World Development Report, 1979

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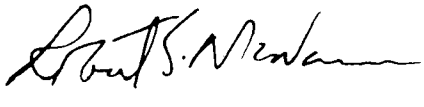
Foreword

The *World Development Report, 1979*, along with its statistical annex, is the second in a series of annual reports designed to provide a comprehensive, continuing assessment of global development issues. This year's report emphasizes issues of employment, industrialization and urbanization in developing countries and discusses the policies necessary to pursue the twin objectives of growth and poverty alleviation. Over the next two decades, these countries will face unprecedented challenges: they will need to create productive employment for a work force that is likely to expand by more than 500 million people between 1975 and 2000; over the same period their cities will need to provide jobs, housing, transportation, water, sanitation and health care for almost one billion additional inhabitants; and a growing number of developing countries face the need for new policy initiatives to shape the process of industrialization. At the same time, however, the range of policy choices available to developing countries is becoming narrower, partly as a result of the past orientation of their development strategies, but partly because of the uncertain and less expansionary climate in the international environment.

The quarter of a century between 1950 and 1975 witnessed substantial progress in developing countries. Such advances were greatly helped by rapid economic growth in industrialized nations and the progressive relaxation of barriers to international trade and capital flows. The slower rates of growth of industrialized economies since the mid-1970s, and the associated increase in protectionist tendencies, have had adverse effects on the growth of developing countries and have given rise to troublesome questions and uncertainties about the future.

The success of developing countries will very largely depend on their domestic programs and policies. But their task can be greatly aided by improved access to markets in the industrialized nations and by more generous flows of concessional assistance from these countries. The uncertainties in the world economy could be much reduced, and the dynamism of world production and trade restored, if countries were to act in recognition of their growing economic interdependence. Over the long term, a more liberal environment for international trade and capital flows would bring benefits to all groups of nations. Industrialized countries stand to gain from buoyant economic conditions in developing countries, which are important markets for their exports; increasing trade barriers and reducing foreign aid in response to short-term pressures may appease sectional grievances, but only at the expense of greater, long-term gains.

This volume reflects the work of many of my colleagues in the World Bank. The judgments expressed do not necessarily reflect the views of our Board of Directors or the governments they represent. The report has been produced under the direction of Attila Karaosmanoglu; Shankar Acharya is the principal author.



Robert S. McNamara

WORLD DEVELOPMENT REPORT, 1979

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Definitions

Country Groups in the analytical framework of this report are as follows:

Developing Countries[1] are divided, on the basis of 1977 gross national product (GNP) per capita into:

Low Income Countries—with per capita income of US$300 and below;
Middle Income Countries—with per capita income above US$300.

Capital Surplus Oil Exporters: Kuwait, Libya, Oman, Qatar, Saudi Arabia and United Arab Emirates are identified as a separate group from other developing countries since, at least for the near future, their economic characteristics are significantly different. Other major exporters of oil are grouped among the developing countries.

Industrialized Countries are the members of the Organisation for Economic Co-operation and Development, apart from Greece, Portugal, Spain and Turkey, which are included among the Middle Income Developing Countries.

Centrally Planned Economies (CPEs) are Albania, Bulgaria, the People's Republic of China, Cuba, Czechoslovakia, the German Democratic Republic, Hungary, the Democratic Republic of Korea, Mongolia, Poland, Romania and the USSR.

Organisation for Economic Co-operation and Development (OECD) members are Australia, Austria, Belgium, Canada, Denmark, Finland, France, the Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

The *Development Assistance Committee* (DAC) of OECD comprises Australia, Austria, Belgium, Canada, Denmark, Finland, France, the Federal Republic of Germany, Italy, Japan, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, the United States and the Commission of the European Community.

The *Organization of Petroleum Exporting Countries* (OPEC) comprises Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates and Venezuela.

Manufactured goods refers to commodities in the Standard International Trade Classification (Revised) (SITC), Sections 5 through 9 minus Division 68: chemicals and related products, including manufactured fertilizers and plastic materials; manufactured articles, including textiles and products based on leather, rubber and wood; iron and steel; products based on metals and non-metallic minerals; machinery and transport equipment; building fixtures and fittings; furniture, clothing, footwear, professional and scientific instruments, photographic and optical goods, watches and clocks, and miscellaneous articles not classified elsewhere in the SITC.

Primary commodities comprise SITC Sections 0 through 4: food and live animals; beverages and tobacco; inedible crude materials; fuels, including coal, petroleum and petroleum products, natural and manufactured gas, and electric current; animal and vegetable oils, fats and waxes; and the non-ferrous metals of SITC Division 68.

Billion is 1,000 million.

Growth Rates are in real terms unless otherwise stated.

Symbols used in the text tables are as follows:

.. Not available.
(.) Less than half the unit shown.
n.a. Not applicable.

[1]The division is slightly different for the projections, where, in order to retain comparability with those made for *World Development Report, 1978*, the earlier country groupings used in that report have been maintained. The difference involves less than 1 percent of the total GNP of all developing countries.

Chapter 1: Introduction

This report is the second in a continuing series designed to address, in an analytical framework, the principal issues of development policy at the domestic and international levels. Many of the themes and points of focus in the present document have evolved out of the extensive discussion of the 1978 report. That document gave particular attention to the problems and prospects of the poor countries of Asia and Sub-Saharan Africa: countries in which the key to more rapid and equitable development lies in policies to stimulate agricultural growth and to confront rural poverty. This year's report gives greater attention to development in the Middle Income countries, in most of which the process of structural transformation is much further advanced than in the poorer developing countries. Two of the principal aspects of this transformation—industrialization and urbanization—are important concerns in all developing nations, but pose especially urgent choices for policy in Middle Income nations. Common to all developing countries is the challenge of creating enough productive jobs for a labor force that is expanding at unprecedented rates. Though world population growth is believed to have peaked in the early 1970s, the earlier rapid growth will add more than 500 million people to the labor force in developing countries between 1975 and the end of this century.

The natural growth of population and the process of industrialization are key factors fueling the rapid increase in the size of urban populations in developing countries. In the final quarter of this century the number of people living in the cities and towns of these nations is projected to increase by nearly a billion, from about 650 million in 1975 to over 1,600 million in 2000. Urbanization is likely to be accompanied by an increasing concentration of urban dwellers in large cities; by the year 2000, some 40 cities in developing nations are projected to exceed 5 million people in size, while 18 of them may be larger than 10 million. This dramatic expansion in urban communities will pose massive new tasks of urban resource management for national and municipal authorities: tasks which will demand bold initiatives in the design and allocation of urban land, transport, shelter, water, sewerage and other services.

As policy makers confront the new challenges thrown up by rapid urban growth, they will need simultaneously to grapple with the manifold problems of industrialization. Increasing numbers of developing countries are engaged in the endeavor of widening and deepening their industrial sectors. The task they confront is to encourage a pattern of industrial development that will rapidly expand productive employment, and will strengthen the mutually beneficial links between industry and agriculture. These intersectoral links are particularly important since, in the majority of developing countries, agriculture will remain the most important single source of livelihood for some time to come, and broadly based agricultural development will, in most cases, continue to be a central element of strategies to alleviate poverty.

The discussion of international issues in this report takes as its starting point the analysis in *World Development Report, 1978*, which emphasized the growth of interdependence among nations over the past quarter century, gave illustrative projections of how the world economy might evolve in the years to 1985, and traced the implications for the economic growth of developing countries. Chapter 2 of this report assesses recent trends and their implications for future developments up to 1990. For the period up to 1985, the basic set of projections foresees somewhat slower growth of developing countries than was projected last year, particularly for Middle Income countries, whose development prospects are especially sensitive to conditions in the world economy. Alternative sets of projections are also presented. One of them outlines the dismal consequences that might follow if the slow growth of world output and trade since 1973 were to continue through to 1990. Another assesses the implications of recovery in world trade and output growth to rates comparable to those experienced in the 1960s. These projections reveal a clear need for international and domestic policy actions that will improve the

environment for international trade and capital flows, and will strengthen the basis for more rapid growth and more efficient structural adjustments in developing and industrialized nations. These policy priorities are the subject of subsequent chapters of the report.

Chapter 3 discusses three areas of international concern—trade, capital flows and energy —where all countries have strong mutual interests, which need to be protected and furthered by national and international action. The next three chapters, on employment, industrialization and urbanization, dwell on the policy issues and options confronted by developing nations as their economies develop and change in structure. Chapters 7 and 8 provide a fuller treatment of Middle Income country development experience and issues than was given in last year's report. To make the analysis more relevant and responsive to the enormous diversity among Middle Income countries, three major types of nations are distinguished and discussed.

The analysis highlights the crucial role of development strategies and policies in creating productive employment and alleviating poverty in developing countries. But it also shows that for these policies to yield their full potential, support from a liberal international environment is essential. Further deterioration in the international framework for trade and capital flows would damage both industrialized and developing economies, and make more intractable the daunting tasks the latter face of expanding employment and alleviating poverty.

PART I: DEVELOPMENT PROSPECTS AND INTERNATIONAL POLICY ISSUES

Chapter 2: Prospects for Development

A year ago, *World Development Report, 1978* put forward projections of developing countries' economic growth through 1985 on the basis of what was then viewed as a likely evolution of the international environment, together with assumptions about these countries' own performance. Gross domestic product (GDP) in the industrialized countries was projected to grow at 4.2 percent a year in 1975-85, significantly more slowly than in the 1960s (4.9 percent), in reflection of economic troubles since then. Protectionist restrictions against the developing countries' manufactured exports were judged likely to remain at much the same intensity as in early 1978. Thus, though exports of textiles and clothing would be severely affected by the tighter quotas introduced in 1977-78, and there would be a continuing threat of new nontariff barriers, further increases in protection would be held in check. An early slowdown was expected in the growth of private capital flows to developing countries. Private flows had accounted for nearly 90 percent of the increase in these countries' net capital inflows during 1970-75, mainly reflecting the rapid growth of commercial bank lending. Official Development Assistance (ODA) was projected to rise at 5 percent a year in real terms, reversing its earlier downward trend as a share of the GNP of the industrialized countries that make up the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development. This share was projected to rise from 0.36 percent of their GNP in 1975 to 0.39 percent in 1985.

Based on these and other assumptions about international economic conditions, Middle Income developing countries were expected to sustain GDP growth rates averaging 5.9 percent a year in 1975-85. Low Income Asia was expected to accelerate its growth to 5.1 percent a year, considerably better than its historical experience, in large measure through improving performance in agriculture. Slower growth at 4.1 percent was expected in Low Income Africa.

This chapter reassesses the growth prospects of the developing countries in the light of recent events and further perspectives on trends in the 1970s. The projections are extended to 1990, and the growth prospects of the Middle Income countries are disaggregated by region. Following the basic set of projections, alternative growth scenarios are analyzed more thoroughly and over a wider range of possibilities than could be done last year.

It needs to be emphasized that the projections presented are simply intended to provide illustrative frames of reference for the discussion of development issues in subsequent chapters. The projections themselves should not be viewed as targets for international decision making. Nor should they be seen as precise forecasts for the future. The prevailing uncertainties regarding growth in industrialized countries, international inflation, currency instability, trade and capital flows, and the institutional framework within which they occur, caution against that.

The assumptions underpinning this year's projections differ from those made last year only where recent developments clearly indicate that modifications are necessary. For the period 1975-85 the main changes as they affect the developing countries are slightly slower growth in industrialized countries, world trade and external concessional assistance, and a different trajectory of private commercial lending. The overall effect is to reduce the projected annual growth of gross domestic product in the developing countries in 1975-85 from 5.7 percent

1. Developing Countries: Growth of Gross Domestic Product, 1970-90
(Average annual percentage growth rates, at 1975 prices)

	1970-76	1977[a]	1978[a]	1975-85	1985-90
Low Income Countries	3.4	5.7	5.4	4.7	4.9
Africa	2.6	4.0	3.4	3.7	3.8
Asia	3.5	6.0	5.7	4.9	5.1
Middle Income Countries	6.2	4.6	5.0	5.3	5.8
All Developing Countries	5.7	4.8	5.1	5.2	5.6

[a]Estimates based on preliminary and incomplete data.

to 5.2 percent. The largest reduction comes in the Middle Income countries—from 5.9 percent to 5.3 percent a year. A sizable reduction is also indicated in Low Income Africa. However, these reductions stem less from changes in the assessment of the future and more from the fact that recovery from the economic difficulties of 1974-75 has been slower than anticipated.

Recent Trends and Implications for the Future

Growth of Industrialized Economies

The economic health of industrialized countries is a key determinant of the growth prospects of developing nations. Industrialized countries are the principal markets for exports from developing countries and their main suppliers of external capital and technology. In 1976 industrialized countries purchased two-thirds of all merchandise exports from developing countries; the share was 69 percent for fuel, 65 percent for other primary commodities and 61 percent for manufactures. The joint attainment of rapid growth, full employment and price stability has remained elusive in recent years in the industrialized economies. In several countries, strong inflationary pressures and volatile external payments situations have hampered sustained recovery from the recession of 1974-75. Projections for 1979 and 1980 do not indicate any significant improvement over the 3.4 percent annual growth recorded between 1970 and 1978, which itself was significantly below the 4.9 percent annual growth achieved in the previous decade. The outlook for the next decade is uncertain, but it seems reasonable to assume recovery to an average growth rate of 4.2 percent a year, with Japan's economy growing at nearly 6 percent a year while the economies of North America and Europe grow at or below the average rate for the group.

2. Industrialized Countries: Growth of Gross Domestic Product, 1960-90
(Average annual percentage growth rates, at 1975 prices)

	1960-70	1970-78[a]	1970-80	1980-90
North America	4.0	3.4	3.3	4.0
Japan and Oceania	9.4	5.1	5.1	5.9
Western and Northern Europe	4.7	2.8	2.9	3.8
All Industrialized Countries	4.9	3.4	3.4	4.2

[a]Estimates for 1978 are based on preliminary data.

Developments in World Trade

Slow and erratic growth in industrialized countries in recent years, combined with other disruptive influences, including increased protection, international inflation, and exchange rate instability, reduced the volume growth of world trade from about 9 percent a year between 1965 and 1973 to just over 4 percent a year between 1973 and 1977. In the same periods, the growth of developing country exports declined from 6.4 percent to 3.6 percent a year. Recent export price trends have been erratic and, on balance, unfavorable to developing countries. In 1978 adverse changes in export and import prices appear to have more than offset the growth in their export volume, resulting in a decline in the purchasing power of their exports.

Primary commodity exports of developing countries have grown little in volume since the boom year of 1973. Aside from the unfavorable international market conditions, noted above, this stagnation also reflects adverse weather conditions during the mid-1970s in key producers of agricultural exports, and other supply difficulties, including the inadequate incentives and low investment priorities that have frequently been accorded to primary production. With the recovery of growth momentum in the industrialized countries, improved weather conditions, and growing benefits from recent efforts to accelerate primary production, the rate of growth of developing countries' primary exports can be expected to return to historical levels. For the period 1976-90 the non-fuel primary commodity exports of developing nations are projected to grow at an average annual rate of 3.3 percent (Table 3).

Developing countries' manufactured exports have continued to show much greater dynamism, but their growth slowed from an average of about 15 percent a year in the period 1965-73 to about 11 percent a year in 1974-77. To a large extent, this slowdown was the result of slower economic growth and heightened protection in industrialized countries. After clothing and textiles, the major product categories most affected by increased protection have been footwear and steel. In 1977, in these four product groups together, the current US dollar value of developing countries' exports rose by only 7 percent—less than the average rise in prices of all traded manufactures (9 percent), reflecting an apparent decline in volume. By contrast, their exports of

3. Growth of Merchandise Exports, by Product Category and Country Group, 1960-76 and 1976-90
(Average annual percentage growth rates, at 1975 prices)

	1960-76			1976-90		
	World	Industrialized Countries	Developing Countries	World	Industrialized Countries	Developing Countries
Fuels and Energy	6.7	4.5	6.3	3.1	3.3	3.2
Other Primary Products	4.4	5.1	3.7	3.3	3.3	3.3
Food and Beverages	4.4	5.4	3.5	3.7	3.9	3.1
Non-food Agricultural Products	5.1	6.3	3.4	1.8	1.1	2.8
Minerals and Non-ferrous Metals	3.9	3.4	4.7	3.5	3.0	4.5
Manufactures	9.1	9.1	12.7	7.0	6.5	10.9
Machinery and Transport Equipment	9.9	10.0	17.5	7.6	7.1	15.3
Other Manufactures	8.5	8.3	11.8	6.5	6.0	9.0
Total Merchandise	7.4	7.8	6.3	5.7	5.9	6.1

Sources: World Bank; *United Nations Yearbook of International Trade Statistics*, various issues (New York: United Nations, UN Statistical Office); *Handbook of International Trade and Development Statistics*, various issues (Geneva: United Nations Conference on Trade and Development); and *Networks of World Trade, By Areas and Commodity Classes, 1955-76* (Geneva: General Agreement on Tariffs and Trade, Studies in International Trade No. 7, 1978).

other manufactured goods rose in current value by 23 percent, resulting in a 16 percent increase in their total manufactured exports (about 9-10 percent in real terms since their export prices probably rose less than those of other countries). Preliminary information indicates that developing countries' manufactured exports grew somewhat faster in 1978 than in 1977.

The projections for manufactured exports in Table 3 assume that growth in industrialized countries will recover to an average rate of 4.2 percent a year in the 1980s, and that further increases in protection will be averted through improved economic policies and determined resistance to protectionist pressures. It is important to emphasize also that the attainment of the export growth rates projected here would require bold policy reforms and sustained effort on the part of developing countries.

The trade projections assume that the developing countries will continue their rapid expansion of trade with one another. In 1976 more than one-fourth of developing country merchandise exports went to other developing nations. This trade—analyzed further in the next chapter—appears to depend more on the developing countries' payments situations, economic growth and overall trade policies than on special

4. Developing Countries: Merchandise Exports, by Product Category and as a Share of World Merchandise Exports, 1960, 1976 and 1990
(Percentages, at 1975 prices)

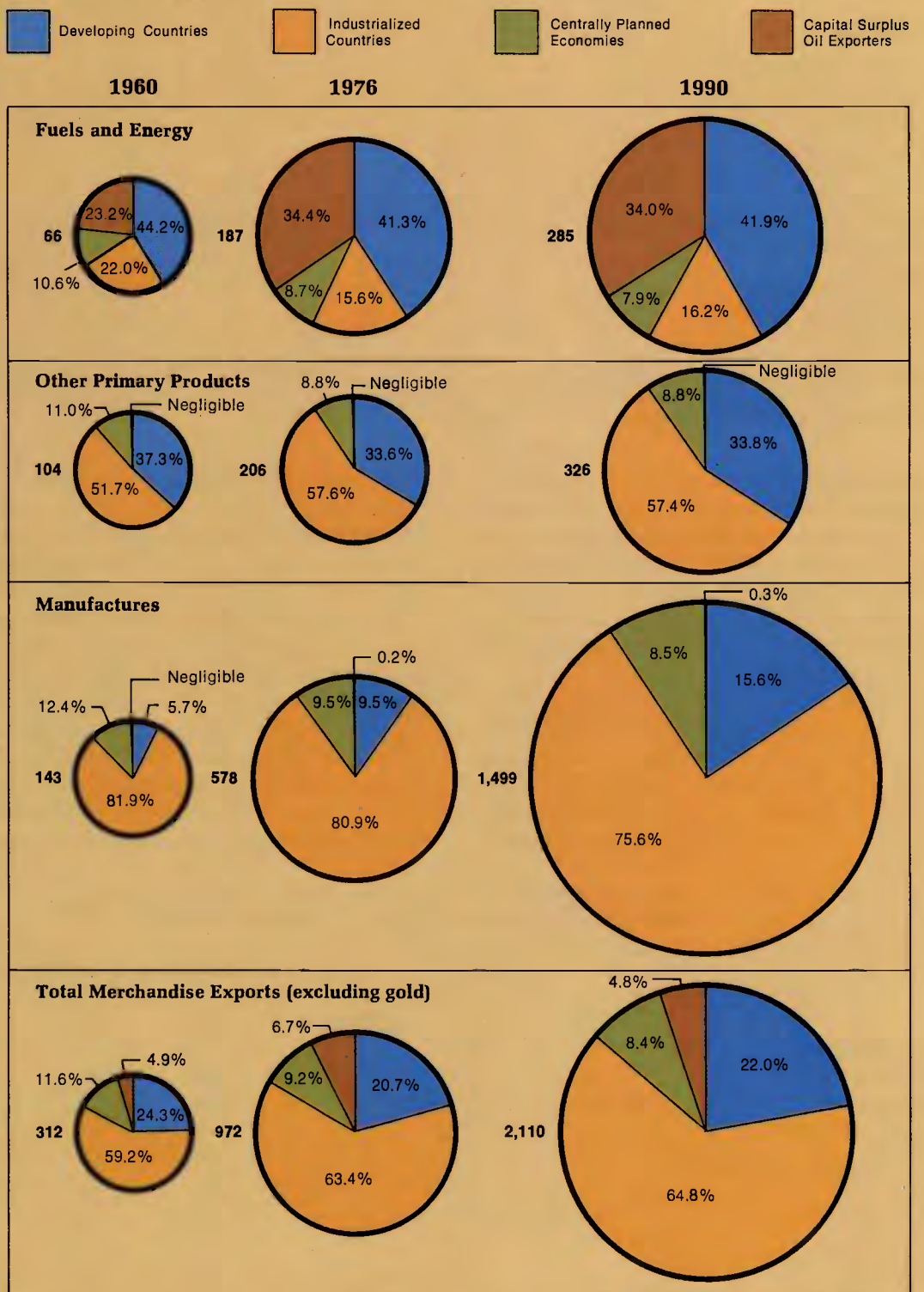
	Product Composition			Developing Countries' Exports as a Share of World Exports		
	1960	1976	1990	1960	1976	1990
Fuels and Energy	38	38	26	44	41	42
Other Primary Products	51	35	24	37	34	34
Food and Beverages	34	22	15	40	35	32
Non-food Agricultural Products	9	6	4	39	30	34
Minerals and Non-ferrous Metals	8	7	5	29	33	38
Manufactures	11	27	50	6	10	16
Machinery and Transport Equipment	1	6	20	2	5	12
Other Manufactures	10	21	30	9	14	19
Total Merchandise	100	100	100	24	21	22

Sources: As in Table 3.

Figure 1

Shares of Merchandise Exports, by Country Group, 1960, 1976, 1990

(Percentages, at 1975 prices)



Note: Numbers beside pies indicate the total values of world merchandise exports, in billion 1975 US dollars. Percentages may not add to 100, due to rounding.

Sources: As in Table 3.

5. Structure and Growth of Merchandise Exports, 1960-90
(Percentages, at 1975 prices)

	Country Composition			Average Annual Growth Rate	
	1960	1976	1990	1960-76	1976-90
Developing Countries	24	21	22	6.3	6.1
Industrialized Countries	59	63	65	7.8	5.9
Capital Surplus Oil Exporters	5	7	5	9.5	3.2
Centrally Planned Economies	12	9	8	5.8	5.1
World	100	100	100	7.4	5.7

Sources: As in Table 3.

arrangements among these nations. Setbacks in the expansion of trade with industrialized economies would adversely affect the overall export performance and balance of payments positions of developing countries, and hence would impede the growth of trade among them. No major change is projected in the trade orientation of the centrally planned economies, which purchased only 6 percent of developing country merchandise exports in 1976. The growing involvement of the People's Republic of China in international trade and capital flows could have significant implications for developing countries, but not enough is known to take this into account in the projections. The composition of developing countries' exports and their shares of world trade in principal product categories are shown in Table 4 and Figure 1.

If world trade evolves according to these projections, the relative importance of major country groupings would show little change by 1990 (Table 5).

6. Developing Countries: External Financing Requirements, 1976-90
(Billion current US dollars)

	Low Income Countries			Middle Income Countries			All Developing Countries		
	1976	1985	1990	1976	1985	1990	1976	1985	1990
Net Imports	3	19	29	24	75	91	26	94	119
(Imports of Goods and Non-factor Services)	(26)	(90)	(146)	(275)	(889)	(1,539)	(301)	(979)	(1,685)
Less: (Exports of Goods and Non-factor Services)	(24)	(71)	(118)	(251)	(814)	(1,448)	(275)	(885)	(1,566)
Interest on Medium- and Long-term Loans	1	4	6	9	40	73	10	44	79
Repayment of Principal	2	8	11	18	115	214	20	122	225
Increase in Reserves	3	2	4	5	21	42	8	23	46
Total to be Financed	8	32	50	56	251	419	64	283	469
Net Factor Income, excluding Interest on Medium- and Long-term Loans	(.)	1	2	5	21	32	5	21	33
Official Grants and Concessional Loans (gross)	5	19	32	9	23	33	15	42	65
Medium- and Long-term Loans at Market Terms (gross)	4	9	12	45	179	309	49	188	321
Direct Investment and Other Capital (net)	−1	2	3	−5	23	38	−6	25	41
Private Transfers (net)	(.)	1	1	2	5	8	3	7	9
Total Financing	8	32	50	56	251	419	64	283	469
At 1975 Prices	8	15	17	54	118	147	62	133	165

Note: Totals may not add due to rounding. The assumed average annual rate of inflation between 1975 and 1990 is 7.2 percent.

The Supply of External Capital

The external capital required by developing countries to sustain the growth projected in the basic scenario is outlined in Table 6.

Despite promises by donor governments and some recent actions on debt forgiveness, net flows of Official Development Assistance (ODA) from the industrialized countries that make up the Development Assistance Committee of the OECD fell in real terms between 1975 and 1977. As a proportion of their gross national product, ODA from these countries declined from 0.35 percent in 1975 to 0.31 percent in 1977 (Table 7). This was less than half the target of 0.7 percent endorsed by the United Nations General Assembly in 1970. Based on renewed commitments by donor governments and preliminary estimates for 1978, indicating a rise in the ODA share to 0.32 percent of donors' gross national product, ODA from DAC countries is projected to increase by nearly 5 percent a year in real terms from 1977, to reach a proportion of 0.35 percent of GNP by 1985, where it is assumed to remain through 1990. This reflects some reduction from last year's projection, in which Official Development Assistance from DAC countries was expected to reach 0.39 percent of GNP by 1985. Achieving even these modest increases will require renewed efforts by donor countries.

Net ODA flows from the Organization of Petroleum Exporting Countries, which had grown rapidly in the early 1970s, leveled off at an average of US$5.6 billion a year during 1975-77. This assistance, currently equivalent to about 2 percent of the donors' GNP, is projected to decline slowly in real terms, reflecting slower rates of economic growth than those experienced in recent years. However, if the real price of petroleum were to increase during the 1980s, net ODA flows from OPEC nations could be expected to rise. Flows of ODA are assumed to be progressively reallocated toward Low Income countries, so that their share of net ODA disbursements increases to 47 percent by 1985 and 51 percent by 1990. Concessional assistance will continue to be of crucial importance to Low Income countries: nearly two-thirds of the external financing requirements of these countries in 1990 is projected to be met by gross disbursements of concessional capital (Table 6).

7. Net Flows of Official Development Assistance From Donors, 1975-90

	Billion Current US Dollars				Average Annual Percentage Growth Rate (at 1975 prices)	
	1975	1977	1985	1990	1975-77	1977-90
Members of Development Assistance Committee of OECD	13.6	14.7	41.8	69.0	−1.9	4.8
Members of Organization of Petroleum Exporting Countries	5.5	5.7	9.4	12.4	−3.7	−1.2
Others	0.5	..	1.3	1.9		
Total	19.6	..	52.5	83.3		
At 1975 Prices	19.6	..	24.7	29.4		
Note:						
DAC Flows as a Percentage of Donors' GNP	0.35	0.31	0.35	0.35		
OPEC Flows as a Percentage of Donors' GNP	2.71	2.01	..	..		
Capital Surplus Oil Exporters' Flows as a Percentage of Donors' GNP	6.46	5.58	..	..		

Note: ODA flows in this table include contributions to multilateral agencies as well as to developing countries, and the value of technical assistance. The assumed average annual rate of inflation between 1975 and 1990 is 7.2 percent.

In marked contrast to the Low Income countries, about four-fifths of the external financing requirements of Middle Income countries in 1976 were met by loans at market terms, with private sources accounting for over 85 percent of this lending. In *World Development Report, 1978* it had been assumed that after the rapid growth between 1971 and 1976 the expansion of private lending would slow down sharply, so that over the period 1975 to 1985, net inflows of private loans to developing countries would grow at about 12 percent a year in current prices. In practice, continuing liquidity in international capital markets permitted a much more rapid expansion of private lending, mostly by banks, in 1977 and 1978. Liquidity in international mar-

8. Net Disbursements of Medium- and Long-term Capital to Developing Countries, 1975-90

	Billion Current US Dollars				Average Annual Percentage Growth Rate (at 1975 prices)	
	1976	1980	1985	1990	1975-85	1980-90
Private Direct Investment	2.4	8.7	14.0	22.5	0.3	3.3
Official Development Assistance	13.1	21.8	37.9	57.9	1.9	3.6
Grants	5.9	9.7	18.0	28.3	2.7	4.5
Bilateral Concessional Loans	5.4	9.4	15.3	23.5	0.5	2.9
Multilateral Concessional Loans	1.7	2.7	4.6	6.1	4.5	1.9
Medium- and Long-term Loans at Market Terms	30.3	39.4	69.8	103.1	2.9	3.4
Private	26.0	30.0	55.1	82.6	2.4	3.9
Multilateral	2.4	6.1	9.9	11.7	6.4	0.2
Official Export Credits	1.9	3.3	4.7	8.8	3.3	3.7
Total	45.8	69.8	121.7	183.5	2.3	3.4
At 1975 Prices	44.4	46.0	57.1	64.4		

Note: Totals may not add due to rounding. The data on official grants and concessional loans in this table are not comparable with those in Table 7. Table 7 shows disbursements by donor countries for all purposes; Table 8 shows receipts of medium- and long-term capital by developing countries. The principal differences are that Table 7 covers technical assistance and contributions to multilateral institutions, including paid-in capital. The latter is the basis of multilateral lending at market terms. The data on official grants and concessional loans in Table 8 do not include technical assistance, and they include the disbursements of concessional loans from multilateral institutions.

kets also helped to ease lending terms, to extend the availability of loans to a wider set of Middle Income countries, and to lengthen maturities. For example, nearly two-thirds of the publicized Eurocurrency credits negotiated by developing countries during 1978 carried maturities of over seven years; this was true of only about 13 percent of such loans in 1977.

However, the growth of private lending can be expected to slow in the 1980s as a result of rising debt service ratios in developing countries and increasing supply constraints on commer-

9. Net Disbursements of Medium- and Long-term Loans and Official Grants to Developing Countries, by Type of Capital and Country Group, 1976-90
(Percentages)

	Low Income Countries			Middle Income Countries			All Developing Countries		
	1976	1985	1990	1976	1985	1990	1976	1985	1990
Distribution of Capital by Category									
Official Grants	21	35	43	12	12	11	14	17	18
Concessional Loans	47	52	46	10	11	11	16	19	18
Loans at Market Terms	32	13	11	77	77	78	70	65	64
(Official)	(10)	(9)	(7)	(10)	(15)	(14)	(10)	(14)	(13)
(Private)	(23)	(4)	(4)	(67)	(62)	(64)	(60)	(51)	(51)
Total	100	100	100	100	100	100	100	100	100
Distribution of Capital by Income Group[a]									
Official Grants	25	40	50	75	60	50	100	100	100
Concessional Loans	47	53	51	53	47	49	100	100	100
Loans at Market Terms	8	4	4	92	96	97	100	100	100
Official	16	12	11	84	88	89	100	100	100
Private	6	2	2	94	98	99	100	100	100
Total	16	19	21	84	81	80	100	100	100

Note: Totals may not add due to rounding. The data on official grants and concessional loans in this table and Table 8 are not comparable with those in Table 7, as explained in the note to Table 8.

[a]The distribution of concessional capital by income group is highly sensitive to the criterion used in classifying countries into Low and Middle Income groups.

cial banks and other private lenders. Furthermore, the bunching of repayment obligations in the period 1978-82 would make net inflows much lower than the levels of gross lending. In the light of these considerations, net private lending to developing countries is now projected to grow at an average annual rate of about 10 percent in current prices—under 3 percent a year in real terms—for the period 1975-85. During the 1980s, the real growth rate is projected to be a little higher, at almost 4 percent, partly reflecting an expectation of slower world inflation in the later years. These and other assumptions about net capital flows to developing countries are summarized in Table 8 on page 9.

The composition of projected net disbursements of medium- and long-term loans and official grants and their distribution by country groups is shown in Table 9, while the debt service ratios associated with the projected capital flows, trade and economic growth are presented in Table 10. For the broad country groupings shown, these ratios are not unacceptably high

10. Developing Countries: Debt Service Ratios, 1977-90

	As Percentage of Exports of Goods and Services			As Percentage of Gross National Product		
	1977[a]	1985	1990	1977[a]	1985	1990
Low Income Africa	9.6	11.6	9.8	2.6	3.4	3.1
Low Income Asia	13.5	17.0	16.0	1.7	1.8	1.6
Middle Income Countries	11.8	18.3	19.2	3.3	5.0	5.3
All Developing Countries	11.8	18.1	18.8	3.1	4.6	4.7

[a]Preliminary.

and do not signal a general debt problem, though individual countries can be expected to encounter liquidity shortages from time to time. These issues are taken up in the next chapter.

Energy

As recent events have demonstrated, the balance in world energy demand and supply hinges on what happens in a few key oil producing countries. Short-run supply bottlenecks and temporarily high oil prices can be precipitated by events in a single country even when global supply capacities exceed demand. In these circumstances, it is not easy to project price trends. World oil production is expected to peak around the end of the century, and over the next two decades the energy problem is essentially that of assuring gradual transition to higher-cost substitutes for oil. In the meantime, the intensified exploration and production in many countries, the growing use of non-oil energy sources, and the reduced energy intensity of economic growth in some important consuming nations, point to the adjustment already being made to the sharp oil price increases of 1973-74.

The behavior of petroleum prices in recent years is illustrated in Figure 2. They continued to rise in current terms after the massive increase of 1974, but declined in real terms, eroded by global inflation and the devaluation of the US dollar. The sharp oil price increases during the first half of 1979 more than compensated for the earlier decline in the real price of petroleum. By July 1, 1979 the average price of OPEC crude oil had risen from its 1978 level of nearly US$13 per barrel to about US$20 per barrel; it is expected to average just under US$18 per barrel in 1979 as a whole—a level about the same, in real terms, as in 1974.

If economies grow at the rates projected in the basic scenario, and if major oil consuming nations follow strong policies with respect to demand conservation, domestic pricing of energy and development of alternative energy sources, it is possible that a balance can be maintained between the global demand and supply of energy through the 1980s without major and sustained increases in the real price of oil from its level of July 1, 1979.[1] However, if energy policy in major consuming countries is weak, if oil production in key supplying nations suffers prolonged setbacks, or if the industrialized economies grow faster than projected above, then upward pressure on energy prices is likely to be exacerbated. These possibilities are explored further in Chapter 3.

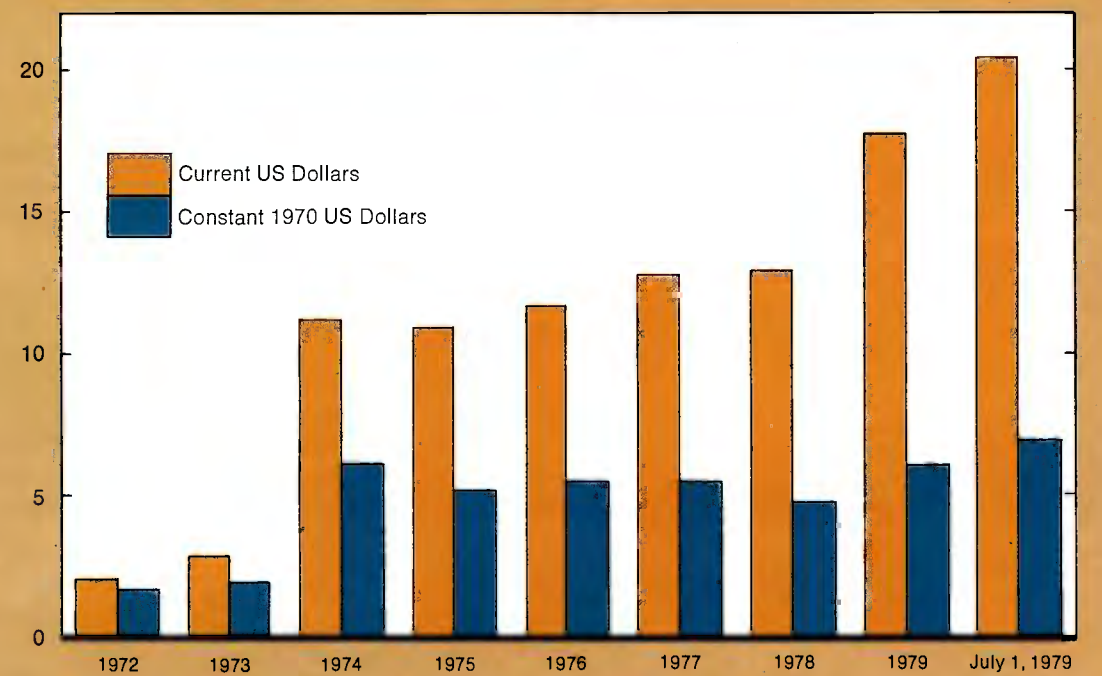
Recent Performance in Developing Countries

With the collapse of a sustained and simultaneous boom in industrialized countries, the peaking of major commodity prices and the sharp increase in the price of imported oil, 1974 marked a turning point in the economic per-

[1]The basic set of projections, made before the oil price increases of July 1, 1979, assume that petroleum prices would remain at their average level for the period 1975-78. Clearly, future projections will have to take account of the recent price increases and their repercussions.

Petroleum Prices, 1972-79 Figure 2

(US dollars per barrel)



Note: The prices shown are average prices for each year. They refer to petroleum exports by the Organization of Petroleum Exporting Countries, and are based on estimates of realized export prices and government sale prices, weighted by countries' shares in total output. Realized and government sale prices are f.o.b. loading ports in OPEC countries. The prices in constant US dollars have been deflated using the Index of International Prices, which is an index of the c.i.f. prices of manufactured goods (SITC 5-8) exported by industrialized countries to all destinations. The prices shown for 1979 are estimates based on information available as of July 1, 1979. OPEC accounts for over four-fifths of world exports of petroleum.

formance and prospects of developing countries. Though external assistance and increased borrowing cushioned the effects of these changes in the international environment, the rate of growth of developing countries' merchandise imports was halved and there was an associated reduction in economic growth in the years 1974-77, compared to the period 1965-74 (Table 11). The sharpest declines in growth occurred in countries of Sub-Saharan Africa, partly because

11. Developing Countries: Growth of Gross Domestic Product and Merchandise Trade, 1965-74 and 1974-77

(Average annual percentage growth rates, at 1975 prices)

	GDP		Exports		Imports	
	1965-74	1974-77[a]	1965-74	1974-77[a]	1965-74	1974-77[a]
Low Income Countries	3.9	5.1	6.2	5.2	2.2	−0.9
Africa	4.1	2.4	5.5	2.3	4.9	−9.6
Asia	3.9	5.5	6.4	5.8	1.1	2.8
Middle Income Countries	6.8	4.8	6.0	4.0	8.7	4.3
East Asia and Pacific	8.3	8.0	11.9	13.2	11.0	5.3
Latin America and Caribbean	6.5	4.0	4.0	−0.9	8.8	−0.4
Middle East and North Africa	7.0	7.5	4.7	3.5	10.5	10.8
Sub-Saharan Africa	5.9	1.6	3.6	−0.7	5.8	2.7
Southern Europe	6.9	4.0	10.8	5.8	7.1	5.5
All Developing Countries	6.2	4.9	6.0	4.1	7.8	3.8

[a]The data for 1977 are preliminary.

Sources: World Bank; *UN Yearbook of International Trade Statistics (op. cit.)*, various issues.

of the additional burden of very unfavorable weather which afflicted many of these nations in 1974-75. The pace of development was also significantly reduced in Latin America and Southern Europe; in the latter, tourism, migrant workers and investment were adversely affected by depressed conditions in Western Europe.

Some countries have adjusted more successfully than others to the difficult external conditions: the Middle Income countries of East Asia have demonstrated a remarkable capacity to reduce their growth of imports, accelerate the expansion of exports and sustain extraordinarily high economic growth; many other developing nations have achieved less dramatic, but commendable, success in steering their way through a difficult period. Most developing countries increased their recourse to commercial and concessional external capital flows, and some of the more advanced Middle Income countries borrowed particularly heavily from private banks. While most nations used their borrowed resources effectively, a few, such as Peru, Turkey and Zaire, which borrowed heavily and sometimes imprudently to sustain the growth of imports and production, have been markedly less successful than others in carrying out the necessary economic adjustments, and continue to face severe short-term problems. In recent months, these countries have undertaken, with varying success, difficult programs for economic stabilization.

One of the brighter aspects of recent performance has been the acceleration in the growth of Low Income Asian countries, especially India. During 1977 and 1978, GDP growth in this region is estimated to have averaged over 5 percent a year, significantly faster than the 4 percent annual average of the previous 15 years. Much of this improvement in performance can

12. Structure of Population, Production and Exports, 1976 and 1990

	Population (millions)	Gross National Product Per Capita (US dollars)[a]	Percentage Shares of Country Groups in Developing Country Total					
			Population		Gross Domestic Product (at 1975 prices)		Exports of Goods and Non-factor Services (at 1975 prices)	
	1976	1976	1976	1990	1976	1990	1976	1990
Developing Countries								
Low Income Countries	1,193	157	56.1	55.6	16.1	15.2	8.6	7.3
Africa	156	158	7.4	7.8	2.1	1.7	2.0	1.8
Asia	1,037	157	48.7	47.8	14.0	13.5	6.5	5.5
Middle Income Countries	936	1,022	43.9	44.4	83.9	84.8	91.4	92.7
East Asia and Pacific	162	671	7.6	7.3	9.3	13.2	19.1	27.1
Latin America and Caribbean	320	1,159	15.0	15.4	32.8	32.6	25.1	24.6
Middle East and North Africa	142	989	6.7	7.0	11.6	11.1	19.4	16.0
Sub-Saharan Africa	190	523	8.9	9.8	9.6	8.0	12.8	8.7
Southern Europe	122	1,948	5.7	4.9	20.6	19.9	15.0	16.4
Total	2,129	538	100.0	100.0	100.0	100.0	100.0	100.0

	Population (millions)	Gross National Product Per Capita (US dollars)[a]	Percentage Shares of Country Groups in World Total					
			Population		Gross Domestic Product (at 1975 prices)		Exports of Goods and Non-factor Services (at 1975 prices)	
	1976	1976	1976	1990	1976	1990	1976	1990
World								
Developing Countries	2,129	538	52.2	56.8	15.3	20.2	22.6	23.2
Industrialized Countries	661	6,414	16.2	13.6	64.6	62.5	63.9	65.8
Capital Surplus Oil Exporters	12	6,691	0.3	0.4	1.1	1.4	5.7	4.0
Centrally Planned Economies	1,276	1,061	31.3	29.2	19.0[b]	15.9[b]	7.8	7.0
Total	4,078	1,673	100.0	100.0	100.0	100.0	100.0	100.0

Note: Totals may not add due to rounding.

[a]Calculated using *World Bank Atlas* methodology, as described in the Notes to Table 1 of *World Development Indicators*.

[b]East European centrally planned economies only.

be attributed to an acceleration of agricultural output growth to rates above 3 percent a year—over twice the rate recorded between 1970 and 1975. Part of the improvement in agriculture was due to better weather, but there is growing evidence that the expansion of irrigation and other investments in agriculture have increased productivity and enhanced the capacity to withstand fluctuations in weather.

Growth Prospects Until 1990

Based on the assumptions and recent trends outlined above, economic growth and accompanying changes have been projected through 1990 for regional groups of Middle Income countries and for the poor countries of Asia and Sub-Saharan Africa. In looking at the growth prospects that emerge from these projections it is important to keep in mind that population, output and trade are very unevenly distributed among developing countries (Table 12 and Figure 3). Aggregate trends in production, trade, capital flows and many other magnitudes disproportionately reflect what happens in the richer developing countries, even though population is concentrated in the poorer ones. For example, nearly half the population of developing countries lives in Low Income Asia, comprising the Indian subcontinent, Indonesia and a few smaller countries; yet this region accounted for only a seventh of developing countries' GDP, a fifteenth of their exports and a tenth of their net capital inflows in 1976. Nor are these shares expected to change significantly by 1990.

As Table 13 shows, wide contrasts in growth are expected across different regions of the world. In Low Income Asia, the projection of a 5 percent annual increase in output during the coming decade is based in part on the recent acceleration of agricultural production in India and the buoyancy of Indonesian oil revenues. Given the anticipated rate of growth of population in this region, GDP per person is projected to increase at nearly 3 percent a year during the 1980s. However, this outcome hinges on achieving the improvements in domestic savings effort indicated in Table 14. Furthermore, this region confronts a daunting employment challenge: despite the declines in fertility that have been achieved and are expected, the past growth of population is expected to expand the work force by over 120 million between 1977 and 1990. This will compound the enormous tasks these countries already face in reducing their present high levels of underemployment and unemployment.

Although optimistic assumptions have been made regarding foreign capital inflows and improvements in domestic savings, income per person in the Low and Middle Income countries of Sub-Saharan Africa is projected to increase at an average rate of less than 1.5 percent a year during the next decade. The principal factors underlying this dismal outlook were analyzed in last year's report. They include the expectations that population will continue to expand rapidly throughout this period; that the legacy of insufficient agricultural research and difficult

13. Growth of Population, Gross Domestic Product and Gross Domestic Product Per Capita, 1960-90
(Average annual percentage growth rates)

	Population			GDP (at 1975 prices)			GDP Per Capita (at 1975 prices)		
	1960-70	1970-80	1980-90	1960-70	1970-80	1980-90	1960-70	1970-80	1980-90
Low Income Countries	2.4	2.3	2.2	4.2	4.0	4.9	1.8	1.7	2.7
Africa	2.6	2.8	2.8	4.1	3.0	3.8	1.5	0.2	1.0
Asia	2.4	2.2	2.2	4.2	4.2	5.0	1.8	2.0	2.8
Middle Income Countries	2.5	2.5	2.4	6.4	5.5	5.8	3.9	2.9	3.4
East Asia and Pacific	2.8	2.3	2.0	7.7	8.5	7.6	4.9	6.2	5.6
Latin America and Caribbean	2.8	2.7	2.5	5.7	5.3	5.7	2.9	2.6	3.2
Middle East and North Africa	2.6	2.7	2.6	7.3	5.7	5.5	4.7	2.9	2.8
Sub-Saharan Africa	2.5	2.9	3.0	5.0	4.3	4.4	2.5	1.4	1.4
Southern Europe	1.4	1.5	1.2	7.2	4.9	5.4	5.8	3.4	4.2
All Developing Countries	2.5	2.4	2.3	5.9	5.2	5.6	3.4	2.8	3.3
Industrialized Countries	1.1	0.7	0.5	4.9	3.4	4.2	3.8	2.7	3.7
Capital Surplus Oil Exporters	3.5	3.7	2.8	11.7	5.6	5.0	8.2	1.8	2.2
Centrally Planned Economies	1.7	1.4	1.1	6.8[a]	5.5[a]	4.2[a]	5.7[a]	4.6[a]	3.4[a]

[a]East European centrally planned economies only.

Figure 3

Population, Exports and Gross National Product, by Country Group, 1976 and 1990

[a]See footnote a to Table 12.
Percentages may not add to 100, due to rounding.

14. Developing Countries: Investment and Savings Rates, 1976 and 1990
(Percentages of gross domestic product, at 1975 prices)

	Gross Domestic Investment		Gross Domestic Savings		Net Foreign Resource Inflows	
	1976	1990	1976	1990	1976	1990
Low Income Countries	17.8	25.0	15.7	21.2	2.1	3.8
Africa	16.0	22.1	8.8	11.4	7.2	10.7
Asia	18.0	25.3	16.7	22.4	1.3	3.0
Middle Income Countries	26.1	26.0	23.1	23.9	3.0	2.1
East Asia and Pacific	27.0	30.9	25.5	31.1	1.5	−0.2
Latin America and Caribbean	23.7	26.0	22.3	24.8	1.4	1.2
Middle East and North Africa	31.4	25.1	29.0	20.0	2.4	5.1
Sub-Saharan Africa	27.0	24.4	25.1	21.0	1.9	3.4
Southern Europe	26.2	23.8	19.0	21.1	7.2	2.7
All Developing Countries	24.8	25.8	21.9	23.5	2.9	2.3

ecological conditions will continue to limit improvements in farm productivity; and that deficiencies in physical and institutional infrastructure are likely to hamper rapid and efficient industrial development.

The development prospects of the Middle Income countries are closely linked with the evolution of the international environment. With continued access to international capital markets and a moderate recovery in their export performance, most of these countries are expected to improve on their somewhat sluggish growth performance during the latter half of the 1970s. The growth prospects of different Middle Income regions are likely to vary, depending on their future opportunities to benefit from international trade, and their ability to save, invest and use resources efficiently. In particular, the contrasts noted earlier between the projected growth rates of manufactured and primary exports imply significant differences in export performance and economic development across regions. With manufactures accounting for 60 percent of their merchandise exports in 1976, and given their demonstrated success in exploiting international market opportunities, the East Asian economies are expected to maintain rapid export growth. In contrast, the much higher share of slow growing primary products in the exports of Middle Income African nations will limit these countries' overall export expansion. In the East Asian economies, rapid economic growth and a reduced rate of population expansion combine to hold out particularly favorable prospects for per capita income increases which, in turn, can be expected to induce swifter structural change than in other countries.

The population of Middle Income countries

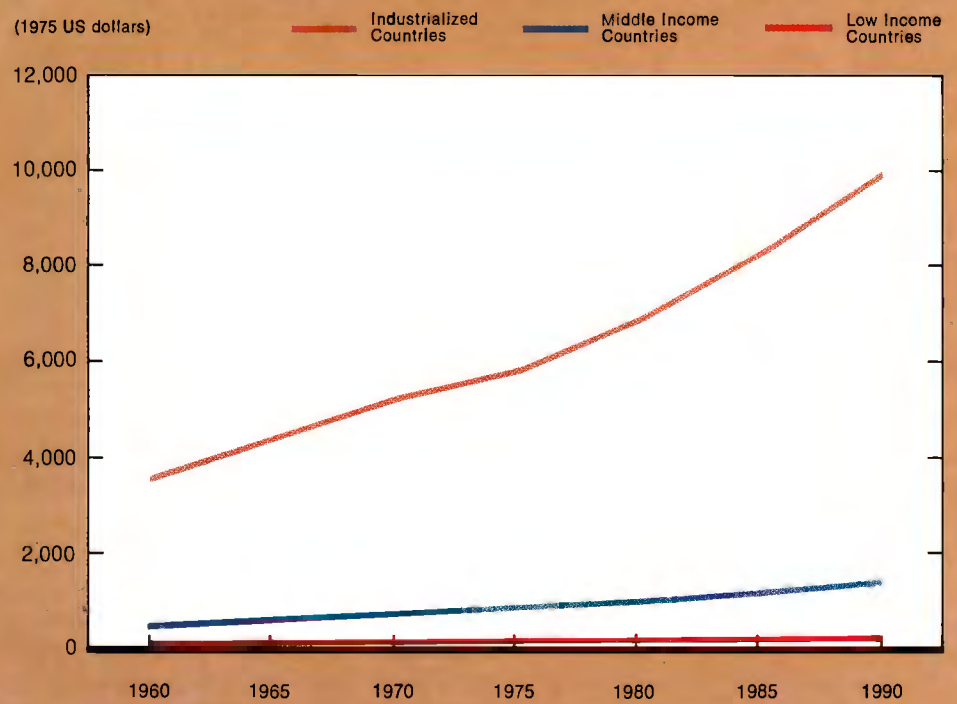
15. Developing Countries: Structure of Production, 1975 and 1990
(Percentages of gross domestic product, at 1975 prices)

	Agriculture		Industry[a]		Services	
	1975	1990	1975	1990	1975	1990
Low Income Countries	41	30	23	28	36	42
Africa	41	33	17	20	42	47
Asia	41	30	24	29	35	41
Middle Income Countries	15	10	38	41	48	49
East Asia and Pacific	22	12	31	39	47	49
Latin America and Caribbean	12	9	36	40	52	51
Middle East and North Africa	12	8	51	50	37	42
Sub-Saharan Africa	22	17	37	37	41	46
Southern Europe	15	11	36	39	49	50
All Developing Countries	19	14	35	39	46	47

Note: Sectoral shares may not add to 100 percent, due to rounding.
[a]Industrial production in all tables in this report refers to value added in manufacturing, mining, construction and public utilities.

Figure 4

Trends in Gross National Product Per Capita, By Country Group, 1960-90



has been growing at an average annual rate of 2.5 percent since 1960, with rates higher than this in Africa, the Middle East and Latin America. This is in sharp contrast to the 1.4 percent rate in Southern Europe. Variations in population growth among Middle Income countries lead to significant differences in development prospects and problems. Thus Southern Europe is projected to enjoy substantially higher increases in per capita output during the next decade than Latin America, the Middle East, or North Africa, even though the expected differences in aggregate economic growth performance are minimal. The higher rates of population growth in the latter regions over the past twenty years also pose commensurately greater challenges of job-creation, to absorb the sizable increments in the labor force that will occur in these countries. For those Mediterranean countries that have thus far used the safety valve of labor migration to Western Europe and capital surplus oil exporting countries, the outlook is complicated by slower growth and changing attitudes to international migration in these host countries. For most Middle Income countries the projections emphasize the need to improve investment choice and productivity in the industrial sector in order to accelerate the absorption of labor, realize the potential for increased manufactured exports and enhance the efficiency of industrial units producing for growing domestic markets.

Alternative Scenarios

It is not difficult to conceive of many different ways in which the evolution of world economic conditions could depart from that outlined above. To provide some indication of the sensitivity of developing country prospects to conditions in the international economy, two alternative scenarios have been explored in some detail. In the High case the assumptions with respect to the growth of industrialized countries, world trade and capital flows are more favorable than in the Base scenario, while the converse is true of the Low scenario. In both

16. Alternative Assumptions for Base, High and Low Growth Scenarios, 1980-90, and Historical Growth, 1960-75

(Average annual percentage growth rates, at 1975 prices)

	1960-75	1980-90		
		Base	High	Low
GDP of Industrialized Countries	4.2	4.2	4.9	3.5
Net Official Development Assistance	4.1[a]	3.6	6.7	3.1
Net Private Medium- and Long-term Loans	..	3.9	6.3	−1.0
World Merchandise Trade	7.1	6.0	7.3	5.0
Developing Countries' Merchandise Exports	5.8	6.5	7.6	5.2
(Primary Products)	(4.5)	(3.3)	(3.5)	(2.8)
(Manufactures)	(12.3)	(11.1)	(13.1)	(8.8)
Real Price of Traded Energy	7.7[b]	0.0	2.0	0.0

[a]The data underlying this growth rate exclude OPEC flows of Official Development Assistance in 1960, on which information is not available, but include these flows in 1975.

[b]On the basis of end-point comparisons, the real price of petroleum remained approximately constant between 1960 and 1973, and rose sharply between 1973 and 1975.

cases, the variation in underlying premises is limited to the 1980s, and moderately optimistic assumptions are made regarding the capacity of developing countries to undertake difficult but desirable domestic policy adjustments to changing international circumstances. The principal assumptions distinguishing each scenario are outlined in Table 16.

The High scenario assumes that economic growth in the industrialized countries will recover to the 4.9 percent annual rate recorded in the 1960s. This would fuel a strong expansion of world trade at the rate of 7.3 percent a year, including a more rapid growth of developing country exports. The faster expansion of developing country exports would stem from two sources: the buoyant world market conditions, and a substantial relaxation in trade barriers which should be facilitated in the industrialized countries in conditions of rapid growth and declining unemployment. Faster growth in industrialized countries should also make it possible to accelerate the expansion of Official Development Assistance, which is assumed to reach 0.45 percent of the gross national product of DAC countries by 1990. Swifter growth of world output will inevitably increase the demand for energy and exacerbate pressures for higher prices. The High scenario assumes an increase in the real price of internationally traded energy of 2 percent a year during the 1980s.

The world view projected in the Low scenario is strikingly different. The growth of industrialized economies does not recover from the undistinguished performance of the present decade. As a result world trade growth is held back to 5 percent a year. The implied continuation of high unemployment and business distress in industrialized countries is likely to weaken resistance to demands for protection against developing country exports, especially of manufactures. As a consequence of these factors, developing country exports of manufactures are projected to grow at less than 9 percent a year, compared with rates of 13 percent in the High case and 11 percent in the Base scenario. Even if the same shares of donor GNP were allocated to ODA as in the Base case, slower economic growth would entail slower expansion of ODA from industrialized countries. With dimmer export prospects, developing countries' capacity to service debt would be restricted, leading to a likely reduction in their net receipts of private capital inflows. Since the slower expansion of global output can be expected to check the growth in demand for energy, sustained increases in the real price of energy are deemed unlikely in the Low scenario.

The implications for developing country growth of these different assumptions are outlined in Table 17. The projections indicate the sensitivity of developing country prospects to conditions in the world economy. They are, in substantial measure, consistent with historical experience during the past 15 years: the 4.8 percent annual growth of developing countries in the Low scenario is similar to the experience of 1974 to 1978, while the 6.6 percent a year growth projected in the High case is not unlike the record of 1965 to 1974.

In the High scenario the main impetus for the faster growth of Middle Income countries comes from the postulated improvement in the international trade environment, while the larger flows of concessional assistance assumed in this case would have a strong positive impact on the growth of Low Income countries. The variation in growth increments across Middle Income

17. Growth and Levels of Gross Domestic Product Under Alternative Scenarios

	Average Annual Growth Rates, 1980-90 (percent, at 1975 prices)						Gross Domestic Product Per Capita (1975 US dollars)			
	Gross Domestic Product			Gross Domestic Product Per Capita			1975	1990		
	Base	High	Low	Base	High	Low		Base	High	Low
Low Income Countries	4.9	5.9	4.3	2.7	3.5	2.0	147	211	232	200
Africa	3.8	4.8	3.6	1.0	1.9	0.7	146	165	181	160
Asia	5.0	6.0	4.4	2.8	3.8	2.2	148	219	240	206
Middle Income Countries	5.8	6.8	4.9	3.4	4.3	2.4	950	1,476	1,622	1,354
East Asia and Pacific	7.6	9.3	6.4	5.6	7.1	4.3	582	1,399	1,638	1,258
Latin America and Caribbean	5.7	6.5	4.6	3.2	3.9	2.1	1,103	1,632	1,756	1,471
Middle East and North Africa	5.5	6.3	5.0	2.9	3.6	2.4	823	1,234	1,325	1,173
Sub-Saharan Africa	4.4	5.3	3.7	1.4	2.2	0.7	544	630	683	586
Southern Europe	5.4	6.5	4.7	4.2	5.2	3.4	1,808	3,122	3,463	2,907
All Developing Countries	5.6	6.6	4.8	3.3	4.2	2.4	499	773	849	712
Industrialized Countries	4.2	4.9	3.5	3.7	4.5	3.1	5,865	9,999	10,747	9,381
Capital Surplus Oil Exporters	5.0	6.1	4.6	2.2	3.2	1.7	6,192	8,439	9,332	8,049
Centrally Planned Economies[a]	4.2	..	..	3.4	..	..	2,560	4,351	..	..

[a]East European centrally planned economies only.

regions reflects differences in their export prospects and capabilities and in the extent to which their debt situations at the beginning of the projection period permit additional borrowing to facilitate import growth. Under the Low scenario, the outlook would be particularly bleak for the Middle and Low Income countries of Sub-Saharan Africa: per capita output would increase by less than 1 percent a year. In all developing countries the contrasts between the High and Low scenarios are particularly strong in regard to the growth of industry, since the availability of imported inputs and the fast growth of demand are crucial to the growth of this sector.

Table 17 also shows the effects that the different growth paths would have on GDP per person in 1990. It is sobering to note that even in the High scenario, after ten years of vigorous economic expansion in developing countries, average income per person in these countries would be less than a twelfth of that in industrialized countries; in Low Income countries the proportion would be less than a fortieth. Even making necessary allowances for differences in consumption patterns and purchasing power, it is clear that massive disparities in living standards will persist among the nations of the world. Even with substantial external assistance and a favorable international environment, the 1980s will only be one decade in the long process of development that will lift only a few of today's developing nations into the ranks of industrialized countries by the end of this century. Furthermore, the projections suggest that the present diversity in income levels among developing countries will continue: all three scenarios project a widening gap between the average incomes of Low and Middle Income countries.

Though the disparities among groups of nations are unlikely to be changed in a matter of a few decades, the welfare of millions of people in developing countries nonetheless depends on choices to be taken now. By 1990, the outcomes of the High and Low scenarios represent very substantial differences in living standards. These differences underline the urgency of international and domestic policy actions to improve the environment for international trade and capital flows. Without such action, it is not difficult to foresee conditions in developing countries that are even worse than those projected here. Slow growth and protectionism in industrialized countries could compound one another and have even worse effects on these countries' economic health than in the Low scenario. The more dismal trends in world trade and exports from developing countries would imply correspondingly worse consequences for these nations' debt servicing capacity and capital inflows, thus reducing imports and economic growth to levels below those projected in the Low case. Such a deterioration in the international environment could trigger inappropriate

policy actions or delay reform in developing countries, causing further setbacks in their development. The resulting stagnation in developing countries could limit the growth of a particularly buoyant market for exports from industrialized countries, and aggravate recessionary conditions and low productivity growth in these countries. The maintenance of a liberal international environment is a need shared by all countries. This need emerges even more clearly from an assessment of the effects of different growth paths on the dimensions of absolute poverty in the world.

Implications for the Alleviation of Poverty

Last year the *World Development Report* estimated that 600 million people could be living in absolute poverty at the end of the century if growth in developing countries continued at the rates envisaged in the Base scenario. Table 18 presents estimates of the numbers of people in absolute poverty in the year 2000 if the developing economies grow at the rates envisaged in the three scenarios. Estimates of the future extent of poverty are even more impressionistic and subject to error than the projections that were outlined above, but the variations that would be associated with differences in economic growth rates can be projected with somewhat greater confidence. These variations are substantial: the projections indicate that there would be over 700 million people living in absolute poverty in 2000 if developing countries were to grow at the rates projected in the Low case, whereas their numbers would be approximately 240 million fewer if growth were to be accelerated in line with the High scenario.

Improvements in the distribution of income could make a further significant contribution to the alleviation of absolute poverty. The above projections assume that, in line with past trends, approximately three-fourths of the increase in aggregate income would accrue to the top 40 percent of income recipients. With very strong redistributive policies in developing nations, the share of this group in increments in national income might be reduced to about 60 percent. If such improvements in income distribution were achieved together with the rapid growth rates of the High scenario, the number of people remaining in absolute poverty by the year 2000 could be reduced to between 300 and 350 million, or less than 10 percent of the total population of developing countries. Such favorable conditions could also help to lower fertility rates more rapidly than otherwise, and this should lower the numbers in absolute poverty somewhat further.

18. Levels of Absolute Poverty Under Alternative Scenarios, Year 2000

	Base Scenario		High Scenario		Low Scenario	
	Percentage of Population	Millions of Absolute Poor	Percentage of Population	Millions of Absolute Poor	Percentage of Population	Millions of Absolute Poor
Low Income Countries	22	440	17	340	26	520
Middle Income Countries	10	160	8	130	12	190
All Developing Countries	17	600	13	470	20	710

Absolute poverty is not likely to be eliminated by the year 2000. Nonetheless, substantial progress could be achieved through a combination of higher growth, improved income distribution, and reduced fertility. These projections emphasize the need to seek every possible means to support the future growth of developing countries. The international and domestic policy issues that merit attention in pursuit of this task are the subject of ensuing chapters of this report.

Chapter 3: International Policy Issues

This chapter discusses three principal areas of international concern: the environment for international trade, the prospects for capital flows and external debt, and energy. As noted in Chapter 2, the issues in these areas are interdependent. A more liberal trade environment improves the export and growth prospects of developing countries, which, in turn, enhances their capacity to service debt and helps to strengthen the structure of international capital flows. As another example, sharp and unpredictable increases in the price of internationally traded petroleum, which increase the strain on the balances of payments of oil importing countries, can induce major industrialized nations to adopt unduly deflationary policies, slowing their own growth and that of developing nations, which rely on them as major markets for exports. Furthermore, in each of the three areas chosen for extended discussion, the developing and industrialized countries have strong, long-term mutual interests. The international community faces the challenge of undertaking informed policy initiatives to realize these mutual interests and to protect them from ill advised actions in pursuit of ephemeral gains.

The World Trade Environment

Trade in Non-fuel Primary Commodities

In 1976, non-fuel primary commodities accounted for 35 percent of the total merchandise exports of developing countries. Sixty-five percent of these primary exports were purchased by industrialized nations. As noted earlier, the recent slowdown in the growth of primary exports is attributable to sluggish growth in industrialized countries and to a wide range of factors inhibiting the supply capability of developing nations. Part of the supply problem results from the inadequate incentives and low investment priorities that have been accorded to primary production in developing countries. Over the past few years these policies have been reversed in an increasing number of nations and export dividends could soon be forthcoming.

Production and exports of primary commodities have also been hurt by large fluctuations in their international prices. Recent international decisions appear to have paved the way for the establishment of a Common Fund which, together with individual commodity agreements, could reduce the amplitude of price fluctuations and facilitate a steadier expansion of supply. The scale and scope of the Fund and the procedures governing its operation remain to be determined. Until this occurs and some operational experience is gained, it will be difficult to assess the effect of the institution on the volume and prices of primary commodity exports.

Non-fuel primary exports from developing countries would also benefit from improved access to markets in industrialized countries. While tariff and non-tariff barriers are low or non-existent for non-agricultural primary products, industrialized nations continue to maintain strong restrictions against agricultural commodities that compete directly with domestic farm products. Relaxation of these barriers would be of particular benefit to developing countries of Latin America, North Africa and Southern Europe. Some of the Southern European nations can, in any case, expect to obtain greater access to the European Community market through gaining membership in the Community over the next few years.

Protection in Manufactured Products: Trends and Consequences

While manufactures amounted to only 27 percent of developing country merchandise exports in 1976, they are the fastest growing category and the one that is likely to supply the bulk of total export growth in the future. It is, of course, true that exports of manufactures largely come from only a few countries, and that for many developing countries non-fuel primary commodities will remain the principal exports for a long time to come. However, the long-term growth of primary commodity markets is expected to remain slow; besides, the ability to expand mineral exports depends in part on chance. Thus the expansion of manufactured exports will be vital for most developing countries, however tenuous their current foothold in world markets.

The industrialized countries are the most important markets for the manufactured exports of developing countries, absorbing over three-fifths of the total in 1976. Developing countries themselves accounted for 31 percent and the centrally planned economies purchased only 6 percent. Thus, access to the markets of industrialized nations is a vital concern for developing countries. The rate of growth of industrialized economies is important in this context, first, for its direct effect on market size, and second, and even more important, for its indirect effects on the trade policies of these countries. Though opportunities for new suppliers are generally best in dynamic markets, the enormous size of the markets in question reduces the significance of this constraint. In 1976, developing countries accounted for only 10 percent of the total imports of manufactures by industrialized nations, and for less than 2 percent of their total consumption of manufactures. Even if developing countries succeed in expanding their manufactured exports at the rates projected under the High scenario, the corresponding ratios for 1990 are not awesome (Table 19). The more significant effect of slow growth and unemployment in industrialized economies on the manufactured export prospects of developing countries is through increased protection and other defensive measures to curb the rise in their market shares.

and textiles, where the increase in restrictive measures has been most severe. Good opportunities still survive outside the most affected sectors, but the consequences of present barriers and the continuing threat of further protectionist action constitute clear causes for alarm.

During the past year protectionist pressures in industrial economies have continued to be very strong, although in some countries they have met growing resistance. The results have been mixed. The favorable signs include:

- A determined effort by the United States and others to push the multilateral trade negotiations to a successful conclusion. These agreements could prove to be the most significant development of the past year.
- German-led resistance in the European Community that has restrained the spread of protection and cartelization to new industries.
- A tendency in the US, since mid-1977, to give "escape clause" relief to domestic producers through temporary increases in import tariffs, rather than new non-tariff barriers, though this trend has not continued in the most recent ruling.
- Determined action by France to permit adjustment of domestic industry to imports in such sensitive sectors as steel.
- Measures by Japan to facilitate imports.

19. Manufactured Exports From Developing Countries as a Share of Markets in Industrialized Countries, Under Alternative Scenarios
(Percentages)

	1976	1985			1990			Share in Market Growth 1976-90		
		Low	Base	High	Low	Base	High	Low	Base	High
In Imports	9.9	12.9	13.7	13.8	14.2	15.8	16.2	17.2	19.3	19.1
In Consumption[a]	1.6	2.6	2.9	3.1	3.4	4.0	4.6	6.2	7.2	8.0

[a]Consumption of manufactures here refers to the amount of manufactured goods demanded and supplied for all uses, estimated as gross output plus imports minus exports.

Discriminatory protection against the manufactured exports of developing countries is not new; it has been significant since the early 1960s. While the early measures were troublesome, they did not prevent 15 years of rapid growth. But the recent upsurge of protectionism, described in *World Development Report, 1978,* has had substantial adverse effects on developing countries' exports, particularly in clothing

However, there have also been adverse changes:

- In textile products, where high US protection was until recently the envy of European producing interests, stringent new quotas introduced by the European Community have encouraged US industries to raise their sights in turn. These industries are demanding and apparently obtaining even more non-tariff protection as a condition for supporting legis-

lation needed to complete the multilateral trade negotiations.

- The US has imposed restrictive "orderly marketing arrangements" against imports of color television sets from the Republic of China and the Republic of Korea.
- The European Community has renewed for another year its "anti-crisis" program in steel, including export restraint agreements with outside suppliers as well as minimum import prices. The evolution of protection in steel and steel products is of significance to developing countries, where steel is a fast growing industry with, in some countries, exceptionally low production costs.
- There has been particularly strong pressure for increased protection in the United Kingdom, with new "voluntary" restrictions that affect Japan above all.
- Subsidies to declining industries, such as shipbuilding, steel and textiles, have reached high levels, especially in some European countries. More general employment and regional subsidization programs are supporting such industries as clothing and footwear.

The outcome of the Tokyo Round of multilateral trade negotiations is also likely to be mixed. On the one hand, the agreements provide for a series of detailed codes relating to subsidies and countervailing duties, government procurement, standards, customs evaluation procedures and other matters, which are designed to constrain the deployment of such non-tariff barriers to trade. Depending on how these codes are implemented, developing countries could gain improved access to markets in industrial countries. The new codes also provide for mechanisms for surveillance and settlement of disputes among nations, though the role of developing nations in establishing and implementing these procedures, and hence their potential benefits from them, will partly depend on their readiness to sign the codes. The Tokyo Round agreements also recognize that developing countries face special problems and make some allowances for these: developing countries can be granted tariff preferences by industrial nations; they can establish preferential arrangements among themselves; and developing country signatories are generally exempted from the ban on export subsidies.

On the other hand, the Tokyo Round tariff cuts discriminate against developing countries. Duties on some product categories of particular interest to these countries—for example, textiles and footwear—are either being exempted from cuts or are being reduced much less than other tariffs. Furthermore, there is a threat that a proposed new code on "safeguards" could legitimize discriminatory restrictions against successful exporting nations. Another significant problem is that in order to gain legislative approval of the overall package, additional protection may be granted to certain producing interests in industrial nations. Such additional protection is most likely in products such as textiles, steel and sugar which are of special importance to developing countries. Finally, and perhaps most important for developing nations, the Tokyo Round negotiations have not addressed the reduction of existing quantitative restrictions, such as those on textiles, clothing and footwear.

Increased protection in industrialized countries reduces the export opportunities of developing countries. However, it is important to keep the effects in perspective. While the adverse implications for exports of textiles, clothing, footwear and steel have been noted, overall, the potential for growth in the volume of developing country manufactured exports is still good. It is noteworthy that those developing countries against which protection has been principally directed continue to expand their exports faster than others, even though their export levels are already high. The worst result of the increased protectionism may be a greater unwillingness on the part of many developing countries to risk more outward-looking trade policies, even where these are urgently needed. They could, therefore, suffer the consequences of inflexibility and low import capacity usually associated with inward-looking trade regimes—costs that are likely to be particularly high in an uncertain and protectionist international environment, where flexibility is at a premium. Partly for this reason, and partly because very low quotas are being imposed on new entrants in such obvious first industries as textiles and clothing, the adverse effects of heightened protection may be felt more by the poorer and less successful developing countries than by the most successful and visible targets.

Nor is protection in the long-term interest of the industrialized countries imposing it. Industrialized economies have much to gain from expanding trade with developing nations. This trade makes it possible to release workers from

low-skill jobs in declining industries and to create a large number of highly skilled and satisfying occupations. A recent study of the OECD countries reveals that this shift of labor follows naturally from the pattern of developing country purchases from industrialized nations. The study estimates that between 1976 and 1986 trade in manufactures with developing countries will lead to a net loss of almost 200,000 unskilled and semi-skilled production jobs in the OECD area, while the employment of skilled workers, managers and administrators will expand by an almost exactly equivalent amount. In the long run, labor displacement by imports from developing countries can substitute for the crucial role played by agriculture and immigration in many industrialized nations during the 1950s and 1960s—that is, as a source of new workers for more dynamic economic sectors. The data in Table 20 demonstrate the importance of developing nations in stimulating the expansion of industrialized country exports in high productivity sectors such as machinery, transport equipment and chemicals, which make up 70 percent of the manufactured goods imported by developing countries from the industrial economies. Protection reduces the import capacity of developing countries and damages the growth prospects of these export sectors.

Low-cost manufactured imports from developing countries help to hold down price increases and increase the purchasing power of consumers. A 1978 survey of all consumer goods except food and automobiles, sponsored by US retail organizations, found that goods imported from Asia and Latin America were, on average, sold for 16 percent less than domestically made products of similar quality. Furthermore, these imports were of greater importance in the expenditures of families with below-average incomes.

Much of the impetus for protectionist action stems from concern over the employment effects of trade with developing countries. It is important to place these concerns in perspective. In one sense, the problem of unemployment is a necessary corollary of the benefits from trade, which come, in part, from the release and temporary unemployment of some factors of production. Compared with other causes of unemployment, labor displacement through trade has the advantage of being almost instantaneously offset through the increase in demand for exports created by that trade. A number of analyses of the consequences of balanced expansion in trade in manufactures with developing countries have been carried out, including studies for Belgium, France, the Federal Republic of Germany, the Netherlands, the US and the OECD as a whole. The estimates of employment implications range from negligible to small net losses. Moreover, these and other

20. Manufactured Exports From Industrialized Countries to Developing Countries, 1970-76
(Percentages)

	Product Composition (at current prices)		Shares of Industrialized Countries' Exports Going to Developing Countries (at current prices)		Average Annual Real Growth Rate
	1970	1976	1970	1976	1970-1976
Machinery and Transport Equipment	53	59	29	36	10
Non-Electrical Machinery	(24)	(24)	31	37	8
Transport Equipment	(18)	(22)	26	34	10
Electrical Equipment	(11)	(13)	39	37	15
Chemicals	13	12	30	29	7
Iron and Steel	8	7	24	29	6
Other Manufactures	26	22	21	24	7
All Manufactures	100	100	26	31	9

Note: Totals may not add due to rounding.

Sources: *Statistics of Foreign Trade, Series C: Trade by Commodities, Market Summaries: Exports*, Vol. 1, Jan.-Dec. 1970, and Vol. 1, Jan.-Dec. 1976 (Paris: Organisation for Economic Co-operation and Development); *United Nations Yearbook of International Trade Statistics, 1977* (New York: United Nations, UN Statistical Office); *Networks of World Trade, By Areas and Commodity Classes, 1955-76* (Geneva: General Agreement on Tariffs and Trade, Studies in International Trade, No. 7, 1978); and *United Nations Monthly Bulletin of Statistics*, March 1979 (New York: United Nations, UN Statistical Office).

studies emphasize the very limited significance of imports from developing countries in displacing jobs in import-competing industries, in comparison with other factors such as technological change and productivity growth. Indeed, protection against developing country imports has sometimes accelerated the adoption of labor-saving equipment in the protected industry and undermined the objective of preserving jobs. Furthermore, to the extent that unemployment exists because of governmental fears about inflationary pressures, a protectionist policy can worsen the problem by reducing the mobility of productive factors, and thus exacerbating bottlenecks and shortages at a given level of aggregate demand in the economy.

Curbing Protection and Adjusting to Imports

Despite the strength of the economic arguments against it, protection retains some appeal for governments for two principal sets of reasons. First, growth in imports from developing countries, like all other economic changes, imposes adjustment costs on certain groups in industrialized countries. Second, political factors influence the response to the challenge of adjustment. The pressures of import competition are concentrated on a small set of labor-intensive industries, some of which, such as clothing and footwear, are already depressed by slow market growth. As a consequence of historical and economic forces, these industries are often located in relatively depressed regions, where they offer low wages to their largely unskilled workers. Many of the employees are women who cannot readily move in search of better jobs because of family obligations. Faced with competition from developing countries, some firms have little choice but to seek protection if they are to survive, and if they do not, individual lives are disrupted and earnings lost.

Industrialized economies have handled much greater economic shifts in their recent past; for example, in several countries employment in agriculture more than halved between 1950 and 1970. The problem is that in the present context of relatively high unemployment, governments face strong pressures to adopt short-term palliatives. Even though imports displace relatively few workers, their visibility invites protection. Producers favor protection because it is the form of government assistance that entails the least direct government intervention; for governments, protection imposes no immediate fiscal burden. Those who lose from protection, such as consumers and export industries, are weakly organized in comparison with the interests seeking protection. Imports from developing countries are particularly vulnerable to political pressures for protection, as these nations offer little threat of retaliation.

If industrialized and developing countries are to realize, more fully, their strong mutual benefits from more liberal trade, steps must be taken to resist or reduce the protectionist pressures from those who fear the consequences of change. Four broad approaches offer promise for this purpose. First, it is essential to impose international restraints on the freedom of action of individual governments. These must include restraints on the use of various protectionist measures, and their effective surveillance. However, juridical restraints alone will not prevent action by sovereign governments in what is considered a crisis. Partly for this reason, it is essential and equally useful to mobilize domestic interests against protection and to educate the public that the "menace" from abroad is not the cause of unemployment problems. Third, and probably most important, it is necessary to promote a return to full employment and better overall economic performance in the industrialized world. While this issue is not considered further here, it is important to stress that policies aimed at improving the adjustment mechanism can only assist with this central aim, while a long-run policy of protection and defensive subsidization is likely to make its achievement more remote. Finally, it is essential to develop microeconomic adjustment policies to lower the social costs of transition and also to redistribute them. In this way, the overall functioning of the economy can be improved and the resistance to trade-induced change can be reduced.

The last three lines of action are all the more important since in one crucial area international agreements are unlikely to be completely effective in restraining protectionist actions by individual countries: the liberalization of non-tariff barriers cannot easily be forced on countries from outside. The protective effects of non-tariff barriers depend enormously on their qualitative details and the exact way in which they are administered. For this reason it is particularly desirable to reduce these barriers and, where some restrictions are deemed absolutely indispens-

able, to switch to more visible instruments such as tariffs.

In designing a better system of adjustment, it can be argued that the market mechanism itself is best equipped to bring about the efficient reallocation of resources, if only it is allowed to work. What is needed, therefore, is a policy that reduces the political resistance to change, which ultimately manifests itself as protection. One possible means of so doing is to compensate those directly affected. To diminish the political support for protection, any program of compensation needs to have a number of characteristics. First, those who are to benefit must be able to rely on the benefits, which entails clear and comprehensible guidelines and speedy administration. Second, compensation must be generous, approximating the private costs imposed on those who are denied protection. Third, the program needs to be seen as fair. Finally, the beneficiaries should probably include all, or at least most, of those who bear major losses and have considerable political power, including owners of capital.

These conditions are not readily satisfied. Thus, any program based on a firm-by-firm examination of the costs imposed by what has already happened tends to suffer from inevitable delays, as well as a certain arbitrariness in eligibility criteria and their application. A possible solution is to certify those employed in whole industries as potentially eligible for compensation, perhaps in connection with petitions for emergency "escape clause" protection or with decisions to eliminate existing import restrictions on specific products. Providing adequate compensation and defining the beneficiaries pose significant practical problems. Virtually any financially feasible program of compensation is likely to be limited to those who leave the industry; in contrast, protection benefits those who stay. Lump sum payments could potentially be given to workers who leave their firms, or whose plants close, based on their age, seniority, and the like, while owners could be compensated according to the book value of their assets (allowing for inflation) as these are scrapped. Inevitably, there will be problems of fairness in setting limits on who will be compensated, not least in regard to industries supplying inputs to the affected industry, and in compensating people who would have left the industry anyway, while not compensating those who stay. Finally, whatever the political justification for compensating owners of capital, it may be felt that it is their function to anticipate economic developments. For that reason, it may be desirable to limit the sums granted and the size of eligible firms.

Existing compensation programs have had mixed results. The US trade adjustment program is perhaps the most interesting example. It provides the bulk of its benefits in the form of payments to workers who have lost their jobs in import-affected firms. However, the payments do not provide full compensation. In addition, they create a disincentive to rapid reemployment, since they are not in lump sum form but depend on the time spent unemployed. Benefits to firms are provided only for modernization or restructuring rather than for closure—a feature which may postpone some necessary exits. Furthermore, firm-by-firm examination of injury tends to cause delays. Other countries have assisted those employed in industries designated for support and structural adjustment in the face of economic changes. Examples are the United Kingdom's Cotton Industry Act of 1959, and that part of the programs of the European Coal and Steel Community which consisted of help to displaced coal miners. In the former case, owners of capital were compensated for closures with some success. However, as with almost all programs that focus on specific industries, there was a certain confusion of purpose, part of the aim being to modernize and revitalize the industry, which proved rather difficult to achieve. So far, programs for compensation have had only limited success in blunting the political pressures for increased protection.

A second and fully compatible approach to adjustment policy consists of attempts to lower the social cost of adjustment, largely by reducing the period during which displaced productive factors are unemployed. One method is to give direct assistance for the creation of new activities in communities hard hit by plant closures or large layoffs. Successful programs have been organized in the US by the Defense Department's Office of Economic Adjustment, which was established to provide help to communities adversely affected by the closure of military bases. More than 200 communities were assisted between 1961 and 1975. In the Federal Republic of Germany, after Volkswagen's layoffs following its losses in 1974, the govern-

ment provided assistance to encourage new activities in the affected region. Looking at wider regional policies, efforts to help backward regions should focus on increasing the supply of skilled labor and not just that of physical capital. Among economywide measures, training and retraining programs, especially on the job, seem to be a successful approach. A recent evaluation found high returns from programs under the United States Manpower Development and Training Act; of particular interest are the exceptionally high benefits to females, who are apt to make up a large proportion of employees in industries that are vulnerable to imports from developing countries. The Swedish National Labor Market Board estimates that 90 percent of its trainees obtain jobs within six months.

Yet another set of policies consists of removing obstacles to mobility, such as non-transferable pensions, rent-controlled housing and losses on owner-occupied dwellings. The last has been a feature of the US Defense Department program mentioned earlier. Firms can be helped by encouragement to locate labor-intensive activities overseas, either through direct foreign investment or subcontracting; this is a part of the Netherlands' adjustment program. If they are to take advantage of such inducements, firms need to be assured of security for their foreign investment. This needs inter-governmental negotiation. Finally, the dynamism of the entire economic system is absolutely crucial. Not only does this demand success with macroeconomic stabilization policy; it also depends upon the rapid development of new and vigorous industries. Apart from general support for research and development, which is characteristic of most industrialized country governments, Japan has been particularly successful thus far in picking the "winners" of the future.

It is important to recognize here that much of what is currently referred to as adjustment assistance is really strongly defensive. Much existing manpower policy consists of subsidizing declining industries, and the same is true of industrial policy. Furthermore, existing investment subsidies in poor regions often lead to the concentration of just those industries most vulnerable to competition from developing countries.

A third approach to adjustment policy consists of temporary protection or direct support for vulnerable industries, either to slow their decline and thus ease the process of adjustment, or to provide a "breathing space" and assistance for modernization and re-equipment in order to make the industry internationally competitive. The goal of slowing down the process of adjustment is a reasonable one, but it has proved very rare, in practice, for protection to major industries to be short-lived. More commonly, the "temporary" protection has been used for new investment in the hope, frequently unfulfilled, of restoring competitiveness. Subsequently, there has been strong pressure to renew and extend protection to make these further investments viable. The textile and clothing industries exemplify this tendency to convert short-term relief from import competition into permanent protection. An alternative strategy is deliberately to restructure an existing industry in accordance with a given plan, often negotiated among the various affected parties (other than consumers). While this approach could conceivably facilitate adjustment, experience from a number of industrialized nations has revealed some severe problems: bringing firms and employees together to develop an industrial plan is apt to engender a well-organized plea for protection; if substantial parts of the industry are unviable, they generate strong pressures for a significant commitment of subsidized funds to pursue the elusive objective of restoring their competitiveness; and lastly, within a market economy any industrywide plan tends to be difficult to administer and to become rapidly outdated. Re-equipping firms works best where they are well managed, and have strong markets rather than declining ones.

This review of adjustment policies suggests some tentative conclusions. First, programs of adjustment assistance are likely to be more effective if they work together with market forces, rather than when they attempt to swim against their tide. Second, assistance in finding alternatives for affected workers and communities is more likely to succeed than programs designed to support declining industries. Third, the efficacy of adjustment programs hinges on the details of their design and implementation. Finally, adjustment assistance can only be expected to supplement and not to substitute for general economic policies that promote rapid growth and high employment, and thus create overall conditions that facilitate adjustment to imports from developing countries.

Developing Countries' Trade With One Another and With Centrally Planned Economies

If protectionism in the industrialized countries were to get still worse, are there ready alternatives? One possibility is more rapid expansion of inter-developing country trade. This trade has been buoyant in recent years. Brazil now trades more with other developing countries than with the United States, and India's exports to developing countries are increasing faster than its exports to the industrialized nations. Trade in manufactures among developing countries has increased rapidly, roughly keeping pace with their manufactured exports to industrialized countries. This has been an impressive accomplishment, since the expansion has involved chipping away at the numerous obstacles, including protective and institutional barriers and weak marketing connections, on many fronts at once. Most of these manufactured exports go from more to less industrialized developing countries; only about one-fifth is traded among countries at similar levels of industrial development. The products exported are typically characterized by substantial economies of scale in production, have demanding skill and capital requirements, and come from industries established mainly to supply local markets. In these respects this trade contrasts with many of the typical labor-intensive exports to richer countries.

Little of the trade in manufactures among developing countries depends on regional integration involving exchanges of protection, preferential tariff treatment, or joint industrial projects: as Table 21 shows, only about one-sixth of this trade takes place within Latin America and Africa, the only two regions where these arrangements have been significant in the past. Although a great deal of the trade taking place under regional arrangements is likely to have occurred anyway, the benefits from judiciously designed regional trading arrangements should not be underestimated.

It is the developing countries' import regimes and export capabilities that largely determine their potential both as markets for, and suppliers to, one another. The expansion of this trade tends to be closely related to their overall export performance, since export earnings largely determine the capacity to purchase imports, including those from other developing countries. Furthermore, many products can only be sold to, or bought from, industrialized countries. Thus, trade with other developing countries should be seen as a complement to trade with industrialized countries, and not as a substitute for it. Excessively inward-looking arrangements made in a quest for "collective self-sufficiency" pose a danger of technological backwardness and the loss of valuable trading opportunities. However, within a satisfactory international environment, inter-developing country trade can be expected to grow rapidly and should, in the process, weaken such commonly cited barriers as costly shipping and inadequate institutions. One kind of institutional assistance could be especially helpful: the recent growth of capital goods exports from the more advanced developing countries to the less

21. Trade in Manufactures Among Developing Countries, 1976

From \ To	Destination of Manufactured Exports (percentage of total)						Total Manufactured Exports Traded Among Developing Countries (billion current US dollars)
	East and South Asia	Latin America and Caribbean	Middle East and North Africa	Other Africa	Southern Europe	All Developing Countries	
East and South Asia	26.6[b]	2.3	11.8	5.5	1.3	47.6	9.0
Latin America and Caribbean	0.4	13.9	0.3	1.0	0.6	16.1	3.1
Middle East and North Africa[a]	0.9	0.2	7.6[b]	0.2	0.4	9.3	1.8
Other Africa	0.4	0.4	0.5	3.0	0.5	4.8	0.9
Southern Europe	2.4	4.9	7.2	5.0	2.8	21.2	4.2
All Developing Countries	30.7	21.7	27.4	14.6	5.6	100.0	19.0

Note: Capital surplus oil exporters are included with developing countries in this table, while trade in manufactures excludes SITC 9. Totals may not add due to rounding.

[a]Includes the capital surplus oil exporters; excludes Algeria and Morocco which are counted in "Other Africa".

[b]Includes substantial re-exports of goods manufactured elsewhere.

Sources: Computed from *United Nations Yearbook of International Trade Statistics*, 1977, Vol. 1, Table B (New York: United Nations, UN Statistical Office), and *United Nations Commodity Trade Statistics*, Series D (New York: United Nations, UN Statistical Office) for individual countries.

developed ones could be further encouraged by expanded export credit and insurance facilities in the exporting nations.

Centrally planned economies buy only 6 percent of the developing countries' manufactured exports, and although both groups would benefit, trade between them is unlikely to expand dramatically. Given their current policy of buying technology from leading industrialized countries, their strained payments situations and growing foreign debts, centrally planned economies are likely to be more important as competitors to developing countries in the industrial world than as their trading partners. In fact, much of the recent protectionism in the industrial nations of Western Europe has been aimed strongly at the centrally planned economies of Eastern Europe. Concern over these countries' ability to reduce their export prices artificially has contributed to this protectionism. In the decades ahead, the People's Republic of China could become a significant source of competition for the developing countries in industrialized country markets for labor-intensive products.

Priorities for International Action

Much of what matters most, in halting and rolling back protection, can only be achieved within individual industrialized countries and the European Community. Nonetheless, actions at the international level can play a valuable complementary role. The emerging results of the Tokyo Round help to show the extent of what can be achieved in the face of strong protectionist pressures. It will now be necessary to push hard to turn these results to the advantage of the developing countries, and all nations, by implementing the new codes and procedures so that they exert a strong positive influence, and by building up a body of case law, precedents and procedures that will effectively stand in the way of abuses. The process of implementation offers significant potential for strengthening the international machinery for surveillance, enforcement and the settlement of disputes. Trade barriers outside, and contrary to, the framework of the General Agreement on Tariffs and Trade need to be tackled. There is an urgent need for a moratorium on further trade restrictions affecting the export prospects of developing countries. In addition, efforts at negotiating reductions in existing non-tariff barriers merit high priority.

Further efforts could be made to clarify and agree on the process of "graduation" whereby special tariff treatment, privileges and immunities from international trade rules presently granted to developing countries can be progressively reduced as countries develop. For the nations affected, pressures to meet new standards can reinforce the case for desirable but difficult policy shifts. Such shifts in policy can be induced and aided by guarantees of improved market access and the provision of additional capital flows to ease the foreseeable strains on the balance of payments. With the progressive graduation of some developing nations, those left behind should benefit from a more exclusive status.

Efforts also need to be made to improve the Multi-Fibre Arrangement and liberalize the associated trade barriers in textiles and clothing. In these industries, after more than 15 years of bilateral quota protection against developing countries, the system appears too entrenched to be quickly removed or allowed to lapse. In these circumstances, attention ought to be directed toward revising and liberalizing non-tariff barriers so as to minimize their damage to the poorer and less advanced of the developing countries. What is most needed here is assurance of market access over a long period, up to quite substantial export levels, for what are now the less industrialized developing countries, in order to reopen labor-intensive manufacturing for export as a potential path of development to countries that need it most. Today most of the textile imports and almost all of the clothing imports from developing countries come from the more industrialized of the developing countries; improving market access for the others would carry little immediate threat of a surge of imports and would not require rapid structural adjustment in importing countries. Given the spread of textile quotas under a bilateral system—European Community quotas or equivalent arrangements now extend to over 35 developing countries and threaten even Lomé partners—and the great difficulties encountered in rolling back non-tariff barriers in agriculture, where they have proliferated as well, it is also crucial to avoid the creation of any similar sanctioned system of barriers in other industries such as footwear or steel.

External Debt and Capital Flows

The rapid growth in the aggregate indebtedness of developing countries after 1973 led to

22. Developing Countries: Medium- and Long-term Debt Outstanding and Disbursed at Year-end, 1970-90
(Billion current US dollars)

	1970	1977	1985	1990
To Private Creditors	32	155	438	771
Low Income Countries	2	10	16	19
Middle Income Countries	30	145	422	752
To Official Creditors, including Multilateral	37	104	302	507
Low Income Countries	15	39	108	183
Middle Income Countries	21	66	194	324
Total	68	258	740	1,278
Total at 1975 Prices	113	231	348	449
Gross International Reserves	22	103	266	441
Low Income Countries	3	11	23	38
Middle Income Countries	19	92	243	404
Note:				
Reserves in Months of Import Coverage[a]	3.0	4.0	3.3	3.1

Note: Totals may not add due to rounding.

[a]This measure expresses gross international reserves in terms of the number of months' imports they could pay for, with imports at the average level for the year in question.

a heightened concern about their debt problems. Between 1973 and 1977 their medium- and long-term debt outstanding and disbursed increased at 21 percent a year in current prices. But the attention paid to this rapid growth obscured the fact that the developing countries' outstanding debt had also doubled in the period 1969-73, and that in real terms the debt grew considerably more slowly in 1973-77 than in 1969-73. Medium- and long-term debt outstanding totaled US$258 billion at the end of 1977. In addition, the developing countries had outstanding short-term obligations of US$50-60 billion and outstanding International Monetary Fund (IMF) credits of about US$8 billion. Because of the rapid growth in private lending, the proportion of debt owed to private creditors increased from 47 percent in 1970 to 60 percent in 1977. Ninety-four percent of the debt owed to private sources at the end of 1977 was held by Middle Income countries (Table 22).

Despite the increase in aggregate debt, various indicators of indebtedness have remained acceptable. For the Middle Income countries as a group, debt service as a percentage of exports did not increase significantly between 1970 and 1977, even though there were substantial increases in some country groups (Table 23). Most of the private debt was owed by relatively few countries, most of which had good growth prospects and reasonably sound economic management. A somewhat belated recognition of these facts, combined with the reduced current account deficits of the developing countries in 1976 and 1977, helped to allay concerns about the aggregate indebtedness of developing countries. However, some countries, such as Peru, Sudan, Turkey, Zaire and Zambia, have encountered significant problems of debt management in this period. In some other nations such as Brazil, Indonesia, Mexico and the Philippines, increased borrowings have resulted in higher indebtedness and debt service ratios but have caused no significant liquidity problems. The increases in debt service ratios projected for some groups of Middle Income countries indicate the growing challenge that will confront these nations in managing large flows of external capital and avoiding liquidity shortages.

In addition to the debt problems of individual countries, the principal concerns that have emerged in recent years with respect to inter-

23. Middle Income Countries: Debt Service Ratios, 1970-90

	As Percentage of Exports of Goods and Services				As Percentage of Gross National Product			
	1970	1977	1985	1990	1970	1977	1985	1990
East Asia and Pacific	6.5	5.7	11.6	10.4	2.5	3.1	5.6	5.1
Latin America and Caribbean	15.9	20.9	24.1	24.2	2.5	4.3	4.8	4.7
Middle East and North Africa	10.3	6.7	12.7	15.8	2.0	2.7	4.9	5.7
Sub-Saharan Africa	5.9	8.5	19.9	27.6	1.5	2.9	6.1	7.8
Southern Europe	8.2	13.1	23.6	23.6	1.1	2.5	4.7	5.0
All Middle Income Countries	10.2	11.8	18.3	19.2	2.0	3.3	5.0	5.3
Note:								
Percentage Shares of Total Debt Service								
Repayment of Principal	70.7	68.2	74.0	74.6				
Interest	29.3	31.8	26.0	25.4				

national capital flows are the worsening maturity structure of debt, the prospects for the continued growth of commercial lending, the efficiency with which the international monetary and financial system handles liquidity crises, the prospects for enhanced quantity and quality of Official Development Assistance flows and the special needs of the poorest countries. In broad terms, the principal concerns of many Middle Income countries relate to possible liquidity problems; the prospects for commercial borrowing and the mechanisms for handling liquidity crises are particularly relevant to their situation. The key issue for Low Income countries is the adequacy of real resource transfers, although some of these nations may also undergo liquidity strains.

Sources of Instability

Liquidity crises occur when a country's external debt situation worsens as a result of external factors or domestic policy failures or a combination of both, which can then lead to reactions that compound the problem and engender the need for debt reorganizations and painful adjustments in domestic economic policies. Various sources of instability can spark the initial worsening of a debt situation. These include a decline or slackening in the growth of foreign exchange earnings, due for example to fluctuations in prices or volumes of commodity exports, increased barriers in export markets, or declines in workers' remittances. Sharp increases in foreign exchange expenditures are another source of instability. These may result from changes in the prices or volumes of imports of basic food and fuel, bunched debt service payments, or fluctuations in interest payments on loans with floating interest rates. Domestic economic measures, such as overly ambitious government expenditure programs, or excessive recourse to short-term foreign borrowing to finance medium- and long-term development needs, are other frequent initial causes of instability.

In view of the varied causes, solutions to liquidity problems depend on a wide range of policies and institutional mechanisms. Nor can debt questions be handled in isolation, as they are inextricably linked to many other economic issues. In a broad sense, successful debt management calls for sound domestic economic policies and the fostering of mutually beneficial trade and financial links with industrialized nations. More specifically, a number of issues and measures should be considered by the international community, first, to forestall liquidity crises, or to reduce their frequency and severity, and second, to alleviate their effects when they occur.

The maturity structure of the medium- and long-term debt of developing countries has worsened during the 1970s, largely because of the increasing share of private debt, which typically has shorter maturities than official debt. As a result, nearly 50 percent of the developing countries' total debt outstanding, including that undisbursed, at the end of 1977 was scheduled to be repaid during the five years 1978-82. The share of private debt to be repaid by 1982 was considerably higher, at about 70 percent. Of official debt outstanding, only 24 percent was scheduled to be repaid by 1982, with another fourth to be repaid during the subsequent five years.

These maturity structures imply that the Middle Income countries, which account for most of the borrowing from private sources, face a heavy burden of debt repayment in the next few years. During 1978, this bunching of repayment obligations was relieved to some extent through voluntary refinancing of loans arranged in earlier years. Because the main borrowing countries in this group have reasonably strong long-term growth prospects, their capacity to service external debt over an extended period is not really at issue. What causes concern is the risk of temporary interruptions in debt service, which in some cases could be associated with rescheduling exercises. Most Low Income countries, by contrast, have more limited growth prospects and confront a more attenuated profile of debt service obligations, to predominantly official creditors. Both of these reasons would make it more difficult to enhance their debt servicing capacity through deferring current and near-term obligations to the late 1980s.

The concern about the maturity structure of external debt arises not because creditors will be unable to roll over the repayments of principal when they become due, but because the larger the proportion of debt that is subject to annual review and recommitment, the greater the danger that initial changes impairing a country's debt situation could trigger loss of confidence and a debt crisis. The concentration of private debt among debtors and creditors makes lenders sensitive to developments in the major borrowing countries. Seven countries (Algeria,

Argentina, Brazil, Indonesia, Mexico, Spain and Yugoslavia) accounted for over half the debt outstanding to private creditors at the end of 1977. Among US banks, about three-fourths of the total claims on developing countries are held by ten large money-center banks. For the developing countries, shortening maturity structures increase the degree of uncertainty with respect to future flows of capital. Lengthening the maturity structure of debt and achieving greater diversification among lenders and debtors remain desirable objectives in the efforts to strengthen the international financial system.

Last year's *World Development Report* noted another potential source of instability relating to capital flows, namely the uncertainty about the rate of growth of lending from private commercial banks. Diversification among lenders was identified as one trend which would enhance the outlook for stable growth in private lending. During 1977 and 1978, this trend has been strongly in evidence, with non-US commercial banks expanding their lending much faster than US banks. Whereas US bank claims on developing countries grew by only about 10 percent in 1977 and by a similar magnitude in 1978, reflecting such constraints as the adequacy of their capital base, portfolio concentration, and changes in the regulatory environment, total commercial bank exposure in developing countries is estimated to have increased by over 30 percent in both 1977 and 1978, with much of the growth coming from German and Japanese banks.

Aside from the general growth of international financial markets, the main factors that increased the interest of German banks in lending to developing countries in the 1970s were the strength of the German mark, the increase in German direct foreign investment, and the slackening of domestic demand for credit. German bank loans tend to be linked to exports, and untied general purpose loans are limited. The principal constraints on the future growth of German bank lending to developing countries are limits set by the banks on their exposure in individual countries; high portfolio concentration in external assets and profits; concerns about creditworthiness caused by recent debt difficulties in some developing countries; and the reluctance of some borrowers to accept loans denominated in marks. In Japan, after low activity in 1975-76, overseas lending began to surge in 1977 as a result of abundant liquidity, slack domestic demand for loans and some relaxation of restrictions on international lending. Japanese banks have limited their lending to a few prime creditworthy borrowers, because their international branch network is limited, and because of a desire to expand exposure cautiously. Although there may be some regulatory concerns and self-imposed limits on exposure in individual countries, the Japanese banks could continue to expand their lending to developing countries as they acquire greater experience and broaden their clientele. Swiss banks have a very limited exposure in developing countries, most of which is in short-term trade financing and correspondent banking; any large increases are considered unlikely.

A major impetus for the external borrowing by developing countries is the need for international reserves to cover normal foreign currency transactions, to cope with unforeseen fluctuations in foreign exchange receipts and obligations and, more recently, in countries such as Brazil, for use as a hedge against adverse developments in capital markets. As was shown in Table 22, between 1970 and 1977 the reserves of all developing countries increased by more than US$80 billion, which was equivalent to over 40 percent of the increase in their medium- and long-term debt outstanding.

Several aspects of this phenomenon are noteworthy. First, to the extent that the borrowings undertaken in the past year or two have been anticipatory in character, taking advantage of the relatively liquid state of international financial markets, the interpretation of recent growth in external debt needs to be modified. The overwhelming bulk of the reserves is held in the major money-center banks in industrialized countries. While carrying this additional liquidity may impose certain costs on the borrowing countries, it can hardly be argued that the additional debt used to finance reserve accumulation has lowered their debt servicing capacity. Second, although this major component of developing country borrowing does not weaken the national "balance sheet" for external finance, it does add to the need for recommitment or roll over of private loan funds. Third, though countries with a strong balance of payments and good growth prospects have managed to accumulate resources through borrowing from private sources at market terms, nations in less favorable circumstances have found it difficult, and sometimes impossible, to obtain general

purpose loans from private capital markets. Greater availability of IMF resources, whether in the form of increased access to the Fund's various facilities or through larger allocations of Special Drawing Rights, is important precisely because these resources supplement and complement those from private lenders.

International Initiatives

Uncertainties regarding the availability of commercial bank funds, the implications of worsening maturity structures of debt, and the growing reserve needs of developing countries all highlight the need of these nations for more stable and longer-term flows of development capital. Expansion in financial flows from multilateral institutions and official export credit agencies would improve the maturity structure and stability of overall capital flows. Recent measures to increase the resources of the IMF and proposals being considered to increase the capital base of the World Bank and other international financial institutions will augment the medium- and long-term resources available to developing countries.

However, among the official sources of financing presently available, there is a gap between the relatively short-term balance of payments accommodation provided by the IMF and the long-term project financing available from institutions such as the World Bank. The gap relates to the substantial, medium-term balance of payments support required by many developing countries to tide them over extended periods of economic adjustment to major changes in the international economic environment, such as those of the past few years. During the 1970s this gap has been filled largely by the rapid growth in private bank lending. Aside from their short maturity structure and potential instability, commercial loans are frequently not available in adequate volume and on appropriate terms to a significant number of developing countries. The Extended Facility of the IMF, launched in 1974, has helped to address this problem, but there are strong indications that more needs to be done. The scope for new initiatives remains significant.

Various other proposals that seek to enhance the transfer of capital to developing countries have been put forward in recent years. To buttress the chances of success of any such program, it would be desirable to ensure that the funds transferred under it are on better terms than they otherwise would have been, that the distribution of capital flows among developing countries is improved, that the funds can be disbursed rapidly, and that the existing structure of international capital flows is not weakened.

Some international discussions have already occurred on measures to increase the access of developing countries to bond markets in industrialized countries. Although still small in relation to their total capital needs, bond issues by developing countries in the Eurobond market and the industrialized countries rose from less than US$0.5 billion in 1970 to nearly US$5.5 billion in 1978. Most of the increase has been in the Eurobond market and in the national markets of Switzerland and, more recently, Japan. In general, industrialized countries have taken only limited action to provide preferential access to bond issues by developing countries. Some of the industrial countries regard their capital markets as sufficiently liberal already; others feel that giving preferential access to developing countries would not help, because bond sales essentially depend on investors' preferences; while some countries argue that their balance of payments situations preclude granting preferential access.

Proposals are being discussed to change the financing facilities available to compensate for sharp fluctuations in export earnings. Access to the Compensatory Financing Facility of the IMF was liberalized in 1975, since which time there has been a substantial increase in the use of the facility by developing countries. Further possibilities for liberalizing the facility include enlarging its scope to cover fluctuations in exports of services and in the costs of essential imports such as cereals; raising the maximum limits on compensatory drawings; and changing the method of measurement of export shortfalls so as more accurately to reflect the extent of the fluctuations around export trends. The enhancement of compensatory financing facilities, and the implementation of any new international initiatives that improve the maturity structure and stability of medium- and long-term capital flows, would also help to reduce the need of developing countries to hold expensive precautionary reserves.

The measures discussed above would improve the maturity structure and stability of capital flows to developing countries and help to forestall liquidity crises. But improvements are also desirable in the mechanisms and pro-

cedures to deal with such situations when they occur. Though the necessity for some change is now generally accepted by both creditors and debtors, their concerns and priorities differ. Developing countries consider the multilateral debt renegotiations through the Paris Club too limited in coverage, since they pertain to only part of the debt. The terms of repayment are considered to be too short, in most cases, and not sufficiently attuned to the specific circumstances of the borrowing country. The creditor countries view the Paris Club as *ad hoc* meetings to prevent imminent default threatened by bunched repayment obligations; their aim has been to provide temporary debt relief, rather than to negotiate a long-term adjustment of the debt burden. They also wish to keep debt renegotiations separate from the provision of concessional assistance. Finally, modifications of present practices would be complicated by the fact that an increasing proportion of developing country debt is owed to private sources, and no formal mechanism exists to renegotiate such debt.

In deciding the coverage and terms of debt renegotiations the medium-term prospects of individual countries ought to receive greater consideration than is commonly given at present. First, as in aid group consultations, Paris Club meetings could, as a matter of course, ask multilateral institutions to present a detailed evaluation of the medium-term prospects and needs of the country concerned. Discussions have recently been initiated on a proposal of this nature. Systematic assessments of medium-term prospects would serve both as a background for the renegotiations and also as a basic scenario against which the implications of different terms of debt renegotiation could be considered. This would permit, under the auspices of the present *ad hoc* mechanisms, the debt covered and its amortization and grace periods to be adjusted according to the expected balance of payments situation of the debtor country. Moreover, if it was considered warranted in the particular case, concessional terms of repayment could be negotiated to provide resource transfers through debt relief, as has been done for Ghana and Indonesia. Second, *bisque* clauses,[1] which were used for Indonesia in 1970, could be used more generally to provide for later adjustments in the agreed repayment terms if the evolving economic situation so warranted. Finally, in certain cases, there may be advantages to closer coordination between official creditors and commercial banks in debt renegotiation exercises. The present system of separate renegotiations with official and commercial creditors leads to long delays, resulting in protracted foreign exchange shortages and unnecessarily high costs in terms of forgone growth for the developing nations affected.

The Low Income countries and some of the poorer Middle Income nations will continue to rely primarily on Official Development Assistance for their external capital needs. Although the projected ODA flows are modest as a percentage of donors' GNP, they will still require early and substantial increases in commitments by the major donors. In recent years, there has been a marked increase in the concessionality of ODA, and during the last year various DAC members have announced debt relief measures for the least developed countries, including cancellation of outstanding concessional ODA debt, conversion of undisbursed concessional loans to grants and, in some cases, the provision of compensation in the form of grants or soft loans for debt service payments due. Detailed arrangements still have to be worked out in many of these cases and legislative approval will be required. Further efforts will also be needed if these debt relief actions are to add to the ODA that would have otherwise been available. In addition to increasing the flow of official resources, the share of such resources going to Low Income countries needs to be raised.

On occasion, disbursements of committed ODA project finance have been hampered, for a number of reasons, including the complexity of projects, especially in relatively new areas such as rural development and education, and, in some countries, limitations on absorptive capacity. Improvements in technical assistance and aid procedures can help to reduce such difficulties. Better coordination among different donor agencies could reduce competition for projects in the same sector and enhance the complementarity of resource flows. In bilateral aid programs, more program and sector finance, more finance for local currency expenditures, untying of aid, better technical assistance and streamlining of aid procedures in donor countries would all work to increase the rate of aid

[1] A "bisque clause" written into the Agreed Minutes of the debt renegotiations permits the debtor, under certain conditions, some agreed amount of further debt relief without cumbersome renegotiations.

disbursement. Such measures merit special emphasis for the least developed nations.

Aid from OPEC countries has been substantial, particularly since 1974. Net disbursements of concessional assistance by OPEC members amounted to 2.7 percent of GNP in 1975. Since then, the decline of OPEC aid as a share of GNP has reflected the reduction in the current account surpluses of these countries. Although the terms of OPEC aid are somewhat harder than those of DAC members, a much greater proportion of OPEC aid is untied. The distribution of OPEC aid has widened from a small group of recipient countries, and is increasingly being channeled through aid institutions that have been established in some OPEC nations. While general balance of payments support and the provision of oil on concessional terms—the dominant forms of OPEC aid in earlier years—continue to be important, there is a growing emphasis on project assistance. A striking feature of OPEC aid is the significant extent of cofinancing of projects with other bilateral and multilateral aid agencies.

Private Direct Foreign Investment

Net private direct foreign investment in developing countries was equivalent to about 15 percent of the net inflows of medium- and long-term loans between 1975 and 1977. During the 1960s, direct foreign investment had increased by only about 4 percent a year in real terms, reflecting the control of such flows by developing countries and regulations by some major industrialized nations. The growth of these flows accelerated temporarily in the early 1970s, because of the rapid economic growth and more pragmatic policies toward transnational firms in Middle Income countries, as well as the raw materials boom of this period. Between 1960 and 1976, France, the Federal Republic of Germany, Japan, the UK and the US accounted for more than 80 percent of the total flows. Nearly 40 percent of foreign investment during 1966-76 went to Latin America and the Caribbean, and about 25 percent to East Asian countries. Several developing countries, particularly in Latin America and East Asia, have begun to undertake direct foreign investment in other developing countries.

The character of links between private transnational firms and developing countries has been changing in recent years. First, equity participation is being gradually replaced by the use of loans and suppliers' credits. Second, direct managerial control by the parent company is being superseded by management participation, technical assistance agreements, production sharing and supply contracts. These changes have resulted partly as a response of multinational corporations to host country controls on foreign investment, and partly from the growth of competition from new suppliers, who are increasingly willing to design arrangements to suit host country requirements. The term "private direct foreign investment" as it is currently understood—equity participation by a foreign firm with an effective voice in the management of the enterprise—does not encompass these shifts. Consequently, information based on traditional definitions of equity participation tends to underestimate the role of transnational firms in capital flows to developing nations in recent years. More important, policies based on the traditional concepts would not address the new economic realities.

In devising policies to encourage foreign investment and to increase the flow of net benefits to the host country, a developing nation's overall economic policies are of crucial importance. Many case studies confirm that these, together with a country's economic structure and stage of development, are much more important in attracting foreign investment than are special incentives. The latter are costly and frequently ineffectual. Many developing nations deploy performance-oriented policies of control on foreign investment, for example by requiring foreign firms to use domestic inputs and labor, and controlling access to the local financial market. Sometimes such policies can have adverse effects on the host country, for example by creating a local labor elite. The effective implementation of these and other controls on foreign direct investment poses significant administrative burdens, which need to be periodically assessed and weighed against the benefits the controls are designed to secure. In the industrialized countries, where the bulk of foreign investment originates, policies which do not discriminate between domestic and foreign investment would normally be desirable and would help to deal with the different pressure groups involved. International institutions, such as the UN Conference on Trade and Development and the UN Center on Transnational Corporations, are engaged in articulating general rules of conduct, providing technical assistance for some developing nations, and encouraging

bilateral action on taxation agreements between home and host countries.

Energy

The Outlook for Commercial Energy

Global energy prospects have been extensively researched. Estimates of future demand and supply vary considerably, depending on the assumptions made about resource availabilities, economic growth, pricing policies, the responsiveness of energy demand and supply to changes in prices and incomes, and political and environmental factors. The projections in Table 24 should be viewed not as a forecast but rather as an illustration of the broad orders of magnitude involved. They assume that economies will grow at the rates assumed in the Base scenario and that reasonable conservation efforts will be undertaken. As indicated, after 1985, world demand for energy is likely to outstrip supply, adding to upward pressure on the price.

However, the increase in the real price of energy during the next decade, above present levels, need not be large, if sustained efforts are made to develop both oil and non-oil energy resources and to restrain demand for energy, and if there are no major production setbacks as a result of political disturbances or oil conservation policies. Several factors support this view. First, there are the possibilities for increased use of oil substitutes, particularly coal and nuclear power, and, in the longer term, there is potential for using resources such as shale oils, tar sands and solar energy. Second, increases in domestic energy prices and other types of energy conservation measures taken in the industrialized countries have slowed the growth of their energy consumption: prior to 1973, energy consumption had increased at about the same rate as aggregate output, whereas between 1973 and 1977 their energy consumption increased by only 3 percent, while their GDP expanded by about 9 percent. Third, increased international energy prices have made the exploration and development of energy resources much more profitable. Dramatic oil finds such as those in Mexico may be unlikely, but the prospects for more modest discoveries and increased exploitation of known resources are good.

The international energy balance is nonetheless likely to continue tight, and substantial concerns remain. Heavy dependence on foreign sources of supply makes the majority of countries concerned to ensure access to energy in the required volumes at reasonable prices and on an uninterrupted basis; short-run instability, marked by disruptions in supply or temporary increases in oil prices, can arise easily, as shown by recent events. As the principal source of

24. Commercial Primary Energy Balances, 1960-90

	Million Barrels a Day of Oil Equivalent						Average Annual Percentage Growth Rate			
	1976		1985		1990		1960-76		1976-90	
	Production	Consumption	Production	Consumption	Production	Consumption	Production	Consumption	Production	Consumption
Developing Countries[a]	26.5	16.8	41.5	27.3	51.3	38.4	6.7	6.7	4.8	6.1
(Net Oil Exporting Countries)	(20.0)	(4.2)	(28.4)	(6.9)	(32.8)	(9.9)	(7.2)	(6.9)	(3.6)	(6.3)
(Net Oil Importing Countries)	(6.5)	(12.6)	(13.1)	(20.4)	(18.5)	(28.5)	(5.2)	(6.7)	(7.8)	(6.0)
Industrialized Countries	46.5	69.8	61.0	91.5	70.7	109.7	2.6	4.1	3.0	3.3
Capital Surplus Oil Exporters	16.1	0.8	23.5	1.5	25.5	2.3	10.7	13.9	3.3	7.8
Centrally Planned Economies	37.9	34.4	54.7	52.1	66.7	64.3	4.4	4.3	4.1	4.6
Bunkers and Others	n.a.	5.3	n.a.	6.5	n.a.	7.0				
Total	127.0	127.1	180.7	178.9	214.2	221.7	4.5	4.5	3.8	4.1

Note: Primary energy here refers to coal and lignite, crude petroleum, natural gas and natural gas liquids, hydro and nuclear electricity, expressed in barrels a day of oil equivalent.

[a]Here, as throughout this report, the group of "developing countries" excludes only the capital surplus members of the Organization of Petroleum Exporting Countries. Thus, the energy balances of other OPEC members—Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Nigeria and Venezuela—are included in those for developing countries.

petroleum for many importing nations, OPEC production is the critical balancing factor, and hence changes in output in OPEC nations can significantly alter the global energy balance. Second, bringing new energy sources into production requires large investments with long lead times. Partly because of these long gestation periods, the decline in the share of oil in total world energy consumption is likely to be gradual, from 45 percent in 1976 to about 40 percent in 1990. Third, there are uncertainties on the demand side, the future economic growth of the industrialized countries being the most crucial factor. Small changes in their rate of growth can substantially affect world demand for energy. Finally, energy conservation policies in certain key oil importing nations have, so far, been weaker than desirable.

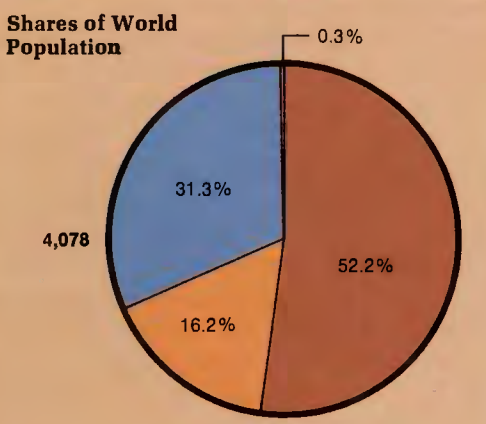
The energy problem over the next two decades should be seen as one of transition, in which countries need to adjust to higher energy prices and ensure that their incremental needs can increasingly be met from sources other than oil. World oil production is expected to peak around the end of this century. Actions are needed now to assure increased production from both oil and non-oil sources in the late 1980s and 1990s. Price and non-price measures are also required to control the growth of demand. All the major groups of countries have their own problems of transition. For the industrialized countries, the main issues lie in the conservation of demand, improvements in the safety of nuclear power and the development of synthetic fuels. For the OPEC countries, and other major oil exporting countries, the principal concerns include the determination of the rate at which to exploit their non-renewable resource, and the design of a development strategy that will ease the transition to a post-oil future. For the oil importing developing countries, the priorities are to explore and develop domestic commercial energy sources, to increase the efficiency of non-commercial and non-conventional sources, and to adjust to higher energy prices.

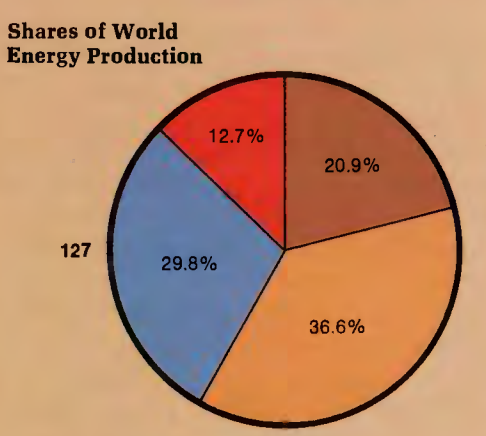
Though different groups of countries face different sets of transitional problems, virtually all nations share a strong interest in assuring that the transition is a smooth one. Oil importing nations need a stable and predictable supply. To the extent that the preservation of balance in the global energy market requires real price increases over the next two or three decades, gradual and predictable increases in oil prices would be more advantageous than sharp changes at unpredictable intervals. This would facilitate investment planning in alternative energy sources and permit orderly adjustments in the oil importing nations, even though the weaker and worst affected oil importing developing countries would nevertheless need special balance of payments support to permit phased adjustment to the price increases. Conversely, the health of the world economy, especially of the major oil importing industrialized nations, is important for maintaining a strong market for the oil sold by the petroleum exporting countries and for preserving the value of the key currencies in which the latter hold their financial wealth. The oil exporting nations constitute substantial markets for goods, technology and skills exported by industrialized and developing nations—elements that are necessary for the development of these oil nations.

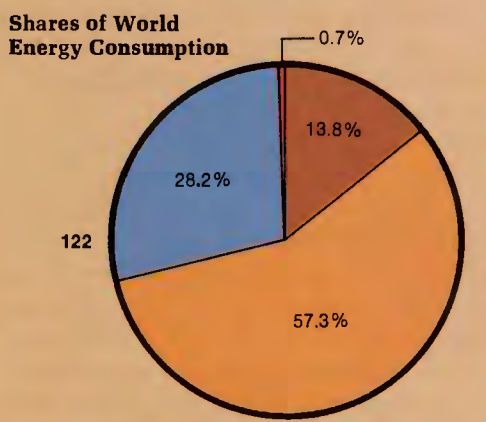
Industrialized countries dominate the energy market, accounting for more than a third of world production and more than half of world consumption (Figure 5). Energy production in these nations is expected to increase by about 3 percent a year between 1976 and 1990. Coal and nuclear power are each expected to account for about 40 percent of the anticipated production increases, with relatively modest overall increases in petroleum and natural gas production. Some of the major issues affecting the development of coal and nuclear power are environmental preservation, safety, and the uncertainties related to oil prices. These factors have resulted in long delays and cost overruns in nuclear power development—problems that are likely to be exacerbated by recent events in the US nuclear power industry, which have heightened the sensitivity to safety hazards and increased the costs of insuring against them. Increasing reliance on coal-fired electricity, including the conversion of existing oil-fired plants, poses additional problems, since coal can be costly to transport and inconvenient to handle, and, in Japan and Europe, coal will be progressively more costly to extract from deep underground mines. Non-conventional energy sources are unlikely to be quantitatively important in this century. Energy consumption in the industrialized countries is expected to grow more slowly than in 1960-73, partly as a result of the slower rate of economic growth and partly because of demand conservation. OECD

Figure 5

Population, Energy Production and Consumption, 1976







Note: Numbers beside pies indicate world totals. Population is measured in millions; energy production and consumption are in million barrels a day of oil equivalent. Percentages may not add to 100, due to rounding.

estimates indicate that with proven technology, considered economic at present prices, conservation measures could save 16-20 percent of the total consumption otherwise projected for 1985, with 40 percent of this conservation potential in the transport sector and about 30 percent each in the industrialized and residential-commercial sectors. Industrialized countries need to devote urgent attention to realizing as much as possible of this conservation potential, which is equivalent to half of the present oil production of OPEC countries. Since the US consumes about 25 percent more energy per unit of GDP than Western Europe, the scope for conservation is likely to be greater in the US.

OPEC countries produce about one-fourth of the world's commercial energy. Consequently a 5 percent change in the net energy requirements of the non-OPEC world would imply a 20 percent change in OPEC production to meet the needs. For the capital surplus OPEC countries and major oil exporters such as Mexico, rates of production will be determined partly by non-economic considerations and partly by the expected real rates of return on financial assets. In view of the oil conservation policies being followed by some of the OPEC countries, and the oil reserve situation and technical constraints on increasing production in others, OPEC oil production is likely to rise much more slowly than in the past. These countries are likely to increase their production and domestic use of natural gas. Like other countries, OPEC members need to channel more public resources to the exploration and development of additional energy resources. Private investment in exploration, and the ratios of proven reserves to production, are declining in some of these countries, while their domestic consumption of oil is rising.[2] For the long run, as is argued in Chapter 8 below, all oil exporting countries need to develop the non-oil sectors of their economies, to maintain the growth of income as their oil reserves are depleted.

Energy production in centrally planned economies, which account for about 30 percent of world production, is expected to grow more slowly than in the past, primarily because of the slower growth of oil production expected in the USSR, where a growing proportion of output

[2]Oil reserves are considered proven when exploratory drilling has confirmed the existence of measured quantities of oil that are recoverable from known fields at current prices and costs using presently available technology.

increases will have to come from smaller oil fields in more difficult terrain. This slowdown is likely to be only partly offset by rapid growth of coal production in the People's Republic of China and of natural gas production in the USSR. As a group, centrally planned economies are expected to remain marginal exporters of energy.

Developing countries account for a relatively small share of the world's production and consumption of commercial energy. The growth of energy consumption in these countries slowed down to an average of about 5 percent a year during 1973-76, though it was typically faster than this in oil exporting developing countries. Electricity consumption continued to increase rapidly, with its share in total energy consumption rising from 16 percent in 1960 to 25 percent in 1976. In the years 1976 to 1990, the developing countries' energy consumption is expected to grow faster than that in industrialized countries, reflecting their higher expected economic growth rates and rising levels of industrialization and urbanization. Moreover, commercial energy is likely to substitute increasingly for non-commercial energy in developing countries. Their share in world energy consumption is expected to rise from under 14 percent in 1976 to about 17 percent in 1990. Although the developing countries as a group will remain net exporters of energy, oil importing countries are projected to require increasing amounts of imported energy.

The Base case projections outlined in Chapter 2 assumed that the real price of traded energy would remain constant at its average level of 1975-78. If the real price of internationally traded energy is 30 percent higher in 1990 than it was in 1975-78, then the additional annual burden on the balance of payments of oil importing developing countries would be an estimated US$30 billion by 1990 (at current prices). While this amount is equivalent to no more than 3 percent of the projected total exports of these countries in that year, it is equivalent to about 20 percent of the projected net disbursements of medium- and long-term capital to these nations in that year. Moreover, the burden of additional payments for energy is likely to be particularly severe for some of the poorest developing countries.

Commercial Energy Development in Developing Countries

The relative importance of different energy sources in the production and consumption of commercial energy in broad groups of developing countries may be gauged from Table 25, which presents estimates for 1976 and 1990. The appropriate combination of energy policies in particular countries will depend on their specific energy demand and supply conditions. Here the discussion dwells on three areas of general relevance: development of indigenous resources, possibilities for demand conservation measures, and energy pricing.

The rise in international energy prices has increased the incentives for developing known energy resources in developing countries and has also justified increased expenditure on resource exploration and pre-investment activity. However, on the basis of the limited information currently available, it appears that relatively few developing countries have significantly increased the proportion of national investment allocated to energy development. Though this partly reflects the inherently long lead times in energy sector projects, it is also a consequence of impediments to energy resource development in these nations.

Increases in the price of oil and gas have been sufficient to cover the cost of exploiting known oil and gas reserves that were previously uneconomic, because of their small size, the expense of the enhanced recovery methods needed for low-pressure wells, or high transport costs. Exploration for petroleum has also become commercially viable in previously unattractive areas. A study prepared for the World Bank identified 70 developing countries with a potential for oil and gas production, of which only 22 already produce oil and gas or are about to do so. Of the remainder, 38 countries have prospects of finding significant quantities of petroleum to help meet their domestic needs, but in only seven has exploration been adequate, and in another seven moderate.[3] Oil importing developing countries, which have 2 percent of the world's proven oil reserves, may account for 15 percent of the world's ultimately recoverable reserves. Even so, the number of exploratory wells drilled per thousand square miles in these countries has been only a small fraction of that in the industrialized countries. The main impediments to the exploration and development of the petroleum and gas resources in developing countries are the scarcity of

[3]An adequate level of exploration is considered as one that is likely to lead to the early identification of exploitable reserves.

25. Developing Countries: Commercial Primary Energy Balances, 1976 and 1990
(Million barrels a day of oil equivalent)

	All Developing Countries[a]		Net Oil Importers		Net Oil Exporters	
	1976	1990	1976	1990	1976	1990
Production	26.5	51.3	6.5	18.5	20.0	32.8
Petroleum	19.5	27.6	1.2	3.8	18.3	23.8
Gas	1.8	8.6	0.4	1.2	1.4	7.4
Coal	3.6	8.4	3.5	8.0	0.1	0.4
Primary Electricity	1.6	6.7	1.4	5.5	0.2	1.2
(of which nuclear)	(0.1)	(2.4)	(0.1)	(2.0)	(.)	(0.4)
Consumption	16.8	38.4	12.6	28.5	4.2	9.9
Petroleum	10.0	20.5	7.2	14.6	2.8	5.9
Gas	1.4	3.5	0.4	1.2	1.0	2.3
Coal	3.8	7.7	3.6	7.2	0.2	0.5
Primary Electricity	1.6	6.7	1.4	5.5	0.2	1.2
Net Imports	−9.7	−12.9	6.1	10.0	−15.8	−22.9
Petroleum	−9.5	−7.1	6.0	10.8	−15.5	−17.9
Gas	−0.4	−5.1	(.)	(.)	−0.4	−5.1
Other	0.2	−0.7	0.1	−0.8	0.1	0.1

Note: Primary energy here refers to coal and lignite, crude petroleum, natural gas and natural gas liquids, hydro and nuclear electricity, expressed in barrels a day of oil equivalent.

[a]Here, as throughout this report, the group of "developing countries" excludes only the capital surplus members of the Organization of Petroleum Exporting Countries. Thus the energy balances of other OPEC members—Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Nigeria and Venezuela—are included in those for developing countries.

risk capital for exploration, inadequate analysis of the data derived from exploration, and a shortage of skilled personnel and institutions to deal effectively with international oil companies. Many developing countries find that though they have potentially economic exploitable resources, they cannot attract international oil companies, either because not enough is known about the characteristics of these resources, or because the petroleum deposits are believed to be too small, or because the contract terms offered are inappropriate. These countries would benefit from external capital to finance exploratory drilling, and from assistance in training and institution building. The total investment requirements during 1976-85 of non-OPEC developing countries for the exploration, development and production of oil and gas—including installation of crude oil pipelines—are estimated at about US$7 billion a year (at 1977 prices). These countries also need help in negotiating agreements with international oil companies and in modifying legislation and procedures to facilitate such cooperation. The World Bank's recent decision to expand lending and technical support for such activities goes some way toward meeting these needs.

Coal production in developing countries increased by 7.6 percent a year between 1973 and 1976, compared with only about 3 percent a year in industrialized countries. Over 90 percent of the increase came from countries with large and established coal industries, such as India, the Republic of Korea, Turkey, Yugoslavia and Viet Nam. In the years to come, the production of coal in developing nations is expected to increase by over 6 percent annually, so that its share in their total commercial energy production would rise from less than 14 percent in 1976 to over 16 percent in 1990. Developing countries are estimated to have nearly 15 percent of the world's proven reserves of coal. India accounts for over half of these reserves, and Brazil and Yugoslavia for another fourth. About 20 developing countries, including Bangladesh, Bolivia, Cameroon, Honduras and Madagascar have coal resources but had not started production as of 1978, notwithstanding the sharp increases in oil prices in 1973-74. Starting new coal production anywhere is apt to be a lengthy and difficult process, but in developing countries the difficulties are often compounded by a lack of adequate transportation, insufficient investment funds and technical know-how, uncertainties regarding export demand and, most immediately, a lack of detailed geological data on which to base coal investment projects. By contrast with petroleum, the problem is less one of identifying the existence of resources, and more of determining their quality and economic viability. During the coming decade, national and international strategies should be directed main-

ly toward detailed exploration and pre-investment studies of known coal resources, along with investments in coal mines and associated infrastructure where proven and commercially viable reserves exist.

Hydro-electric power plants already account for 40 percent of the installed capacity for electricity generation in developing countries, but the unexploited hydro potential remains vast. It is estimated that in developing countries of Africa only 2 percent of the technically feasible potential has been exploited, while the corresponding proportions in Latin America and Asia are 6 percent and 12 percent, respectively. These proportions are only indicative as they do not take account of production and distribution costs and market potential. The development of hydro-power has been held back by its high capital costs, a lack of sufficient preparatory work for formulating projects and, in some cases, disagreements between riparian states, which limit the use of water resources and the export of hydro-power.

A few countries, including Argentina, the Republic of China, India and Pakistan already have nuclear power while others, such as Brazil, Iran and Mexico, are expected soon to become producers. Serious problems remain with respect to the disposal of radioactive waste, safety, and environmental considerations. Furthermore, the demanding requirements of technical and managerial expertise, and the need for plants to be large to be commercially viable, tend to limit their use to Middle Income and large countries.

Looking beyond the next decade, note should be taken of the very substantial untapped resources of shale oils and heavy oils in developing countries. Brazil, the People's Republic of China and Zaire, for example, possess substantial shale oil resources, while Ecuador, Peru and Venezuela have large deposits of heavy oils. These resources can be expected to become commercially viable in a world of higher petroleum prices and improved extractive technologies.

There are significant possibilities for conserving energy demand in developing countries, particularly in the industrial and transport sectors, which together account for 70-90 percent of final commercial energy consumption in these nations. Energy use in industry can be limited by adopting the more energy-efficient techniques developed in industrialized countries, as old capital stock is replaced. In the Federal Republic of Germany, for example, from 1953-73, the use of energy per unit of industrial output fell by over 40 percent; in practically all industries the fall was greater than 10 percent. Energy can be conserved in the transport sector by encouraging the use of mass transit, rather than private vehicles, and through improvements in fuel efficiency attained by increased use of trucks with diesel engines, phasing out steam locomotives, and upgrading railroad rolling stock. In the power sector, energy can be saved by encouraging larger system sizes—an objective which in some regions, such as West Africa and Central America, would entail the interconnection of national power systems. Higher overall efficiency can be attained in industrial areas by cogeneration schemes, which supply power jointly with process steam for industries. Where the natural gas byproduct of crude oil extraction is flared at present, it can be harnessed for power generation, industrial uses or reinjection for secondary oil recovery; a project of this nature is being prepared in Egypt. The conversion of electricity generating plants from oil to coal, as has been done in Chile, is another possibility to be considered. The potential for saving energy in the residential sector is limited except in some of the richer Middle Income countries.

Despite these possibilities, developing countries have not yet given much emphasis to demand conservation measures, partly because in many of them the absolute level of energy consumption is low, and partly because conservation measures are difficult to implement and require substantial use of scarce capital and technical and managerial skills. Greater attention will need to be given to demand conservation in the future as energy consumption expands with industrialization and urbanization. Conservation efforts that focus on improvements in urban mass transit systems and in energy-intensive industrial activities are likely to yield the quickest rewards.

Energy pricing is a complex issue. Most developing countries subsidize different forms of energy to pursue a variety of objectives. Kerosene is frequently subsidized to benefit poor consumers. Energy for industry is priced below cost to encourage industrialization. In oil exporting countries, domestic consumer prices are kept well below international levels, because it is politically difficult to do otherwise, in view of the low costs of production. In a number of

countries an inactive energy pricing policy is based on the belief that the importance of the public sector in production, processing and consumption of energy blunts the allocative role of energy prices. The complex energy pricing policies of many developing countries allow certain producers and consumers to reap unintended windfall gains, and also distort production incentives. The subsidization of electricity prices, for example, frequently weakens the capacity to finance power development and sometimes benefits better-off groups in society.

Since the oil price increases of 1973-74, developing countries have made significant progress in increasing energy prices to domestic users, though scope remains for further price rises. Between 1973 and 1977 the prices for the most commonly used petroleum distillates registered increases averaging over 40 percent in real terms in the oil importing developing countries, compared with an average increase of about a third in industrialized nations. Nevertheless, prices for most petroleum products in developing countries remain significantly below the levels prevailing in industrialized nations. Moreover, electricity prices in developing countries rose by only about a third of the average increase in energy prices. Policies for the management of energy resources and uses in developing countries will require attention to elements other than pricing, such as environmental controls, safety standards and strategic requirements. But the potential benefits from further reform of energy pricing should not be underestimated. With the future supply and international prices of energy subject to so much uncertainty, further efforts are desirable to move domestic energy prices toward international levels, reducing excessive and general subsidies, so as to encourage the conservation of demand and the development of indigenous energy resources. To avoid severe political difficulties the reforms could be implemented gradually, and selective tightly targeted subsidies for low income users and infant industries may need to be retained.

Non-commercial and Non-conventional Energy

The traditional sectors of developing economies rely heavily on energy from firewood, charcoal, plant and animal residues, human and animal effort, solar energy, and, to a lesser extent, wind and water power. Many of these sources are referred to as non-commercial, although they are often bought and sold. Some of them are also referred to as non-conventional energy sources. Such forms of energy only supply about 5 percent of world energy consumption. But they account for about half the total energy production of oil importing developing countries, supplying more than 85 percent of the requirements of rural areas in many developing countries. Some Low Income nations, such as Mali, Nepal and Tanzania, rely on non-commercial sources for 90 percent of their energy needs. The demand for such fuels is dominated by household uses, primarily cooking. About half of the world's population today cooks with non-commercial energy.

Despite the importance of non-commercial energy in developing countries, neither national nor international institutions have yet given sufficient attention to the sources and technologies being used, their economic and environmental consequences, or to the development of alternatives. The acute scarcity of reliable information calls for more attention to data gathering and research. However, some of the emerging problems are so pressing that corrective actions and policies must be initiated on the basis of existing knowledge.

Deforestation and fuelwood shortages have become a critical problem and are appropriately labeled "the other energy crisis." In Nepal, the growing demand for fuelwood, fodder and cultivable land is denuding the hillsides and causing severe erosion, which is reducing the fertility of the soil and its capacity to retain water during the dry season. If the present rate of deforestation continues, Nepal's hillsides will be completely bare in 15 years. Deforestation and soil erosion are also serious problems in other countries, including El Salvador and Haiti; in the Sahel and Sudan they have accelerated the process of desertification. Estimates indicate that at least 12 nations are currently using fuelwood at an annual rate faster than their forests can sustain. This does not mean that deforestation is not a serious problem in other countries. Most nations suffer from severe fuelwood shortages around densely populated areas. This is true even of nations as rich in timber as Zaire, which uses only a small fraction of its sustainable forest yield. In many other countries, as fuelwood becomes more difficult to obtain, the use of other fuels, such as animal and crop residues, is increasing, with serious implications for soil fertility, crop yields and the availability of

livestock feeds. This is of particular significance in the drier areas of Africa, much of South Asia, and some parts of Latin America.

Programs for afforestation and reforestation are urgently required. Current progress in this area falls far short of needs. According to rough estimates, the present rate of afforestation in developing countries may be less than a tenth of that necessary to ensure that these nations are reasonably self-sufficient in fuelwood at the end of this century. However, the traditional solution of merely planting trees will not work. The history of failed reforestation projects provides some cautionary guidance. In particular, it is extremely difficult to prevent trees from being felled prematurely to satisfy urgent basic needs for fuelwood. It is therefore essential to start afforestation programs early, before the situation becomes critical.

It may also be useful to integrate forestry projects in rural development programs, which are perceived by the rural population to address their basic needs, and which take account of the close interconnections between forestry, fodder and food production. Moreover, forestry projects could include the promotion of low-cost stoves, which need only half as much firewood as open fires. Such provision has already been made in a number of projects, supported by the World Bank, in countries such as Burundi, Niger, Nigeria, Pakistan and Tanzania. Afforestation efforts are likely to be more successful if the central government is committed to decentralizing control, so that village and district level administrations can effectively participate in managing local resources. With proper management, and appropriate fast growing species of trees, an area can yield five times as much fuelwood as a natural forest. Some countries, including the Philippines and the Republic of Korea, have launched promising afforestation programs on a large scale.

Though the use of commercial energy tends to increase with development and industrialization, because of its high cost large sections of the world's population will continue to rely on non-commercial sources for the foreseeable future. Hence in most developing countries plans for energy development should seek to improve the availability and efficiency of these sources. For example, roughly 300 million households in developing countries have no electricity. Even if it were technically feasible, to provide connections to them using presently available technology would cost several hundred billion US dollars. It would be more practical to improve the locally available traditional fuels while efforts are made to reduce the costs of rural electrification. Similarly, in many places the immediate introduction of agricultural machinery and chemical fertilizers is impractical, both because of their high monetary costs and because of the effects of mechanization on the demand for labor. Efforts to promote the use of draft animals and traditional fertilizer can help to make agriculture more productive without adding to the demand for commercial energy.

Several non-conventional energy technologies are practical and competitive in developing countries at present prices. The improved wood stoves already mentioned can be constructed largely from local materials for about US$5-10 each; with stronger promotion and the development of extension services and artisan training schemes, the use of these stoves could be greatly extended. Charcoal yields can be doubled by the introduction of better-designed kilns. Biogas plants are in use in various countries, including the People's Republic of China, the Republic of China, India and the Republic of Korea. However, economies of scale make them more viable for relatively wealthy families with four or five head of cattle and enough land to use the sludge produced for fertilizer. An Indian subsidy program for biogas plants was discontinued when it was found to have increased the effective price of dung, causing hardship to the poor. Solar dryers can be used to dry crops and can reduce losses in storage. Solar water heaters are economical, and solar power is being used to distill water in some parts of the world. Windmills of traditional and advanced designs are worth considering in areas with adequate wind and poor rainfall. Micro-hydro schemes can be used to provide electricity in small isolated communities. Ethyl alcohol can be readily produced in most developing countries by fermenting and distilling agricultural products with a high content of starch or sugar. The resulting crude alcohol can be used as a fuel for cooking and, after dehydration, can be used as an additive to automotive gasoline, or even as a substitute for it, if engines are suitably modified. In most cases, however, alcohol from fermented agricultural products remains more costly than gasoline, and production is still small relative to fuel demands, except in Brazil, where an ambitious effort is under way.

The opportunities for further development and improvement of non-conventional energy sources and uses are substantial: existing technologies need to be systematically evaluated, and new ones developed. The priorities for policy in this area depend on the stage of technological development. Where economically competitive technologies exist, but their current use is limited, policies should focus on promoting their use and resolving implementation problems. Where technologies are at an early stage of development, further design efforts and implementation trials are necessary before the new technologies can be propagated in homes and communities. At present, research and development concentrate disproportionately on mechanical power and electricity; more widespread benefits may be gained from shifting the emphasis to cooking needs and the more efficient use of draft animals. Systematic research is necessary to improve the data base on non-conventional and non-commercial energy uses and technologies, and to assess the environmental damage that might result from their application. International cooperation and exchange of information can help to avoid duplication of effort.

To sum up, the energy outlook for all countries in the next two decades is fraught with considerable uncertainty. For energy importing nations, rich and poor, it is desirable to err on the safe side—overdoing demand conservation and undertaking "excessive" investments for increased energy production—because the disruptive effects of shortfalls can be serious. In the long run, such risk-averse behavior by energy importing nations is also in the interests of today's energy exporting nations, which stand to gain from rapid and non-inflationary growth in the world economy.

PART II: STRUCTURAL CHANGE AND DEVELOPMENT POLICY

The economic growth of nations has been associated with far-reaching changes in their social and economic structure. Modern economic development comprises a set of interrelated processes that transform essentially rural, agricultural societies into more urban, industrialized nations. Of particular significance are the processes of industrialization, urbanization and the sectoral redeployment of labor. The pace and character of structural change vary greatly across countries according to their size, resource endowments, demographic trends, sociopolitical histories and, perhaps most important of all, the development policies they pursue. But when their past experience is viewed as a whole, some broad patterns emerge.

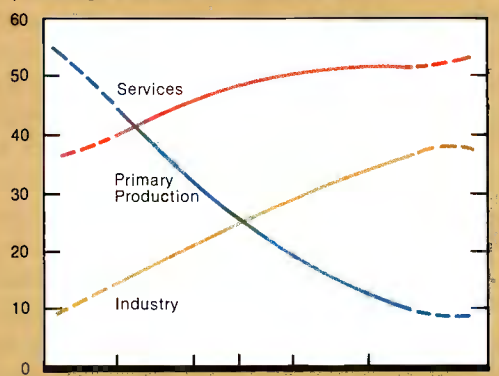
Figure 6 illustrates average patterns of change in the composition of production as per capita income increases. The central feature is the increase in the share of industry in total output and the decline in the share of primary production (agriculture and mining) as countries develop. The poor countries of Asia and Africa are at present in the early part of the transformation, followed by the Middle Income nations of Latin America, East Asia and the Mediterranean region, while in the industrialized countries, where income per capita is highest, the rising share of services in the economy is accommodated by stabilization and eventual decline in the share of industry. This pattern of industrialization is the product of mutually interacting changes in supply and demand that accompany economic development. On the supply side, the accumulation of capital and skills augments the productive capabilities of an economy. The resulting increases in per capita income bring about important shifts in the composition of aggregate demand which, in turn, guide the sectoral composition of incremental output. Food consumption, for example, which accounts for two-fifths of aggregate demand in an economy at US$150 per capita, accounts for less than a fifth of demand in an economy at US$3,000 per capita—a decline that explains much of the re-

Figure 6

Aspects of Structural Transformation

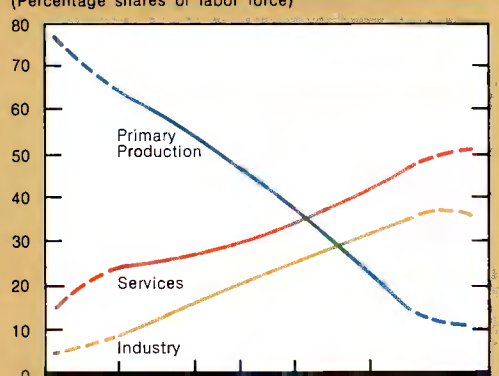
Transformation of Production

(Percentage shares of GDP, at 1977 prices)



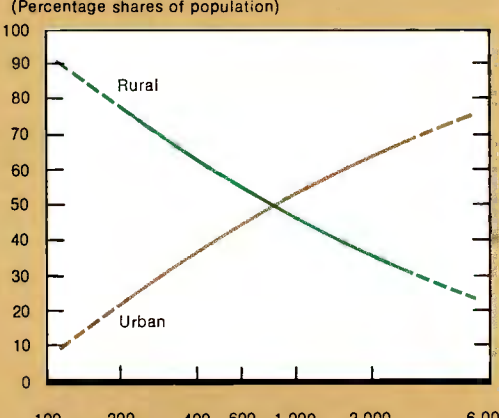
Transformation of Labor

(Percentage shares of labor force)



Urbanization

(Percentage shares of population)



Gross National Product Per Capita, in 1977 US Dollars

(Semi-log scale)

Source: Based on Hollis Chenery and Moises Syrquin, *Patterns of Development, 1950-1970* (Oxford: Oxford University Press for the World Bank, 1975). The curves shown apply to countries of medium size population.

duction in the share of primary production as the economy grows.

The evolving composition of production is reflected in similar changes in the deployment of productive factors, notably labor. As development proceeds, the work force moves from agricultural to non-agricultural occupations, while within each sector productivity is increased by new technologies, greater division of labor, and the accumulation of capital and skills. Though the underlying patterns are similar, the sectoral transformation of the labor force has historically lagged behind the transformation of production, partly because in most countries industrial development has been relatively capital intensive, so that labor productivity is higher in industry than in agriculture, but also because of the unprecedented growth of the labor force in recent decades, which has far exceeded industry's capacity to absorb labor. As a result, while industry and primary production account for equal shares of total output when the economy reaches an income level of just under US$700 per capita, parity in labor force shares is not achieved until average income is more than twice that level.

These changes in the sectoral composition of output and the labor force are closely related to shifts in economic activities from rural to urban locales. Modern industrial and service activities benefit greatly from the economies of agglomeration, and as these activities increase their shares in production and the labor force, they spur the growth of urban centers.

The broad trends outlined above also reflect other socioeconomic changes that are part of the development process, including demographic changes, shifts in foreign trade patterns, technological development, increasing specialization among economic activities, and the dramatic growth of institutions. Furthermore, the future pace and pattern of structural change may differ substantially from that observed in the past because of the powerful influence of population growth and changes in the age structure of the population. Though the rate of growth of world population is believed to have peaked in the early 1970s, the consequences of earlier growth will include an unprecedented expansion in the labor force of developing countries in the next two decades, with pervasive implications for the future character of structural change.

It must also be emphasized that the development patterns sketched above are illustrative averages, not predetermined paths of development for individual countries. In any country, the trajectory of development and structural change depends to a large extent on the choice of development policies. These policies are the principal subject of the chapters that follow.

Scope and Nature of the Employment Challenge

Because average labor productivity is lower in agriculture than in industry or services, the sectoral restructuring of the labor force initially proceeds more slowly than that of production. As a result, agriculture so far remains the predominant source of employment not only in Low Income countries but also in many Middle Income countries.

26. Structure of the Labor Force, 1950-70

	Percentage of Labor Force in								
	Agriculture			Industry			Services		
	1950	1960	1970	1950	1960	1970	1950	1960	1970
Low Income Countries	78	77	75	8	9	10	14	14	15
Middle Income Countries	65	59	50	14	17	20	21	24	30
Industrialized Countries	25	17	10	36	38	38	39	45	52

The large number of workers remaining in agriculture in developing countries has increasingly raised doubts about the adequacy of the industrialization process as a source of remunerative employment. Only in a few developing countries has there been an absolute decrease in the agricultural labor force in response to the growing demand for industrial labor. Even in the Republic of Korea, where extremely rapid growth of total output and industry between 1950 and 1970 was accompanied by a large decline in the share of agriculture in the total labor force—from 70 percent to 50 percent—there was still an increase in the absolute numbers employed in agriculture. During the same period, the agricultural labor force in Bangladesh increased by over 6 million, agriculture's share of total employment remaining about 85 percent. Although the developing countries vary considerably in this regard, in many of them the sectoral transformation of the labor force is disappointingly slow.

Compared with the historical experience of the industrialized countries, today's transformation efforts must contend with much more rapid labor force growth: throughout the nineteenth century the labor force in European industrialized countries grew at less than 1 percent a year, whereas that in the developing countries is currently growing at more than 2 percent a year. It took 90 years for the labor force to double in the industrialized countries; it now takes less than 30 years in the developing countries.

Such differences in the pace of labor force growth have significant implications for the transformation process. Relative to the size of the total labor force, industrial employment expanded at roughly the same rate—absorbing between 0.3 percent and 0.4 percent of the labor force a year—in the European industrialized countries at the turn of the century and in the Low Income countries in the 1960s. The Middle Income countries absorbed a substantially higher proportion in the 1960s: about 0.7 percent a year. Relative to the annual increments in the labor force, however, the outcomes have been very different. Whereas the industrialized European nations could absorb almost half of their incremental labor force into industry each year, the Low Income countries, because of their very much higher labor force growth rate, have absorbed less than 20 percent of their additional workers into industry each year, and the Middle Income countries, notwithstanding their rapid industrialization, have absorbed less than 35 percent. The sectoral transformation of the labor force in the developing countries has been much slower than the European historical experience, not because of unusually slow expansion in industrial employment, but because of unusually fast growth in the labor force.

The most visible consequence of modern industry's inability to provide adequate employment for such a rapidly growing labor force is the emergence of underemployment—a state of

low labor productivity, sporadic employment and depressed earnings—as a significant phenomenon, not only in agriculture but also in the traditional segments of the industrial and service sectors. Although precise estimates of their numbers are not available, the underemployed are usually understood to comprise most of the rural landless, many small farmers, many of the urban self-employed and most employees of small-scale urban enterprises. While some are not fully employed because of such factors as seasonal variation in the demand for agricultural labor, others work long hours throughout the year but earn very little from their low-productivity jobs. Their common characteristic —low income—identifies them as the core of the poverty problem.

Frequently, the expansion in service sector employment observed in many countries is regarded as a further manifestation of the failure of industry to create enough jobs. This view is oversimplified, however, in that it neglects the great variety of activities in the service sector and underemphasizes the extent to which their expansion is induced by economic growth. Intermediate services—transport, communications, commerce, banking, finance and professional services—respond and contribute to successful industrial and agricultural development, rather than merely serving as a sump for residual, unproductive employment. Many of the social goals espoused by developing country governments entail increases in employment in the service sector. Education and health programs and, in most developing countries, expansion in the role played by government in other sectors, have contributed substantially to the observed increase in employment in services. In the early 1970s, the public sector accounted for more than 15 percent of the total wage employment in, for example, Argentina, Chile, India and Venezuela. In some countries, part of the expansion in public sector employment has represented excessive hiring by governments seeking to defuse social tensions stemming from unemployment and underemployment. Although measured productivity is frequently higher in services than in either agriculture or industry, many service activities, especially in petty trading and domestic service, are indeed appropriately characterized as low-productivity jobs. The demise of these activities has been retarded by the continued excess supply of cheap unskilled labor in many developing countries.

A second consequence of the rapid increase in the labor force combined with insufficient growth in industrial employment is the high rate of unemployment experienced by first-time entrants to the urban labor market, especially those who have primary or secondary education. Unemployment rates of over 20 percent have been recorded for the age group 15-24 in the urban areas of countries as diverse as Colombia, Kenya, the Philippines and Sri Lanka. The concentrated incidence of unemployment on such a politically vocal group makes this an especially pressing social issue. Unlike underemployment, however, unemployment is not necessarily associated with low income, because only those with access to unearned income are able to finance a period of unemployment while they search for a job they consider satisfactory. The poor, on the other hand, cannot afford to be unemployed; they are obliged to accept underemployment.

In many countries, increasingly rapid growth in the labor force will make the creation of adequate employment opportunities more difficult in the future than it was in the past. Although changing labor force participation rates may

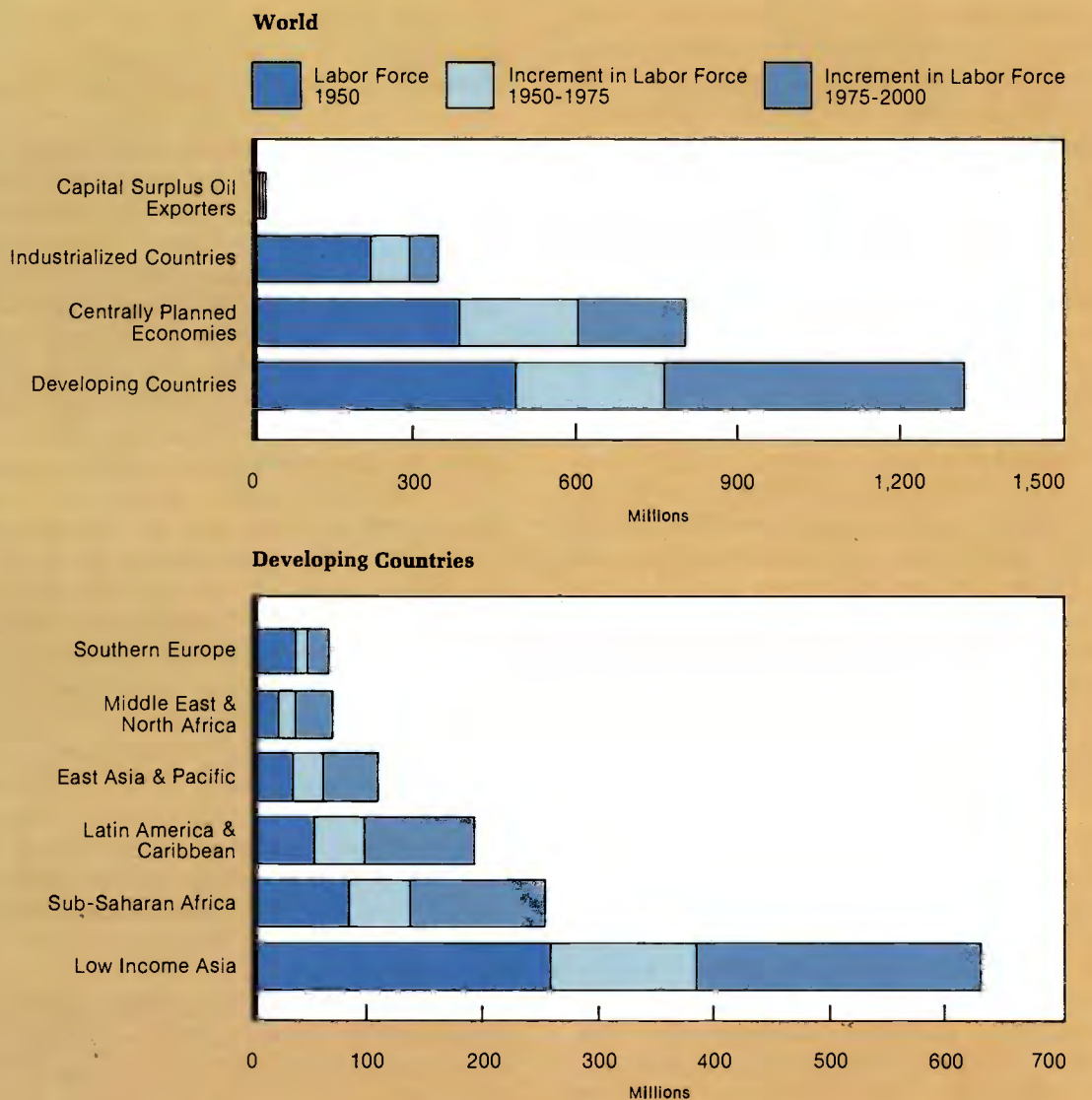
27. Growth of the Labor Force, 1960-2000

	Average Annual Percentage Growth Rate			
	1960-70	1970-80	1980-90	1990-2000
East Asia and Pacific	2.4	2.6	2.3	2.0
Low Income Asia	1.7	2.0	2.0	1.9
Latin America and Caribbean	2.4	2.7	3.0	2.7
Middle East and North Africa	1.9	2.6	2.9	2.2
Sub-Saharan Africa[a]	2.2	2.2	2.5	2.6
Southern Europe	0.8	1.3	1.3	1.2
All Developing Countries	1.8	2.2	2.2	2.1
Industrialized Countries	1.2	1.2	0.7	0.5

[a]In all tables and figures in this chapter and in Chapter 6, the term "Sub-Saharan Africa" includes Low and Middle Income countries.

Figure 7

Labor Force Estimates and Projections, 1950-2000



modify the relationship somewhat, labor force growth is determined mainly by past population growth with a lag of about 15 years. Consequently, the high, and in some countries increasing, rates of population growth of the late 1960s and 1970s will not be reflected in labor force growth rates until the 1980s and 1990s. Although already high by historical standards, the recent annual rates of labor force growth reported for Latin America and the Caribbean, Sub-Saharan Africa, the Middle East and North Africa, and Low Income Asia will be surpassed in the future (Table 27).

The immensity of future expansion in the labor force is illustrated in Figure 7. In Low Income Asia, the labor force increased by about 125 million people between 1950 and 1975; between 1975 and 2000, despite a projected slight decline in the participation rate, it is expected to increase by almost 250 million to approxi-

mately 630 million. While not so overwhelming, the projected increments in the labor force for the last quarter of the century in Sub-Saharan Africa (120 million) and Latin America and the Caribbean (100 million) are nevertheless daunting. The remainder of this chapter discusses the policy measures required to cope with this unprecedented expansion in the supply of labor. The analysis puts its main emphasis on the creation of remunerative employment opportunities through the promotion of appropriate agricultural and industrial development strategies and the creation of a more skilled and better educated labor force. These efforts can be reinforced by labor market policies that facilitate the geographical and occupational mobility of workers and improve the sectoral allocation of labor. The discussion ends with an analysis of a policy instrument—population planning—the significance of which lies in its potential to reduce labor force growth in the medium and long term.

Development Strategies for Expanding Employment and Improving Skills

Agricultural Policy

While rapid population growth has been a major reason for the slow sectoral transformation of the labor force, other factors have depressed the growth of employment and income-earning opportunities in agriculture. Policies that discriminate against agriculture in general and agricultural labor in particular have exacerbated rural underemployment and poverty, and contributed to the increase in rates of rural-urban migration.

The role of agriculture during the process of industrialization is discussed in Chapter 5. Here it is simply noted that appropriate policies toward investment and pricing can have significant implications for the growth of agricultural production. Policies in these areas have even more important implications for poverty and employment, especially in the Low Income countries, where more than 70 percent of the labor force depends directly on agriculture and will continue to do so in the foreseeable future. In addition to their immediate, first-round benefits within agriculture, increases in agricultural production and incomes will generate new demands for non-agricultural output. In Sri Lanka, for example, where agriculture still accounts for almost 40 percent of GDP, one-third of the country's non-agricultural gross output is purchased by rural households. As income rises, an increasing proportion of incremental expenditure is allocated to non-farm commodities and services. Policies to improve agricultural incomes thus not only benefit the underemployed small farmer directly, but also create a demand for non-agricultural labor through expenditure linkages. These linkages are especially important in Low Income countries in view of industry's dependence on a growing domestic market; the production of consumer goods and agricultural implements and the processing of agricultural produce, as well as related activities such as construction, transport and wholesale marketing, depend critically on development in agriculture.

Rural small-scale enterprise has demonstrated a remarkable capacity to respond to increases in demand and to provide jobs for rural labor. In the Republic of Korea, for example, employment in rural manufacturing grew at an annual rate of nearly 6 percent in the 1960s; in the Republic of China, employment in the rural manufacturing sector grew at an even faster annual rate—7.4 percent—in the decade 1956 to 1966. Non-farm activities are the main source of employment for between 20 percent and 30 percent of the rural labor force in Chile, Colombia, India, Indonesia, Iran, Kenya, the Philippines and Venezuela, and are an important secondary source of income for many small farmers, especially during agricultural slack seasons. In Egypt and Malaysia, for example, many small farm households devote 30 percent to 40 percent of their labor to off-farm activities. The inherent dynamism of rural non-farm enterprise can be enhanced by public assistance in the form of improved infrastructure, rural electrification and the extension of credit facilities. The People's Republic of China, for example, by actively stimulating investment in rural industry, has created new employment opportunities and simultaneously provided agriculture with a valuable source of inputs to enhance productivity, ranging from chemical fertilizers to drainage machinery.

Several countries have used public works programs to provide slack-season employment for rural labor. Most of these programs have emphasized temporary employment and income generation rather than the creation of assets designed to increase productivity permanently. The Instruksi Presiden (INPRES) programs in Indonesia, for example, are reported to have provided employment for almost 1 percent of

the country's total labor force. This is a remarkable achievement and has undoubtedly brought at least temporary benefits to those employed; nevertheless, the construction of physical infrastructure has not been quite as successful. In poor countries, public works programs should be increasingly designed to create infrastructure that is economically justified, rather than simply to generate temporary employment. Minor irrigation and drainage schemes and land reclamation, for example, are highly labor-intensive activities which can be undertaken in the agricultural slack season, and which can be expected to stimulate increases in production by raising yields and making larger areas viable for cultivation.

Other policies within the agricultural sector have an influence on labor demand and income distribution. Of particular concern in this respect is the common provision of subsidized credit to large farmers and the exclusion of small farmers from the formal credit market. With the notable exceptions of the Republic of China and the Republic of Korea, institutional credit in developing countries rarely reaches more than one-fourth of the farm population; most of it is usually secured by large farmers, often at very low or even negative real rates of interest. Subsidized credit programs have often had the unintended effect of encouraging mechanization. In the early 1960s, farms of more than 50 hectares accounted for over 90 percent of all tractors in Chile, over 60 percent in Colombia, and for over 70 percent of all farm machinery in Mexico. The significance of this observation is that studies in Asia and Latin America have consistently demonstrated the labor-displacing effect of mechanization. Selective mechanization may be appropriate where output is limited by seasonal shortages of labor, but its general encouragement through subsidized credit is unwarranted, especially in poor countries.

Small farms receive relatively few institutional loans and are forced to rely on informal credit markets where real interest rates higher than 50 percent are not unusual. As a result, these farms rarely use credit to finance technological improvements such as the introduction of high-yielding varieties of seed, inorganic fertilizers or chemical pest and weed controls, but resort to borrowing mainly in emergencies such as crop failure. Moreover, small farms generally have less contact than large farms with government seed and fertilizer programs and extension services, and are usually inadequately connected to the main markets. Since the cultivation techniques required by the new varieties are relatively labor intensive, failure to ensure their widespread distribution limits the growth of both agricultural output and employment.

Unequal land distribution and policies that discriminate against the small farmer have resulted in bimodal agrarian structures, in which a well supported, large-scale, commercial, but relatively small, subsector of farms coexists with a large backward subsistence sector. Countries such as the Republic of China, Israel and Malaysia, in all of which land is relatively evenly distributed, have achieved a more broadly based development of agriculture by distributing government-supported services—infrastructure, irrigation, credit—throughout the sector. Although experience varies, some countries following such a unimodal strategy have achieved agricultural growth rates at least as high as those of countries with a bimodal structure, and have enjoyed a considerably more egalitarian distribution of the benefits of growth.

Many studies have demonstrated that small farms typically use more labor per unit of land than large farms. In 1960, Colombian farms of less than three hectares used 20 times as much labor per hectare as farms in the range of 50 to 500 hectares. Since the more intensive application of labor is also associated with higher yields, achieving a more equitable distribution of land ownership offers the prospect not only of improving rural equity, but also of increasing output and labor demand. Several countries—the Republic of China, Egypt and the Republic of Korea—by combining land reform with credit and other types of assistance, have successfully enabled the participating farmers to increase productivity. Tenancy reform, to fix rents and guarantee security of tenure, has facilitated the adoption of innovations by tenants in, for example, Ecuador and Sri Lanka. Supervised credit programs and technical assistance for small farmers, such as Operaçao Tatu in Brazil, the Small Farmer Development Agencies in India, and Kenya's Small Farmer Credit Program have also stimulated the adoption of new techniques which have increased the labor intensity of production and resulted in higher yields.

Promoting agricultural growth and encouraging the efficient use of rural labor are the most important means of reducing underemployment

in the Low Income countries. This conclusion applies with almost the same force to the Middle Income countries, many of which still have half their labor force in agriculture. Though some of the Middle Income countries have industrialized rapidly, agriculture remains the single most important source of employment; it provides a large market for industrial output and can, given the appropriate support, relieve the pressures of rural-urban migration. For these and other reasons, greater attention to agriculture is of importance not only in the Low Income countries but also in Middle Income nations.

Industrial Policy

Despite their obvious abundance of labor, many developing countries have encouraged capital-intensive industrialization, either directly, through public sector projects, or indirectly, by artificially lowering the price of capital to the modern private sector. Subsidized interest rates, allowances for accelerated depreciation, tax holidays, overvalued exchange rates, and facilities for duty-free imports of capital have enhanced the profitability of capital-intensive investments and often encouraged enterprises to economize on labor rather than on capital.

Access to institutional credit and capital subsidies for industry is commonly confined to large-scale modern enterprises. Traditional and small-scale enterprises, unable to take advantage of these subsidies, have pursued more labor-intensive paths of expansion. Their development, however, has been constrained by the overly bureaucratic administration of industrial licensing schemes and by the unreliability and high cost of credit in the informal "curb" markets. The generation of income, both wages and profits, is thus restricted in that part of the economy where a large number of the poor seek their livelihood.

The elimination of subsidized credit, relaxation of administrative requirements for industrial licenses, and the expansion of government-backed credit facilities to encompass small-scale operations are some of the measures that would enhance the overall efficiency of the industrial sector in many developing countries. The provision of adequate financial resources to small-scale enterprises will usually require government initiative and support. The Republic of Korea, for example, guarantees loans from the Citizens' National Bank and the Medium Industries Bank to small- and medium-sized industries; by 1977, these loans accounted for almost 40 percent of the total lending to industry. Among other countries that have fostered the development of small-scale enterprises, India has reserved some consumer goods for exclusive manufacture by the small-scale sector. In certain circumstances, such as the possibility of widespread unemployment as a result of technological change, the temporary use of quantitative controls and other special measures to assist small-scale industry merit consideration. In general, however, the appropriate approach toward the small-scale sector is the removal of policies that impair its competitiveness, rather than the creation of an incentive structure biased against large-scale enterprises. Measures that enhance the exploitation of potential linkages between small and large units are also important. The promotion of subcontracting, for example, assures a market for the output of small-scale enterprises, encourages the transmission of technical expertise, and provides a low-cost source of inputs for large firms.

Foreign trade policy is an equally important component of a successful employment-generating industrial strategy. While selective protection is likely to be essential in early phases of industrial development, the small size of the domestic market limits the gains from prolonged recourse to import-substitution policies. Particularly in the middle and later phases of development, industrial output and employment have grown more slowly in countries that have relied heavily on tariffs and quantitative restrictions to foster import substitution, than in countries that have provided incentives of similar magnitude to both import substitutes and exports. The elimination of the policy bias against exports normally accelerates industrial labor absorption in two principal ways. First, there is a shift of

28. Growth of Industrial Production and Labor Force in Selected Developing Countries, 1960-70
(Average annual percentage growth rates)

	Value Added	Labor Force
Export Promoting Countries		
Korea, Republic of	17.2	11.2
China, Republic of	16.4	6.3
Singapore	12.6	5.6
Import Substituting Countries		
Mexico	9.3	4.5
Colombia	6.0	3.7
Philippines	6.0	2.5

resources into export production, rather than production of import substitutes; this increases labor demand because exports, especially in the early phases of industrialization, are usually more labor intensive than import substitutes. Second, the overall improvement in industrial efficiency induces higher rates of investment which, in turn, further increase the demand for labor. Employment thus benefits both from more labor-intensive methods of production and a more rapid expansion in the stock of national capital.

The Republic of Korea has been strikingly successful in export promotion. Between 1960 and 1970, industrial output and employment grew at annual rates of 17 percent and 11 percent, respectively; the capital stock in manufacturing increased fourfold between 1960 and 1973, and gross investment expanded from 11 percent of GDP in 1960 to 27 percent in 1975. These developments were reflected in annual growth rates of both GNP per person and real wages in manufacturing of around 7 percent between 1960 and 1976, and a decrease in the unemployment rate from 9 percent in 1960 to less than 5 percent in 1970. The increase in employment has enabled the benefits of a high growth rate to be dispersed through the labor market to a significant proportion of the population; thus the export-promoting strategy has furthered both economic growth and the alleviation of poverty.

Production for the domestic market, as well as for export, can be rendered less efficient by inappropriate tariff structures or by unduly heavy reliance on quantitative import restrictions. The pursuit of such policies in India during the 1960s contributed to the slow annual growth in the industrial labor force (1.6 percent) and in output (5.5 percent). Rationalizing trade policy is an important component of an employment strategy even if the domestic market remains the main outlet for industrial production.

How great an impact a more trade-oriented industrial strategy would have on employment rates will vary among countries. In semi-industrialized countries that are still following import-substitution policies, this impact could be substantial. In the Low Income countries, existing trade policies may not be the sole constraint on exports, and improvements in such policies may have their greatest effects on the efficiency of industrial production for the domestic market. Increases in employment resulting from improvements in industrial policies are nonetheless likely to be small relative to the annual increase in the labor force: if the rate of growth in industrial employment in the Low Income countries were suddenly doubled, the industrial sector would still only absorb about a third of the annual increment in the labor force. Rationalization of industrial trade policy should be encouraged, but improved agricultural strategies are likely to be quantitatively more significant for these countries.

Education and the Acquisition of Skills

Improvement in the abilities of the labor force is a fundamental feature of development. Technological advance continuously demands new industrial skills. Most countries have recognized this and have expanded educational facilities very rapidly. By 1976 in many Low Income countries more than 50 percent of the primary school age children were in school. Universal primary enrollment had been achieved, or was within sight, in most Middle Income countries and some Low Income countries, such as Kenya and Zaire. At the secondary level, enrollment rates were lower than 20 percent in many Low Income countries, although Sri Lanka had achieved a rate of over 50 percent. In the Middle Income countries, secondary enrollment rates varied from a low of 4 percent in the Yemen Arab Republic to a high of 85 percent in Portugal, with the rates in almost half the countries falling between 30 percent and 60 percent.

In many countries, education has made workers more geographically mobile and increased their range of possible occupations; those able to obtain school places have later benefited substantially from the better earning opportunities available to educated workers. In some countries, however, educational expansion has resulted in high rates of unemployment among recent graduates, especially at the secondary level. In the early 1970s, for example, almost 20 percent of Sri Lanka's secondary school graduates were unemployed. In part, such high rates reflect the success of these countries in raising enrollment rates at a time when the school age population was itself increasing: the consequent increase in the supply of educated labor exceeded demand, resulting in unemployment. However, they also reflect the failure of the labor market to adjust to this imbalance: wage differentials between educated and uneducated workers have not diminished suffi-

ciently to eliminate the excess supply. Since the public sector is often the largest employer of educated labor, the unemployment problem highlights the importance of ensuring that public sector pay scales are responsive to developments in the labor market. Current unemployment among the educated also emphasizes the need for a critical review of future plans to expand higher educational facilities in these countries.

Because education offers one of the few chances for the poor and disadvantaged to escape from poverty, efforts to ensure the equitable distribution of educational opportunities are extremely important. In this respect, the high unit costs of secondary relative to primary education, and the need to widen access to primary education, suggest a reallocation of limited educational budgets in favor of the latter. The location of adequate primary schools in rural areas and the provision of grants and scholarships to compensate poor students for the loss of earnings while attending school are important aspects of an education strategy to benefit the poor.

In economies where the modern sector has expanded very rapidly, a shortage of workers with secondary education can be expected. Such a shortage is being felt in oil exporting countries such as Saudi Arabia, where educational facilities are not yet widely spread, and in rapidly growing economies such as Brazil, where the secondary school enrollment rate is less than 20 percent. For these countries further early development of secondary education is warranted on economic grounds.

The appropriate combination of academic and vocational training for the labor force is crucial during industrialization; in many developing countries the skills supplied by the educational system may not match the skills demanded by industry. The most important feature of a successful industrial training program is a direct link with the labor market. In the traditional apprenticeship schemes of West and East Africa, training is linked to the labor market in the person of the master craftsman. This system is useful in imparting certain types of skills, but in an economy in the process of rapid transformation, it is unlikely to be adequate.

Attempts to provide vocational training through the formal education system, as in Kenya's secondary technical schools and Colombia's comprehensive schools, have sometimes had limited success because they lacked strong links to the labor market. In these countries, on-the-job training is still the most common way in which workers acquire skills. Some countries have deliberately sought to stimulate on-the-job training and to make vocational institutions responsive to labor market conditions, with considerable success. The Industrial Training Board in Singapore, for example, was established expressly to promote and coordinate industrial training, within a highly flexible and responsive framework. It offers a variety of training courses which combine formal instruction and on-the-job training in different proportions, and which are tailored to meet industry's rapidly changing requirements. The Board also supervises the Joint Government-Industrial Training Scheme and the Industrial Training Grants Scheme, both of which are designed to encourage industry's participation in training programs, either in conjunction with the government or independently through the provision of grants. Brazil's National Service for Industrial Apprenticeship is another institution responsive to the needs of industry. It relies on periodic surveys of the labor market to provide a basis for forecasting the quantitative and qualitative needs of business, and on careful job analyses to identify the technical requirements of specific tasks. The one-percent payroll tax used to finance this scheme also serves as an incentive to employers to undertake their own on-the-job training programs, since employers who do so are exempted from payment. Although their details vary, the programs in Singapore and Brazil are similar in their determination to involve the business community in training and in their efforts to monitor, and respond to, changing labor market conditions.

Labor Market Policies

The principal means to the more rapid expansion of productive job opportunities lies in the choice of appropriate policies for agricultural and industrial development. But, as a growing proportion of the labor force comes to depend on wage employment, a significant supplementary role can be played by policy intervention in the labor market. As developing economies shift out of agriculture, land gradually yields its place to labor and reproducible capital as the predominant sources of income. At the same time, the extent of wage employment increases relative to self employment. In most Low Income coun-

tries, with some exceptions such as Sri Lanka, more than 60 percent of the labor force remains self-employed, whereas in the industrialized countries around 80 percent relies on wage employment.

Dualism in the Labor Market

As formal labor market transactions increase, the institutional structure of the market develops in a number of respects. Labor is more able to form, organize and maintain trade unions. Similarly, the public sector assumes an increasingly important role in determining wages, both as an employer in its own right and as an arbiter of private sector wage rates through legislation and the pronouncements of wage tribunals. The expansion in wage employment also facilitates the introduction of social security legislation and payroll taxation.

The motivating force behind these developments is the improvement of working conditions and incomes and the provision of security for the employed. In most developing countries, however, the state of institutional development severely limits the coverage of such programs, and often effectively confines them to the public sector and the modern industrial, extractive or plantation sectors. As a result, overly vigorous pursuit of improvements in conditions of employment can help to cause labor market dualism—that is, a situation in which workers of similar abilities are paid substantially different wages, depending on the sector of employment. Such a situation is an inherent danger of technological dualism, which is apt to worsen as the gap widens between the traditional labor-intensive modes of production and the capital-intensive technologies of the modern sector.

The economic consequences of labor market dualism include disruption of the efficient allocation of labor, and encouragement of capital-intensive investment in the high-wage sector. Since both of these effects serve to limit the creation of modern sector jobs, attempts to increase the incomes and improve the working conditions of those within the public sector's immediate purview can conflict with efforts to extend remunerative employment opportunities to as many people as possible. As a result, dualism is often cited as one of the major causes of underemployment and unemployment.

The severity of labor market dualism, however, varies considerably among countries. In India, for example, the government has sought to moderate wage demands through wage boards, industrial tribunals and labor courts. The Republic of China, the Republic of Korea and Singapore have exercised wage restraint by circumscribing the power of trade unions. In other countries, such as Afghanistan, Ghana, Indonesia, Sudan and Thailand, governments have either used minimum wage legislation sparingly or else not intervened in the market at all. Countries such as Brazil and Mexico have elaborate minimum wage legislation, but its implementation leaves it with relatively little effect on the labor market.

Dualism is more apparent in the labor markets of countries such as Nigeria, Sri Lanka and Tanzania where effectively enforced minimum wage legislation or excessive increases in public sector pay scales—especially when coupled with a tendency toward substantial overmanning in public employment—have accelerated wage increases. It is also apparent in countries such as Chile, Venezuela and Zambia where important, sometimes foreign-owned, mining enclaves have acceded to the demands of well organized unions, and granted large wage increases which have percolated through the rest of the modern sector. Since these enclaves are usually small, successful percolation requires public sector support in the form of upward adjustment in public pay scales and legislated minima, and more generous wage awards. The distinguishing feature of these countries, therefore, lies in the source of the wage increases rather than in the mechanism that secures their extension to the rest of the modern sector. Since the maintenance of relatively high and protected wage levels for some people can retard the expansion of productive income earning opportunities for many more, both groups of countries could promote growth and alleviate poverty by reassessing their wage policies.

Social security programs and payroll taxation can reinforce labor market dualism in certain circumstances. Most of the countries with major programs are in Latin America, with a few in Asia and Africa. Colombia, Malaysia, Mexico, Sri Lanka, Venezuela and Zambia allocate 3 to 4 percent of GDP to social security, but some countries, such as Chile, allocate as much as the industrialized countries—around 15 percent. In Latin America, again with exceptions such as Chile, 15 to 20 percent of the labor force is usually covered by insurance. Australia, Canada, Sweden and the UK finance a large part of their

social security payments from general revenue, but other industrialized countries and most developing countries rely more heavily on payroll taxation. In the latter, taxation rates of around 5 percent on employees and 10 percent on employers are not unusual. Where employers are able to shift their portion of the tax on to labor, its impact on labor costs and hence on labor demand is relatively slight. In this event, social security payments and payroll taxes serve primarily to redistribute income from relatively well paid, employed persons to relatively poor, inactive persons. But where the tax is borne by the employer, labor costs are increased and, other things being equal, the demand for labor is accordingly reduced.

The most appropriate set of policies for securing an orderly development of the labor market varies among countries, but certain broad guidelines merit consideration. In doing so, it is important to recognize that in any country these general guidelines for labor market policies designed to reduce dualism and expand productive employment will have to contend with practical political constraints and broader non-economic objectives. Government policies toward trade unions, for example, cannot be formulated in narrowly economic terms, but must also reflect the wider political and social role and significance of these organizations in pluralistic societies.

First, where minimum wage legislation is enacted, it should be used mainly to counteract the concentrated market power of employers in the labor market by establishing a "floor" for the wage structure; the use of legislated minima as standard-setting rates for a large part of the modern sector labor force should be avoided. Thailand's legislation in 1974 and 1975 exemplifies the successful use of minimum wages: it secured a wage increase for low-paid female textile workers, without impeding the overall efficiency of the market for unskilled labor.

Second, the ability of trade unions to engage in voluntary collective bargaining should be strengthened wherever employers exert undue control over wage determination. With the important exception of the mining unions, few unions in developing countries are able to engage in across-the-table bargaining with employers who dominate the market, and instead are obliged to rely on public sector mediation. Since the essentials for effective bargaining—organizational skills and financial strength—take time to develop, the public sector can foster this process by establishing the legal framework and administrative procedures for voluntary collective bargaining. Third, the public sector can strive to ensure that its own pay scales and the decisions of its wage tribunals and industrial courts reflect, rather than determine, trends in the labor market. The principal objective here should be to keep public sector salaries competitive in order to ensure an adequate supply of well trained manpower for the civil service.

Fourth, where the demand for labor is adversely affected by payroll taxation, the possibility of financing social security payments from alternative sources may be investigated. Fifth, information services, labor exchanges and job-placement agencies could be improved and expanded to provide more assistance to the unemployed in their search for suitable jobs. In a world where the supply of educated workers is increasing rapidly and technological developments are transforming the skills needed by industry, better flows of information can be of great help to first-time job seekers in evaluating and adjusting to changing market conditions.

Migration

Mobility is an essential attribute of a well functioning labor market. High rates of domestic and international migration attest to workers' responsiveness to geographical variations in income earning opportunities. In most developing countries, more than 30 percent of the additions to urban population during the 1960s were migrants from rural areas; in some countries—Ghana, the Republic of Korea, Tanzania—migration accounted for over 60 percent of urban growth, and in a few countries, notably Ivory Coast and Uganda, it accounted for over 70 percent. International labor migration depends on the proximity of foreign demand. Southern Europe and Northern Africa, for example, supply more than six million temporary workers to the industrialized countries of Northern and Western Europe; several million illegal migrants from Mexico and other Latin American countries are believed to be working in the United States; and over two million construction workers from the non-oil Arab countries and South Asia are employed in capital surplus oil exporting countries such as Kuwait and Saudi Arabia. Other main international destinations of temporary migrant workers include the prosperous agricultural economies on the

West African coast and the mines of the Republic of South Africa.

International migration is tacitly or explicitly encouraged by most labor exporting countries, even though in some cases the loss of the emigrants' skills offsets much of the gains from their remittances. While some countries—Malawi and Mozambique, for example—have curtailed migration for political reasons, the majority regard repatriated earnings as an important source of foreign exchange: in 1975, remittances equaled about one-fourth of Turkey's import bill, 20 percent of Yugoslavia's, and 9 percent of Pakistan's. International migration also provides jobs for a substantial proportion of the labor force in some labor exporting countries. In 1975, over 10 percent of Algeria's labor force and over 5 percent of Yugoslavia's were employed abroad. International migration is a less important source of employment for populous countries like Pakistan, less than 1 percent of whose labor force is employed abroad.

Official reaction to high rates of internal migration has been less sanguine, most countries expressing concern that rural underemployment is being transformed into urban unemployment. This concern is frequently exaggerated. Evidence from several countries—Argentina, Brazil, Chile, the Republic of Korea, Peru, Tanzania and Thailand—indicates that most urban migrants find work within one month of arrival, many migrants moving only when they are assured of an urban job; most increase their income and improve their employment status as a result of their move. Despite the very obvious poverty of some urban migrants, the majority consider themselves better off than their rural counterparts and evince no desire to return to their rural existence; many in fact are sufficiently well off to help support their rural kin. Where migrants have chosen to remain unemployed in order to search for high-paying jobs, the fault lies not with the process of migration but with dualistic wage structures and inadequate flows of information about job opportunities. The appropriate policy responses to migrant unemployment, and to urban unemployment in general, are those outlined in the previous section.

Concern with migration has caused a few countries, such as the People's Republic of China and Indonesia, to implement measures restricting the rural-urban flow. But since migration is motivated mainly by the desire for better employment, this concern might more effectively be shown in policies that influence the spatial distribution of income earning opportunities. The encouragement of industry relative to agriculture, which has been a common feature of many development strategies, has concentrated new job opportunities in urban areas. Rural-urban migration has been the natural consequence. Redressing the balance between incentives to industry and agriculture may not reverse rural-urban migration, but it will reduce the movement to more manageable dimensions and alter the spatial requirements for infrastructure and other services. The interactions between migration, the spatial distribution of the population, and the costs of urbanization are discussed in Chapter 6.

Population Planning

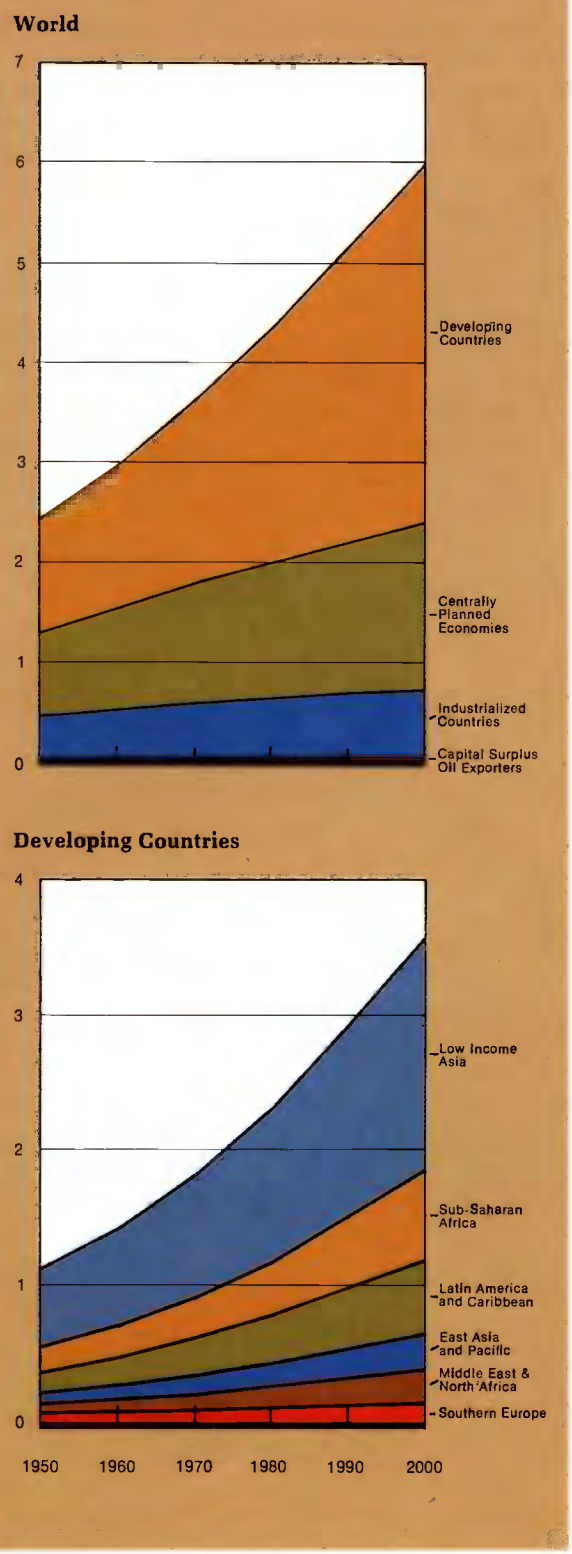
In the short and medium term, economic policies must be designed to contend with rapidly increasing numbers of new entrants to the labor force. In the longer run, however, population policy is fundamental to any strategy that seeks to raise productivity and incomes by transforming the sectoral structure of the labor force. Of the projected increase in world population between 1975 and 2000 of approximately 2 billion, more than 1.5 billion will be citizens of developing countries. The areas of greatest population expansion will be Low Income Asia (680 million), Sub-Saharan Africa (330 million) and Latin America (250 million).

The main determinant of future population growth is the level of fertility; with few exceptions, mortality decline will not be an important factor. In parts of Latin America and East Asia, mortality rates are already approaching those of the industrialized countries. In Low Income Asia, mortality is higher, but given its current level, future declines will have a smaller impact on population growth than those of the past. Although high mortality remains a major problem in Africa, the prospects for a rapid decline are not encouraging. With respect to fertility, declines in the crude birth rate between 1960 and 1977 in excess of 30 percent have occurred in a number of East Asian countries—the Republic of China, Hong Kong, the Republic of Korea, Singapore and Thailand—and in Chile, Colombia, Costa Rica, Trinidad and Tobago, Tunisia and Turkey. There have been smaller but nevertheless significant decreases in India, Indonesia, Malaysia, the Philippines and Sri Lanka, in some Latin American countries such

Figure 8

Population Estimates and Projections, 1950-2000

(Billions)



as Jamaica, Panama and Venezuela, and in Greece, Portugal and Yugoslavia. In the remaining Low Income Asian countries and virtually all countries in Africa (the main exception being Egypt) and in the Middle East, fertility has either remained constant or else shown only a modest decline. In these countries, population growth rates of well over 2 percent a year can be expected throughout the remainder of this century. These rates are substantially higher than the 0.4 percent a year projected for the industrialized countries and the 1.2 percent a year projected for the developing countries of Southern Europe.

While much of the observed fall in fertility can be attributed to general improvements in social and economic conditions, which increase the incentives for families to limit their size, most countries experiencing significant declines in crude birth rates had adopted public programs in the 1960s designed to reduce fertility. Family planning programs have taken a variety of forms, ranging from policies of persuasion (such as the public promotion of small families in Indonesia), to tax incentives (for example, reducing the benefits accruing to large families in the Philippines and Singapore) to measures such as raising the minimum legal age for marriage in India and the Republic of Korea. Most programs concentrate on providing information about contraception and supplying contraceptive services, including sterilization at or below market cost.

Declining fertility rates are also associated with increased urbanization, improved educa-

29. Contraceptive Use and Crude Birth Rates in Selected Developing Countries, 1977

	Percentage of Married Women of Child-bearing Age Using Contraceptives[a]	Crude Birth Rate Per Thousand Population
Kenya	4	51
Pakistan	6	45
Indonesia	19	37
Mexico	21	38
Egypt	21	36
Thailand	32	32
Malaysia	34	29
Sri Lanka	44	26
Colombia	49	30
Hong Kong	64	19

[a]These data refer to the latest available information covering the period 1975-77.

tion and more extensive participation of women in the labor force. These factors alone, however, may not guarantee a rapid decline in the birth rate; family planning programs offer an important complementary means of limiting future labor force growth by making the public more aware of the benefits of birth control and by providing contraceptive supplies and information. If natural fertility is equated with a crude birth rate of approximately 50 births per thousand of the population a year, experience to date indicates that the rate declines by about one birth for every 2 percent of the women in the child-bearing age group who practice effective contraception (Table 29).

The development of population policies is particularly important in the Low Income countries of Africa where fertility rates have not yet started to decline, and in some Middle Income Latin American countries where population growth rates are above 3 percent. Few countries in either group have yet introduced population policies to any significant extent.

The potential significance of declines in fertility for the size of the labor force in the long term may be illustrated by some rough simulations. If fertility rates in developing countries had suddenly been halved in 1975, by the year 2000 the total male labor force would be approximately an eighth smaller than it is otherwise projected to be; however, the male labor force under 25—the group who usually display the highest incidence of unemployment and underemployment—would be only half the size that is presently projected. By the year 2020, such a fertility decline would be felt even more dramatically: the total male labor force would be nearly 40 percent smaller, while the male labor force under 45 would be only half the size that is presently projected. Slower population growth would not only help to contain the future dimensions of the employment problem; without it, for many countries, the immense demands for social and economic infrastructure are likely to pose a crippling burden on public budgets and planning capacities.

Chapter 5: Industrialization

The share of industrial production in the economy is an important indicator of the stage a country has reached in the process of structural transformation. In Middle Income countries, the high rates of industrial growth sustained since 1960 have raised the share of industry from 32 percent of gross domestic product in 1960 to 37 percent in 1976. Industrial output has grown somewhat more slowly in the Low Income countries, but the share of industry in their GDP has risen more, because the other sectors, agriculture and services, have grown even more slowly than in the Middle Income nations (Table 30).

30. Structure and Growth of Production, 1960-76
(Percentages)

	Distribution of Gross Domestic Product (at current prices)					
	Agriculture		Industry		Services	
	1960	1976	1960	1976	1960	1976
Low Income Countries	50	38	17	24	33	38
Middle Income Countries	22	15	32	37	46	48
Industrialized Countries	6	4	40	38	54	58

	Average Annual Growth Rate, 1960-76 (at 1975 prices)		
	Agriculture	Industry	Services
Low Income Countries	2.1	6.0	5.2
Middle Income Countries	3.1	7.6	6.7
Industrialized Countries	1.3	4.9	4.2

The industrialization patterns of countries show some systematic differences with respect to their size and specialization in international trade. At a given level of average income, large countries such as Brazil and Turkey, which rely predominantly on domestic markets, have tended to attain higher levels of industrialization than small nations, which rely more on international trade for their development. Among small countries, those poor in natural resources, such as the Republic of China and Hong Kong, which specialize in manufactured exports, have industrialized more rapidly than those such as Costa Rica, Iraq and Malaysia that have ex-

Shared Patterns and Problems

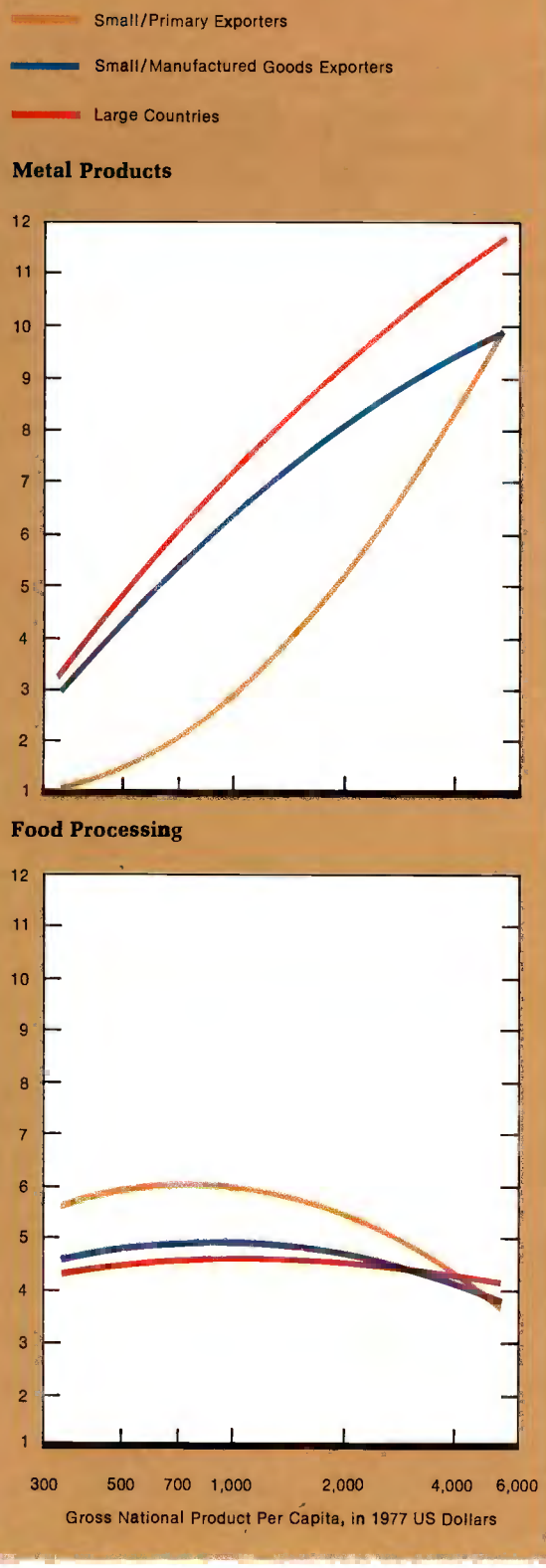
Since countries at similar levels of average income have much in common in what people buy and what local industries can make, there tend to be marked similarities in the evolution of industrial structure. For example, food processing is typically an important subsector in countries at low income levels, particularly in small nations specializing in primary products, but it becomes less significant as incomes rise (Figure 9). Other labor-intensive activities, such as textiles, also are important at early stages of development. As development progresses, more capital- and skill-intensive sectors like rubber products, chemicals and metal products come into their own. These later-stage activities tend to be more important in the industrial structure of large countries, which are normally better positioned than small ones to exploit economies of scale in process industries. Among small countries the industrially specialized economies diversify earlier into these sectors than the primary exporting countries. Figure 9 illustrates these average patterns of change with respect to the metal products sector.[1]

[1]Metal products refers to items in the International Standard Industrial Classification Divisions 38 and 39: fabricated metal products, machinery, equipment and miscellaneous manufactures.

Figure 9

The Pattern of Structural Change

(Percentages of gross domestic product, at 1977 prices)



ploited their natural resource endowments to specialize in exports of primary products.

Many developing countries deviate substantially from these average patterns of industrialization, not least because of the different policies with which they have responded to similar initial conditions. But though these responses differ, many of the key problems and choices encountered by industrializing nations are similar. It is these shared problems and issues of industrialization that are the subject of this chapter.

The problems of industrialization are particularly onerous in the early stages of development, when incomes are low and skills scarce, but a wide range of new institutions and activities needs to be established and coordinated, and crucial choices have to be made with respect to the sector, scale and timing of investments. Successful industrialization has generally required substantial and efficient investment in supporting infrastructure. In industries that compete with imports, difficult choices usually need to be made as to how, and how much, they should be protected against foreign competition: while too much protection stunts learning and productivity growth and nurtures vested interests, too little could prevent an industry from starting at all. In many industrial products characterized by economies of scale, the most economically efficient plant size is significantly larger than that which the initial domestic market will justify. The timing and phasing of such "lumpy" investments thus raises important issues, since building plants that are sub-optimal in scale can often result in unnecessarily high costs. The financing and management of large plants and complex production systems are frequently beyond the capacity of the local private sector, making it necessary to consider the alternatives of public enterprises or foreign transnational firms; each of these institutional modes poses fresh challenges for policy. Perhaps the foremost shared problem at early stages of development is how to foster a stable and consistent policy framework that supports industrialization without discouraging the development of the most important sector of the economy, agriculture.

As industrialization proceeds beyond the initial stages, other issues come to the fore for policy consideration. Growing attention needs to be paid to expanding the opportunities for indigenous managers and entrepreneurs, partic-

ularly with respect to learning to produce, export, and market manufactured goods in an internationally competitive environment. Frequently, this requires a substantial liberalization of the industrial policy framework. At the same time it becomes increasingly necessary to enlarge the pool of technological expertise, so that the country can adapt and innovate industrial technologies appropriate to its endowment of natural resources, capital and labor. The growing depth and interdependence in the domestic industrial structure calls for complex investment planning and coordination, particularly with respect to the intermediate and capital goods producing sectors.

The Role of Agriculture

Debates over development strategy have often swirled around the relative importance to be assigned to industry versus agriculture. Historical evidence suggests that this dichotomy is frequently overdrawn. In particular, the notion that rapid industrialization entails a neglect of agriculture is misplaced; it underestimates the importance of the mutually beneficial links between agricultural and industrial development. Indeed, in most developing countries successful industrialization has been supported by sustained and broadly based agricultural growth. This is hardly surprising in view of the fact that in the overwhelming majority of developing nations, including most Middle Income countries, more people earn their livelihood from agriculture than any other major sector of the economy. A buoyant and productive agricultural sector stimulates domestic demand for industrial goods, supplies cheap food for industrial workers and raw materials for agro-processing industries, earns foreign exchange to finance imports of capital and intermediate goods for industrialization, and facilitates the development of labor-intensive small- and medium-scale industrial units in small towns and rural areas.

Increases in agricultural productivity and incomes are particularly important for generating domestic demand for industrial products at the early stages of development, when agriculture provides employment for well over half of a country's labor force. Detailed micro-studies of farm household behavior in several countries, including Malaysia and Sri Lanka, show that increments in rural incomes have powerful multiplier effects, in that they increase the demand for non-agricultural goods and services and hence the incomes of those providing the goods and services. Moreover, the evidence indicates that the multiplier effects of increases in smallholder incomes are, if anything, greater than those of comparable increments in the incomes of large farms, suggesting that a smallholder-oriented agricultural development strategy would enhance the expansion of a domestic market for industry.

Limited and stagnant rural purchasing power is a particularly severe constraint on the industrial development of the large poor countries of Asia, which have to rely principally on domestic markets for their industrialization. Where significant increases in agricultural yields and incomes have loosened this constraint, as for example in the Indian states of Haryana and Punjab over the past two decades, rapid gains in industrialization have been recorded. In such cases, while much of the increase in industrial output has occurred in textiles and other consumer goods purchased by rural households, part of the increment reflects the expansion of fertilizers, pesticides, agricultural implements, tractor parts and other intermediate manufactured products, which have, in turn, made agriculture more productive and highlighted the potential for mutually reinforcing links between the two sectors. Furthermore, when agricultural growth has been broadly based, the increments in purchasing power have induced the expansion of labor-intensive industrial activities, many of them in small-scale enterprises located close to rural markets.

In the early stages of development, when agriculture dominates the economy, it is inevitable that some of the resources for industrialization come from agriculture. But the manner and amounts in which such resources are transferred can have profound consequences. All too often the methods deployed have included artificially low prices to agricultural producers, taxation of agricultural exports, an overvalued exchange rate, heavy protection for manufactured goods, including those purchased by the rural sector, and other measures which have turned the domestic terms of trade against agriculture and dampened the incentives for its development. Frequently these policies have been compounded by deficiencies in transportation and marketing infrastructure, and inefficiencies in agro-processing industries, which have levied further implicit tolls on agricultural

incomes. From an economic viewpoint, land taxation and the mobilization of rural savings through financial institutions are more desirable means of transferring resources from agriculture to industry; these played a significant role in the early development of Japan. More recently, the Republic of China, the Republic of Korea and the Indian state of Punjab, among others, have achieved considerable success in using financial institutions to channel rural savings to other sectors.

Agriculture remains important to the industrialization process for nations in the middle income range. In many of these countries, agriculture still accounts for well over half of merchandise export earnings, which are necessary to finance the burgeoning imports of intermediate and capital goods for industrial production. With a growing proportion of the labor force employed outside agriculture, Middle Income countries need to produce food efficiently if they are to escape the unwelcome consequences of massive food import bills, or the inflationary pressure on industrial wages exerted by high food costs. Countries such as the Republic of China, the Republic of Korea and Malaysia, which invested heavily in irrigation, land improvements, other rural infrastructure and agricultural research in their early stages of development, have been reaping the benefits of high agricultural productivity and incomes, and cheap food. In contrast, nations such as Chile, Jamaica and Zambia, which paid insufficient attention to agricultural development in earlier years, are finding that high food import bills severely limit the foreign exchange available for industrial development. Appropriate agricultural pricing policies are equally important. In West Africa, for example, the Ivory Coast's concern to provide adequate incentives for producers has been rewarded with decreasing dependence on food imports, whereas the unattractive producer prices adopted in Ghana have contributed to a substantial decline in food production per capita.

In many Middle Income countries, rural purchasing power remains fundamental to the domestic market for industrial goods. This is particularly true in larger countries such as Brazil and Turkey, which need to give greater priority to broadly based agricultural development, especially if protection in international markets reduces the potential for selling industrial products abroad. Conversely, in rapidly growing Middle Income countries, including the Republic of China, the Republic of Korea, Mexico and Nigeria, the sharp increases in effective demand for agricultural products offer significant opportunities for stimulating domestic agriculture, especially on small farms, and effecting a wider dispersion of the benefits of fast growth.

Government Support for Industrialization

Infrastructure, Planning and Finance

In most developing countries governments have played a crucial role in initiating and supporting the early stages of industrialization. They have been mainly responsible for the building of roads, railways and port facilities which have reduced transport costs, integrated markets, and made development possible. State undertakings have usually been created to produce and distribute the power, water, sewerage and telecommunications services essential to the growth of industrial activities and the concomitant development of towns. The economies of scale inherent in the provision of these utilities typically entailed large-scale projects that were beyond the capabilities of the local private sector at early stages of development; moreover, the widespread practice of subsidizing these basic services could not have been pursued by private companies. However, in many developing countries, policies for underpricing public utilities have outlived their original justification of nurturing modern industrial activity; continued reliance on such policies strains national budgets, undermines the financial and managerial autonomy of the utilities concerned, and gives misleading signals for investment decisions. Finally, government investments in transport infrastructure and public utilities have generated substantial demands for equipment and for construction materials and services, which have created significant opportunities for local industrial expansion, even though much of the demand was initially met from abroad.

The state's role in early industrialization efforts has extended beyond the provision of expensive large-scale physical infrastructure. Following World War II, growing numbers of developing nations espoused industrialization as a prime goal of government economic policy and launched a broad array of initiatives in its pursuit. Much of the impetus for development planning came from and was focused on the requirements of industrialization. The large

investment and foreign exchange requirements of industrial and infrastructure projects, and the high degree of interdependence among them, spurred governments to draw up comprehensive and detailed medium-term projections and plans for economic activity. These early efforts at development planning highlighted the inherently interconnected nature of government fiscal, monetary and foreign trade and payments policies, and nurtured a coordinated approach to development strategy. Investment planning also catalyzed the identification and appraisal of alternative projects, provided early warnings on emerging bottlenecks in production and manpower supplies, and permitted the implications of alternative policy packages to be assessed.

Some governments went further and attempted to use development plans as detailed blueprints for the central direction of economic activity. In several countries, particularly those at low levels of development, the volume and quality of central planning and detailed state intervention required for such a strategy outstripped the capacity of their planning and implementation apparatus: coordination was often faulty; projects were delayed by lack of complementary inputs; cost overruns were frequent; plans were too rigidly adhered to in the face of unforeseen events; and the capacity for decentralized decision making was stunted. These experiences have increasingly led to the use of more decentralized and flexible planning procedures such as "rolling plans" and multi-year budgets, which attempt to bridge the exigencies of short-term economic policies and the medium-term planning needs on which investment decisions must be based. In developing countries with more advanced industrial structures, the high and growing capital costs of minimum-scale plants, the growing interdependence among industrial activities, recent advances in complex analytical techniques and the availability of skilled analysts combine to offer cost-saving opportunities from the planned timing, scale, location and phasing of investments in industries such as fertilizers, petrochemicals and mechanical engineering.

Besides providing infrastructure and a coordinated policy framework, developing country governments have spearheaded efforts to marshal skills and financial resources and direct them to industry. Numerous specialized institutes have been created to train indigenous managers, entrepreneurs, administrators and industrial technicians. In nations where the historical legacy of such skills was particularly scarce, as in many countries of Sub-Saharan Africa, programs have been established for the transitional use of expatriate personnel in private and public industrial ventures. Such policies have not been free of difficult issues such as salary disparities between expatriate and indigenous staff, the appropriate rates of "citizenization" of jobs held by expatriates, charges of neo-colonialism, and other vicissitudes of post-colonial cross-cultural cooperation; nonetheless they have usually permitted more rapid and efficient industrialization than would have been possible otherwise.

Governments have channeled finance to industry through a number of means, including direct lending and equity participation in industrial enterprises and the creation of industrial development banks, which act as conduits for domestic and foreign financial savings. Beyond supplying medium- and long-term finance to industry, the development banks provide a wide array of technical services and propagate the application of modern investment appraisal criteria. In some developing countries, including India, the Republic of Korea, Mexico and Tanzania, the major government-supported development banks have become pivotal institutions in industrial development. In most developing economies, governments have also been active in delineating and monitoring the role of foreign transnational firms in transferring capital, skills and technology to local industry. The means they have used range from defining investment and tax codes for private foreign investment to assisting domestic private and public entities to negotiate contracts with foreign firms.

Public Enterprises in Industry

One set of public institutions for furthering industrialization in developing countries merits special attention. These are industrial enterprises owned and operated by government. Such enterprises have been created in many developing countries for diverse reasons, including the desire to launch and control large capital-intensive plants producing fertilizers, petrochemicals or steel, which might not have been undertaken by the private sector or would require regulation of monopolistic profits if they were; the goal of deploying state economic power to balance that of domestic industrialists

and foreign transnational firms; the need to increase the supply of trained managers and technical staff; and nationalization of existing private units to take over the "commanding heights" of the economy, or, alternatively, to forestall bankruptcies and layoffs in private enterprises of marginal profitability. In many Low Income countries, particularly in Africa, where the dearth of indigenous private industrial entrepreneurs frequently narrows the choice of institutional modes to state enterprises or foreign firms, the former are often preferred.

Some of these underlying objectives have been fulfilled. Large-scale industrial projects beyond the capacity of the local private sector have been set up in many countries. In India public enterprises have made pivotal contributions to the establishment of a domestic capital goods manufacturing sector and the evolution of a professional cadre of industrial managers. In the Republic of Korea, public enterprises played a key role in the development of internationally competitive fertilizer and iron and steel industries. Turkish state enterprises facilitated the introduction of new manufacturing technologies and modern sales organizations, while the training programs of these firms supplied substantial numbers of managers and skilled workers to other industrial units. Public sector management of nationalized units has sometimes been more dynamic and far-sighted than that of their private predecessors. In a number of countries, negotiations and joint ventures with foreign firms have been aided by the existence of public industrial units; this is particularly true of sectors engaged in processing petroleum and non-fuel minerals.

However, in most countries there is growing concern about the low profits and operational inefficiencies of many state enterprises. Most public undertakings in developing countries operate in monopolistic domestic markets protected from international competition by tariffs and quotas, and receive significant benefits from tax exemptions and priority allocations of scarce foreign exchange and domestic credit. Yet substantial losses are common and high profits are exceptional. Their history of poor profitability stems partly from their pursuit of other, social, objectives, such as employment and the development of backward regions, and partly from the fact that many of these enterprises are recent ventures in difficult sectors where an extended learning period can reasonably be expected. But all too often the explanation lies with the framework of policies and incentives within which state enterprises operate. Frequently, public enterprise managers are granted very little discretion regarding pricing, wages, hiring practices and investment decisions. Wage and salary scales are narrowly bound by legislation, product prices are controlled by other state agencies, and investment decisions are subject to detailed and dilatory scrutiny by the central government, which also intervenes in the day-to-day operation of the undertakings. Overmanning at all levels is common since public undertakings are often viewed as employers of last resort; hiring decisions frequently result from the exercise of political patronage while dismissal procedures are cumbersome and ineffectual. Furthermore, state enterprises are often favored targets for labor strikes.

These practices lead to frequent losses which are almost invariably financed from the national treasury or the banking system; bankruptcy is rare. The prevailing environment provides little incentive to workers and managers to improve their performance and thus tends to perpetuate the existing problems. The costs of poor performance extend beyond the state enterprises, especially in countries where they produce a large proportion of industrial output. The cumulative losses burden the national treasury and preempt credit which could have otherwise gone to more productive users. In some countries, such as Mali and Turkey, the funding of public enterprise losses by the banking system has been a significant source of inflation and macroeconomic instability.

It is easier to diagnose the difficulties, many of which are shared by some state units in industrialized countries, than to devise and implement solutions, especially since the latter will depend to a large extent on political factors. However, the experience from a number of countries suggests some broad guidelines. First, large industrial projects in the public sector merit particularly careful pre-investment scrutiny, since once they are initiated the practical possibilities of reversing a mistake through permitting bankruptcy are limited. Second, the non-commercial objectives of a state enterprise need to be limited and specified, if they are not to be used as blanket justifications for inadequate performance. The experience between

1950 and 1970 of Italian public enterprises under the holding company, the Institute for Industrial Reconstruction, provides an example. Agreement on the nature and scale of a particular social objective was arrived at between the government, the holding company and the individual enterprise, which then received earmarked funds, at predetermined levels, to pursue the specific social objective. The company was not expected to compromise its quest for profits.

Experience from Mexico and Italy indicates that competition between private and public firms tends to make both more efficient in industries where economies of scale and the size of the domestic market limit the number of units. In sectors where public firms occupy near-monopoly positions, competitive discipline can be exerted through more liberal import policies. The benefits of competitive pressure are more likely to be reaped if measures are taken to grant public enterprise managers greater autonomy with respect to product pricing, financial management, employment practices and investment decisions, coupled with greater accountability for their performance. The historical evidence also suggests that the dynamism of state enterprises is likely to be enhanced through joint ventures with private domestic and foreign firms. Finally, a number of countries, including Argentina, Brazil, Japan, the Republic of Korea and Singapore, have successfully followed the practice of selling public enterprises to the private sector once the pioneering role of the government has been discharged. In this way, the government's limited managerial and financial resources can be used sequentially to pioneer new ventures and promote competition within specific monopolistic industries.

Technology for Industrial Development

Successful industrialization requires the acquisition and mastery of new technological processes and the development of capacity to adapt and innovate technical and organizational changes that will raise productivity in developing country conditions. Much of the technical progress in developing country industries has been achieved through experience accumulated on the job, and through small changes in physical plant, layout and organization. Such gradual changes more than doubled the annual production capacity of a Brazilian steel plant in seven years, with very little new physical investment. Similar, though less dramatic, gains have been recorded in many successful industrial firms in other sectors and countries.

Developing countries still depend heavily on industrialized nations for new industrial processes and techniques. The overwhelming majority of these originate in developed countries (including European centrally planned economies), which are estimated to account for over 95 percent of world spending on research and development. New technology is transferred to developing nations through diverse channels, including the capital goods imported by these countries, direct investment by foreign transnational companies, engineering consultancy, education and training, turnkey projects, licensing agreements, management contracts, and a variety of informal business links. Countries at early stages of industrialization tend to rely more heavily on transfer mechanisms, such as foreign private direct investment, that combine technology, capital, skills, marketing and management in one package, while nations with more developed industrial structures are better positioned to define and contract for their specific technology needs. Over time, the growing sophistication of technology buyers and increased competition among the proliferating suppliers of technology have induced a general tendency toward the more specific, unpackaged forms of technology transfer. The trend has been slower in high technology industries, such as petrochemicals, motor vehicles, precision machine tools and computers, where developing country buyers lack the requisite expertise and the sources of supply are few.

The international market for industrial technology is an imperfect one, and a complex arena for buyers from developing countries, especially the less advanced among them. The costs of acquiring technology are frequently bloated by the manipulation of prices for transactions between constituent units of transnational companies; technology contract clauses that restrict the buyer's exports and require purchases of imported inputs from the supplier; and by certain developing country policies, including excessive industrial protection, unduly generous tax inducements to foreign investors and indiscriminate, sometimes duplicative, acceptance of technology contracts.

A more open, stable and competitive environment for industrial trade and investment and the elimination of unnecessary tax inducements in

some developing countries could substantially reduce the costs to developing countries of acquiring technology. In recent years several countries, including Argentina, Colombia, India, the Republic of Korea and Mexico, have established national technology registers and similar agencies to screen prospective technology contracts between foreign and domestic firms, with a view to reducing the excessive costs of duplication, unduly high payments and severely restrictive clauses. According to preliminary evaluations, the Colombian and Mexican programs have had significant success in reducing costs and acquainting domestic entrepreneurs with cheaper alternative technologies. Recent international initiatives have also led to negotiations on international codes of conduct for technology transfer and transnational corporations.

Costs are not the only concern of developing country purchasers of industrial technology. Frequently the industrial processes designed and developed in the relatively capital-rich industrialized countries are too capital intensive for developing nations, and their indiscriminate adoption aggravates unemployment and underemployment in these countries. Studies indicate that developing countries could significantly increase both employment and output by adopting more appropriate technologies. Individual firms in these countries rarely have ready access to information on profitable alternative technologies. Recognizing this, a number of countries, including Ghana, India, Indonesia and Mexico, have founded institutes for research and dissemination of such information. Of potentially greater significance for the long term is the recent emergence of technology exports from a few industrially more advanced developing countries. These exports could significantly widen the array and terms of technology acquisition available to other developing nations.

During the present decade a few countries, including Argentina, Brazil, the Republic of China, India, the Republic of Korea and Mexico, have begun to export capital equipment, turnkey plants and engineering consultancy services, and to undertake transnational corporate investments. India has been exporting capital equipment for textiles, sugar processing and cement for some time; its more recent exports have included a growing range of machine tools and other engineering products. Argentina has exported turnkey plants for meat refrigeration and fruit processing, while Brazil and Mexico have won turnkey contracts in steel manufacture. The competitiveness of these technology exports is founded on a history of learning, improving, and adapting technological processes and products imported from industrialized nations, the relatively low cost of highly skilled manpower, the suitability of the technologies for developing country conditions, and their presentation in relatively unpackaged forms so that buyers can specify their needs. Such technology exports are still small in the global context, but they presage significant and growing opportunities for trade and technological links among developing nations.

The experience of these few technologically more advanced developing nations highlights the significance of the domestic engineering and metal-working sectors in furthering the development of technological expertise and industrial efficiency. In developing countries with relatively advanced industrial structures and a sizable skilled labor force, there are strong reasons for encouraging the production of machinery. Exports of machinery and transport equipment are projected to continue as the most dynamic element of world trade in manufactured goods. Much of the increase in demand for these products is likely to come from developing countries, which in 1976 absorbed over 30 percent of world exports, but supplied less than 5 percent of the total. Development of machinery manufacturing could increase a country's exports of machinery and engineering consultancy services, augment its ability to adapt and innovate industrial processes suited to indigenous resources and conditions, and enhance its capacity to choose and negotiate technology purchases from abroad, as well as creating substantial employment opportunities for skilled and semi-skilled labor. Furthermore, unlike process industries such as steel, fertilizers and other chemicals, machinery production does not require large, capital-intensive, vertically-integrated firms. Relatively small firms can secure the economies of scale necessary for efficient production through product specialization, tight production scheduling and careful control of inventories.

In most developing countries where machinery production is a sizable sector, its efficiency is currently hampered by a number of factors, including uncertainties in the supply of raw materials such as steel, inadequate training of operatives, too little sharing of the managerial

and engineering experience accumulated in the sector, a lack of standardization in materials and parts, insufficient expenditure on research and development, weak marketing arrangements and instability in the demand for the sector's products, caused by fluctuations in economic growth and sudden changes in trade and industrial policy.

Government action can help to alleviate some of these problems. Programs for vocational training or to subsidize in-plant training can make labor more productive. Plants may be made more efficient through government-sponsored extension services in which experienced engineers and production personnel advise on the use of machines, layout and flow of work. The Republic of Korea is launching such a program. Production and exports could also gain from the establishment of a centralized engineering consultancy service for the conception, establishment and operation of turnkey plants, such as that operated by Engineers India, Limited. The state could take the lead in introducing national standards for materials, industrial fasteners and other parts. Fluctuations in the supply of raw materials and in demand for the sector's products could be reduced through planned phasing of investment in the industries supplying the sector and using its products, as well as through flexible and liberal import policies to allow unforeseen shortfalls in raw materials to be offset. Machinery exports would benefit from the provision of longer-term export credit and insurance facilities, better dissemination of international marketing information, and the institution of centralized quality control facilities. Machinery firms in developing countries undertake little research and development, though this is necessary to sustain productivity gains and spur innovations in design that best exploit the availability of indigenous resources. Governments could offer firms tax incentives for research and development expenditures, establish institutions to undertake contract research for industry, and reverse the current bias in the funding of research and development that favors basic research over development work. Finally, policies that assure high and stable rates of investment in the economy and facilitate the evolution of small- and medium-scale machinery firms will aid the development of the machinery sector and broaden the country's technological capacity.

Foreign Trade and Competition

Trade Policies: Costs and Benefits

Growth in the international exchange of goods and services has contributed significantly to the economic development of trading nations. The basic principle of foreign trade—that specialization and exchange increase the overall availability of commodities—allows all parties to benefit from international transactions. The extent to which countries have recognized and adhered to this principle has been a key factor in the success of their industrialization efforts. Countries that have used foreign trade opportunities to capitalize on natural advantages, such as their location and plentiful supplies of cheap labor, or on acquired advantages such as skills and technical capabilities, have developed more quickly and avoided cyclical foreign exchange crises more successfully than similarly endowed countries that have excluded foreign competition and protected domestic production beyond the initial creation of an industrial base.

Experience suggests that only a limited phase of protection is required in the early stages of industrialization. All of the currently industrializing countries, with the sole exception of Hong Kong, have protected domestic production to some extent. Frequently, however, protection has been introduced as a means of limiting imports in response to balance of payments crises, rather than as a conscious effort to encourage the rational development of industry. Among the unforeseen consequences of the ensuing reliance on quotas, indiscriminately imposed tariffs, and administrative control of foreign exchange are the misallocation of resources in favor of large-scale, capital-intensive production, reduced incentives to export, and the creation of vested interests in the protected industries. Initially, however, despite the inefficiency of the protective devices used in many countries, the encouragement of import-substituting industries has generally secured a rapid expansion in manufacturing output. In the 1950s and 1960s Mexican manufacturing, for example, grew at annual rates above 7 percent; Brazil, the Philippines and Turkey, among other countries, have also achieved considerable rates of growth in manufacturing through import substitution. The development of the manufacturing sector has in turn helped to create and spread industrial and entrepreneurial skills, and in some countries, such as Brazil and India, has resulted

in the emergence of substantial domestic technological capacity.

The early stages of import substitution usually involve labor-intensive, non-durable consumer goods, the production of which is technically simple and also efficient even at low levels of output. To encourage import substitution in these products, many countries have afforded the highest levels of protection to consumer goods, giving successively lower levels to intermediate and capital goods and primary commodities. While the details vary, this broad pattern of protection is common to countries as diverse as Chile, Colombia, India, Indonesia and Pakistan.

Once early import substitution opportunities have been fully exploited, a continued reliance on protection imposes increasingly higher costs on the economy, because the production of goods associated with later stages—intermediate goods, capital goods and durable consumer goods—has relatively advanced technological requirements, is more demanding of skilled labor, and needs to be organized on a relatively large scale if it is to use resources efficiently. Limited domestic markets and a structure of incentives that discourages exports have condemned capital-intensive industries to inefficient levels of production in countries—Colombia, Ghana and Pakistan, for example—that have pursued import-substitution strategies for too long. Even in larger economies, such as Brazil (at least until 1965), India, Mexico and Turkey, the prolonged use of protective measures has contributed to the development of high-cost, inefficient domestic industries. Moreover, an important corollary of the protection afforded to manufacturing is its disincentive effect on agricultural production. Import-substitution policies have tended to limit agricultural growth, and hence domestic demand for manufactured goods, while simultaneously keeping industrial production dependent on internal purchasing power.

Experience suggests some guidance for the future. Low Income countries still in the early stages of industrialization can successfully deploy protective measures while skills are acquired and the necessary infrastructure is established. Such protection, however, should be of limited and clearly specified duration and, where possible, should rely more on tariffs than on quantitative restrictions. Adequate promotional incentives—subsidies and information—could also be made available to new industries to encourage them subsequently to enter world markets. Japan and the Republic of Korea, for example, have demonstrated that very high levels of initial protection need not prevent an industry from becoming internationally competitive within 10 or 15 years, provided that all concerned are given clearly to understand that protection is to be temporary. In Low Income countries, low-skill, labor-intensive products are the most appropriate initial focus for industrialization efforts; technologically more sophiscated products may need to await the development of adequate supplies of skilled labor and technological capacity. At the same time, domestic demand for industrial products can be stimulated by maintaining incentives to agriculture at levels which secure the continued growth of agricultural incomes.

Where domestic markets are relatively small, the pursuit of import-substituting policies beyond the early stages of industrialization should be viewed with caution. Several countries—the Republic of China, Israel, the Republic of Korea and Singapore—have demonstrated that the continued development of industry can be secured by an alternative approach—namely, a switch to production for export. Apart from maintaining and even accelerating the rate of industrialization, the policy switch allowed these countries to avoid the costly mistakes associated with excessive import substitution and to reap a number of benefits. In particular, since manufactured exports tend at first to be more labor-intensive and less skill-intensive than import substitutes, these countries were able to economize on skills and capital and simultaneously to increase job opportunities for unskilled labor. Opportunities for acquiring technical and managerial skills were also expanded, and industry, no longer constrained by domestic demand, was able to take advantage of economies of scale and to increase capacity utilization. The resulting growth in their manufactured exports was phenomenal: between 1961 and 1976, for example, the manufactured exports of the Republic of China and the Republic of Korea increased at annual rates of about 25 and 50 percent respectively.

Experience demonstrates that a successful export drive depends crucially on easy access to duty-free imported inputs, through, for example, special export-processing zones or efficient systems of bonded warehouses and tax

rebates, and on the maintenance of export price incentives that are comparable to those accorded production for the domestic market. An existing industrial base is also a prerequisite, although countries such as the Republic of China, Israel, the Republic of Korea and Singapore began to compete successfully in the world market for manufactures when their industrial sectors were quite small. In the Republic of Korea, for example, industrial value added was only about US$1 billion (at 1975 prices) in 1964, and yet this was the year in which the highly successful export drive took off. A significant number of Low Income countries already have industrial bases of comparable size and are therefore in a position to embark on their own export drive.

Regional economic integration offers an alternative means of participating in the benefits of trade, but international experience with such efforts has been mixed. While member countries enjoy access to each other's domestic markets, they forgo the possibility of purchasing extra-regional commodities that may be cheaper than those available within the region. A potentially more significant field for regional cooperation is the phasing of large-scale investments so as to avoid excess capacity. The Association of South East Asian Nations, for example, has recently embarked on the construction of regional nitrogen fertilizer plants in Malaysia and Indonesia.

Transition to an Outward-Looking Trade Regime

The Republic of China, the Republic of Korea and Singapore switched to export promotion relatively early in the industrialization process. Many other countries, recognizing the limitations of prolonged reliance on import substitution, have also redressed, at least partially, a bias against exports. Their experience suggests that the transition to more outward-looking trade policies increases in difficulty with the duration and extent of import-substitution policies. Countries that are still in the preliminary phases of import substitution are well advised to initiate their policy transition before the emergence of politically vocal, and strongly entrenched, vested interests. Countries that have already entered the later stages of import substitution behind protective barriers face more severe problems in securing a smooth transition. But, at the same time, the recent experience of nations such as Brazil, Colombia and Spain indicates that success is feasible and that the resulting benefits are substantial. In Brazil, for example, manufactured exports increased from about US$300 million in 1967 to about US$2 billion in 1974 (at 1975 prices) despite a prior history of almost exclusive reliance on import substitution.

The range of countries that have now moved toward a trade regime less biased against exports indicates that such a step can be contemplated in a wide variety of economic circumstances and policy environments: export success has been achieved in poor and rich countries, in small and large countries, and in countries well advanced in import substitution as well as those still in its initial stages. This range of experience, including a number of failures, constitutes an important empirical basis for the development of policy guidelines for countries yet to embark on the transition.

Although the basic ingredients of the policy package—devaluation, inducements for exports, and reduction of quantitative restrictions and of tariffs on imports—are reasonably well understood, their implementation poses many problems. Frequently, such a policy change has been initiated in the midst of a foreign exchange crisis; sometimes it has been a direct response to pressure from aid donors. Absence of a strong national commitment to export promotion has sometimes meant that export incentives have been unsatisfactory, and inadequately maintained. This, compounded by a lack of adequate external financial support over a difficult transitional period, appears to have hampered some devaluation efforts, such as those of Brazil in 1957 and India in 1966. In several countries engaged in trade policy reform, inflation-induced erosion of international competitiveness has constrained the expansion of exports. This, together with the improved access to, and consequent growth in, imports has often led authorities to reinstate quantitative restrictions and increase tariffs to defend a deteriorating trade balance. In some cases the policy reforms have been thwarted by a lack of adequate external financing to support the balance of payments during the transitional period before exports respond to the new trade incentives.

Although policy changes introduced in response to crises are apt to run into difficulties, the adjustment to a more outward-looking trade policy will perforce often have to be initiated in unfavorable circumstances—especially in coun-

tries that are already far along the import-substitution route and have highly distorted trade systems. Experience suggests that in such cases a gradual approach is most appropriate; giving initial emphasis to expanding exports rather than reforming the import regime, except to the extent that the latter directly inhibits exports. Strong incentives to expand and diversify exports are particularly important where a shortage of foreign exchange is restraining industrialization. Devaluation is usually essential for this purpose. In addition, exporters of manufactures must be assured of access to duty-free imported inputs and convinced of official commitment to export promotion. Export-processing zones have been important in the early expansion of exports in a number of countries. Resort to certain temporary expedients also merits consideration: for example, it may be useful to tie the distribution of import licenses and access to foreign exchange to export performance, even though the ultimate goal is the removal of import licensing and exchange controls. It is more important, however, to ensure that over the long term, production for export remains as profitable as production for the domestic market; for this purpose, the exchange rate may need to be adjusted frequently in order to offset differential rates of domestic and international inflation.

As exports rise, attention can be turned to import liberalization. Remaining quotas can then be eliminated and tariff structures rationalized with less fear of a foreign exchange crisis, although even here a gradual approach may be most appropriate. Israel, for example, began liberalization by reducing tariffs on imports that did not compete with domestic industries; the additional step of eliminating quotas and reducing tariffs on competing imports took another seven years.

Reforming a trade and exchange rate regime in the midst of a crisis runs the risk of a recession. Apart from the hardship caused by the loss of output and employment, the ensuing dissolution of efficient and promising manufacturing activities also retards industrialization. The avoidance of recession is difficult since, unless exports are highly responsive, or sufficient external financing is made available, deflationary measures—fiscal austerity, tight monetary control and high interest rates—are required. Avoiding the premature liberalization of imports, encouraging domestic savings, and obtaining support from additional foreign capital inflows can help to lower the risks of recession somewhat. Even so, the transition from a severely distorted trading environment to a more outward-looking trade regime will involve a politically difficult redistribution of income, away from some of the existing import-substituting activities toward the newly emerging export sectors. These difficulties underscore the importance of retaining control over the timing of the transition: beginning the policy switch from a position of strength, perhaps deriving from good harvests or improved terms of trade, and before the commitment to import substitution has become excessive, renders the transition both economically more feasible and politically more palatable.

Industrial Licenses and Price Controls

Even if a successful transition is made to a more open trade regime, the competitiveness of the foreign trade sector may be diminished if administrative controls—industrial licensing and price regulations—hinder the functioning of domestic markets. Such measures are usually introduced for specific purposes, but difficulties of implementation have frequently prevented them from attaining their immediate objectives, and have often imposed severe costs on other sectors of the economy. Industrial licensing schemes, for example, frequently fail to consider issues of plant location and size, the timing of investments, or the choice of technology, while they have rarely achieved their main objectives of regional balance and control of monopoly power. Industrial licensing in Brazil did not secure regional balance; the licensing system in Spain only achieved a limited regional dispersion of industry, and that at the cost of building plants that were too small to be efficient. Efforts at monopoly control through industrial licensing also have met with limited success, primarily because, as in India, the well informed, larger and better organized enterprises have been able to take advantage of the licensing system at the expense of their smaller competitors, thus stifling rather than promoting competition.

Price controls on industrial products have also had many unintended results and often have proven costly to the economy. The ubiquitous cost-plus pricing system, for example, provides little incentive for efficiency or cost minimization; moreover, because it limits the

profits available for reinvestment in production capacity, the system has often resulted in critical shortages of output. Pakistan, for example, has experienced chronic shortages of fertilizer partly as a result of this system. Further, since in many countries—including Egypt, India, Tanzania and Turkey—public sector firms are not normally permitted to go into liquidation, the losses resulting from price controls have necessitated substantial government subsidies.

Countries that have a long history of direct controls can rarely abandon them immediately; the transition is likely to be facilitated if, as in the foreign trade sector, it is initiated in favorable economic circumstances and the controls are dismantled progressively over a specified period. Prior announcements of the forthcoming administrative reforms could also be made to minimize uncertainties and delays. The loosening of price controls and industrial licensing, and their replacement, where necessary, by appropriate fiscal incentives, may best be commenced in low-priority sectors and then extended to the more strategic sectors. The achievement of regional balance and the control of monopoly power can be sought through taxes and subsidies and the provision of infrastructure, rather than licensing systems. The alignment of domestic prices and real economic costs following price decontrol will usually improve the allocation of resources and make the reforms of foreign trade policy more effective. Since these transitions entail significant adjustment costs, countries may be well advised to limit their reliance on administrative controls during the earlier stages of industrialization.

Chapter 6: Urbanization: Patterns and Policies

Key Features of Urbanization in Developing Countries

Urbanization has been a worldwide phenomenon during much of this century.[1] Between 1920 and 1970, the proportion of the world population living in towns and cities increased from 19 to 37 percent, and by the year 2000 over half the world's population is likely to be living in urban areas. This shift in the balance between rural and urban sectors is closely linked to industrialization and changing patterns of employment, and to rapid changes in cultural, social and political conditions throughout the world.

The features of contemporary urbanization in developing countries differ markedly from those of historical experience. Whereas urbanization in the industrialized countries took many decades, permitting a gradual emergence of economic, social and political institutions to deal with the problems of transformation, the process in developing countries is occurring far more rapidly, against a background of higher population growth, lower incomes, and fewer opportunities for international migration. The transformation involves enormous numbers of people: between 1950 and 1975, the urban areas of developing countries absorbed some 400 million people; between 1975 and 2000, the increase will be close to one billion people (Figure 10). The rate of urban population growth in these countries is likely to decline after 1975, but it is expected to remain three to four times as high as the urban growth rates of the industrialized countries in this period (Table 31).

The number of very large cities in the developing world is expanding rapidly: in 1950, only one city in these countries (Greater Buenos Aires) had a population over 5 million, while five cities in the industrialized countries had reached or exceeded that size. By the year 2000, the developing world will have about 40 cities of or above this size, compared with only 12 in the industrialized countries. Eighteen cities in developing countries are expected to have more than 10 million inhabitants, and one at least—Mexico City—may well have triple this number. The net additions to city populations are even more striking. For example, in each year of the mid-1970s, Mexico City and Sao Paulo each grew by over half a million people, while such cities as Jakarta and Seoul grew by over a quarter of a million people.

31. Urbanization Rates and Urban Population Growth, 1950-2000

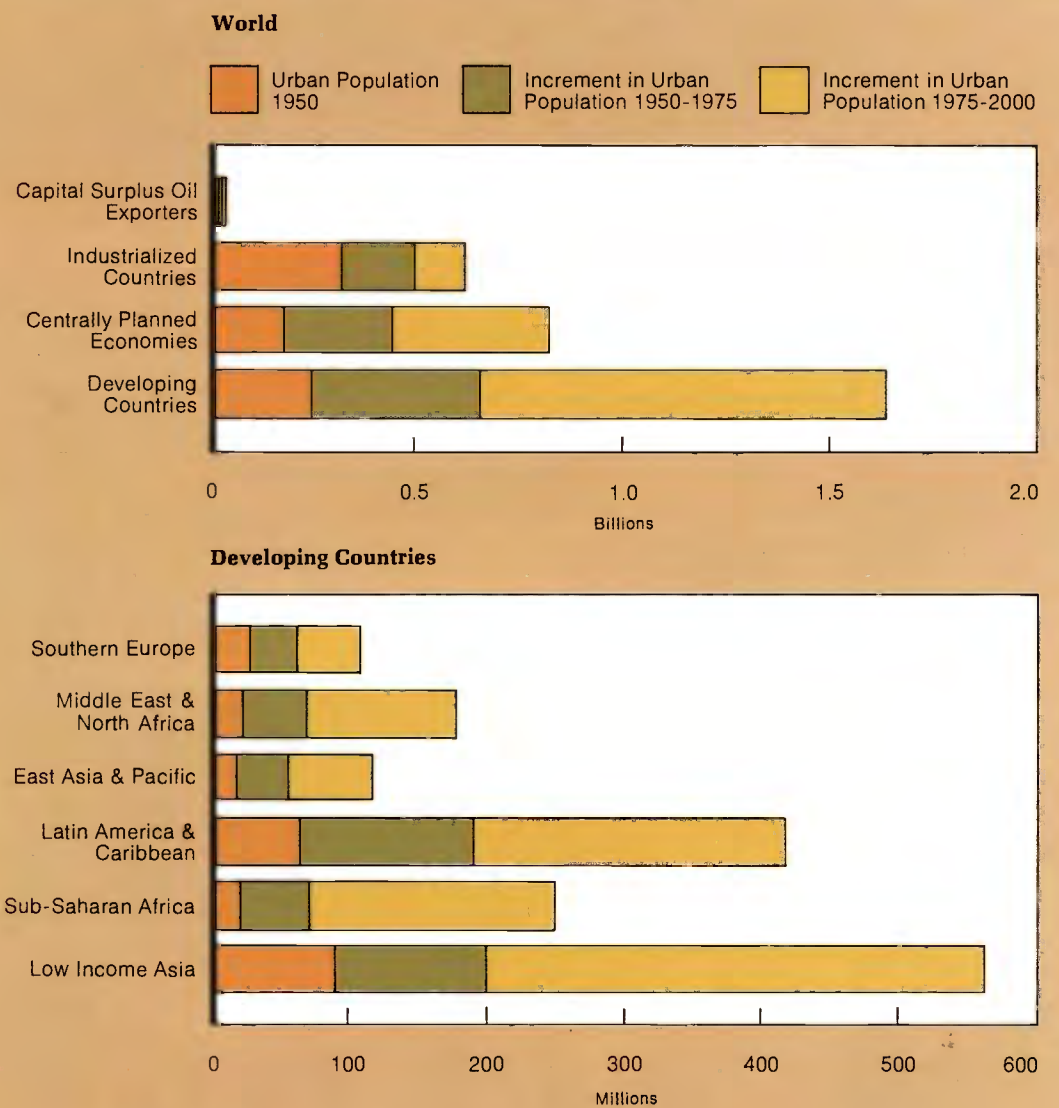
	Urban Population as Percentage of Total Population			Average Annual Percentage Growth of Urban Population		
	1950	1975	2000	1950-60	1970-80	1990-2000
Developing Countries	20.6	31.1	45.8	4.0	4.0	3.5
Industrialized Countries	62.4	74.4	83.6	2.0	1.2	0.8
Capital Surplus Oil Exporters	16.9	55.5	77.9	7.9	7.1	3.1
Centrally Planned Economies	20.7	34.4	49.2	5.2	2.7	2.4
World	29.0	39.3	51.5	3.5	2.8	2.6

The differences in the characteristics of urbanization among developing countries can be exemplified by some broad regional groups (Figure 11). The first of these groups comprises the highly urbanized Middle Income countries of Latin America. In this group, more than half the population already lived in urban areas in 1975, and three-fourths are expected to do so by the year 2000. Although the rate of rural-urban migration is likely to slow down considerably as this high degree of urbanization is reached, cities will continue to grow rapidly as

[1]The level of urbanization is defined as the percentage of the total population of a country living in urban areas. This report relies mainly on UN estimates of urbanization levels. Since different countries use different definitions of "urban," cross-country comparisons of these estimates should be interpreted cautiously.

Figure 10

Urban Population Estimates and Projections, 1950-2000



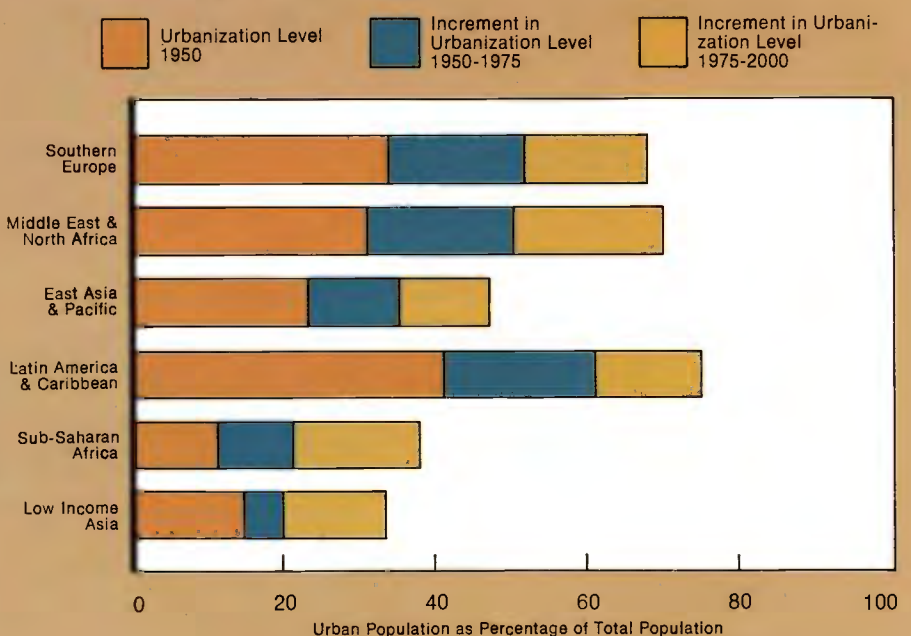
long as natural population growth is not curtailed. The pattern of urbanization in these countries is characterized by a heavy concentration of economic activities and wealth in a few very large urban centers, providing a stark contrast to the economic stagnation and much lower average incomes in many of the peripheral regions. Although average urban incomes are relatively high, poverty remains a serious problem in many cities.

In the second group are the predominantly rural countries of Sub-Saharan Africa, where urban growth is a relatively recent phenomenon but is now very rapid, because of high natural population growth and massive rural-urban migration. In these countries the proportion of people living in urban areas will remain small through the remainder of this century in comparison with those in the first country group, and most of the cities are of moderate size by

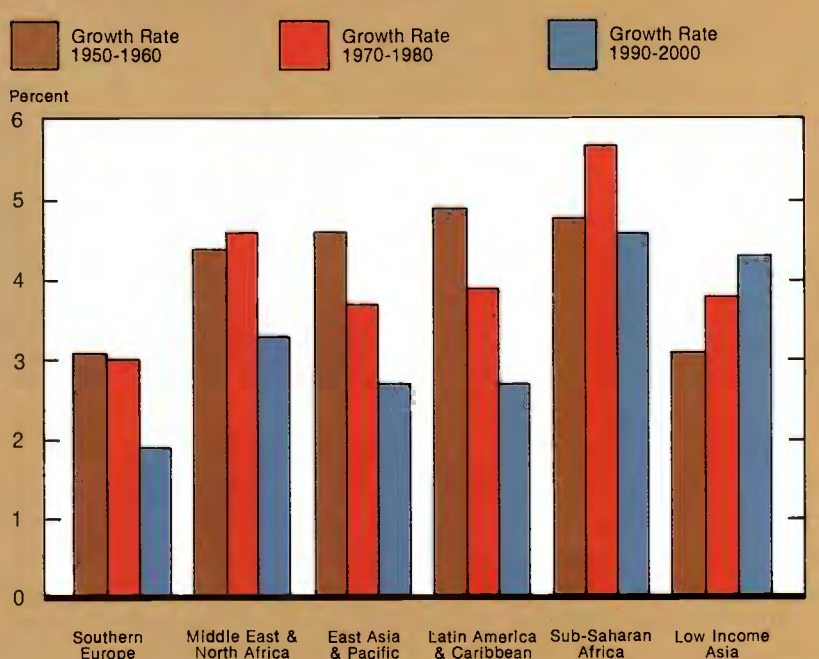
Figure 11

Urbanization Estimates and Projections for Developing Countries, 1950-2000

Urbanization Levels



Average Annual Growth of Urban Population



international standards. Urban poverty is a relatively minor problem when compared with these countries' rural poverty. Since this group of countries is still in the early stages of a very rapid urbanization process, the policies for guiding the transformation take on special importance.

The third pattern of urbanization is encountered in Low Income Asia. Though they have some of the world's largest cities, the countries in this group are predominantly rural, and despite intense population pressures on agricultural land, the level and rate of urbanization are expected to remain low. This is mainly because cities generally do not offer more attractive working and living conditions than do rural areas; indeed, the incidence of poverty is as severe in urban as in rural areas. Nevertheless, the absolute size of the urban population in this region is already very large; in 1975 the urban population of India, for example, exceeded the combined urban population of Argentina, Brazil and Mexico.

The urbanization patterns of countries of Southern Europe, East Asia, the Middle East and North Africa lie somewhere between the trends noted in Latin America and those observed in Sub-Saharan Africa and Low Income Asia. The countries of Southern Europe, the Middle East and North Africa approach levels of urbanization similar to those in Latin America, while East Asia is as yet much less urbanized. The rates of urban (and total) population growth in Southern Europe are substantially lower than in any other group of developing countries, and urban population growth is slowing down in the Middle East and North Africa, and especially in East Asia. Most of the countries of these three regions will be predominantly urban by the turn of the century, with rural-urban migration continuing to play a major role in the transformation process. Compared with Latin American nations, these countries are less troubled by regional disparities in economic activity and income, though important pockets of urban poverty and regional stagnation exist in some nations such as the Philippines and Turkey.

Though urbanization patterns differ, policy makers concerned with urban growth in developing countries usually have two concerns in common. First, they believe that urbanization is excessively rapid, concentrated and costly, and they take as evidence the large numbers of rural-urban migrants, the concentration of economic activity and wealth in a few regions of the country, and the high capital cost of urban infrastructure. Related to this set of problems, but often seen separately, is the concern with poverty and inefficiency within cities. Lack of remunerative employment, housing and public services for a large number of urban dwellers, as well as congestion and pollution, are the main manifestations of this second set of problems. These are real problems which need to be confronted. Urbanization, however, also presents important opportunities for increases in productivity and incomes, and for a reduction in the incidence of poverty. The present chapter considers these problems and opportunities associated with urbanization, discussing first the policy issues relating to the spatial distribution of economic development at the national level, and then those relating to the growth of a specific city. It is important to bear in mind, however, that these two sets of issues are highly interrelated aspects of one and the same transformation process.

National Spatial Development: Determinants and Policies

Determinants of Urbanization and Spatial Concentration

On the surface, the main determinant of the pace and pattern of urbanization in developing countries appears to be rural-urban migration. The flow of migrants is often blamed for causing rural stagnation and excessive urban growth, as well as urban unemployment and poverty. However, this is at best a partial and at worst a misleading view. First, natural population growth, rather than migration, is the major source of urban population increases in many developing countries, particularly in Latin America. Second, the view that cities are burdened with a flood of uneducated, unskilled and unmotivated migrants is incorrect. Studies show that migrants from rural areas are well educated and motivated relative to those who stay behind, and that within cities they are not represented disproportionately among the poor or the unemployed. Third, although the inflow of migrants usually imposes additional financial burdens on public services, these burdens could be alleviated if the services were more appropriately priced and distributed. They are not an inevitable consequence of migration as such, since the costs per person of providing essential services are not necessarily higher in urban than in rural areas. Fourth, migrants move mainly in response to

better employment and educational opportunities, rather than in reaction to the proverbial bright lights of the city or other amenities of urban life. The true determinants of urbanization and spatial concentration in developing countries are therefore found in the forces that determine the location of employment opportunities: the nature and pattern of industrialization, the pace of agricultural development, and the growth of transportation and communications networks.

The pace and pattern of industrial development is the most important of these determinants of urbanization and spatial concentration. Industries locate themselves in urban areas, especially in larger cities, because there they can benefit from ready access to capital and labor, as well as to specialized needs such as financial, legal and technical support services. Cities offer markets for industrial products, and provide convenient access to other domestic and international markets through the established transportation systems. The spatial concentration of economic activity and the emergence of large cities is therefore a necessary adjunct of a development process which relies predominantly on the growth of modern industry rather than on agriculture. However, public policies commonly bias this basic spatial development pattern toward more rapid urbanization and more extreme spatial concentration.

Foreign exchange policies, tariffs and industrial incentives often support activities of the type located in the major urban centers more than those located in economically less progressive regions, as has happened, for example, in Brazil and Nigeria. Governmental regulation of transport tariffs and energy prices often favors large cities, as do public investment and subsidies for urban services that influence the incentives for the location of industries. The importance of face-to-face contacts with central government authorities dispensing trade licenses, credits, and regulations further provides a strong pull for industry toward the capital city. The effects of these policies on industrial location are difficult to quantify, but there is little doubt that the attraction of large cities is significantly enhanced by them.

Urbanization is also influenced by the pace of rural development. The ability of the agricultural sector to absorb a growing rural labor force depends on such factors as the climate, the availability and distribution of land, the choice of agricultural technology, the demand for agricultural products, and the availability of credit, fertilizers and technical assistance. Climate and the availability of land are usually immutable constraints. The Sahel region of Africa, where recurrent droughts in recent years have spurred migration and urbanization, provides an extreme example of the effects of climate. In some developing countries, particularly in Latin America and Africa, new land can still be brought into agricultural use, but in most there is little scope for increased agricultural employment and earnings based on newly cultivated land. The other factors impeding the expansion of agricultural employment can more readily be influenced by policy. Highly unequal distribution of land ownership, especially in Latin America, slow growth and premature mechanization of agricultural production, and market barriers in industrialized nations, have made it difficult for the sector to absorb the growing rural labor force, and increased the rate of rural-urban migration. Policies that protect domestic industries from foreign competition, and give more favorable incentives to industry than to agriculture, agricultural credit that is biased toward machinery instead of labor, and neglect of rural extension and training services, all tend to hamper rural development and employment, pushing the rural population into urban areas, and to favor the growth of cities over that of small towns.

The different experiences of the Republic of China and the Republic of Korea help to illustrate the influence of the pace and pattern of rural development on the concentration of economic activities and population. In the Republic of Korea, agriculture is not naturally well endowed. Lacking special support from government policies it did not share commensurately in the growth of the Korean economy during the 1950s and 1960s. Since basic infrastructure was inadequate everywhere but in the larger cities, industrial growth was concentrated around these cities and attracted large flows of migrants. By the late 1960s, the government introduced measures that improved the agricultural terms of trade and enhanced rural welfare, reducing rural-urban migration. The fact that land had been very evenly distributed since the land reform of 1949 contributed to the success of the policy switch. The Republic of China, by contrast, is more richly endowed with agricultural resources, and agro-industries were the founda-

tion of its economic development. When rapid industrialization began, the rural infrastructure was more developed and more evenly distributed than that in the Republic of Korea, and greatly encouraged the dispersion of industrial activities across the island.

Finally, transportation and communications networks are important determinants of the spatial pattern of development, since they influence the movement of people, commodities and information between regions. Public investment, taxation, pricing and regulation of a country's transport and communications system can easily bias spatial development in favor of certain locations. If domestic transport systems are left at a rudimentary stage of development, industries will be encouraged to locate in cities, usually the large ports or capital cities, that have relatively good links to international and domestic markets. But if unaccompanied by other measures, improvements in domestic transportation and communications may in fact accentuate the concentration of economic activity in the largest cities, since they lower the natural protection of industries located in smaller provincial centers, and reduce the barriers to migration. If the development of transport and communications is to play a major role in reducing spatial concentration and developing backward regions, it must be planned as part of a broader strategy to achieve those goals.

Appropriate Policies for Spatial Development

Rapid urbanization and the concentration of economic activity in a few locations are likely to be the inevitable outcome of industrial development, but, as the preceding paragraphs have indicated, various policy biases have tended to reinforce the prevailing trends and patterns in many developing countries. Unfortunately it is extremely difficult, if not impossible, to determine the optimal rate of urbanization and the best spatial distribution of economic activity in any given country. Information on the relative costs and benefits of urban versus rural development, and of the growth of large versus small cities, is woefully inadequate. As a result it is difficult to judge whether the high capital costs of providing urban infrastructure, and the increasing congestion and pollution in large cities, are being offset by the benefits of continued city growth: lower costs and higher productivity in industry, easier provision of social services such as education and health, and the social and cultural amenities of urban life. In any event, economic efficiency is not the only aspect of urbanization with which governments are concerned. In most developing countries, particularly those with distinct regional or ethnic political interests, it is extremely important to maintain balance between regions and between rural and urban development; hence some attempt to slow down the urbanization process and to spread economic development more evenly across regions may be politically necessary, even if its economic desirability is not obvious.

The policies required to improve the allocation of resources among regions and cities and to achieve a more balanced spatial development pattern differ across countries, but some general principles apply. One such principle is the importance of bringing down birth rates in order to slow down population growth in general, and urban growth in particular. In Sub-Saharan Africa and Low Income Asia, family planning efforts in rural areas are important to reduce migration to urban areas. In Latin America, slowing down the natural growth rate of the urban population holds the most direct hope for reducing the explosive growth of cities.

These efforts need to be complemented by the removal of national policies that bias the spatial pattern of development toward large cities. Sound agricultural policies are most important at low levels of urbanization, where the farm sector provides a large share of national production and employment. Excessive urban concentration is difficult to correct once it has occurred. In the more highly industrialized and urbanized countries, particular attention should be given to the removal of policy biases resulting in industrial development that is overly concentrated in the largest cities. The elimination of subsidies in the provision of urban services, and the control of congestion and pollution in large cities are important; so is the reduction of biases in credit allocation and public sector investment, in public administrative and hiring practices, and in the allocation of fiscal resources to state and local authorities. Many of these policy biases are not generally recognized to have implications for the spatial pattern of development, but their effects on urbanization and regional concentration are likely to be much more important than those of the policies used explicitly to influence the location of development.

Even if these implicit policy biases are corrected, urbanization and spatial concentration will continue, though at a more moderate pace. Explicit policies to balance regional and urban development may therefore be necessary in the interests of interregional equity, political cohesion and national security. The range of effective policy instruments available for this purpose is, however, quite limited. Direct controls on migration have rarely been found effective in reducing, let alone stopping, the flow of migrants to large cities, except where extreme forms of coercion were applied. Experience in Jakarta has shown that residence registration requirements are difficult to enforce, while the bodily removal of slum dwellers and their shacks from cities has imposed hardships, but has not prevented their overnight return. As long as cities offer favorable job prospects, migrants will keep coming. The creation of job opportunities through increased private and public investment in locations other than the largest cities is therefore the main expedient for influencing the location of development.

To counterbalance the growth of the largest cities effectively, it is necessary to support the development of a few existing cities that show potential for expansion. These are most likely to be cities of intermediate size with ready access to major transportation corridors. The construction of new towns, other than satellite towns close to large cities, has virtually always resulted in failure, because of their high cost and their small scale relative to the large cities. In deciding to promote the development of specific sectors, such as different branches of manufacturing, or agriculture, tourism, or natural resources, the sectoral development potential of particular cities and regions should be carefully evaluated. To encourage private investment at selected locations, it may be necessary to upgrade infrastructure and institutional support, including making local authorities more efficient, and providing access to credit, technical assistance and training. All these facilities are usually rudimentary outside the largest cities. Favorable tax treatment and subsidized interest rates, by themselves, have usually had little influence on private location decisions; sometimes, indeed, they have given incentives to use unduly capital-intensive technologies in investments that would have been made anyway.

In considering these explicit policies for spatial decentralization a few points need to be borne in mind. First, to be effective, decentralization policies must be applied consistently over extended periods. A stop-go approach provides private investors with ambiguous signals and reduces their willingness to move from the largest cities. Second, unless carefully designed, decentralization policies may increase the concentration of income within the favored region, since the wealthier groups may be in the best position to reap the benefits of special support measures. Third, the costs of alternative decentralization schemes, such as subsidies or public investment in infrastructure, must be assessed and compared, in order to achieve the desired balance in spatial development with the least possible loss of production and growth in the economy as a whole. Finally, national policies to improve balance in spatial development cannot substitute for better internal management of city growth. For example, urban congestion or public service shortages in large cities cannot be remedied by fostering the development of small or intermediate-size cities or of backward regions. Policies need to be brought to bear directly on these problems within each city to increase the efficiency and equity of its growth.

Policies for Efficient and Equitable Growth of Cities

Urban Policy Problems

The cities in developing countries will continue to grow, even if national policy biases favoring urbanization are corrected and vigorous decentralization measures are deployed. Metropolitan areas such as Bombay, Buenos Aires, Jakarta, Mexico City, Sao Paulo and Seoul already have populations comparable to those of medium-sized developing countries. In terms of income and production, these large cities are even more important. Consequently, the degree of efficiency with which cities allocate their resources will increasingly determine the overall economic performance of the developing countries. Moreover, while the incidence of poverty in developing countries tends to be higher in rural than in urban areas, the absolute numbers of poor people living in cities and towns are very large. In Manila, for example, 1.5 million people were judged to be living in absolute poverty in the early 1970s; in Brazil some 600,000 currently live below the poverty threshold in Rio de Janeiro and Sao Paulo, and some 1.7 million live in absolute poverty in other urban

areas. A policy to reduce poverty must therefore come to grips with the poverty problem in urban areas, where it is particularly visible and politically troublesome due to its high concentration.

Despite the obvious manifestations of urban poverty, urban policies are often designed to make cities serve more effectively the preferences of the better-off, who tend to view the growing slums as an infringement on the beauty of their city; who regard street vendors, pedestrians and overcrowded buses as nuisances impeding the mobility of private automobiles; and who perceive educational and health care needs in terms of unmet requirements for higher education and curative medicine. The policies that follow from this diagnosis of the urban problem include the bulldozing of slums; the construction of high-cost public housing, limited access highways and subways; the banning of street vendors and traditional transport modes from public places and major streets; and the expansion of subsidized universities and modern city hospitals.

If, instead, increased efficiency and the alleviation of poverty were adopted as the goals of urban policy, the diagnosis would focus on the insufficiency of remunerative employment opportunities for the rapidly growing numbers of unskilled workers, and on the inadequacy of basic urban services, especially transportation, housing, and education and health services, in meeting the needs of large segments of the urban population. Policies would therefore be designed to raise the demand for unskilled urban workers, improve the functioning of the urban labor market, and curb the growth of the urban labor supply through family planning programs and accelerated rural development. These employment policies must largely be pursued at the national rather than at the city level, and were discussed in Chapter 4 above. The remaining sections of the present chapter are concerned with the question of how the supplies of urban transport, housing and social services can be rationed efficiently and equitably at the city level, while extending the delivery of these services more rapidly, especially to the urban poor who are most disadvantaged in their access to available supplies of urban amenities.

Two general arguments are of recurring importance in the discussion that follows. First, many urban policies can be designed to improve both the efficiency and the equity of the development of cities, without a conflict between these goals. Second, accessible and well serviced land for industrial, commercial and residential use is essential to the efficient and equitable growth of urban areas. The management of urban land in its manifold dimensions —land transfer and tenure regulation, public investment decisions, taxes and user charges, to name but a few—is therefore an important element of an effective urban policy package.

Urban Transportation

Urban transportation plays a central role in the development of cities as the essential link between residence and employment, and between producers and users of goods and services. As cities grow over time, the combination of increased city area, lower population density and greater use of motorized transport typically requires substantial increases in transport facilities, including road space and mass transit. It is therefore not surprising that urban transport places a considerable financial burden on urban authorities. In Bombay and Calcutta, for example, public investments programmed for the transport sectors for 1972-78 respectively accounted for 26 and 48 percent of these cities' total planned investment. Traffic congestion inevitably occurs as cities grow: transport facilities cannot be expanded enough to maintain mobility, partly because of resource constraints and partly because urban transport demand is not curtailed by pricing or regulation. The private automobile takes roughly nine times more road space per passenger than does a bus. The explosive increase in automobiles in the cities of developing countries, at rates two to five times those of city populations, therefore exerts tremendous demands on the existing urban road space, and is a major cause of severe congestion and pollution problems, especially in the cities of the Middle Income countries.

The urban poor suffer disproportionately if urban transport services are inadequate, since they tend to be pushed to locations to which access is most difficult, costly and time-consuming. For the very poor, such costs may become so high that in order to secure and keep employment, they must accept minimal standards of shelter (or no shelter, as in the case of street dwellers) in central locations. Whether a neighborhood is accessible by road also determines to a considerable extent whether other urban services, such as water, electricity, sewerage and

drainage, solid waste collection, police and fire protection are made available, and whether schools and health care are within reach of the inhabitants. Better roads for poor neighborhoods therefore often have far-reaching effects on the welfare of the residents. Finally, urban transport provides employment for a significant proportion of urban dwellers, including the poor, particularly where traditional non-motorized vehicles—like the cycle-taxis in many Asian countries—are still in use, or where labor-intensive motorized mass transport has been allowed to develop, such as the "jeepneys"—jeeps converted for urban passenger transport—in Manila.

Prevailing policies in the cities of developing countries have generally done little to make their transport systems operate efficiently and meet the needs of the poor. Urban transport investments have served mainly to increase the road capacity for automobiles, often at the expense of travel modes used by the poor. In the larger cities of Southeast Asia, for example, cycle-taxis have progressively been banned to make way for automobiles. A few large cities—Buenos Aires, Mexico City, Sao Paulo and Seoul—have attempted to solve their transportation problems by constructing subways, but the capital and operating costs of these systems have been so high that the poor cannot afford to use them unless they are highly subsidized. Such subsidies in turn place severe burdens on public budgets. Moreover, it is becoming increasingly evident that a bus system can achieve roughly the same objectives as a subway, and much more cheaply.

In some encouraging instances transport investment policies have been adapted to the real needs of cities in developing countries. The Brazilian authorities have begun to favor improvements in urban bus systems over the further construction of subways. Many recent urban transport projects supported by the World Bank, for example in Abidjan, Bombay, Kuala Lumpur, Tunis and a number of Brazilian cities, have upgraded the conventional bus systems, through improvements to the bus fleets and in the layout of routes, reserving street lanes for buses, and giving preferential treatment to buses at intersections. This approach is usually complemented by support for bicycle and pedestrian traffic and the construction of low-cost access routes for buses and service vehicles in poorer neighborhoods. One medium-sized Indonesian city has successfully experimented with separating slow moving non-motorized traffic, including cycle-taxis, from motorized traffic in different lanes, thus reducing congestion without banning non-motorized traffic. In many other Asian cities, more supportive policies toward unconventional modes of mass transit, such as the mini-buses in Kuala Lumpur, are gaining ground.

Improvements in transport investment policies need to be complemented by improvements in transport pricing practices. Road users, especially automobiles, are generally not made to bear the costs which they impose on society by adding to urban traffic congestion. As a result, roads and urban land are used inefficiently. Subsidies on public transport impose severe fiscal burdens on the government, often lead to poor public service, and generally have not induced car riders to use public transport. The investment costs of urban transport facilities are usually borne by taxpayers at large, rather than by the beneficiaries, thus adding to the fiscal problems of national and local authorities. Examples of effective urban transport pricing schemes are, however, to be found in some cities, and can serve as useful lessons elsewhere. Singapore in 1975 successfully introduced a congestion pricing system, consisting of time- and area-specific license charges for automobiles, and central city parking fees. Unsubsidized private and public bus companies provide good service in many cities without constituting a drain on public budgets. In some countries, taxes are levied on landowners who benefit from urban transport investments, providing an equitable and effective means of financing such investments. In Colombia, for example, such charges have facilitated the rapid expansion of urban infrastructure, especially roads, even in poor neighborhoods.

These and other examples indicate that there is considerable scope for revising conventional practices of urban transport investment, pricing and regulation, which would not only make urban transport more efficient, but would also help to conserve energy, foreign exchange and public resources, increase employment, and improve services for the urban poor. Such changes are certain to be opposed vigorously by the beneficiaries of traditional urban transport policies, particularly car owners, bus users, and property owners. Thus the success of any major change in urban transport policy will depend to

a large extent on how it is implemented: for example, increased bus fares should be matched by improved services, where bus subsidies are eliminated; improved public transport should be provided where the use of automobiles is restricted through congestion charges; and extensive publicity campaigns should make the public aware of the broad benefits from improved urban transport policies.

Urban Housing

Housing is essential for welfare and economic development, particularly when the concept of housing is broadly defined to cover not only buildings, but also the land on which the buildings stand and the services provided for their residents. Together with food and clothing, housing is one of the most important items in household spending throughout the world; new residential construction accounts on average for some 20 percent of the fixed capital investment in developing countries. Housing is a major outlet for private household savings and generates employment at low foreign exchange costs. It can provide substantial private and social benefits in offering shelter from the elements, space for work and leisure, and, depending on its location, access to sanitation, education and health services, and to employment opportunities.

Housing is of special concern in urban areas: rapid urban population growth puts great stress on the existing stock of shelter and service infrastructure, and frequently has deleterious effects on health and environmental conditions. In many cities of developing countries, more than half of the population lives in slums and squatter settlements; between one-fourth and one-third of the urban population in these countries has no access to safe water supply and no facilities for the disposal of human waste. The high concentration and visibility of deficiencies in urban housing make this one of the most urgent problems facing developing countries in their transition from rural to urban societies.

Assessments of the urban housing problem in developing countries frequently begin by defining standards of adequacy in terms of space, structure and services, usually at levels comparable to those of middle income housing, but beyond the ability and willingness of the poor to pay. Estimates of housing needs based on such standards inevitably imply huge investment requirements, which cannot possibly be met either from private or public resources. Implementation of public housing projects based on such standards readily confirms the impression of urban housing needs as a bottomless pit, since the investments in high-cost, subsidized public housing do not satisfy even a small part of the needs that are identified. In fact, these investments have often aggravated the housing deficiencies of the majority of the poorer urban households, since they tie up scarce resources in a small number of housing units, usually for the benefit of the better-off. Moreover, they have frequently involved the bulldozing of slums, and thus the destruction of housing stock.

A different and more appropriate view of the urban housing problem in developing countries has recently been gaining ground. Housing shortages, overcrowding, poor infrastructure services and steeply climbing housing prices are seen to result from the failure of the supply of land, services and shelter to expand in step with the rapid increases in housing demand. The poor are particularly adversely affected, since they do not have the resources or influence to bid for scarce housing supplies. Furthermore, the poor tend to suffer from higher rents rather than to benefit from increased housing values, to the extent that they do not own houses. The supply of land, services and finance is crucially influenced by public policy.

Frequently, more unused urban land could be made available for residential use if it were not for institutional constraints: the subdivision of urban land, the assembly of small central-city plots, and the conversion of land for different uses are impeded by restrictive zoning regulations, cumbersome land registration requirements, high land transfer taxes, and disputed land titles. The poor are least able to overcome these institutional barriers. If they are not willing to accept overcrowded living conditions, they must engage in various forms of illegal land deals, such as invasion or illegal purchase and development. If they do so, they suffer from insecure tenure, and this in turn limits their ability and willingness to improve their shelter. Examples such as a slum upgrading project in Manila have shown that the poor are able and willing to pay for urban land and secure tenure, and that they make dramatic improvements to their housing once their tenure is secured. Public ownership of urban land, as in Tanzania and Zambia, by itself does not mean that the urban poor will have access to land.

Administrative costs and political constraints place severe limits on the ability of governments to manage large urban landholdings for residential development. Indeed, public land banking or nationalization of urban land will not generally make more land available for housing unless it is accompanied by a judicious relaxation of land regulations and controls, improvements in the legal and registration systems, and public efforts to clarify land titles and provide secure tenure.

Urban land used for housing should provide access to essential services such as water and energy supply, human waste disposal, and transportation. Low income households, in particular, value improvements in these services very highly—more highly in fact than improvements in the quality of the buildings in which they live. In most cities in developing countries, these services are publicly provided, to take advantage of economies of scale, and also because they yield benefits to society over and above the private benefits reaped by the individual consumer, particularly as regards environmental and health conditions. Even without subsidies, the cost savings from access to public services can be significant for a poor household. For example, the price of a gallon of water from a vendor is often ten times that of water from a public tap or a private house connection.

Since the benefits from public services are substantial and private initiative cannot easily substitute where the public sector fails to act, it is particularly troublesome that public agencies have not been able to meet the service needs of the rapidly growing urban population. Past investment and pricing policies have often compounded the difficulties of a task already of major dimensions. Investment in public services has tended to emphasize high-cost technologies borrowed from the industrialized countries, such as costly water connections to houses, water-borne sewerage systems, and mechanized solid waste disposal techniques. Conventional house connections for water supply, for example, can be eight times more expensive to install per household than standpipes, although some low-cost distribution systems have been designed which significantly reduce this cost differential. Water-borne sewerage systems are five to eight times more expensive than upgraded pit latrines suitable for urban areas, even once operating and maintenance costs are allowed for. The cost of improving a traditional labor-intensive mode of solid waste collection and disposal in Cairo and Alexandria is only about one-fourth that of establishing a mechanized collection and composting system. The practicability of low-cost technologies varies, and cities in Middle Income countries can afford higher average standards than can those in Low Income nations. Nevertheless, the propagation of low-cost technologies is crucial if essential services are to be provided to all urban dwellers.

Extensive subsidization and the resulting financial drain have further confounded efforts to expand urban services. In Jakarta, for example, failure to collect charges to cover its costs put the municipal water company in a dire financial situation, preventing it from providing a safe and reliable service to its customers, let alone expanding the service to new ones. Since customers were less willing to pay for such poor service, a vicious circle developed, as happens frequently where urban services are highly subsidized. In contrast there are cases, for example in Colombia and the Republic of Korea, where beneficiary charges have been quite effective in recovering urban service costs, and where as a result it has been possible to expand services rapidly throughout urban areas.

Extensive reforms of service charges, especially where public service subsidies are large and widespread, have to be introduced gradually to permit the development of institutions to implement the charging systems, and to gain public acceptance. Moreover, selective subsidies may need to be retained where costs of metering and fee collection are high, or where the poorest are clearly the beneficiaries, as is the case with water standpipes.

Where land and services are available, lack of finance probably is the primary reason for the difficulties poor households encounter in their efforts to build or improve shelter structures. Financial markets are underdeveloped, particularly for housing finance, and are hampered by government regulations limiting interest rates and the conditions under which funds may be lent. The poor are the first to be excluded from such a capital market, especially where disputed land titles make it impossible to use land as collateral in borrowing. Capital markets could be improved in most developing countries by permitting interest rates commensurate with the cost of capital, by clarifying land tenure and improving its security, and by strengthening financial institutions. Even if such changes are

successful, however, for most of the poor the construction of houses will remain a gradual process of improvement and upgrading depending on their intermittent ability to buy materials or to pay contractors.

Private initiatives for building houses can be further supported by the elimination of rent control, a reduction in the impediments resulting from zoning regulations and building codes, and an emphasis on public and private upgrading, rather than demolition, of slum housing. Investment in housing structures, however, is rarely an efficient use of public resources, especially when compared with such activities as the provision of public services, measures to provide security of tenure, and capital market improvements. The success of large-scale public housing schemes in Singapore and Hong Kong is due to a number of exceptional factors, including the high average incomes in these two cities, the unusually well developed managerial and administrative capacity of the executing agencies, the acute scarcity of land, and the cultural and social acceptability of high-rise, high-density housing. Virtually everywhere else, most notably in Brazil, similar approaches have failed to make any substantial improvement in the urban housing problem.

An appropriate urban housing strategy in developing countries would thus focus on how public policy can stimulate the private sector to improve the housing supply: by eliminating impediments to private initiative and by providing those elements of housing supply which the private sector is least able to supply by itself. The elements of such a strategy—sites and services schemes, slum upgrading, provision of secure tenure and construction loans—have been introduced into some of the recent urban housing policies and projects in developing countries with considerable success. In projects with these elements, the investment costs per household have been as much as 80 percent lower than those of conventional urban housing projects, while many of the essential benefits of improved housing are preserved. As a result, the benefits from public intervention have reached large numbers of the urban poor, where previously only a few of the better-off had gained. In Jakarta, for example, almost two-thirds of all slum areas have been upgraded through low-cost infrastructure investments over the last ten years. More widespread availability of services and reduced overcrowding are the most notable results. Since such improvements can often be afforded by the poorest urban residents, investment and operating costs can be recovered from the beneficiaries to finance similar programs in the future. Difficulties remain, especially because the institutional capacity to handle large-scale urban development programs is often limited. But the basic strategy holds out hope for an eventual alleviation of the urban housing problems in developing countries.

Education and Health

On average, urban households are more educated, healthier, and better served by public and private education and health facilities than their rural counterparts. The urban poor, however, are considerably worse off than the average statistics suggest. Schools are scarce in squatter and slum areas, attendance rates are low and drop-out rates are high. For example, in Greater Cairo primary school places are available to only 20 percent of the school age population in the low income fringe areas, though the city-wide average is 75 percent. In Manila, the primary school drop-out rate is 20 percent in the non-squatter areas, but 35 percent in squatter areas. Again in Manila, the incidence of infant mortality, tuberculosis, gastroenteritis, malnutrition and anemia is two to eight times as high in squatter areas as in non-squatter areas. Within Calcutta and Madras there are similar differences in health and nutrition conditions. In Kingston, the incidence of tuberculosis has increased in recent years; in Sao Paulo, infant mortality is rising, there is a resurgence of malaria and bubonic plague, and in 1974, meningitis reached epidemic proportions.

The urban poor usually only have limited access to private or public health care, due to the high costs of medical attention and drugs, lack of information, and the physical as well as cultural inaccessibility of modern curative care. Infant malnutrition and mortality in urban slums are aggravated by the fact that mothers increasingly switch from breast feeding to commercial baby foods, frequently diluted with unsafe water.

The urban poor, as much as their rural counterparts, are therefore trapped in a vicious circle in which low incomes ensure poor education, nutrition, and health, which in turn lead to low productivity and incomes. A comprehensive reform of education and health policies is required, involving a movement away from the

common emphasis on subsidized higher education and modern curative health care. Education can often be made more efficient, and brought to a larger number of people, by a greater emphasis on basic education, functional training, and special efforts to reduce the out-of-pocket expenses education involves for the poor. Improved sanitation and housing, nutrition programs for pregnant women, lactating mothers, and infants, as well as health education and preventive health care, are essential for better health and nutrition and are much more cost-effective than curative medicine in reducing the incidence of ill health and malnutrition among the poor. The framework of the basic health care system in Jamaica provides a good example of an attempt to develop a community-based health system. It relies primarily on out-patient treatment in small health centers; it emphasizes preventive health care and education, improved sanitation, maternal and infant care, immunization, family planning, and nutrition programs; and it is supported by a relatively inexpensive but effective paramedical staff.

While the major responsibility for providing and financing social services generally rests with national rather than local authorities, the latter frequently play an important role in the delivery of social services in urban areas. Initiative at the local level and integration with other urban service programs are therefore important elements in an overall strategy to provide urban social services.

Urban Government: Administration and Finances

Urban government presents very difficult tasks under the best of circumstances; in the cities of developing countries the problems faced by urban authorities are monumental, while the resources to deal with them are exceedingly scarce. But since the public sector has a pervasive role in managing urban growth, the benefits from making urban governments more effective will be substantial. Even the best urban development strategy comes to naught unless there are institutions that can implement it. Improvements in the institutional framework are therefore a prerequisite for more efficient and equitable urban growth.

The high density of urban settlements inevitably requires the public provision of physical and social infrastructure and some regulation of human interactions. Many of the governmental activities in urban areas are highly interrelated —for example, the planning and regulation of land use, and the extension of the road and public utilities networks—and hence concerted planning and implementation throughout a metropolitan area are very important. Such coordination is frequently hampered because responsibility is scattered among numerous public agencies. Geographic fragmentation of local authorities is not, as yet, an overriding problem in most cities of the developing countries, although some, most notably Calcutta and Manila, have suffered from a proliferation of municipal jurisdictions within their metropolitan areas, and others have begun to spill over their traditional boundaries. To avoid future problems, national governments should be quick to respond to city growth by extending municipal boundaries through annexation or amalgamation of local jurisdictions.

Of much greater concern is the widely prevalent fragmentation of public responsibility along hierarchical and functional lines: responsibility for providing and regulating urban services is typically shared by national, state and local governments, and at each level of government there commonly exist numerous autonomous public agencies with overlapping servicing, taxing or regulatory functions. In Bogota, for example, some 15 independent local public agencies, as well as various national government ministries and agencies, are involved directly or indirectly in transportation, housing, education and health. In such circumstances, the objectives and priorities of individual agencies rarely match, and at times conflict with each other, often resulting in poor coordination, delays, or contradictory actions. The anecdotes about streets repeatedly excavated, to lay first one utility line, and then the next, and then a third, are not without foundation. In such an environment of fragmented responsibility, urban development programs with a comprehensive approach to a city's needs for services and infrastructure have to be preceded by extensive lobbying of numerous public agencies at all levels of government, with hard-won agreements always threatened by subsequent breaches by one or the other agency.

The problems of urban public administration are frequently compounded by the fact that local governments' responsibility for expenditures exceeds their power to raise revenues. In most cities, with the exception of a few special capital districts such as Bogota, Mexico City and Seoul, local governments have been left

with revenue sources that fail to grow with population, economic development and inflation, even where they are properly administered. Financial transfers from higher level governments are generally unpredictable; they are the first to be cut under general fiscal pressures and the last to be restored. At the same time, the expenditure needs of local governments in urban areas have grown rapidly as urban populations have multiplied and demands for better and more costly urban services have expanded. Few attempts are made by higher level authorities to help local governments in urban areas to develop their capacity to deal with the important and growing tasks of urban service delivery, planning and regulation. Management, budgeting and accounting practices are generally very poor; structures of taxes and fees tend to be antiquated, and their local administration and collection badly neglected, partly for lack of political will, and partly because of the inadequacy of trained personnel, technical assistance, or incentives from higher government levels. All too often, the national ministries in charge of local governments develop adverse relationships with their local counterparts, and confine themselves to supervision and control, rather than developing a spirit of cooperation, support and assistance.

The choice of a strategy to improve urban public administration and finances necessarily depends on the objectives of those in charge of reform. Those who believe in strong central control by a unified national executive will want to reduce local government autonomy in favor of direct administration by the national government. In contrast, those who believe that local governments have an important role to play in articulating people's demands for public action in a pluralistic society will favor strong and independent local authorities. But in either case, good urban government has a number of basic ingredients. First, it is important that a unifying element be created at the city level to assist in coordinating the many governmental functions within a metropolitan area. Usually this will involve either a strong metropolitan government, as in Bombay, Jakarta, Seoul or Singapore, or, at a minimum, a planning agency with well defined statutory functions and its own resource base, permitting it to collect and disseminate information throughout the metropolis, to develop plans for action and financing, and to enforce inter-agency agreements. The metropolitan authorities recently created in Calcutta, Manila and Tunis indicate that such reforms are feasible and help to improve urban administration and management.

Second, whether local authorities carry out a large or a small range of functions, they must be encouraged to raise their own financial resources to meet their tasks. Charges related to the costs and benefits of urban services are particularly important revenue instruments, since they not only raise revenues but can also improve the efficiency and equity of service provision, and avoid the danger of budgetary biases in favor of urban against rural areas, or in favor of large cities against small towns. However, most cities will still need to rely on general local taxes and on transfers from national budgets, particularly for the financing of social services. These revenue instruments should be designed so as to avoid biases in favor of urban areas and to ensure the efficient use of funds by local authorities.

Third, technical assistance for financial and personnel management, land use planning, infrastructure investment and operation has been found useful. Manpower training and more competitive local government salaries are further ingredients of local government reform. One successful model for this type of assistance has been the Venezuelan Municipal Development Agency (FUNDACOMUN), an autonomous public agency that has provided technical assistance and training for improvements in accounting and budgeting, in the cadastral and property tax system, and in local regulatory and planning procedures. Finally, there is an urgent need to increase coordination and cooperation between municipal and national authorities for finance, planning and other functions germane to urban resource management. The scope and dimensions of the growing tasks of urban management require commensurate policy attention from the highest decision making bodies in developing countries.

PART III: COUNTRY DEVELOPMENT EXPERIENCE AND ISSUES

The *World Development Report, 1978* concentrated on the development issues facing the Low Income nations of Asia and Sub-Saharan Africa. The next two chapters of the present report dwell mainly on development perspectives and priorities in Middle Income countries. The term Middle Income encompasses a set of nations with very different socioeconomic conditions, resources, development potential and problems: the policy concerns of Liberia are inevitably very different from those of Brazil or Yugoslavia. To better reflect this underlying diversity in the discussion of development experience and priorities, three broad types of Middle Income countries have been distinguished.

The first group of countries includes some 16 "semi-industrialized" nations in which manufacturing accounts for a relatively large share of production and merchandise exports. The present Middle Income status of most of these countries is not greatly dependent on the exploitation of natural resources. The other two groups, jointly referred to as primary producing countries, owe their present income levels in large measure to the utilization of minerals or agricultural land, and manufacturing activity plays a much less important part in their economies. They share many features and problems with Low Income countries; most of the "mineral economies" would not be in the Middle Income category but for their mineral wealth, while the "predominantly agricultural countries" have, as their name suggests, arrived in the Middle Income ranks by specializing in agricultural production.

A few points need to be emphasized with respect to these distinctions. First, the groups are far from mutually exclusive; certain countries could be classified in more than one group. Second, not all Middle Income countries can be comfortably accommodated within these three groups and, conversely, some countries which are not treated as Middle Income in this analysis could be appropriately included. The capital surplus oil exporting nations, for example, share many of the development concerns of other mineral-dominated countries. Finally, while countries within a group have much in common, the diversity among them should not be underestimated. Despite these qualifications, however, the chosen grouping focuses on common issues and helps to enrich the discussion of country development policy.

Development Patterns in Semi-industrialized Countries

Some of the more advanced Middle Income countries can aptly be described as semi-industrialized, since in several respects their economies are more akin to those of industrialized countries than to those of other developing countries. To illustrate their development experience, 16 countries have been selected, in each of which manufacturing accounts for about 20 percent or more of gross domestic product and merchandise exports. Although few in number, the 16 countries account for about 70 percent of the total GDP and over half of the total population of the Middle Income countries, and have per capita income levels ranging from about US$320 in Egypt to over US$3,000 in Spain. Several of these countries have achieved high levels of per capita income even though they are not richly endowed with natural resources.

Among the semi-industrialized countries, three broad patterns of development can be identified. The first is marked by very rapid population growth, moderate to fast GDP growth, and a relatively high incidence of poverty. Several relatively large countries—Brazil, Colombia, Egypt, Mexico, the Philippines and Turkey—are prime examples of this pattern. The Republic of Korea and the smaller East Asian nations—the Republic of China, Hong Kong and Singapore—typify a second pattern. Although with the exception of Singapore their populations are still growing at 2 percent a year, they have clearly entered the declining-fertility phase of the demographic transition; they have also achieved remarkably fast GDP growth and have virtually eliminated absolute poverty. The Southern European countries—Greece, Portugal, Spain and Yugoslavia—exemplify a third pattern, whose distinguishing characteristic—a very low rate of population growth—is largely a consequence of their having maintained comparatively high living standards over an extended period. Their maintenance of moderately fast GDP growth over a relatively long period has also enabled these countries virtually to eradicate absolute poverty. Argentina

32. Basic Indicators for Selected Semi-industrialized Countries

	Population (millions)	GNP Per Capita (US dollars)	Average Annual Percentage Growth 1960-77		Percentage of Manufacturing in GDP		Percentage of Labor Force in Agriculture		Percentage of Manufactures in Merchandise Exports	
	1977	1977	GNP Per Capita	GDP	1960	1977	1960	1977	1960	1976
Brazil	116.1	1,360	4.9	8.0	26	..	52	42	3	25
China, Republic of	16.8	1,170	6.2	9.1	22	37	56	34	..	85
Greece	9.2	2,810	6.2	6.7	16	19	56	40	10	49
Israel	3.6	2,850	4.8	8.0	23	30	14	8	61	78
Korea, Republic of	36.0	820	7.4	10.0	12	25	65	44	14	88
Philippines	44.5	450	2.5	5.5	20	25	61	51	4	24
Spain	36.3	3,190	5.2	6.4	27	30	42	19	22	69
Turkey	41.9	1,110	4.1	6.4	13	20[a]	78	62	3	24
16 Semi-industrialized Countries	494.2	1,315	4.4	6.3	25	28	54	39	22	58

[a]1976.

and Israel complete the group of 16 countries. Although their development patterns are not easily accommodated in the threefold classification given above, the richness of their individual experience warrants their inclusion in the analysis.

The diversity of experience among the semi-industrialized countries can yield insights into the process of structural transformation that can be used to guide countries yet to embark on a major industrialization program. The emphasis in this chapter, however, is on the lessons to be gleaned for future development within the semi-industrialized countries. In particular, it examines the possibility of further reducing poverty and assesses the prospects for sustaining rapid economic growth in a less expansionary international environment.

Growth and Equity: The Record

Economic Growth and Structural Transformation

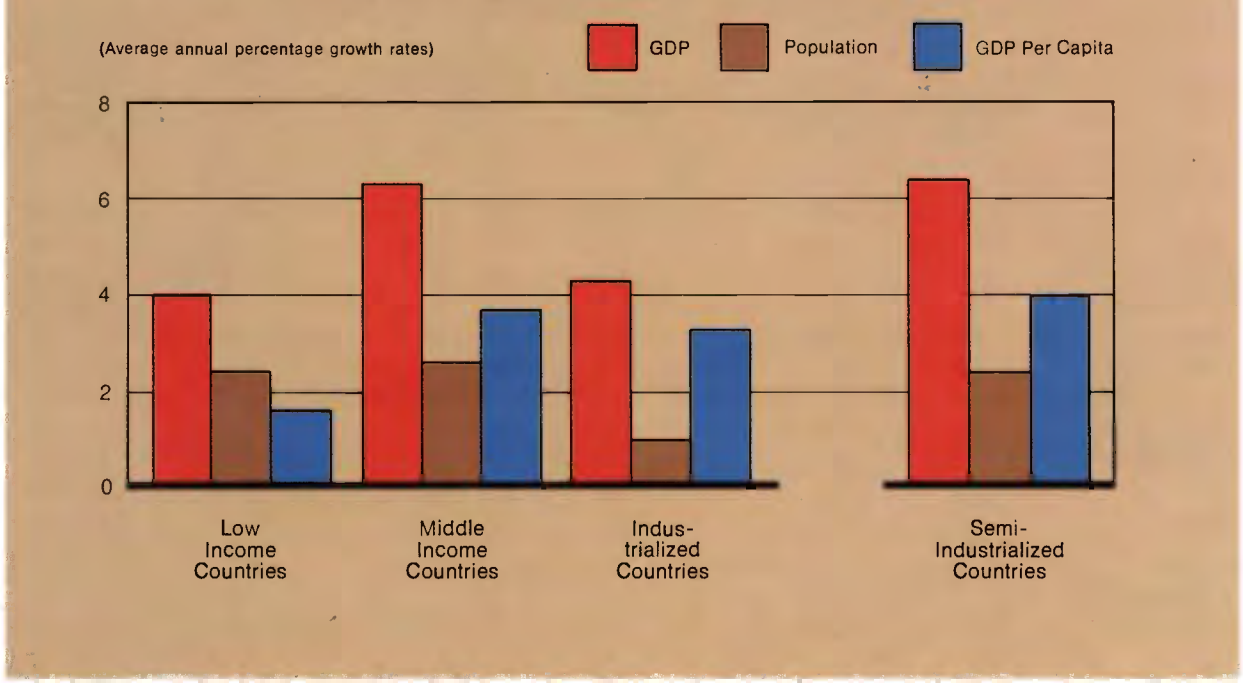
Many of the semi-industrialized countries have achieved impressive rates of economic growth. Between 1960 and 1976, the combined GDP of the 16 countries increased at an annual average rate of 6.4 percent. Not only is this growth performance considerably superior to that of the other developing countries, it also surpasses the 4.3 percent annual growth rate achieved by the industrialized countries (Figure 12). Not all of the semi-industrialized countries, however, have been equally successful in this respect. With the exception of the Philippines, the East Asian countries recorded the highest growth rates—around 9 percent a year. The other countries achieved annual growth rates from 5 to 8 percent, the sole exception being Argentina whose economy grew at less than 4 percent.

Because of the marked variation in population growth among countries, these rates of GDP growth had very different implications for per capita output. For example, although Mexico and Greece experienced very similar rates of economic growth between 1960 and 1977 (6.5 percent and 6.7 percent respectively), Mexico's population was growing at 3.3 percent a year, so that its per capita output rose by about 70 percent, while Greece, with population growth of only 0.6 percent a year, increased its per capita income by as much as 170 percent.

This example epitomizes the differences between the Southern European and some of the Latin American countries. The former and

Figure 12

Semi-Industrialized Countries: Comparative Growth of Gross Domestic Product and Population, 1960-76



Argentina have virtually completed the demographic transition: their low death rates (around 10 deaths per thousand of the population) are associated with low birth rates (around 20 births per thousand of the population) and hence slow population growth. Brazil and Mexico have attained equally low death rates, but their birth rates are double those in Southern Europe and —unlike those of the East Asian countries— have barely started to decline.

Economic growth is rapidly transforming the structure of production in the semi-industrialized countries. In virtually all of them industry in general, and manufacturing in particular, have been the most dynamic sectors. In the 1970s, manufacturing grew at an annual rate of nearly 20 percent in the Republic of Korea, and at more than 12 percent in the Republic of China. In the remaining countries, annual manufacturing growth rates ranged from 5 to 9 percent, with the exception of Argentina where the annual rate was only 3 percent. By 1977, manufacturing accounted for between 20 and 40 percent of GDP in the semi-industrialized countries, compared with 10 to 20 percent in the other Middle Income countries and only 10 percent in most Low Income countries.

Notwithstanding their impressive rates of industrialization, agriculture remains the major source of income for a significant proportion of the population in most of the semi-industrialized countries. Most of them have achieved impressive rates of agricultural growth. Disregarding the city-states of Hong Kong and Singapore, many of them expanded agricultural production at annual rates close to 3 percent or more between 1960 and 1977; only in Portugal was the rate less than 1 percent. Only Argentina, Hong Kong, Israel, Singapore and Spain had less than 20 percent of their labor force in agriculture in 1977; the range for most of the remaining countries was 30 to 50 percent, the extreme case being Turkey where agriculture accounted for 60 percent of the total labor force.

The number of people dependent on agriculture, however, is declining both relatively and absolutely in many of these countries. This trend sets them apart from other developing countries, in which the absolute size of the agricultural labor force is still increasing, and it has significant consequences for the growth of labor productivity in agriculture, as is illustrated in Table 33. Between 1960 and 1976 agricultural production grew about 50 percent faster in the semi-industrialized countries than in the Low Income countries, whereas agricultural labor productivity grew more than five times faster in the former than in the latter group.

33. Semi-industrialized Countries: Comparative Growth of Agricultural Production, Labor Force and Productivity, 1960-76
(Average annual percentage growth rates)

	Value Added	Labor Force	Labor Productivity
Low Income Countries	2.1	1.5	0.6
Middle Income Countries	3.1	0.8	2.3
Industrialized Countries	1.3	−4.1	5.4
Semi-industrialized Countries[a]	3.1	−0.2	3.3

[a]Excludes Brazil, Israel and Hong Kong for lack of data on growth in agricultural value added.

Expansion of international trade has been an important ingredient of growth in several semi-industrialized countries, especially in the smaller ones. Those economies in which production for export has expanded more quickly than production for the domestic market have generally enjoyed the fastest rates of overall growth. The Republic of China, the Republic of Korea and, to a lesser degree, Greece, Hong Kong, Israel and Spain have benefited substantially from rapid export growth. Much of this growth reflects the interaction between rapid

34. Semi-industrialized Countries: Comparative Growth and Structure of Merchandise Trade, 1960-77
(Percentages)

	Average Annual Growth 1960-77		Exports as Share of GDP	Manufactures as Share of Exports
	Exports	Imports	1977	1976
Low Income Countries	3.8	3.6	12	23[a]
Middle Income Countries	7.7	8.9	19	33
Industrialized Countries	8.4	7.6	15	75
Semi-industrialized Countries	11.3	9.5	14	58

[a]Based on 14 Low Income countries, which account for nearly 90 percent of the total GDP of Low Income countries.

industrialization and limited domestic markets: the small semi-industrialized countries quickly exhausted the possibilities for efficient import substitution and switched to production for export in order to maintain the pace of industrialization. As a result, the share of manufactures in merchandise exports has changed dramatically in some of these countries: in the Republic of Korea, for example, it increased from below 20 percent in 1960 to almost 90 percent in 1976. Apart from the Republic of China and Hong Kong, no other country can match this performance; nevertheless, in Israel, Portugal, Spain and Yugoslavia manufactures now account for two-thirds or more of total merchandise exports. In the remaining semi-industrialized countries, manufactures typically make up 20 to 30 percent of merchandise exports. The growth of exports in general, and of manufactured exports in particular, highlights the extent to which future expansion in the semi-industrialized countries depends on a favorable international trading environment.

Poverty and Basic Needs

In the wealthier semi-industrialized countries —Argentina, Greece, Hong Kong, Israel, Portugal, Singapore, Spain and Yugoslavia—few people remain seriously impoverished. Even in countries such as the Republic of China and the Republic of Korea, whose annual per capita incomes are around US$1,000, a relatively egalitarian distribution of income ensures that very few people are in absolute poverty. In Brazil, Colombia, Egypt, Mexico, the Philippines and Turkey, however, poverty remains a serious problem: rough estimates suggest that 15 to 30 percent of their populations subsist below a poverty line defined as the minimum income necessary to purchase basic requirements of food, clothing and shelter.

The majority of the poor in these countries live in rural areas. In Brazil, for example, around 70 percent of the poor live in rural areas, a large proportion of them in the Northeast. Many of them depend on the labor market for their income, either solely, because they have no land, or partially, because their smallholdings yield inadequate incomes. In urban areas, the poor usually seek their livelihood in the traditional service and manufacturing sectors. Although few are unemployed, most are confined to low-productivity jobs where long hours of labor are required simply to subsist.

A common characteristic of poor households is their large size. Rough estimates suggest that the poorest 20 percent of households in Colombia, for example, support almost 30 percent (approximately 2 million) of all children under age 10. Although crude, such figures indicate the especially severe incidence of poverty among children, and highlight the importance of directing government programs toward the alleviation of poverty, and poverty-induced deficiencies, among children. They also emphasize the desirability of extending family planning facilities to the poor in both urban and rural areas.

Other measures of wellbeing such as life expectancy, child death rates and adult literacy rates provide further indications of social and economic progress. Between 1960 and 1977, for example, life expectancy at birth increased by between five and ten years in most of the semi-industrialized countries; the average citizen of the richer nations—Argentina, Greece, Hong Kong, Israel, Portugal, Singapore, Spain and Yugoslavia—had achieved an expected life span of more than 65 years by 1977. These same countries reduced their child death rates during this period to three or fewer deaths per thousand in the age group 1 to 4 years. In 1975 more than 75 percent of adults were literate in all semi-industrialized countries, with the notable exceptions of Egypt, Portugal and Turkey.

Economywide statistics, however, conceal considerable variation within some countries. Life expectancy in rural Northeast Brazil, for example, is reported to be about 20 years less than in Sao Paulo. In Brazil as a whole, more than 70 percent of children aged 7 to 14 were in school in 1974, but in the rural Northeast, the enrollment rate was less than 50 percent. In Turkey almost one-fifth of the population was estimated to consume less than 75 percent of the recommended daily calorie intake, though the country's supply of calories was more than adequate to meet the population's needs. Nutritional deficiencies are often more apparent, and are always most harmful, among children: for example, it is estimated that less than half of all Brazilian children attain the normal body weight for their age.

These disparities in welfare reflect both the maldistribution of personal income and the inequitable supply of public services. Health, education, water supply, sanitation and housing are important determinants of individual wellbeing

35. Semi-industrialized Countries: Some Comparative Indicators of Welfare

	Life Expectancy at Birth (years)		Child Death Rate Per Thousand[a]		Percentage of Adults Who Are Literate	
	1960	1977	1960	1977	1960	1975
Low Income Countries	42	50	30	19	29	36
Middle Income Countries	53	60	19	11	51	69
Industrialized Countries	69	74	1	1	..	99
Semi-industrialized Countries	57	64	13	7	64[b]	76[c]

[a]The child death rate is the number of deaths among children 1-4 years of age, per thousand children in the same age group, in a given year.

[b]Excludes Singapore.

[c]Excludes Greece and Spain.

and environmental quality. The public provision of these services, however, is usually much more extensive and effective in urban than in rural areas. Over 80 percent of Colombia's urban population, for example, had access to safe water and excreta disposal facilities in 1975, compared with about one-third of the rural population. There are similar disparities in the distribution of health services and education. Even within urban areas, however, access to public services is generally unevenly distributed among income groups. Frequently, the urban poor are unable to afford the high-cost piped and treated water systems and housing units provided by the public sector. Despite their income levels of more than US$1,000 per person, Brazil, Mexico and Turkey have neither eliminated absolute poverty nor ensured universal access to basic services.

Approaches to Poverty Elimination

Augmenting and encouraging the efficient use of the productive assets owned by the poor—labor and land—is the most desirable approach to eliminating poverty since it simultaneously contributes to growth. In those countries where the structure of incentives has encouraged both employment creation and broadly based agricultural expansion, the benefits of growth have been relatively evenly distributed. Public investments to increase the productivity of labor and land—educational expansion, the construction of irrigation systems and physical infrastructure—have helped both to stimulate growth and to reduce poverty. Investments in social infrastructure, such as health facilities and water supply, though less directly related to productivity, have also improved the wellbeing of the poor in a number of countries.

Income Growth for the Poor

How far the poor participate in the benefits of growth depends to a large extent on the choice of industrialization strategy, with its implications for employment. The employment-creating attributes of the Korean strategy of export promotion, described in Chapter 4, have been noted and partially emulated by several other semi-industrialized countries. The Brazilian industrialization experience is of particular interest since it both exemplifies the transition from import substitution to export promotion and demonstrates the importance of trade policy even for countries whose domestic markets are relatively large.

Before 1964, production in Brazil was heavily protected by tariffs and quantitative restrictions: during the 1950s and early 1960s, average rates of net protection for all internationally traded goods oscillated between 50 and 100 percent, but were very much higher for manufactures than for other traded commodities. Exports were discouraged by the much overvalued exchange rate: implicit net export taxes averaged 30 to 40 percent, those on manufactures being considerably higher. Under this policy regime the economy performed well in certain respects. Between 1947 and 1962, GDP increased at an annual rate of 6 percent, manufacturing output grew at 10 percent, and agriculture expanded at more than 4 percent, mainly as a result of increases in the area cultivated.

The limitations of import substitution were becoming apparent by 1960. Imports had been reduced to only 4 percent of the total supply of manufactures and only 10 percent of that of capital goods, while exports of manufactures amounted to only 3 percent of domestic production. Even more significant in the present con-

text, however, was the very low rate of labor absorption in manufacturing (under 3 percent a year) and the negligible rate of growth in agricultural labor productivity. Moreover, the use of low-interest loans and subsidized inputs, intended to offset the bias against agriculture implicit in strategies of import-substituting industrialization, largely served to encourage large landowners to introduce labor-displacing mechanization. The failure of the import-substituting strategy to create adequate employment in either industry or agriculture, and its inability to stimulate smallholder agriculture, implied a failure to expand the income sources upon which the poor were most dependent.

In 1964, Brazil began a major shift in policy. Significant devaluations between 1964 and 1968, and "crawling-peg" adjustments to the exchange rate thereafter, combined with fiscal incentives for exports and reductions in protection, established a realistic exchange rate and virtually eliminated the bias against exports. Increases in public sector expenditure on infrastructure and investment in manufacturing helped to accelerate growth: between 1967 and 1974 GDP (at 11 percent a year), manufacturing (at 13 percent), and agriculture (at 5 percent), all expanded even faster than in the earlier phase of rapid growth based on import substitution.

The switch in policies not only secured a significant increase in exports but also promoted the growth of employment. Manufacturing employment, for example, rose by over 6 percent a year between 1968 and 1973. Real wages increased and considerable numbers of workers moved to better-paying jobs. A large shift of labor out of agriculture was accommodated without an increase in unemployment, while at the same time the productivity of agricultural labor increased, partly as a result of the more favorable exchange rate and partly as a result of movements in world prices. On balance, the policies associated with export promotion proved more successful than those of import substitution in stimulating growth and in securing significant increases in the incomes of the poor.

Many of the semi-industrialized countries have switched their policies away from heavy reliance on import substitution toward the promotion of exports. Hong Kong and Singapore and their East Asian neighbors, the Republic of China and the Republic of Korea, have pursued export promotion more vigorously than any other country and have reaped the benefits of rapid growth in production and remunerative employment. A number of countries, including Argentina, Brazil, Colombia, Greece, the Philippines, Spain and Yugoslavia have provided some degree of encouragement to exports over the past decade, but in most of them further efforts in this direction are warranted.

In some countries the task of creating adequate employment opportunities has been eased by slow population growth. In Yugoslavia, for example, where the population growth rate is less than 1 percent a year, the labor force increased at an annual rate of less than 1 percent between 1960 and 1977. Foreign demand for Yugoslav workers, the strong growth of demand for non-agricultural labor, and slow labor force growth combined to secure a decrease in the agricultural labor force of more than one million between 1960 and 1977. Slow labor force growth also eased the problem of employment creation in Argentina, Greece, Portugal and Spain. For example, while Spain and Mexico had roughly the same size labor force in 1960, the increment in Spain during 1960-70 was only about 250,000 workers, compared with an increase of 3.5 million in Mexico.

The effect of rapid population growth on the age structure of the population has significant implications for dependency ratios: the average member of the Portuguese labor force, for example, supported about 1.5 dependents in 1970, whereas his Mexican counterpart was responsible for almost 2.5 dependents. The concentration of large families among the poor in Brazil, Colombia, Mexico, the Philippines and Turkey has been an important factor limiting the equitable distribution of incremental income.

Most semi-industrialized countries that have not yet succeeded in eliminating rural poverty possess dualistic agricultural structures. Since the relatively high agricultural growth rates achieved by Brazil, Colombia and Turkey, for example, are largely the product of expansion in a commercialized subsector, large portions of their agricultural populations remain severely impoverished. In countries such as the Republic of China and the Republic of Korea, by contrast, a relatively egalitarian distribution of landholdings has ensured that the benefits of agricultural growth are widely dispersed.

The experiences of the Republic of China and Mexico illustrate the interaction among the distribution of land ownership, the diffusion of

public support for agriculture and the eradication of rural poverty. Throughout the 1950s and 1960s, these countries achieved equally high annual rates of agricultural growth, at approximately 4 percent. In the Republic of China, however, the productivity of labor and land increased at 3 and 4 percent a year respectively, whereas in Mexico they increased at less than 2 percent. Moreover, the Mexican productivity and yield increases were concentrated in a relatively small modern sector, where increased mechanization and more intensive use of fertilizer significantly expanded wheat and cotton production. The large traditional sector, comprising small private farms and most *ejidos*[1] and accounting for 70 percent of the agricultural labor force, stagnated. The growth that did occur in the output of such crops as corn and beans largely came from newly cultivated land. Thus yields and labor productivity in traditional agriculture failed to show any marked improvement.

A significant difference between the experiences of the Republic of China and Mexico lies in the distribution of land and other inputs and the diffusion of technical knowledge. In the Republic of China, land reform had conferred rights of ownership within an existing, fairly even distribution of operational units. A substantial part of the total cultivated land was irrigated, fertilizer use was widespread, and technical innovations and credit were effectively disseminated through farmers' associations. In Mexico, however, land reform involved the expropriation and redistribution of only part of the total agricultural area, while irrigation facilities were not provided to most small farmers, and research and extension, with some exceptions, were concentrated primarily on irrigated agriculture.

Land reform is a highly sensitive political issue, but in the absence of further efforts at reform, extreme poverty will remain a prominent feature of rural Brazil, Colombia, Mexico and Turkey. The stimulus given to rural industry by a more egalitarian distribution of land holdings is an important ancillary benefit, and one of special significance in these economies, where the landless constitute a substantial proportion of the rural labor force. Non-farm rural enterprises in the Republic of China, for example, have benefited from the demand by small farmers for both agricultural inputs and consumer goods, as well as from public efforts to improve rural infrastructure. By 1970, 70 percent of this country's farm households derived some income from non-farm employment, and almost 30 percent earned more from their non-farm jobs than from farming. In bimodal agricultural systems, however, the demands of the modern sector are largely for items such as tractors and high-value consumer goods which are usually only available from urban or foreign suppliers.

Surveying the experience of the 16 countries, the crucial obstacles to eliminating absolute poverty are the failure to create enough non-agricultural jobs, fast population growth, and the inequitable development of agriculture. Unless population growth rates among the poor are reduced and employment and agricultural opportunities are expanded, available estimates indicate that continued GDP growth will succeed in reducing the percentage of the population in poverty but will have little impact on the absolute numbers of people in poverty.

Provision of Public Services

The wealthier semi-industrialized countries —Argentina, Greece, Hong Kong, Israel, Portugal, Singapore, Spain and Yugoslavia—have rapidly extended the provision of education, health services and water supply. Achievements in the other semi-industrialized countries vary. The Republic of China and the Republic of Korea, for example, have attained a relatively even distribution of public services, whereas some of the larger countries have failed to provide adequate services in depressed regions—Northeast Brazil, Southern Mexico, and Eastern Turkey. The relatively high per capita incomes in these countries suggest that they are now in a position to expand the flow of services. Equally important, however, is the possibility of reorienting existing services, to reach people in poverty more consistently. Although the appropriate recommendations will vary among countries, some of the illustrative policy measures described below contain elements of general validity.

Educational programs provide a prime example of the scope for reorientation. The low enrollment rate among children aged 7 to 14 in Northeast Brazil, for example, may be due less to the insufficiency of school places than to

[1] *Ejidos* are agricultural communities based on redistributions of land since the 1910 revolution. Members have the right to the products of the land and pass on that right to their heirs, but the land cannot legally be sold or rented to others.

the insufficiency of demand for them: parents are reluctant for their children to attend school because of the earnings they will forgo in doing so. Providing incentives to attend school is one possible solution. In the state of Goias, experimental programs of free school meals increased school attendance rates from below 80 to around 90 percent, and helped to improve the nutritional status of school children. Higher salaries are also required to attract better-trained teachers to rural areas. Such efforts could be financed from within existing educational budgets, by gradually reducing subsidies to higher education, which often constitute one of the most inequitable transfers of income. Since public expenditure on higher education is about half that on primary education in most countries, a substantial amount of public funds could be released by introducing tuition fees for higher education.

Health systems in many countries are biased toward urban rather than rural areas, and toward curative medicine, which generally meets the requirements of the rich, rather than preventive medicine, which can reach more people at lower cost. The annual subsidy from the Colombian public health system to households in large cities is estimated to be more than twice that to rural households. In Brazil, the expansion in health expenditure from 1 to 2.5 percent of GDP between 1949 and 1975 reflects an increasing bias toward curative medicine; whereas preventive medicine accounted for almost 90 percent of total health expenditure in 1949, by 1975 it accounted for less than 30 percent. Rough estimates indicate that a health care system that emphasized preventive rather than curative medicine could serve the entire Brazilian population without any increase in total health expenditures. Restructuring the health system in favor of preventive health care, especially in the rural areas, could significantly improve the health of the poor. Brazil has already begun efforts in this direction: the Program for Interiorization of Health and Sanitation Actions in the Northeast (PIASS) emphasizes preventive and simple curative medicine at the community level, with a well developed arrangement for the referral of more complicated cases to health centers and regional hospitals.

The health of the population also benefits substantially from improvements in nutrition and sanitation. The secular improvement in health standards in Western Europe and North America, for example, followed from the rise in living standards and better social conditions, rather than from improved medical care; the incidence of cholera and typhoid fell in the UK and the US long before effective methods of treatment were available for these diseases. Similar results have been observed in the developing countries: in the Philippines, for example, improved water supply and sanitation have reduced the incidence of cholera by about 70 percent. Significant improvements in the health status of the poor may not be forthcoming until water supply and sanitation are adequate.

Efforts to provide information on nutrition and family planning services to the poor are especially important given their large family sizes. General improvements in socioeconomic conditions may not reduce birth rates sufficiently, especially in countries such as Brazil and Mexico where the distribution of income is highly uneven. Colombia, despite a much lower level of per capita income, successfully initiated a comprehensive family planning program in the 1960s. Relying heavily on paramedical workers and lay "outreach" field workers, Colombia reduced its crude birth rate from 46 births per thousand of the population in 1960 to 30 in 1977. The Colombian experience is especially pertinent for the other countries in Latin America where population growth remains extremely high. Pregnant and lactating women and children with nutritional deficiencies also benefit from the services provided at Colombian health care centers. Since the learning capacity of children, and hence their subsequent earning ability, can be seriously impaired by inadequate nutrition, such programs are an especially important part of efforts to help the poor escape their poverty.

Some of these programs can be financed by appropriate reallocation of expenditure within existing budgets, but additional revenue will be required in many cases. In oil producing countries such as Colombia and Mexico, elimination of the subsidy on the domestic consumption of oil products could increase government revenue by the equivalent of about 3 percent of GNP. In most countries, the introduction of more realistic user charges, especially for urban services, could significantly reduce the outflow of public funds and ensure a more efficient use of public services. In Colombia, the valuation of property at market prices could yield an additional 1 percent of GNP in property taxes.

Eliminating income tax exemptions on the imputed rent for owner-occupied dwellings, a highly regressive subsidy used in many countries, could yield equally substantial increases in revenue. The preferred combination of services, expenditure reallocation and revenue generation will vary among countries. In raising revenues to finance basic services, the poorer of the semi-industrialized countries, such as Egypt and the Philippines, may have few options but to reallocate public expenditures. But countries such as Brazil, Mexico and Turkey, where annual per capita income exceeds US$1,000, could afford both to raise additional fiscal resources and to reallocate existing funds to finance the equitable provision of these services.

Sustaining Economic Growth in a Changing World

The future success of the semi-industrialized countries in sustaining rapid growth will depend crucially on their policy responses to changes in world trading conditions and to structural changes within their own economies. The prospect of increased protection in the industrialized countries, the decelerating rate of growth in world trade, rising domestic labor costs, a continuing shift out of agriculture, and a worsening foreign debt position are the main issues confronting them.

Industrialization and Trade Policy

In 1973-77 the annual rate of growth in world trade fell to less than half the 9 percent recorded between 1965 and 1973. The annual growth rate of developing country exports recorded comparable setbacks, declining from 6.4 percent to 3.6 percent, largely as a result of slower growth in the industrialized countries and increased protection, especially against manufactures. These trends raise important issues for countries for which expansion in manufactured exports has been the prime stimulus for GDP growth, as well as for countries where export-promotion policies have had an important salutary effect on industrial efficiency and agricultural growth.

There is a danger that the prospect of slower world economic expansion may induce the semi-industrialized countries to retreat to the extensive use of import-substitution policies, in the hope of maintaining the pace of industrialization. Faced by a crisis in world trade during the Great Depression, Argentina adopted import-substituting policies, and pursued these policies for several decades, with unfortunate results for economic growth and stability; export stagnation, inefficient domestic industries and recurrent balance of payments crises resulted in slow and very irregular economic growth. Turkey's import-substituting approach to industrialization has been characterized by similar stop-go cycles, and the most recent crisis has yet to be surmounted. Other countries—Brazil, Colombia, Mexico and the Philippines—which relied heavily on import substitution, also experienced cyclical balance of payments problems though of a less severe nature. The historical evidence suggests that the pursuit of industrialization through import-substitution policies is not always a satisfactory response to temporary slowdowns in the expansion of world demand for exports.

Moreover, continued growth in the semi-industrialized countries is crucially dependent on their capacity to import, and hence on their ability to earn foreign exchange. Two points are particularly noteworthy in this regard. First, the move to increased protection in the industrialized countries is concentrated on those manufactures—clothing, textiles, and footwear—that have constituted an important part of the recent expansion in exports from the developing countries. Second, the semi-industrialized countries have now established sizable industrial bases; their labor forces are relatively skilled; and some of them are losing their competitive edge in traditional, labor-intensive exports as a consequence of rising real wages.

These points suggest that the more advanced semi-industrialized countries are now at the stage where both external and internal developments warrant a gradual shift into more capital-intensive and skill-intensive lines of production. Such a move would be consistent with the historical experience of Japan, where changes in the relative profitability of different manufactured goods, induced by rising real wages for unskilled labor and an expanding supply of skilled workers, led to a reorientation of exports away from labor-intensive products such as textiles and clothing and toward capital-intensive and skill-intensive items such as steel, shipbuilding and car manufacturing.

Recent trends in international trade herald a movement to greater concentration on capital goods exports in the total exports of developing countries. During the 1970s the growth of

their machinery exports has far exceeded that of their traditional exports. Although these nations have exploited the fast growing markets for capital goods in the industrialized countries, in 1976 over 40 percent of developing country exports of machinery and transport equipment went to other developing nations. The bulk of these exports are of relatively low-technology goods such as small electric motors, cables, electric meters, television receivers and powered hand tools, but the semi-industrialized countries have begun to diversify their exports into more complex lines of industrial machinery. Brazil, for example, has been exporting textile equipment, machinery for making pulp and paper, construction and mining equipment, and power transformers to the US and Europe; Singapore's exports include ball and roller bearings, construction and mining equipment, pumps and centrifuges, powered tools and mechanical handling equipment; and in the Republic of China the production of sewing machines, agricultural machinery, bicycles and textile equipment has helped the development of a dynamic machine tool industry.

The development of a capital goods sector in the semi-industrialized countries depends critically on the maintenance of export-promoting policies, given the limited, albeit expanding, domestic markets for these goods. Although some protective tariffs or other modes of subsidization may be necessary for the establishment of a capital goods industry, continued reliance on such supportive measures could be self-defeating. Other forms of public action may also be required, such as vocational training programs and the subsidization and organization of schemes for in-plant training; public support for industrial research, through tax incentives and government contracts; and efforts to centralize marketing and product-testing facilities. Finally, the indivisible nature of investments in the sectors using capital goods, and the need for correspondingly large and discontinuous expansions in the capital goods-producing sector itself, justify some degree of indicative macroeconomic planning in order to reduce uncertainty and avoid costly errors.

Priorities in Agriculture

Apart from its important role as a source of employment and labor income, agriculture remains a significant earner and saver of foreign exchange in most semi-industrialized countries, particularly the larger ones. In 1976, agricultural commodities made up more than half the total merchandise exports of Argentina, Brazil, Colombia, the Philippines and Turkey, whereas in smaller nations such as the Republic of China, Hong Kong, Israel and Singapore, and in most of the richer Southern European countries, the share was less than 30 percent. Food comprised less than 15 percent of merchandise imports in all countries of the group except Egypt, Hong Kong and Portugal. Agriculture's ability to generate foreign exchange, either directly through exports or indirectly through food production, is and will remain crucial to the growth of semi-industrialized countries. Furthermore, in an increasingly protectionist environment the buoyancy of the domestic market will come to depend more heavily on healthy, broadly based agricultural growth.

The broad macroeconomic approach to exchange rate policy, agricultural pricing issues, and the sectoral allocation of investment influences the relative profitability of agricultural production and exports, and hence the overall rate of agricultural growth. The significance of the general macroeconomic framework for agriculture has been described in Chapter 5, and is readily apparent in the individual experiences of the semi-industrialized countries. The Republic of China and the Republic of Korea, for example, maintained the profitability of agriculture through exchange rate and agricultural pricing policies and by the adequate provision of infrastructure. At the other extreme, the disappointing performance of Argentinian agriculture throughout the 1950s and 1960s, despite the country's rich resource endowment, was primarily due to the implicit and explicit taxes on agriculture and the fluctuating and generally unfavorable exchange rate. The slow growth of agriculture was, in turn, an important factor contributing to the country's persistent foreign exchange shortage.

Since the maintenance of an appropriate macroeconomic framework has been discussed elsewhere, this section concentrates on policies toward agriculture that are most relevant to those semi-industrialized countries whose agricultural labor force has started to decline. Where slow population growth is accompanied by a rapidly expanding demand for non-agricultural labor, efforts to enhance agricultural labor productivity become increasingly important.

To meet these productivity requirements, the

availability and timely dissemination of new and improved technologies are essential. Countries such as the Republic of China and the Republic of Korea, which invested in agricultural research at an early stage of their development, were subsequently able to achieve substantial increases in agricultural production and labor productivity. Until the early 1970s, chemical technology was the main factor raising agricultural yields in the Republic of Korea, but since 1972 the development and dissemination of high-yielding varieties of rice also has been an important stimulus to yields. In recent years, mechanical equipment has been gradually, but increasingly, substituted for labor: between 1965 and 1976, the use of labor per harvested hectare of rice decreased from 1,400 hours to 1,040 hours, while the capacity of farm machinery per hectare of cultivated land increased from about 0.2 to 0.9 horsepower. Rising labor costs in some of the more advanced semi-industrialized countries have signaled the need to increase the use of farm machinery, especially at planting and harvesting time.

The crucial policy issues during this phase of development are the provision of appropriate pricing signals to private agriculture, and the efficient development of industries that supply inputs to agriculture and process its outputs. In Turkey, the development behind protective measures of a domestic tractor industry, combined with subsidized credit for tractor purchases, resulted in premature mechanization: the number of tractors in use trebled between 1962 and 1972, although unemployed and underemployed workers were readily available. This experience highlights the deleterious effects of efforts to force the pace of both industrialization and agricultural mechanization.

Finally, the changing pattern of demand for agricultural products entails corresponding adjustments in the commodities produced, with expansion in the output of livestock products, fruits and vegetables, and development of processing, packaging and marketing facilities. Self-sufficiency in staple crops may become more difficult and less necessary as increased emphasis is given to the production of high value export and industrial crops.

Resource Mobilization and Debt Management

The semi-industrialized countries have maintained high and increasing rates of investment, ranging in 1977 from 19 percent of gross domestic product in Argentina to above 30 percent in Singapore and Yugoslavia. In some countries, such as Brazil and Turkey, public investment has been an important part of total capital formation, but in other countries, such as the Republic of China, the Republic of Korea and the Philippines, the private sector has been the main source of fixed investment. In the exceptional case of Yugoslavia, worker-managed enterprises have been responsible for a significant proportion of total capital formation.

The method of financing investment has varied considerably among countries. High interest rates and development of the capital market, for example, were important in the Republic of China and the Republic of Korea. Major tax reforms and improvements in tax administration and collection in the mid-1960s helped to finance the Brazilian expansion in public investment. Some countries—notably Argentina and Turkey—had recourse to involuntary savings enforced by inflation, but often at the cost of serious foreign exchange crises. Private direct foreign investment has been important in Singapore and, to a lesser extent, in Brazil, Hong Kong, Mexico and Spain.

Many of the semi-industrialized countries faced severe problems in adjusting their balances of payments to the oil price increases of 1973-74, and the slackening in the demand for

36. Semi-industrialized Countries: Comparative Investment and Debt Service Ratios, 1960-77
(Percentages)

	Gross Domestic Investment as Share of GDP		Debt Service as Share of[a]			
			GNP		Exports of Goods and Services	
	1960	1977	1970	1977	1970	1977
Low Income Countries	14	21	1.3	1.8	12.4	7.6
Middle Income Countries	21	25	1.7	2.4	9.1	9.2
Semi-industrialized Countries	21	24	1.5	2.2	11.4	11.7

[a]Debt service on external public and publicly guaranteed medium- and long-term loans only.

their exports that resulted from the recession in industrialized nations in 1974-75. Most of these countries turned to foreign capital markets in an attempt to sustain their economic growth; indeed, much of the increase in the total foreign debt of developing countries that occurred in 1974 and 1975 reflects the borrowing activities of semi-industrialized countries. As a result, some of these countries now have high debt burdens. A few of them, including Portugal and Turkey, have already experienced significant debt problems, while others, such as Brazil, the Republic of Korea and Mexico, have avoided liquidity crises even though their debt burdens are sizable.

Their increased foreign borrowing, especially in private capital markets, allowed the semi-industrialized countries to finance the imports they required to maintain the pace of economic growth through 1976. In the following two years, however, with the important exception of the East Asian semi-industrialized countries, a limited capacity to purchase imports, resulting from weak export performance and increased debt service burdens, meant that economic growth was significantly slower. The East Asian countries' ability to adjust to changing external conditions and to develop and diversify their exports has been crucial to their continued success. The East Asian experience, combined with the need of all countries to preserve a stable climate for commercial capital flows and to avert balance of payments crises, underscores the importance of further expansion and diversification of manufactured exports by Latin American and Southern European semi-industrialized countries. Unless these countries can improve their export performance and increase their domestic savings rates, their existing debt burdens will limit their room for maneuver, with potentially serious consequences for their economic growth.

Chapter 8: Development in Primary Producing Countries

Broadly defined, the term primary producing countries refers to virtually all developing countries with the exception of the semi-industrialized ones, which were the subject of the previous chapter. The common distinguishing feature of primary producing countries is their relatively low degree of industrialization, as measured by such indicators as the share of manufactured goods in total production and in merchandise exports. Two subgroups of primary producing countries are analyzed in this chapter: a group of "mineral economies" and another composed of predominantly agricultural nations. In each case, the emphasis is on Middle Income countries.

Development Issues in Mineral Economies

The mineral economies are characterized by large shares of minerals in their domestic production and merchandise exports.[1] Excluding those with populations of under one million, this group of countries comprises a dozen that depend principally on non-fuel mineral production, and 14 economies dominated by petroleum production. The ranks of the latter have swelled significantly in the past decade. Most of the mineral economies are in three parts of the world: Sub-Saharan Africa (for example, Angola, Guinea, Liberia, Mauritania, Nigeria, Sierra Leone, Togo, Zaire and Zambia); Latin America and the Caribbean (for example, Bolivia, Chile, Ecuador, Jamaica, Peru, Trinidad and Tobago and Venezuela); the Middle East and North Africa (for example, Algeria, Iran, Iraq, Kuwait, Libya, Saudi Arabia and Syria). A number of mineral economies with populations under one million, such as Bahrain, Botswana, Gabon, Guyana, Oman, Qatar and the United Arab Emirates, also fall in these three regions. With the exception of the capital surplus oil exporting nations and a few Low Income countries (Angola, Guinea, Indonesia, Mauritania, Sierra Leone, Togo and Zaire), mostly with GNP per capita above US$200, the mineral economies are Middle Income nations. All except Indonesia and Nigeria have populations of less than 40 million, and most have less than 15 million.

A number of structural features associated with the historical, technical and institutional development of the mining industry distinguish the mineral economies from other developing countries, especially from the predominantly agricultural nations, and present these countries with a special set of development opportunities and problems. Historically, the international mining industry has been shaped by the highly uneven geographical distribution of minerals, the enormous uncertainty associated with exploring and exploiting exhaustible natural resources, and the highly capital-intensive nature of mining technology. These features have engendered the dominance of large, vertically integrated international mining firms. The highly capital-intensive and historically foreign-dominated nature of mining industries in most developing countries is the principal cause of the prevailing pattern of limited production and consumption linkages between the mining sector and the rest of the economy, as well as the associated dualism between a modern enclave dominated by mining and an underdeveloped poverty-ridden hinterland. On the other hand, the large rents[2] realized from the sale of scarce non-renewable resources have presented developing country governments with substantial opportunities to raise finances. Over the last two decades, these opportunities have increasingly been pursued through various forms of mineral taxation and through government participation in mining enterprises, but their realization has been com-

[1]The thresholds, which have been applied with some discretion, are that the share of minerals averaged 10 percent or more of gross domestic product in 1967-75, and 40 percent or more of merchandise exports in 1973-76. As with any country groupings not based strictly on geography or income, the distinctions are sometimes hard to apply.

[2]The concept of economic rent, indispensable to the analysis of exhaustible resources, refers to the surplus earned by factors of production over and above the minimum earnings necessary to induce their employment.

plicated by the oligopolistic character of the international mining industry and the fluctuations and uncertainties associated with mineral prices. Finally, for their development over the long term, mineral economies need to adapt their economic structures, building up other sources of income as their mineral resources dwindle and eventually are exhausted.

Development Experience of Mineral Economies

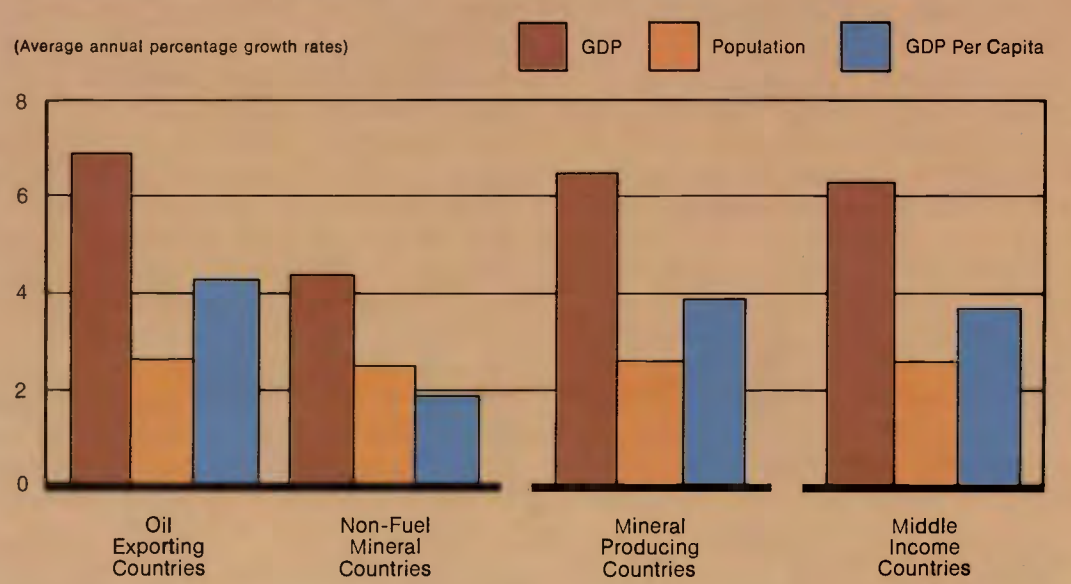
Between 1960 and 1976, the mineral economies grew at an average rate of 6.5 percent a year, which compares with an average growth rate of 6.3 percent recorded by all Middle Income countries (Figure 13). This aggregate performance masks significant differences in the growth rates of two subgroups of mineral economies. The oil exporting countries, which benefited from unprecedented increases in petroleum prices and exports, grew at an average rate of 6.9 percent a year, with per capita incomes growing at 4.3 percent a year. In contrast, the non-fuel mineral economies faced more cyclical conditions for their main exports and were able to achieve an average economic growth rate of only 4.4 percent over the same period, with per capita income increases averaging 1.9 percent a year.

Of the many mineral exporting countries in the contemporary developing world, few have had a long history as mineral-dominated economies, and thus the basis for drawing insights and lessons is limited. Nevertheless, the long mineral histories of countries such as Bolivia, Chile, Iran, Peru, Venezuela and Zambia, and the more recent experiences of many more nations, permit some tentative generalizations.

The essential advantage of the mineral economies over other developing countries lies in their possession of a resource that is readily converted into a large financial flow. A large mineral sector yields both foreign exchange and domestic tax resources, which are normally two of the key constraints at early stages of development. The differences between mineral economies and others are striking: in the early 1970s, in mineral economies as a group, the ratio of export earnings to gross domestic product was about twice as high as that recorded by all other Middle Income countries, while the ratio of tax revenues to production was about 50 percent higher. These extraordinary flows of foreign

Figure 13

Mineral Producing Countries: Comparative Growth of Gross Domestic Product and Population, 1960-76



exchange and tax receipts have permitted mineral economies to sustain much higher levels of aggregate consumption and investment than other countries at comparable stages of development. Indeed, most of the mineral economies have reached Middle Income status primarily because of the incomes generated in mining.

Large mineral earnings have not, however, been an unmixed blessing. Experience indicates that the development of a large mining industry as the leading sector in a developing country poses special challenges and problems for economic management, perhaps foremost among which are the implications of a leading sector that is highly capital intensive. The mining industry has been highly capital intensive and is becoming increasingly so, while mineral processing and related industries are also among the most capital-intensive manufacturing activities. Thus the growth of a large mining industry has tended to sharpen the technological dualism between that sector and the rest of the economy. Too often this technological dualism has spawned dualism in wages, with those in the mining sector being very much higher than in other parts of the economy. In several countries, high wages in mining are due not only to the capital intensity of mining operations and the associated high productivity of mining labor, but also to the historical and social forces that have shaped the mining sector. In the last years of the colonial era, and subsequently, foreign mining companies generally found it expedient to meet the demands for increased wages from local unionized mining labor, especially in countries such as Jamaica and Zambia where the mining labor unions were at the forefront of national independence movements. The growth of government participation in the mining companies in the post-colonial period has not significantly altered the political difficulty of controlling mining wages.

In some mineral economies wage dualism has had severe consequences. First, the high mining wages have acted as a goal, in labor negotiations, for all other wage employees in the modern and relatively formal segment of the economy, including government workers, and thus imparted a strong upward bias to the entire wage structure in the formal sector. This, in turn, has induced rapid rates of rural-urban migration and high rates of open unemployment in the cities, as aspirants queue in the lottery for scarce high-paying jobs. Not surprisingly, the highly dualistic development of many mineral economies has been associated with relatively inegalitarian distributions of household income and a much more limited diffusion of education and health facilities than in other countries at comparable levels of average income.

An issue of central importance for mineral economies is thus how to convert a wealth of physical resources into a labor force with the skills, education and experience required to run a highly productive, fully developed economy after the mineral wealth has been exhausted. It appears to be much more difficult for these economies to upgrade their human resources than to improve their physical infrastructure. Very few of them had an adequate nucleus of well educated people and reasonably good schools when mineral wealth was first opened up. Especially in Africa and the Middle East, even the economies richest in minerals have had to build on a labor force with low literacy rates and a population with weak educational traditions. To find suitable teachers and strengthen the educational system rapidly in such a situation, it may be necessary to bring in foreigners and foreign influences on a large scale, but, as Iran's experience helps to illustrate, doing so can be socially and politically disruptive. The alternative of building from within involves a slow process of educational improvement over generations, not unlike that in any other developing economy, with the pace of advance and the quality of results held back by the initial conditions. The closely related task of improving the health of the population, though by no means easy, appears somewhat more tractable with heavy public investment. A handful of mineral economies, notably Jamaica, Kuwait, and Trinidad and Tobago, have already achieved levels of life expectancy close to those in industrialized countries, though others lag far behind. In over a dozen mineral economies, including Saudi Arabia, life expectancy remains at 50 years or less.

The second major set of problems besetting the mineral economies springs from their tendency to neglect the development of non-mineral sectors, especially agriculture, which remains the largest employer of labor in all but a few of them. The ready availability of foreign exchange and fiscal resources from the mining sector has made it less urgent to develop other productive activities. Typically, the high incomes earned in the mining-based modern sec-

tor fueled consumption demands which were met through imports or domestically produced import substitutes. Like many other developing countries, most mineral economies nurtured import-substituting industries behind strong protective barriers. But unlike most of these other nations, the mineral economies could, because of their mineral exports, afford to bear the growing costs of excessive protection for much longer, postponing the transition to a more outward-oriented trade policy. The structure of incentives in such countries as Zaire and Zambia was biased heavily against agriculture, and most mineral economies did little to compensate for such biases through investments in agricultural infrastructure, extension, research or credit. Food crops were particularly neglected. In some countries, such as Guyana, Jamaica, and Trinidad and Tobago, agricultural production was further impeded by shortages of rural labor, which were partly attributable to the severe wage dualism in these economies.

The abundance of mineral exports permitted many countries to maintain an exchange rate that was appropriate for the high productivity mining sector, but which, in view of wage distortions and other factors, offered little incentive for the production or export of non-mineral goods. As a result, these countries achieved little export diversification (Table 37). In some, including Chile and Nigeria, agricultural exports actually dwindled from the levels of pre-mineral years.

The growing dependence on mineral exports in some mineral economies of recent origin, the slow diversification of exports in some of the mineral economies of long standing, and the characteristics of the international markets for their products, make many of the non-fuel mineral economies particularly vulnerable to instability in export earnings. Partly for this reason, as well as more general problems of economic management, some mineral economies, including Peru, Zaire and Zambia, have been prone to external debt problems. One particular aspect of sudden changes in mineral export earnings deserves special mention. If a sudden surge in export receipts is transformed too swiftly into increases in aggregate domestic demand, the resulting bottlenecks and inflationary consequences can be severe, as the experience of Iran and Nigeria between 1973 and 1976 exemplifies.

37. Mineral Producing Countries: Export Diversification, 1960 and 1976
(Percentages)

	Shares of Total Merchandise Exports			
	All Primary Commodities		Minerals (Including Fuels)	
	1960	1976	1960	1976
Mineral Economies	95	98	59	94
Petroleum Economies	99	99	57	95
Non-fuel Economies	86	89	67	72
Non-mineral Middle Income Countries	83	50		

Development Priorities for the Future

Investment Strategy

The long-term development priorities of mineral economies flow from the fundamental fact that their mineral wealth is exhaustible. Investments made during the mineral-exploitation stage of a nation should be such as to leave in place a growing, self-sustaining economy when the mineral rents wither away. Thus the appropriate sectoral choice and sequencing of investments is of paramount importance. Furthermore, because mineral rents accrue to a nation largely through the tax system or government participation in mining, the role of the state in implementing investment priorities acquires particular significance. Despite their important similarities, mineral economies vary enormously with respect to the size of population, extent of mineral wealth, stage of mineral exploitation, agricultural potential, the level of human resource development and the endowment of economic and social infrastructure, to mention only a few key features. Investment priorities vary accordingly. Some flavor of the pattern and variation of investment priorities among the mineral economies may be gained by paying particular heed to two features: population size and mineral wealth per capita. (The latter is a useful notion for illustrative purposes, though it is a very rough one, in view of the enormous uncertainties pertaining to the size of mineral deposits, the future behavior of mineral prices, changes in mining technologies, and possible innovations of substitutes for certain minerals.)

Countries with small populations and large mineral wealth, such as Kuwait, Libya and Saudi Arabia, have the best prospects for a strategy of resource-based, capital-intensive industrialization built around the domestic processing of minerals and related industries. As

many of these industries are technologically very sophisticated and require highly skilled manpower, the strategy demands early and careful planning and investment in education, training, and research and development. Since investments in education have a long gestation, at early stages it will generally be necessary to rely quite heavily on foreign expertise. These economies could also become profitable international financial centers. In most other countries industrialization based primarily on mineral processing is unlikely to be a successful strategy. However, selective opportunities exist, conditioned by such factors as the raw material cost shares of such industries, the availability of essential complementary inputs such as natural gas and hydro-electric power, and barriers to entry in prospective foreign markets. These last are of particular concern in iron, steel, aluminum and copper.

The sharpest contrast to the small, richly endowed countries is offered by the large nations with low mineral wealth per capita, notably Indonesia, Nigeria and Zaire. In these countries, agriculture remains the largest source of incomes and employment, indicating correspondingly high priorities for investment in agricultural infrastructure, extension, research and credit. Large and growing numbers of non-agricultural workers and potentially large domestic markets for manufactures also indicate the need for rapid development of labor-intensive industry. These are also the countries that can least afford to emulate the past policies followed by some mineral economies, in which incentives, wages and consumption have been allowed to evolve as if mineral resources were not depletable.

The investment priorities of other mineral economies fall between these two extremes. Few can afford to neglect agriculture. The larger, better endowed countries, such as Iran and Morocco, can expect greater opportunities for the development of efficient import-substituting industries, while the smaller, relatively mineral-poor nations, such as Peru and Syria, will need to give greater attention to developing labor-intensive manufacturing for export, if they are to achieve the transition to a growing and diversified post-mineral economy. Virtually all mineral economies need to make vigorous efforts to widen and deepen their limited stocks of social and economic infrastructure.

These views on sectoral priorities receive some support from the recent record of mineral economies. A few countries such as Algeria, Iraq and Venezuela, which have deployed their mineral earnings to invest in human resources and not neglected agriculture, have strengthened the basis for diversifying their economies. Nations such as Bolivia, Zaire and Zambia, by contrast, have tended to neglect their non-mineral sectors, resulting in low and erratic growth punctuated by periodic balance of payments crises, and little economic diversification.

Policies to Appropriate Mineral Rents

The importance of investment strategy, especially public investment strategy, in mineral economies derives in part from one of their more distinctive features: the potentially strong fiscal linkage between mining and the rest of the economy. The strength of this fiscal linkage in practice depends on the willingness and ability of developing country governments to tax or otherwise participate in the incomes originating in mining. The mining industry in most developing countries is characterized by the presence of large transnational corporations and by the existence of a substantial element of rent in the market value of minerals. These two facts imply that mineral economies must pay particular heed to mineral taxation, participation in the mining industry, and negotiations with transnational mining corporations. These complex tasks constitute special challenges.

In theory, the objective of mineral economies is simple: it is to maximize, in the long run, the appropriation of all rents, while allowing the investor to earn the return necessary to induce him to invest. In practice, this objective is extremely difficult to achieve. In the first place, the identification of mineral rents is hampered by a number of factors, including the oligopolistic nature of the international mining industry and the associated lack of open markets for many minerals; developing countries' limited knowledge of the mining industry and mineral reserves; difficulties in evaluating investors' perception of risks; and uncertainty with respect to future mineral prices and technologies. Second, even if these problems did not exist, choices would still remain as to the rate of mineral exploration and exploitation, and how these should be conducted in a given institutional environment. Mineral economies have adopted very different approaches to these pressing policy issues. As with investment strategy, there

is no single, universally applicable set of desired policies, but experience suggests some guidelines for the future.

In principle, the simplest way to capture all rents is for a mineral economy government to own and run the mines. But few mineral economies currently possess the managerial, technical and marketing skills needed to substitute fully and efficiently for the transnational corporations that have historically dominated the industry. As these skills are developed over time, governments are likely to participate increasingly in mining. Such participation speeds the necessary accumulation of knowledge about the industry, the nation's mineral reserves, and its long-term needs and capacities for mineral exploration and exploitation. The acquisition of practical knowledge on mining and mineral processing can also be accelerated through greater exchange of information among developing economies and joint research and development efforts. Meanwhile, the role of transnational corporations is likely to remain significant in most of these countries, and so, too, is that of mineral taxation.

Mineral taxation takes many forms. The oldest —royalties—has a number of serious defects, but its assurance of stable revenues and its ease of administration argue strongly for its use as a supplement to other forms of taxation. Taxes on income and excess profits can be more finely calibrated to capture mineral rents, and entail few distortions in the allocation of productive factors. These features commend the greater use of such instruments in a number of mineral economies that have so far neglected them. The spirit of income and profits taxes is maintained, while the advantages of private operation and reduced political risks are retained, in production sharing and production contracting arrangements such as those used in Indonesia and Peru; however, these arrangements are not finely tuned to rents and require extremely skillful negotiation and supervision. Finally, recent problems of absorptive capacity in countries such as Iran and Nigeria emphasize the need for a judicious assessment of the rate of mineral exploitation, and, possibly, for investing mineral earnings in financial or real assets abroad instead of using them immediately to fuel consumption.

Other Development Measures

The preceding discussion has emphasized the importance of improving the appropriation and investment of mineral earnings in these economies. The agenda of development concerns and policies does not cease there. Many of them, such as the need to mobilize more domestic savings and the desirability of extending low-cost basic education and health services more rapidly to the rural and urban poor, are shared by other developing countries and have been discussed elsewhere in this report. This is also true of the need for more rapid and broadly based agricultural growth if rural poverty is to be alleviated. This section thus confines itself to some concerns seen to be of particular significance to mineral economies.

As was argued above, in a number of mineral exporting countries excessively high wages in the mining sector have widespread distortionary effects. Two distinct elements of this situation call for policy intervention. First, wage increases in mining and mineral processing need to be moderated. Second, wages in other modern formal sector activities should reflect productivity trends in those sectors, and be only minimally influenced by wage developments in mining. Both these objectives may be pursued through clearly defined incomes policies. The enormous political difficulties of implementing such policies have been demonstrated by past experience in countries such as Bolivia, Jamaica, Trinidad and Tobago, and Zambia. But the serious economic costs of failing to do so justify continued efforts. Incomes policy initiatives may yield particularly high dividends in those countries with relatively short mineral histories, where mining industry labor has not yet established strongly articulated vested interests.

The other policy instrument that exerts a pervasive influence on the mineral economies is the exchange rate. It was noted earlier that the exchange rate warranted by the mineral sector and the general balance of payments situation —typically dominated by mineral exports—normally does not provide adequate incentives for the development of non-mineral production and exports. To provide such incentives there are several possible permutations of exchange rate policy and foreign trade taxes, the appropriate choice of which can only be made in specific country contexts. The fundamental objective of such a choice, however, should be a foreign trade and exchange rate regime that facilitates the diversification of exports and production. Such a diversification will be essential for most

mineral economies if they are to move successfully into a dynamic post-mineral future.

Finally, some mineral economies are particularly vulnerable to instability in their export earnings and fiscal revenues. Part of the remedy lies with the compensatory financing schemes, like that of the International Monetary Fund and Stabex, as well as with international buffer stock arrangements that are presently being discussed in international forums. In addition, individual mineral economies can institute reserve funds, which are accumulated when export prices are high and drawn down during recessions.

Structural Change in Predominantly Agricultural Nations

The predominantly agricultural developing countries include some of the Middle Income nations of West Africa, Southeast Asia and Latin America, the smaller countries of South Asia, the Low Income nations of Sub-Saharan Africa and the large densely populated countries of Low Income Asia. Since the development issues facing the last two groups were extensively discussed in *World Development Report, 1978,* they receive little attention here. Instead, this section dwells on the development experience and priorities of countries such as Burma, El Salvador, Ghana, Guatemala, Honduras, Ivory Coast, Malaysia, Paraguay, Sri Lanka, Sudan and Thailand. Apart from Burma and Thailand, these nations are small, with populations of less than 20 million. While the majority are Middle Income, some Low Income nations have been retained in the set, since in some cases their present per capita income levels are more a reflection of past lost opportunities than of markedly different initial conditions around 1950. Furthermore, much of the development experience of the Middle Income members of the group can provide useful insights for the Low Income ones.

Shared Development Problems and Varying Responses

The development performance of these countries has varied tremendously, with 1960-77 average annual growth rates ranging from 2 to 3 percent in such countries as Burma and Ghana, to 7 to 8 percent in others, notably Ivory Coast, Malaysia and Thailand. Such contrasts result partly from differences in initial sociopolitical conditions and resource endowments, partly from the varying incidence of changes in the international trade and payments environment, and partly from clear differences in the nature and quality of their policy responses.

Initial Conditions and Common Problems

By 1950, most of these economies had clearly established themselves as specializing in agricultural exports. In most of them exports were equivalent to one-fifth or more of gross domestic product. Typically one or two commodities dominated merchandise exports in each country: for example, rice in Burma, cocoa in Ghana, coffee and cocoa in Ivory Coast, rubber and tin in Malaysia, tea and rubber in Sri Lanka, and cotton in Sudan. In most cases, the export spe-

38. Basic Indicators for Selected Predominantly Agricultural Countries

	Population (millions)	GNP Per Capita (US Dollars)	Average Annual Percentage Growth 1960-77		Percentage of Manufacturing in GDP		Percentage of Labor Force in Agriculture		Percentage of Manufactures in Merchandise Exports	
	1977	1977	GNP Per Capita	GDP	1960	1977	1960	1977	1960	1976
Burma	31.5	140	0.9	3.1	8	9	68	55	1	1
El Salvador	4.2	550	1.8	5.3	15	15	60	47	6	..
Ghana	10.6	380	−0.3	2.1	10	11[a]	64	54	10	1
Guatemala	6.4	790	2.8	5.8	..	..	67	57	3	..
Honduras	3.3	410	1.5	4.4	13	17	70	63	2	10
Ivory Coast	7.5	690	3.3	7.2	7	12	89	82	1	8
Malaysia	13.0	930	3.9	6.9	9	18	63	44	6	16
Sri Lanka	14.1	200	2.0	4.1	11	15	56	54	2	14
Thailand	43.8	420	4.5	7.7	11	20	84	77	2	19

[a] 1974.

cialization reflected several decades of cash crop development, taking advantage of abundant fertile land and often under colonial rule. While some of this development was based on plantations, especially for tree crops, in the majority of countries smallholders had already established a substantial role in cash crop production by the middle of this century. The bulk of modern economic activity, private and public, was generally built around the export trade in cash crops. Domestic manufacturing industry was relatively undeveloped, usually amounting to less than 10 percent of domestic production. Though the countries differed in their stocks of indigenous educated and skilled labor and entrepreneurs, none was abundant in such human resources.

During the 1950s, many of these predominantly agricultural countries faced formidable tasks of nation building as they gained independence from colonial rule. Foremost among the development challenges and choices they faced was whether to continue specializing in export agriculture or to shift their priorities and resources in favor of industry. For some of them, primary export specialization held unpalatable associations with the old, colonial, division of labor. Furthermore, the tremendous variation in international commodity prices during the Korean War and its aftermath emphasized the uncertainties associated with reliance on these markets. Many countries feared a secular decline in their commodity terms of trade. Second, with steady or rising fertility, combined with declining mortality rates, the growth of population accelerated, swelling the need for jobs, for food, and for investment in social infrastructure. The case for purposive population policies gathered strength. The growth of population and associated concerns with food supply accentuated the need to reverse the historical neglect of food crops and traditional agriculture in the policies and programs of many of these nations. Third, the burgeoning demand for educated and skilled people meant that choices had urgently to be made on the priorities for expenditure on education and training. Where indigenous technical, managerial and entrepreneurial skills were in particularly short supply, the merits of relying on foreign skills and firms (or on those of local ethnic minorities) became a significant policy issue. Finally, as accelerated development became an avowed goal of all governments, crucial issues arose regarding the extent and form of state intervention in the economy.

Policy Responses and Experiences

It is perhaps no coincidence that the countries that developed fastest were those which chose to deepen and broaden their specialization in agriculture. This was not because the gloomy predictions about commodity prices were proven wholly false by events. All too often they were accurate. Rather, countries that continued to give priority to agriculture managed to expand production and exports, to more than compensate for the income lost due to adverse movements in their commodity terms of trade. Their continued specialization in agriculture was accompanied by deliberate and sustained diversification and modernization within the sector.

Malaysia and Ivory Coast are prime examples. In Malaysia, replanting and new planting increased the output of rubber from smallholdings at an average annual rate of about 7 percent between 1960 and 1975, while at the same time major programs of diversification into oil palm and timber were carried out. In Ivory Coast increases in the production of the traditional exports, coffee and cocoa, were accompanied by substantial diversification into timber, oil palm, rubber, coconut, pineapple and bananas. Nor did these countries neglect smallholder food crops. In Malaysia, new investments in paddy production, introduction of new high-yielding varieties and a favorable producer price policy enabled the country to supply an increasing proportion of its rice consumption: from about 60 percent in 1957 to over 90 percent in 1972. In both countries, and other more modestly successful nations such as Guatemala and Thailand, the key elements of successful agricultural diversification and modernization have been heavy public investment in irrigation and new land development, maintenance of remunerative producer prices, and well staffed, dynamic institutions for agricultural research, credit and distribution of inputs.

In contrast, countries such as Burma, Ghana and Sri Lanka tended to neglect their existing agricultural assets and achieved little success in diversifying into new cash crops or supporting the traditional food crop sector. Burma's rice sector languished from policy neglect while the country's rich potential for timber remained underdeveloped. Cocoa production in Ghana suf-

fered from declining incentives and food crops received little policy support. Inadequate producer incentives and policy uncertainties hurt the tree crop sector in Sri Lanka, resulting in little new investment or replanting of tea, rubber or coconut. This neglect of agriculture was not offset by any substantial diversification into manufacturing, even though in some countries rapid industrialization was a key policy objective, as in Ghana. Indeed, a striking feature of the development experience of the predominantly agricultural countries is the fact that those nations that made the best use of their agricultural potential were also the ones which forged the strongest mutually beneficial links between agriculture and industry and achieved the swiftest structural transformation.

Several factors underlay the relatively successful industrialization efforts of Ivory Coast, Malaysia and Thailand. First, the rapid and broadly based expansion of agriculture generated substantial increases in rural incomes. These provided a ready and buoyant market for manufactured consumer goods and agricultural inputs such as fertilizer and farming equipment, which in turn contributed to increases in agricultural productivity. Second, the growing supply of low-cost agricultural produce sustained the rapid development of such processing industries as sawmilling and other wood products, food processing, rubber goods and palm oil production. Third, the rapid growth in primary export earnings was able to finance the growing requirements for capital and intermediate goods imports of an expanding industrial sector. Fourth, the protection offered to manufacturing activities was relatively modest and discriminating, avoiding most of the costs of excess protection so frequently incurred in developing countries. Comparatively outward-looking trade policies have facilitated the rapid growth of manufactured exports in recent years. Fifth, these countries recognized the importance of high level skills and entrepreneurship and, by and large, fostered a policy environment that permitted these to flourish, even when the requisite skills came from abroad or from local ethnic minorities. Sixth, while these nations had relied heavily and successfully on public investment and other forms of government support for their agricultural development, they desisted from setting up numerous state-run manufacturing enterprises, preferring to support the growth of industry through infrastructure investments, a favorable trade and fiscal policy environment, and development finance institutions. Finally, industrialization in these countries benefited from the cumulative dimension to success: high and steady economic growth rates have permitted a steady rise in domestic savings which, together with external capital, could finance the investment necessary for balanced growth of agriculture and industry. The slower pace of industrialization in other predominantly agricultural countries has been largely due to the absence of some or all of these features.

The growth of population accelerated in the 1950s in all the predominantly agricultural countries. Population growth rates remained high during the period 1960-77, with a continued acceleration in some countries. The demographic trends showed marked geographic differences. The characteristically high birth rates in African countries showed little change and, coupled with continued declines in mortality, led to an acceleration in population growth. There were larger declines in fertility in the predominantly agricultural Latin American nations, but as these were usually outweighed by sharper falls in death rates, the rate of population growth went up. The Asian countries, notably Burma, Malaysia, Sri Lanka and Thailand, experienced the sharpest declines in fertility, and in the last three countries there was an associated decline in the rate of population growth.

The observed fertility declines have been attributed to several factors, including improvements in general social and economic conditions and the spread of family planning services, though it is not possible to assess the relative significance of these factors with any precision. Except for Ghana, none of the African and Latin American countries of this group had instituted government family planning policies by 1970; El Salvador and Guatemala did so in 1974 and 1975, respectively. Malaysia and Sri Lanka launched their family planning programs in the mid-1960s, though much of the dramatic reduction in fertility in Sri Lanka is generally attributed to the rapid diffusion of improvements in education, health and nutrition, which resulted from the country's heavy emphasis on mass-oriented social expenditures. Though the government family planning program in Thailand was not begun until the early 1970s, by 1977 over 30 percent of the married women of childbearing age were estimated to be contraceptive users.

Challenges for the Future

In predominantly agricultural nations that have tended to bias incentives and resource flows against broadly based agricultural development, the key priority is to reverse this historical tendency. The policies best suited to effect this change will vary greatly across countries, according to their resource endowments and sociopolitical conditions. For example, countries such as Burma or Sudan, where land is relatively abundant, can seek substantial production increases through acreage expansion. Their main concern will be to ensure that large capital-intensive agricultural schemes do not preempt resources and markets from traditional smallholders. In economies with little unused arable land, such as Sri Lanka, agricultural policies will have to stress the efficient intensive use of the existing cultivated area. Output increases may be sought through investments in irrigation, feeder roads and research, the spread of improved seeds, fertilizer and pesticides, and the inculcation of better cropping practices.

Some of the Central American republics face particularly difficult tasks of reducing the traditional dualism between the large commercial farms producing cotton, sugarcane, beef and bananas on fertile coastal lands and the relatively neglected peasant sector, engaged largely in subsistence farming on poor upland soils. Rural poverty and population pressure in the upland areas of El Salvador, Guatemala and Honduras have exacerbated problems of soil erosion and deforestation. Greater emphasis on programs to support smallholder development would reduce rural poverty and ease the formidable task of conserving and managing the valuable forest resources of these countries.

Some recent changes augur well for the future. In many of these countries there have been marked increases in producer prices in the last five years, though the effects of such increases on farm incomes and incentives have been greatly reduced by general inflation. In Ghana, two large projects for rehabilitating and replanting cocoa have recently been launched, while since 1972 the government has improved incentives for other crops including food. The incentives for agricultural exports have improved in Burma as a result of the recent devaluation, increases in producer prices and a partial decentralization of the state monopoly for export trade. The mid-1970s saw the enactment of new laws for agrarian reform in El Salvador and Honduras and the acceleration of efforts to support smallholder development in Guatemala.

In several agricultural countries, the manufacturing sector is highly protected and subject to very detailed and comprehensive licensing regulations and price controls, which have tended to spawn high trading profits and inhibit industrial efficiency. Some reduction in protection and regulations could open up this sector to greater competitive pressures and facilitate the growth of small- and medium-scale enterprises, which frequently forge strong mutually beneficial links with the agricultural sector. In countries where government-owned manufacturing enterprises are important, there is a clear need for greater cost consciousness, autonomy and accountability among managers.

Those economies that have developed slowly are in greater need of active population policies. For one thing, these countries cannot rely on significant declines in fertility stemming from rapid overall development. For another, these are the nations which can least afford to feed, house, educate and employ a rapidly growing population. The recent successes of the Indonesian family planning program indicate that well conceived and vigorously implemented population policies can significantly reduce fertility, even in relatively difficult social and economic conditions. To the extent that the spread of basic education and health services speeds the decline in fertility, as appears to have been the case in Sri Lanka, the arguments for low-cost provision of these basic public services are reinforced.

Nations that have already exploited their agricultural potential to advantage face a somewhat different set of challenges in the future: while there is still a strong need to maintain the dynamism of agriculture, the large non-agricultural segment of the economy also commands attention. Within agriculture it is increasingly important to orient policies and programs in favor of smallholders and others of the rural poor. Though these groups have benefited from the past growth and diversification in agriculture, substantial numbers of them remain in poverty, and as the average incomes in these countries continue to increase, the poor merit greater attention from public policy.

Ivory Coast, Malaysia and Thailand have already made great strides in industrialization and manufactured exports. As their industrial struc-

tures grow more complex they will need more sophisticated skills. With time they can increasingly diversify their manufacturing sectors from agricultural processing and simple labor-intensive manufacturing into more demanding, skill- and technology-intensive areas of production. This suggests giving early attention to the creation of the requisite skills and to the options for judicious encouragement of the domestic production of capital goods. Now that the manufacturing sector is well established, these countries can contemplate reductions in the modest protection conferred by their present trade and fiscal policies, though the case for selective special treatment of infant industries will remain valid.

The search for manufactured export markets will continue to require dynamism and perseverance, especially if the international trading environment becomes clouded by increased protectionist actions in the industrialized world. These predominantly agricultural countries still face significant export opportunities in processed timber and other wood products, leather goods and rubber products, and opportunities in textiles and clothing could expand if industrialized country protection in these categories were reduced. In sum, the prospects for further industrialization in these countries are intimately linked to developments in the international trading arena.

Chapter 9: Conclusions

The central objectives of economic development remain the growth of incomes and the alleviation of absolute poverty. This report has assessed the problems and prospects that arise in the pursuit of these objectives in four principal areas:

- The scope and nature of the employment challenge facing the developing countries, and the programs and policies that offer the best hope of creating jobs and raising incomes in different groups of developing countries;
- The importance of achieving balance and complementarity between agriculture and industry, to facilitate sustained economic growth and a wide diffusion of its benefits;
- The unprecedented rate of urban growth in developing nations and the massive new tasks posed by the shift of population to cities and towns; and
- The need to restore a more supportive international environment for trade, capital flows and energy development.

Policies to Increase Productive Employment and Alleviate Poverty

The dimensions of the employment challenge are unprecedented. Between 1975 and 2000, the labor force in developing countries is expected to increase by about 550 million—over twice the increment of the previous quarter of a century. Given the already high levels of underemployment and absolute poverty, the scale of the task of expanding productive employment and income opportunities cannot be overdramatized.

In the Low Income countries, the key to more rapid employment expansion, swifter alleviation of poverty and a more robust basis for the long-term structural transformation of the economy lies in improving performance in the rural economy. More than 70 percent of the labor force is directly dependent on agriculture and will remain so for the foreseeable future; in addition, many millions of jobs in small-scale rural enterprises depend on agricultural production and incomes. As a first priority, investment, pricing and trade policies that presently discriminate against agriculture need to be reversed. Within agriculture, sustained programs of institutional, technical and infrastructural support for small farmers offer the best hope for increasing employment and alleviating poverty. Small farms generally use labor much more intensively than large ones. Nor are small farmers laggards in adopting high-yielding seed varieties and associated labor-intensive cultivation techniques, once they are granted ready access to essential inputs such as credit, fertilizers and extension advice, and can count on markets for their produce. Too often, the distribution of such government-supported services is skewed in favor of larger farms or is otherwise inadequate. Investments in irrigation works, large and small, are particularly promising as they not only augment agricultural productivity and incomes, but can also create a substantial number of off-farm jobs in construction and maintenance.

In addition to the immediate first-round benefits within agriculture, increased agricultural production and incomes generate new demands for non-agricultural output and employment. Rural non-farm enterprises have demonstrated a remarkable capacity to respond to increases in demand and to provide a growing number of rural jobs. Their inherent dynamism can be greatly enhanced by government assistance in the form of improved infrastructure, rural electrification and expanded credit facilities. More generally, sustained and broadly based agricultural growth is extremely important for successful industrialization in the Low Income countries, especially the larger ones, whose industries must rely primarily on growing domestic markets. The manufacture of clothing, textiles and other mass consumption items, the production of intermediate manufactured inputs for agriculture, the processing of agricultural produce and the expansion of related activities in construction, transport and wholesaling, depend heavily on developments in agriculture. Conversely, the efficient manufacture and distribution of rurally purchased consumer goods enhances rural living standards, while the availability of low-cost fertilizers, pesticides, agricultural implements and other intermediate

inputs augments the technical productivity of agriculture, thus forging mutually beneficial links between industry and agriculture.

The promotion of agricultural development in general, and small farms in particular, will be fundamental to the expansion of employment and the alleviation of poverty in most Middle Income countries, many of which still have half or more of their labor force in agriculture. In addition, most Middle Income nations need to implement industrial and trade policies that promote a rapid expansion of production and employment in industry. Almost all developing nations have, to varying degrees, followed import-substituting policies in their early stages of industrialization. While in many instances policies of tariff protection and import quotas have undoubtedly assisted the establishment of industrial activities, prolonged recourse to such measures has all too often hampered the continued expansion of industrial production and employment. By and large, countries that have shifted their industrial policies, to reward exports with incentives comparable to those for domestic sales, have achieved faster growth in industrial production and employment than those whose policies have remained inward looking. Countries in the latter group stand to benefit from the implementation of policies that give greater inducements to manufactured exports. As these exports tend to be more labor intensive than industrial import substitutes, employment is likely to grow faster. In addition, the increase in industrial efficiency and output normally associated with more outward-looking policies should facilitate a more rapid expansion of the national capital stock, and hence further augment the demand for labor. The gains from an open industrial policy depend crucially on the international environment for trade: the more liberal this environment, the greater are the likely gains from undertaking the indicated policy reform, or, for those developing countries that have already reduced their policy bias against exports, from maintaining their existing outward-oriented trade and industrial policies.

In some of the semi-industrialized Middle Income countries, as well as in a few Low Income countries with large and sophisticated industrial sectors, the further growth and deepening of the industrial structure calls for increased attention to acquiring, learning and adapting new industrial technologies; to establishing new institutions, such as export credit agencies, while making existing ones, including public enterprises, more responsive to cost and market pressures; and to mastering the design, production and marketing of new manufactured exports. Some of these nations are particularly well placed to supply the growing developing country markets for machinery and other capital equipment with products tried and tested in developing countries.

During the next two decades, the main responses to the unprecedented employment challenge in developing countries must come from the design and implementation of appropriate agricultural and industrial strategies. But if the dimensions of growth in the labor force are to be more manageable in the early years of the twenty-first century, population policies have a central role to play. Much has already been accomplished. Between 1960 and 1977, declines in crude birth rates of more than 30 percent occurred in a number of East Asian countries and a few others. Smaller but significant decreases have been observed in other nations, including two of the largest Low Income ones, India and Indonesia. While the decline in birth rates is partly due to general improvements in economic and social conditions, a significant role has been played by family planning programs begun during the 1960s. This lends additional force to the argument for encouraging more active population policies in those countries, notably in parts of Latin America and Sub-Saharan Africa, where population growth rates remain in the neighborhood of 3 percent a year and little attempt has yet been made to curb them. The need for action is particularly acute in Africa, where a combination of factors is expected to hold back the growth of aggregate income to relatively modest levels.

While the rapid expansion of productive employment opportunities and slower growth in the labor force can be expected to be the principal vehicles for alleviating absolute poverty in developing countries, much can be done to raise the living standards of the poor through expanded provision of appropriately designed low-cost public services, in the form of education, health care, water supply and sanitation. The opportunities are particularly great in some of the richer Middle Income countries where, at present, a disproportionate share of publicly provided amenities benefits the wealthier segments of the population. These countries can

afford to channel greater flows of public expenditures to benefit their poor. To the extent that these increments are used to finance preventive rather than curative health facilities, primary rather than higher education, and public standpipes rather than costly water connections to houses, the dispersion of benefits among the poor is likely to be greater.

Urbanization: Priorities for Action

The urban populations of developing countries are growing at explosive rates. Between 1950 and 1975, urban communities in developing countries had to absorb about 400 million additional inhabitants; in the subsequent 25 years, the increment is likely to be close to one billion people. The number of very large cities is also increasing rapidly. In 1950, these countries had only one city larger than 5 million people. By the year 2000, some 40 cities are likely to be at or above this size, while about 18 are expected to hold more than 10 million inhabitants. This pace of urban growth is posing unprecedented challenges for national and municipal policy makers.

To some extent, the rate and pattern of urbanization can be influenced through policy measures. The main determinants of urbanization and spatial concentration are the pace and structure of economic development and the rate of natural population growth. Policies that accelerate broadly based agricultural development and improve living conditions in rural areas can be expected to slow the migration to towns and cities. In the long run, measures that reduce the natural rate of population growth will slow the growth of urban populations, both directly, and indirectly, through lessening the demographic pressures on rural resources and incomes and hence helping to reduce migration to towns. In most developing countries, a wide array of current policies reinforces the concentration of economic activity in existing large cities, especially national capitals. The elimination of large-city biases in government policies with respect to public investment, foreign trade and exchange controls, and transport and energy pricing could help to achieve a more balanced pattern of urban growth. This could be further aided by positive measures to encourage the growth of medium-sized cities.

The cities in developing countries will continue to grow even if national policy biases favoring urbanization are eliminated and vigorous decentralization measures are deployed. Modern industrial and service activities benefit from the economies of agglomeration, and to the extent that industrialization and structural change are a necessary adjunct of economic development, the impetus for urban growth is well-nigh inexorable. The central task facing national and urban planners is thus to devise and implement policies to encourage the efficient and equitable growth of cities. Instead of bulldozing slums, banning street vendors and traditional modes of transport from public places, and building high-cost public housing, subways and limited-access highways, all of which primarily serve the interests of wealthier residents, urban investment and regulation policies should be designed to assist the expansion of those forms of transportation, housing, sanitation and other services which meet the needs of the majority of the urban population, including the poor, at low cost.

Where past urban transport investments have served mainly to increase the road capacity for the growing swarms of private automobiles, the priorities need to be shifted in favor of expanding bus fleets and routes, making traditional forms of transport—including bicycles and walking—easier, and constructing low-cost access routes for buses and service vehicles in poor neighborhoods. Better roads for these areas often bring far-reaching benefits to residents, since the provision and maintenance of other urban services, such as water, electricity, sewerage, waste collection, and police and fire protection, frequently depend on road accessibility. The past response to urban housing needs has too often been limited to the construction of a few costly public housing schemes, which are of little consequence in relation to requirements. A more appropriate public policy would focus on eliminating impediments to private initiative and providing those elements of housing supply —sites, low-cost water, sanitation and other services, security of tenure and construction loans—which the private sector is least able to supply. Similar shifts in favor of low-cost, replicable delivery systems may be necessary if education and health services are to reach the majority of urban dwellers. Both the scale of the urban resource management problem and the need for fresh initiatives and policy directions require concerted efforts: to delineate the responsibilities and functions of urban authorities clearly; to ensure that these authorities coordi-

nate their activities effectively within a given city or town; to upgrade their planning and technical capacities; and to improve the coordination between urban and national authorities for finance, planning and other relevant functions.

Improving the International Environment for Development

The progress developing countries can make in increasing production, expanding employment and reducing poverty will partly depend on the international climate for trade and capital flows. The impressive advances made by many of these countries in the 25 years after World War II were greatly assisted by the unprecedented expansion in world output, trade and capital flows that took place during this era. The slowdown in the growth of world production and trade since the early 1970s has raised the central issue of this decade: is the retardation simply a temporary setback resulting from the coincidence of adverse events, or does it presage a prolonged period of slow growth and unsettled international economic conditions? This report takes the view that the health of the world economy is less a product of inexorable historical processes and more the result of policy choices and actions in key industrialized and developing nations of the world. The boom in world output and trade during the 1960s and early 1970s was, in large measure, the result of deliberate and successful international efforts to reduce restrictions on international trade. Similar rewards could accrue from reversal of the recent surge in protectionist actions and from a more determined pursuit of growth in key nations. Conversely, the continuation of the recent disappointing trends in world trade and production would retard growth in developing countries, and jeopardize any reduction in the number of people condemned to live in absolute poverty.

Trade liberalization and output growth are mutually reinforcing processes. Containing and reversing protectionist tendencies and reaping the benefits of the Tokyo Round multilateral trade agreements would be greatly aided by the restoration of higher growth in the industrialized countries. In addition, these nations can undertake an array of small, but cumulatively significant, policy initiatives to reduce the costs to groups adversely affected by international competition and imports, so that society at large may enjoy the benefits of cheap imports, fast growing, skill-intensive export industries, healthy growth of international capital flows, and other benefits that stem from more liberal trade.

Industrialized nations need to undertake special efforts to curb protection and ease market access for imports from developing countries. Not only is this essential for accelerating growth and employment generation in developing countries; it is also in the long-term interest of the industrialized nations, which stand to gain from cheap imports and the rapid expansion of major markets for their exports. In 1976, developing countries purchased 28 percent of the total merchandise exports of industrialized nations and 31 percent of their manufactured exports.

Developing countries, for their part, need to resist the temptation to adopt inward-looking trade policies, or to delay a transition to more export-oriented policy regimes, in response to current difficulties in the international trading environment. Despite recent protectionist tendencies, important export opportunities exist for countries that are willing to risk investing in export industries. The more advanced developing countries can strengthen the basis for more liberal trade if they are willing progressively to surrender their present privileges and immunities from international trading rules, and if they participate more actively in future multilateral trade negotiations and agreements. Where this involves a substantial reduction in trade protection, a transition to more liberal policies may be aided by guarantees of improved market access and the provision of additional medium-term capital flows from official sources, to ease the foreseeable strains on the balance of payments.

More buoyant economic conditions in industrialized countries should also facilitate the necessary expansion of Official Development Assistance. Net disbursements of ODA from members of the Development Assistance Committee of OECD are estimated to have amounted to only 0.32 percent of donors' GNP in 1978—far short of the international target of 0.7 percent of GNP endorsed by the United Nations General Assembly in 1970. Only Denmark, France, the Netherlands, Norway and Sweden had exceeded or were close to that proportion by 1977, while net ODA from the three largest economies, the Federal Republic of Germany, Japan and the United States, remained signifi-

cantly under half the 0.7 percent target. The expansion of concessional resource transfers is particularly important to the Low Income countries, which rely on these sources for about 70 percent of their net inflows of medium- and long-term capital. Relatively small percentage increases in real ODA flows could, if directed toward the Low Income countries and the poorer Middle Income nations, have a substantial impact on absolute poverty.

Over two-thirds of the net disbursements of medium- and long-term capital to Middle Income countries comes from private sources, predominantly commercial banks. Though the international private capital market has been remarkably responsive and flexible in meeting the capital requirements of these countries, recent experience and projections for the next decade give some causes for concern. First, the relatively short maturity structure of private commercial loans, and the attendant need for frequent refinancing, lead to high stocks of outstanding debt and increase the fragility of the structure of capital flows. Recent measures to increase the resources of the International Monetary Fund, and proposals being considered to increase the capital base of the World Bank and other international institutions, will strengthen the international financial system. Nonetheless, there remains considerable scope for renewed efforts and fresh initiatives to expand the flow of official medium-term capital to developing countries, to assist them in adjusting to major shifts in the international economic arena and in undertaking desirable but risky reforms of their trade and industrial policies.

Second, though the projections do not point to a general debt problem for developing countries, from time to time individual countries may experience liquidity crises, like those in recent years in Peru, Turkey and Zaire. To the extent that international initiatives succeed in improving the maturity structure of aggregate capital flows and debt, such liquidity strains will occur more rarely. Liberalization and expansion of international compensatory financing facilities would help to allay the liquidity strains that can be caused by unforeseen shortfalls in export earnings. Improvements are also desirable in methods to deal with liquidity crises when they occur. In particular, the existing procedures for multilateral renegotiations of official debt under the auspices of the Paris Club could benefit from more systematic consideration of the medium-term prospects and needs of the debtor countries concerned, so that the need for recurrent debt rescheduling exercises is reduced.

As recent events have shown, the balance in the world demand and supply of energy still hinges on what happens in a few key oil exporting countries. In these circumstances, disruptions in the supply of oil, accompanied by temporary increases in its real price, can be precipitated by events in a single country. However, if prolonged production setbacks in key countries can be avoided, if strong conservation measures are pursued in major consuming nations, and if sustained efforts are made to find and develop new energy resources, then the increases in the real price of internationally traded energy need not be large.

Viewed in a longer perspective, the next two decades may be seen as a critical transitional period during which the world has to adjust to higher energy prices and increasing use of more costly energy substitutes for oil. While different groups of countries face different sets of problems in accomplishing this transition, all share a strong interest in assuring that the transition is a smooth one. In the industrialized countries, the main transitional tasks lie in the conservation of demand, improving the safety of nuclear power, the pricing of domestic energy supplies and the development of synthetic fuels. The principal concerns of the major oil exporting nations include the determination of how rapidly to exploit their non-renewable resource, and the design of a long-term development strategy that will ease the transition to a post-oil future. For other developing countries, the main priorities are to explore and develop domestic commercial energy potential, to increase the efficiency of non-commercial and non-conventional energy sources, and to adjust to higher energy prices. If the maintenance of equilibrium in the global energy market requires real price increases over the next two decades, it would be advantageous for all to have gradual and predictable oil price increases rather than sharp unforeseen changes. This would facilitate investment planning in alternative energy sources and permit oil importing countries to adjust their economies gradually; in the weaker and worst affected of the non-oil developing countries, such adjustments would require increased balance of payments support. For their part, the oil exporting nations stand to gain from the orderly evolution of world output, trade and

capital flows that is more likely to be associated with a smooth transition.

Developing countries face major challenges in developing their very substantial unexploited resources of commercial energy. Most of these countries need to increase investment and augment their technical, planning and management systems in the energy sector. International support with finance and technical expertise, such as the World Bank's recent initiative to support oil production, can greatly aid this effort. Developing nations also need to direct greater attention to their use of non-commercial energy sources. About half of the energy produced in oil importing developing countries comes from traditional fuels, such as firewood, charcoal, and animal and crop residues. In many parts of the world, where unchecked reliance on such sources has led to grave ecological problems of deforestation and desertification, there is an urgent need for well designed afforestation programs. At the same time, development and dissemination of improved cooking stoves, biogas plants and charcoal kilns could greatly improve the efficiency of energy use from traditional sources.

As the decade of the 1970s approaches its end, the interdependence in the world economy is becoming increasingly apparent. International trade, capital flows and energy developments are some of the strands in the web of economic ties and mutual interests that link nations together. A break in one strand jeopardizes others: for instance, increased protectionism toward their exports reduces the debt servicing capacity of developing nations, and weakens the global financial system. In a fundamental sense, interdependence goes deeper than shared economic interests. All nations stand to gain from furthering a course of development that will lift the blight of absolute poverty from this planet and provide meaningful jobs and security to its inhabitants. The international community faces the challenge of undertaking informed policy initiatives to realize the underlying mutual interests of nations and to protect those interests from ill advised actions in pursuit of ephemeral gains.

Annex

World Development Indicators

Index of Countries

[a] In the tables, countries will be listed within their group in ascending order of income per capita. The reference numbers indicate that order.

World Development Indicators

Contents

Introduction

World Development Indicators is designed to provide information of general relevance about the main features of economic and social development. The present volume largely follows the format of the 1978 edition. However, it takes account of comments received after the publication of that edition, and includes six new tables, as well as additional information on trade flows. The data fall into the following broad areas: national accounts, industrialization, energy, external accounts and aid flows, demography and the labor force, urbanization, social indicators, and income distribution. The indicators in Table 1 give a summary profile of countries. Information has been drawn from the data files and publications of various international agencies, including the World Bank's data bank. For ease of reference, ratios and rates of growth are shown; absolute values are reported only in a few instances.

The country groups used in the tables are: Low Income developing countries, with per capita income of US$300 and below in 1977; Middle Income developing countries, with per capita income above that level; Industrialized countries; Capital Surplus Oil Exporting countries; and Centrally Planned Economies. Within each group countries are listed in order of their per capita income in 1977, starting with the poorest. The alphabetical index on the page preceding the Table of Contents shows the reference number of each country which is used in all tables. Countries with populations less than 1 million are not reported upon in the tables, largely for lack of comprehensive data. Key indicators for 29 small countries that are members of the United Nations and/or the World Bank are shown in the Technical Notes to Table 1.

Summary measures — averages and median values—have been calculated for the country groups where appropriate. Since the coverage of countries is not uniform for all the indicators, and since the variation around the central tendencies is generally very large, users should exercise due caution in comparing the summary measures, both among indicators and among country groups.

The Technical Notes at the end of the volume should be referred to in any use of the data. These notes outline the concepts, definitions, methods, and data sources used. The Bibliography gives details of the data sources. Although the statistics presented are drawn from sources generally considered the most authoritative and reliable, some of them, particularly those describing social features, may be subject to considerable margins of error. Users are urged to exercise care in comparing indicators across countries. Though the data presented are useful to indicate trends, and characterize certain major differences among countries, variations in national practices mean that the data in certain instances may not be completely comparable. The data on income distribution in Table 24 must be treated with extreme caution, for reasons detailed in the Technical Notes. In most countries the collection of such data has not been systematically organized and integrated into the official statistical system for reporting national accounts.

The present volume incorporates a number of important revisions to indicators shown in last year's handbook. These result from revisions made to many of the main data sources during the past year. They affect the data in four main areas: national accounts, reflecting the revisions made to the historical series of many member countries by national statistical offices; the growth of trade, reflecting revisions by UNCTAD to the underlying data; population and associated indicators, reflecting the new, provisional, assessments by the UN Population Division in early 1979; and social indicators, reflecting revisions made by WHO and Unesco in the light of new data supplied by the reporting countries.

While this volume is not designed as an exhaustive statistical compendium, it is hoped that policymakers will find it a useful source for ready reference. It is intended to update the handbook annually.

Key to Tables

Figures in the brown bands are summary statistics for each group of countries. The methodology used for them is given in the Technical Notes.

w = weighted average
g = group average
m = median value

.. Not available.
(.) Less than half the unit shown.

All growth rates are shown in real terms.

Italics: Figures in italics refer to years other than those specified, as explained in the footnotes to the tables in question.

Table 1: Basic Indicators

	Population (millions) Mid-1977	Area (thousand square kilometers)	GNP Per Capita (US dollars) 1977	GNP Per Capita Average Annual Growth (percent) 1960-77	Average Annual Rate of Inflation (percent) 1960-70[a]	Average Annual Rate of Inflation (percent) 1970-77[b]	Adult Literacy Rate[c] (percent) 1975	Life Expectancy at Birth 1977	Index of Per Capita Food Production, 1969-71 = 100 Av. 1975-77
Low Income Countries (w)			170	1.4			36	50	98
1 Bhutan	1.2	47	80	—0.2	..	..	..	41	99
2 Cambodia	8.4	181	..	..	3.8	..	..	48	59
3 Bangladesh	81.2	144	90	—0.4	3.7	17.4	*22*	47	96
4 Lao PDR	3.2	237	90	..	..	..	..	42	98
5 Ethiopia	30.2	1,222	110	1.7	2.1	3.3	*10*	39	85
6 Mali	6.1	1,240	110	1.0	5.0	7.6	10	42	91
7 Nepal	13.3	141	110	0.2	8.5	7.7	19	45	95
8 Somalia	3.7	638	110	—0.4	4.5	10.2	50	43	88
9 Burundi	4.2	28	130	2.2	2.8	9.9	*10*	45	99
10 Chad	4.2	1,284	130	—1.0	4.6	*6.6*	15	43	83
11 Rwanda	4.4	26	130	1.0	13.1	13.0	*23*	46	103
12 Upper Volta	5.5	274	130	0.6	1.3	6.1	*5*	42	94
13 Zaire	25.7	2,345	130	1.1	29.9	22.4	..	46	96
14 Burma	31.5	677	140	0.9	2.7	15.0	67	52	95
15 Malawi	5.6	118	140	3.0	2.4	9.2	*25*	46	101
16 India	631.7	3,288	150	1.3	6.9	8.9	36	51	99
17 Mozambique	9.7	783	150	0.9	2.8	8.8	..	46	85
18 Niger	4.9	1,267	160	—1.4	2.3	*5.5*	8	42	79
19 Viet Nam	50.6	330	160	..	..	..	87	62	100
20 Afghanistan	14.3	647	190	0.2	11.9	4.1	12	42	102
21 Pakistan	74.9	804	190	3.0	3.3	15.2	21	51	101
22 Sierra Leone	3.2	72	190	1.3	2.9	9.8	15	46	96
23 Tanzania	16.4	945	190	2.6	1.8	12.0	*66*	51	93
24 Benin	3.2	113	200	0.2	1.9	8.5	*11*	46	92
25 Sri Lanka	14.1	66	200	2.0	1.8	11.8	..	69	113
26 Guinea	5.0	246	220	1.3	1.7	4.9	..	44	86
27 Haiti	4.7	28	230	0.1	4.1	13.3	23	51	96
28 Lesotho	1.3	30	240	5.8	2.5	11.1	40	50	97
29 Madagascar	8.1	587	240	—0.2	3.2	10.1	*50*	46	95
30 Central African Emp.	1.9	623	250	0.2	4.2	*8.3*	..	46	103
31 Kenya	14.6	583	270	2.5	1.5	12.4	*40*	53	89
32 Mauritania	1.5	1,031	270	3.6	0.8	10.8	*17*	42	70
33 Uganda	12.0	236	270	0.7	3.0	18.4	..	53	93
34 Sudan	16.9	2,506	290	0.1	3.7	4.0	*20*	46	106
35 Angola	6.6	1,247	300	2.3	3.3	22.1	..	41	89
36 Indonesia	133.5	2,027	300	3.3	..	22.0	62	48	104
37 Togo	2.4	56	300	3.8	1.7	*8.6*	16	46	62
Middle Income Countries (w)			1,140	3.6			69	60	105
38 Egypt	37.8	1,001	320	2.1	3.5	7.0	*44*	54	97
39 Cameroon	7.9	475	340	2.9	3.7	9.8	..	46	101
40 Yemen, PDR	1.7	333	340	—4.8	..	..	*27*	47	107
41 Ghana	10.6	239	380	—0.3	7.6	30.9	30	48	85
42 Honduras	3.3	112	410	1.5	3.0	6.5	57	57	80
43 Liberia	1.7	111	420	1.8	1.9	9.7	..	48	108
44 Nigeria	79.0	924	420	3.6	2.6	15.2	..	48	92
45 Thailand	43.8	514	420	4.5	1.9	9.3	*82*	61	110
46 Senegal	5.2	196	430	—0.3	1.6	*12.1*	*10*	42	104
47 Yemen Arab Rep.	5.0	195	430	..	..	*16.0*	*13*	47	100
48 Philippines	44.5	300	450	2.5	5.8	14.3	*87*	60	112
49 Zambia	5.1	753	450	1.5	7.6	4.3	*39*	48	108
50 Congo, People's Rep.	1.4	342	490	1.1	5.4	*10.3*	50	46	99
51 Papua New Guinea	2.9	462	490	3.4	3.6	7.2	32	48	103
52 Rhodesia	6.7	391	500	1.8	1.3	8.2	..	52	102
53 El Salvador	4.2	21	550	1.8	0.3	9.3	*62*	63	111
54 Morocco	18.3	447	550	2.2	2.2	8.9	*28*	55	78
55 Bolivia	5.2	1,099	630	2.3	3.5	24.3	*63*	52	113
56 Ivory Coast	7.5	322	690	3.3	2.8	12.3	20	46	116
57 Jordan	2.9	98	710	1.8	1.1	*9.6*	*59*	56	71
58 Colombia	24.6	1,139	720	2.7	11.9	21.4	*81*	62	107
59 Paraguay	2.8	407	730	2.4	3.0	12.8	*80*	63	104
60 Ecuador	7.3	284	790	3.1	..	15.2	74	60	100
61 Guatemala	6.4	109	790	2.8	0.1	10.4	46	57	106
62 Korea, Rep. of	36.0	99	820	7.4	16.7	17.4	91	63	113
63 Nicaragua	2.4	130	830	2.5	1.9	11.0	57	55	103
64 Dominican Rep.	5.0	49	840	3.6	2.1	8.6	67	60	92
65 Peru	16.4	1,285	840	2.3	9.9	18.3	72	56	93
66 Tunisia	5.9	164	860	4.3	*3.7*	7.2	38	57	130
67 Syrian Arab Rep.	7.8	185	910	2.3	1.8	18.5	53	57	146

	Population (millions) Mid-1977	Area (thousand square kilometers)	GNP Per Capita (US dollars) 1977	GNP Per Capita Average Annual Growth (percent) 1960-77	Average Annual Rate of Inflation (percent) 1960-70[a]	Average Annual Rate of Inflation (percent) 1970-77[b]	Adult Literacy Rate[c] (percent) 1975	Life Expectancy at Birth 1977	Index of Per Capita Food Production, 1969-71 = 100 Av. 1975-77
68 Malaysia	13.0	330	930	3.9	—0.3	7.1	*60*	67	113
69 Algeria	17.0	2,382	1,110	2.1	2.3	13.7	*35*	56	87
70 Turkey	41.9	781	1,110	4.1	5.5	19.9	60	61	107
71 Mexico	63.3	1,973	1,120	2.8	3.5	16.5	76	65	97
72 Jamaica	2.1	11	1,150	2.1	3.8	15.9	86	70	100
73 Lebanon	2.9	10	..	..	1.4	..	..	65	87
74 Chile	10.6	757	1,160	1.0	32.9	267.8	88	67	98
75 China, Rep. of	16.8	36	1,170	6.2	4.1	11.0	*82*	72	..
76 Panama	1.8	76	1,220	3.5	1.6	8.3	78	70	100
77 Costa Rica	2.1	51	1,240	3.2	1.9	15.6	*88*	70	113
78 South Africa	27.0	1,221	1,340	2.1	3.1	..	..	60	95
79 Brazil	116.1	8,512	1,360	4.9	46.0	28.7	*76*	62	118
80 Uruguay	2.9	176	1,430	0.8	51.1	68.3	94	71	99
81 Iraq	11.8	435	1,550	3.8	1.7	..	..	55	78
82 Argentina	26.0	2,767	1,730	2.7	21.8	107.3	93	71	108
83 Portugal	9.6	92	1,890	6.0	3.0	13.9	70	69	95
84 Yugoslavia	21.7	256	1,960	5.6	12.6	16.5	85	69	116
85 Iran	34.8	1,648	2,160	7.9	—0.5	24.3	*50*	52	109
86 Trinidad and Tobago	1.1	5	2,380	1.6	3.2	22.8	*95*	70	95
87 Hong Kong	4.5	1	2,590	6.5	2.3	8.0	90	72	60
88 Venezuela	13.5	912	2,660	2.7	1.3	12.2	82	66	97
89 Greece	9.2	132	2,810	6.2	3.2	13.6	..	73	122
90 Israel	3.6	21	2,850	4.8	6.0	27.5	88	72	114
91 Singapore	2.3	1	2,880	7.5	1.1	7.0	*75*	70	101
92 Spain	36.3	505	3,190	5.2	6.3	13.9	..	73	119
Industrialized Countries (w)			6,980	3.4			99	74	106
93 Ireland	3.2	70	2,880	3.1	5.2	14.7	*98*	73	125
94 Italy	56.5	301	3,440	3.7	4.4	14.0	98	73	101
95 New Zealand	3.1	269	4,380	1.9	3.3	11.0	*99*	72	107
96 United Kingdom	55.9	244	4,420	2.5	4.1	14.1	99	73	107
97 Japan	113.2	372	5,670	7.7	4.8	9.6	99	76	99
98 Austria	7.5	84	6,130	4.2	3.6	7.6	99	72	106
99 Finland	4.7	337	6,160	4.2	5.6	13.2	100	72	108
100 Netherlands	13.9	41	7,150	3.7	5.3	8.8	99	74	116
101 France	53.1	547	7,290	4.2	4.1	9.3	99	73	104
102 Australia	14.1	7,687	7,340	2.9	3.1	12.8	100	72	115
103 Belgium	9.8	31	7,590	4.0	3.6	8.6	99	72	103
104 Denmark	5.1	43	8,040	3.1	6.0	9.8	99	74	99
105 Germany, Fed. Rep.	61.4	249	8,160	3.3	3.2	5.9	99	72	99
106 Canada	23.3	9,976	8,460	3.6	3.1	9.4	98	74	108
107 United States	220.0	9,363	8,520	2.4	2.8	6.8	*99*	73	112
108 Norway	4.0	324	8,550	3.9	4.2	8.6	*99*	75	106
109 Sweden	8.3	450	9,250	2.9	4.3	9.3	*99*	75	111
110 Switzerland	6.3	41	9,970	2.1	4.6	6.6	99	74	107
Capital Surplus Oil Exporters									
111 Saudi Arabia	7.6	2,150	6,040	6.7	..	*32.9*	..	48	92
112 Libya	2.6	1,760	6,680	6.6	4.9	25.1	45	55	149
113 Kuwait	1.1	18	12,270	—3.1	0.6	*31.3*	60	69	..
Centrally Planned Economies (w)			1,160	3.4			..	66	110
114 China, People's Rep.	885.6	9,597	390	5.1	..	..	..	64	110
115 Albania	2.5	29	630	4.3	..	..	..	70	104
116 Korea, Dem. Rep.	16.7	121	670	5.1	..	..	..	63	124
117 Mongolia	1.5	1,565	830	0.8	..	..	..	63	100
118 Cuba	9.6	115	910	—0.4	..	..	*96*	72	86
119 Romania	21.6	238	1,580	8.5	..	..	98	70	135
120 Bulgaria	8.8	111	2,580	4.4	..	..	..	72	107
121 Hungary	10.6	93	2,580	2.9	..	..	98	70	122
122 USSR	258.9	22,402	3,020	3.7	..	..	99	70	106
123 Poland	34.7	313	3,150	4.1	..	..	98	71	106
124 Czechoslovakia	15.0	128	3,890	2.6	..	..	..	71	113
125 German Dem. Rep.	16.9	108	4,680	3.2	..	..	..	73	122

[a] Figures in italics in this column refer to 1961-1970 rather than 1960-1970.
[b] Figures in italics in this column refer to 1970-1976 rather than 1970-1977.
[c] Figures in italics are for years other than 1975. See Technical Notes.

Table 2: Growth of Production

	Average Annual Growth Rates (percent)									
	GDP		Agriculture		Industry		Manufacturing		Services	
	1960-70[a]	1970-77[b]	1960-70[a]	1970-77[b]	1960-70[a]	1970-77[b]	1960-70[a]	1970-77[b]	1960-70[a]	1970-77[b]
Low Income Countries (w)	3.9	3.2								
1 Bhutan	..	..	..	..	..	..	..	..	..	..
2 Cambodia	*3.8*	..	*2.3*	..	*6.9*	..	*8.1*	..	*4.1*	..
3 Bangladesh	3.6	2.3	2.7	1.0	7.9	4.2	6.6	4.1	3.8	4.5
4 Lao PDR	..	..	..	..	..	..	..	..	..	..
5 Ethiopia	*4.4*	2.5	*2.2*	0.7	*7.4*	1.1	*8.0*	1.7	*7.8*	5.0
6 Mali	3.3	*3.5*	..	*—0.8*	..	*8.9*	..	..	..	*5.5*
7 Nepal	2.5	2.8	..	..	..	..	..	..	..	..
8 Somalia	1.0	1.2	—1.5	..	3.3	..	14.3	..	2.5	..
9 Burundi	4.5	*1.4*	..	*1.0*	..	*4.3*	..	..	..	*1.1*
10 Chad	0.5	*0.8*	..	..	..	..	..	..	..	..
11 Rwanda	2.7	3.9	..	..	..	..	..	..	..	..
12 Upper Volta	3.0	*3.3*	..	*3.2*	..	*7.0*	..	..	..	*1.8*
13 Zaire	3.6	*1.9*	..	*2.2*	..	*1.6*	..	*2.4*	..	*2.0*
14 Burma	2.6	3.7	4.1	3.0	2.8	3.7	3.3	3.8	1.5	4.3
15 Malawi	5.0	*6.3*	..	*4.3*	..	*6.2*	..	..	..	*4.6*
16 India	3.6	3.0	1.9	4.1	5.5	2.6	4.8	4.1	5.2	(.)
17 Mozambique	4.6	—5.0	2.1	—1.3	9.5	—9.1	6.6	—9.8	6.3	—8.3
18 Niger	2.7	*1.8*	3.3	*—2.7*	11.1	*9.4*	..	..	0.6	(.)
19 Viet Nam	..	..	..	..	..	..	..	..	..	..
20 Afghanistan	2.0	4.5	..	..	..	..	..	..	..	..
21 Pakistan	6.7	3.6	4.9	1.8	10.0	3.6	9.4	2.2	7.0	5.1
22 Sierra Leone	4.2	1.9	..	2.3	..	—3.2	..	..	..	5.0
23 Tanzania	6.0	4.5	..	3.2	..	2.9	..	4.6	..	5.6
24 Benin	2.6	*2.0*	..	..	..	..	..	..	..	..
25 Sri Lanka	4.6	3.1	3.0	1.6	6.7	2.8	6.3	1.6	5.0	4.3
26 Guinea	3.2	*5.3*	2.1	*3.2*	2.3	*10.2*	..	..	6.2	*3.9*
27 Haiti	0.1	3.8	—0.6	2.4	0.4	8.7	—0.1	7.0	1.6	1.6
28 Lesotho	4.5	5.2	..	..	..	..	..	..	..	..
29 Madagascar	2.9	—0.3	..	0.7	..	(.)	..	—0.4	..	—1.2
30 Central African Emp.	1.2	*0.9*	0.8	*1.9*	5.5	*4.7*	..	..	0.1	*—1.8*
31 Kenya	6.0	*6.2*	..	*2.9*	..	*11.0*	..	*11.0*	..	*6.5*
32 Mauritania	..	2.3	..	—2.3	..	2.1	..	..	..	7.6
33 Uganda	5.9	*—0.1*	..	*1.3*	..	*8.0*	..	..	..	*—1.7*
34 Sudan	1.3	5.0	..	..	..	..	..	..	..	..
35 Angola	4.8	—10.4	4.0	—11.5	11.0	—3.7	7.2	—12.8	4.2	—12.7
36 Indonesia	3.5	7.7	2.5	4.2	5.0	12.9	3.3	11.3	8.0	4.5
37 Togo	8.5	3.1	..	..	..	..	..	..	..	..
Middle Income Countries (w)	6.2	6.1								
38 Egypt	4.5	*7.9*	2.9	*3.1*	5.4	*5.2*	4.7	*5.7*	5.1	*11.7*
39 Cameroon	4.7	3.4	..	3.5	..	5.2	..	6.6	..	2.6
40 Yemen, PDR	..	*5.1*	..	..	..	..	..	..	..	..
41 Ghana	2.1	0.4	..	—0.7	..	0.8	..	..	..	1.6
42 Honduras	5.1	3.5	5.7	0.8	5.2	6.0	4.0	5.6	4.5	4.4
43 Liberia	5.1	*2.7*	..	*5.2*	..	*0.3*	..	*7.4*	..	*4.5*
44 Nigeria	3.1	6.2	—0.5	—1.5	13.8	10.3	9.1	13.4	5.6	2.9
45 Thailand	8.2	7.1	5.5	4.4	11.7	10.3	11.0	11.2	8.5	6.8
46 Senegal	2.6	*2.8*	1.9	*5.2*	3.7	*4.8*	4.6	*10.2*	2.8	*1.1*
47 Yemen Arab Rep.	..	*7.8*	..	*6.8*	..	*9.8*	..	..	..	*8.5*
48 Philippines	5.1	6.4	4.3	4.8	6.0	8.7	6.7	6.8	5.2	5.6
49 Zambia	5.0	2.8	..	2.1	..	2.6	..	3.7	..	4.1
50 Congo, People's Rep.	2.7	*5.6*	1.0	*0.2*	6.9	*12.7*	..	..	1.8	*3.4*
51 Papua New Guinea	6.5	5.0	..	..	..	..	..	..	..	..
52 Rhodesia	4.3	3.3	..	..	..	..	..	..	..	..
53 El Salvador	5.9	5.1	3.0	2.8	8.5	6.7	8.8	5.6	5.4	4.9
54 Morocco	4.1	*4.8*	4.2	*0.6*	4.2	*7.8*	4.0	*5.7*	3.9	*5.5*
55 Bolivia	5.2	6.0	3.0	4.7	6.2	6.1	5.4	7.1	5.5	6.3
56 Ivory Coast	8.0	*6.5*	4.2	*3.5*	11.6	*7.9*	..	..	10.0	*7.7*
57 Jordan	6.6	*7.0*	5.0	..	9.9	..	..	..	6.4	..
58 Colombia	5.1	6.4	3.5	4.9	6.0	5.9	5.7	7.5	5.7	8.7
59 Paraguay	4.3	7.2	..	6.1	..	8.4	..	6.2	..	7.4
60 Ecuador	..	9.2	..	5.4	..	13.2	..	10.2	..	8.9
61 Guatemala	5.6	6.0	4.3	5.7	7.8	7.3	8.2	5.5	3.7	7.1
62 Korea, Rep. of	8.5	10.4	4.5	5.0	17.2	17.0	17.2	19.3	8.4	8.5
63 Nicaragua	7.2	5.8	6.7	5.4	11.0	7.3	11.1	6.3	5.7	5.0
64 Dominican Rep.	4.4	*9.1*	2.2	*3.5*	6.2	*13.7*	5.0	*9.4*	5.0	*8.9*
65 Peru	5.4	4.6	1.9	0.6	5.5	5.1	7.2	..	6.2	5.4
66 Tunisia	*4.6*	8.4	*2.0*	6.9	*8.7*	9.5	..	12.2	*4.2*	10.3
67 Syrian Arab Rep.	5.7	*7.0*	4.4	*6.4*	5.9	*11.1*	4.4	*7.5*	6.3	*5.4*

	Average Annual Growth Rates (percent)									
	GDP		Agriculture		Industry		Manufacturing		Services	
	1960-70[a]	1970-77[b]	1960-70[a]	1970-77[b]	1960-70[a]	1970-77[b]	1960-70[a]	1970-77[b]	1960-70[a]	1970-77[b]
68 Malaysia	6.5	7.8	..	5.4	..	9.3	..	12.3	..	8.6
69 Algeria	4.6	5.3	0.4	0.2	12.9	5.9	7.7	6.9	3.0	5.5
70 Turkey	6.0	7.4	2.4	*3.4*	9.4	*8.9*	10.7	..	7.0	*9.5*
71 Mexico	7.3	5.0	3.9	1.1	9.3	6.2	9.4	6.0	7.1	5.0
72 Jamaica	4.6	(.)	1.5	1.2	5.6	—2.0	5.6	0.6	4.8	1.5
73 Lebanon	4.9	..	6.3	..	4.5	..	5.0	..	4.8	..
74 Chile	4.5	0.1	2.6	2.2	5.0	—1.5	5.5	—3.6	4.5	0.9
75 China, Rep. of	9.2	7.7	3.4	1.5	16.4	12.2	17.3	12.5	7.8	4.5
76 Panama	7.8	3.5	5.7	..	10.1	..	10.5	..	7.6	..
77 Costa Rica	6.5	5.7	..	..	..	..	..	..	..	..
78 South Africa	5.9	..	..	..	..	..	..	..	..	..
79 Brazil	5.3	9.8	..	5.8	..	10.7	..	..	..	9.9
80 Uruguay	1.2	1.6	1.9	0.2	1.1	2.9	1.5	2.7	1.0	1.2
81 Iraq	6.2	*10.8*	5.7	*—1.5*	4.7	*12.2*	5.9	*11.5*	8.3	*13.5*
82 Argentina	4.2	2.9	2.3	2.7	6.0	2.8	5.7	3.0	3.3	3.0
83 Portugal	6.2	5.3	1.3	—0.9	8.8	4.8	8.9	5.0	5.9	7.8
84 Yugoslavia	5.8	7.1	3.3	5.5	6.3	9.2	5.7	..	6.9	5.4
85 Iran	11.3	7.8	4.4	5.8	13.4	3.4	12.0	16.7	10.0	16.8
86 Trinidad and Tobago	3.9	3.4	..	—0.1	..	2.8	..	—1.1	..	4.0
87 Hong Kong	10.0	8.2	..	—0.2	..	6.8	..	6.3	..	9.6
88 Venezuela	5.9	5.7	5.7	3.7	4.5	3.0	6.2	6.8	7.2	7.9
89 Greece	6.9	5.0	3.5	2.2	9.4	5.1	10.2	7.0	7.1	5.9
90 Israel	8.2	*5.9*	..	*6.6*	..	*5.3*	..	*6.1*	..	*5.4*
91 Singapore	8.8	8.6	5.0	1.6	12.6	8.6	13.0	9.0	7.7	9.5
92 Spain	7.3	4.8	2.5	1.9	9.4	4.9	9.7	..	7.2	4.9
Industrialized Countries (w)	5.1	3.1								
93 Ireland	4.2	3.4	0.9	..	6.1	..	..	..	4.3	..
94 Italy	5.3	2.9	2.8	1.8	6.2	2.6	7.2	3.4	5.1	3.7
95 New Zealand	3.9	2.0	..	..	..	..	..	..	..	..
96 United Kingdom	2.9	1.5	2.3	0.1	3.1	0.5	3.4	0.7	2.7	2.3
97 Japan	10.5	*5.3*	4.0	*3.0*	10.9	*5.7*	11.0	*5.7*	11.7	*5.3*
98 Austria	4.5	4.0	1.2	1.9	4.9	3.6	4.8	3.6	4.4	4.6
99 Finland	4.6	3.4	0.6	—2.0	6.3	3.6	6.2	3.3	5.3	4.7
100 Netherlands	5.5	3.1	2.9	3.3	6.8	3.0	6.6	3.6	5.1	3.3
101 France	5.7	3.8	1.8	—0.4	6.4	4.2	6.6	4.1	5.7	4.4
102 Australia	4.1	3.8	2.7	1.7	4.6	3.9	5.6	3.9	4.0	3.9
103 Belgium	4.8	3.7	—0.5	—0.5	6.0	4.0	6.2	3.8	4.6	3.1
104 Denmark	4.7	2.8	0.2	..	5.5	..	5.4	..	4.9	..
105 Germany, Fed. Rep.	4.4	2.4	1.5	1.4	5.2	2.1	5.4	2.0	4.2	3.3
106 Canada	5.6	4.7	*2.5*	1.3	*6.8*	3.8	*6.7*	3.7	*5.5*	5.3
107 United States	4.3	2.8	0.3	0.7	5.2	2.3	5.3	2.4	4.2	3.3
108 Norway	4.9	4.8	0.1	2.4	5.5	5.0	5.3	2.5	5.0	5.0
109 Sweden	4.4	2.0	0.6	—0.9	6.2	1.6	6.2	1.4	3.9	2.7
110 Switzerland	4.3	0.2	..	..	..	..	..	..	..	..
Capital Surplus Oil Exporters										
111 Saudi Arabia	..	*12.9*	..	*3.7*	..	*13.9*	..	*4.1*	..	*12.1*
112 Libya	24.8	—0.3	..	14.0	..	—4.0	..	15.3	..	13.6
113 Kuwait	5.7	—1.3	..	..	..	..	..	..	..	..
Centrally Planned Economies (w)	5.2	4.6								
114 China, People's Rep.	6.6	5.8	..	..	..	..	..	..	..	..
115 Albania	7.3	5.8	..	..	..	..	..	..	..	..
116 Korea, Dem. Rep.	7.8	8.9	..	..	..	..	..	..	..	..
117 Mongolia	2.8	3.7	..	..	..	..	..	..	..	..
118 Cuba	1.1	2.9	..	..	..	..	..	..	..	..
119 Romania	9.0	10.9	..	..	..	..	..	..	..	..
120 Bulgaria	5.9	4.3	..	..	..	..	..	..	..	..
121 Hungary	3.8	3.1	..	..	..	..	..	..	..	..
122 USSR	5.2	4.0	..	..	..	..	..	..	..	..
123 Poland	4.3	6.0	..	..	..	..	..	..	..	..
124 Czechoslovakia	3.1	3.1	..	..	..	..	..	..	..	..
125 German Dem. Rep.	3.1	3.4	..	..	..	..	..	..	..	..

[a] Figures in italics in these columns refer to 1961-1970 rather than 1960-1970.

[b] Figures in italics in these columns refer to 1970-1976 rather than 1970-1977.

Table 3: Structure of Production

	Distribution of Gross Domestic Product (percent)							
	Agriculture		Industry		(Manufacturing)[a]		Services	
	1960[b]	1977[c]	1960[b]	1977[c]	(1960[b]	1977[c])	1960[b]	1977[c]
Low Income Countries (w)	**50**	37	**17**	**25**	**11**	**13**	**33**	38
1 Bhutan	..	..	..	..	..	..	..	..
2 Cambodia	..	..	..	..	..	..	..	..
3 Bangladesh	61	55	8	13	6	7	31	32
4 Lao PDR	..	63	..	13	..	3	..	24
5 Ethiopia	65	52	12	15	6	10	23	33
6 Mali	55	*38*	10	*17*	5	*11*	35	*45*
7 Nepal	..	68	..	9	..	..	..	23
8 Somalia	45	..	17	..	2	..	38	..
9 Burundi	..	*64*	..	*14*	..	*10*	..	*22*
10 Chad	55	*52*	12	*14*	5	*10*	33	*34*
11 Rwanda	81	..	7	..	1	..	12	..
12 Upper Volta	55	37	13	14	8	..	32	49
13 Zaire	30	*25*	27	*25*	13	*8*	43	*50*
14 Burma	33	47	12	11	8	9	55	42
15 Malawi	58	*47*	11	*18*	6	*12*	31	*35*
16 India	50	37	20	25	14	16	30	38
17 Mozambique	55	56	9	12	8	6	36	32
18 Niger	66	*47*	10	*17*	4	..	24	*36*
19 Viet Nam	..	..	..	..	..	..	..	..
20 Afghanistan	..	..	..	..	..	..	..	..
21 Pakistan	46	33	16	23	12	16	38	44
22 Sierra Leone	..	40	..	19	..	6	..	41
23 Tanzania	57	*45*	11	*16*	5	*10*	32	*39*
24 Benin	..	*38*	..	*15*	..	*10*	..	*47*
25 Sri Lanka	38	39	16	21	11	15	46	40
26 Guinea	..	..	..	..	..	..	..	..
27 Haiti	..	..	..	..	..	..	..	..
28 Lesotho	..	30	..	15	..	2	..	55
29 Madagascar	37	40	10	19	4	14	53	41
30 Central African Emp.	45	*37*	12	*36*	6	*23*	43	*27*
31 Kenya	38	*35*	18	*20*	9	*12*	44	*45*
32 Mauritania	..	26	..	37	..	11	..	37
33 Uganda	52	*55*	13	*8*	9	*7*	35	*37*
34 Sudan	58	..	15	..	5	..	27	..
35 Angola	50	49	8	23	4	3	42	28
36 Indonesia	54	31	14	34	8	9	32	35
37 Togo	55	23	16	31	8	..	29	46
Middle Income Countries (w)	**22**	**15**	**32**	**36**	**22**	**24**	**46**	**49**
38 Egypt	30	28	24	30	20	24	46	42
39 Cameroon	..	32	..	21	..	13	..	47
40 Yemen, PDR	..	*24*	..	*7*	..	..	..	*69*
41 Ghana	41	39	19	22	10	..	40	39
42 Honduras	37	32	19	27	13	17	44	41
43 Liberia	40	*30*	37	*40*	..	*5*	23	*30*
44 Nigeria	63	34	11	43	5	9	26	23
45 Thailand	41	27	18	29	11	20	41	44
46 Senegal	30	*28*	20	*24*	12	..	50	*48*
47 Yemen Arab Rep.	..	35	..	14	..	5	..	51
48 Philippines	26	29	28	35	20	25	46	36
49 Zambia	11	14	63	41	4	18	26	45
50 Congo, People's Rep.	23	*11*	17	*34*	10	*9*	60	*55*
51 Papua New Guinea	*49*	33	*13*	26	*3*	9	*38*	41
52 Rhodesia	18	..	35	..	17	..	47	..
53 El Salvador	32	30	19	21	15	15	49	49
54 Morocco	29	*21*	24	*31*	12	*12*	47	*48*
55 Bolivia	26	17	25	29	15	13	49	54
56 Ivory Coast	43	*25*	14	*20*	7	*12*	43	*55*
57 Jordan	16	*12*	14	*23*	8	..	70	*65*
58 Colombia	34	26	24	29	16	19	42	45
59 Paraguay	36	*35*	20	*22*	17	*16*	44	*43*
60 Ecuador	33	20	19	36	14	17	48	44
61 Guatemala	..	..	..	..	..	..	..	..
62 Korea, Rep. of	40	27	19	35	12	25	41	38
63 Nicaragua	24	23	21	26	16	20	55	51
64 Dominican Rep.	27	20	23	21	17	19	50	59
65 Peru	26	*16*	29	*31*	17	*19*	45	*53*
66 Tunisia	*24*	17	*18*	32	*8*	11	*58*	51
67 Syrian Arab Rep.	25	17	21	14	16	..	54	69

	Distribution of Gross Domestic Product (percent)							
	Agriculture		Industry		(Manufacturing)[a]		Services	
	1960[b]	1977[c]	1960[b]	1977[c]	(1960[b]	1977[c])	1960[b]	1977[c]
68 Malaysia	37	26	18	29	9	18	45	45
69 Algeria	21	8	33	57	10	11	46	35
70 Turkey	41	*28*	21	*25*	13	*20*	38	*47*
71 Mexico	16	10	29	36	23	28	55	54
72 Jamaica	10	9	36	37	15	19	54	54
73 Lebanon	12	..	20	..	13	..	68	..
74 Chile	11	10	38	29	23	20	51	61
75 China, Rep. of	28	12	29	46	22	37	43	42
76 Panama	23	..	21	..	13	..	56	..
77 Costa Rica	29	*21*	19	*25*	12	*17*	52	*54*
78 South Africa	12	..	42	..	23	..	46	..
79 Brazil	16	12	35	37	26	..	49	51
80 Uruguay	19	12	28	36	21	29	53	52
81 Iraq	17	*8*	52	*69*	10	7	31	*23*
82 Argentina	17	13	38	45	31	37	45	42
83 Portugal	25	14	36	45	29	36	39	41
84 Yugoslavia	24	16	45	45	36	..	31	39
85 Iran	29	10	33	55	11	13	38	35
86 Trinidad and Tobago	8	3	46	62	24	14	36	35
87 Hong Kong	4	2	34	31	25	26	62	67
88 Venezuela	6	6	22	17	..	..	72	77
89 Greece	23	17	26	31	16	19	51	52
90 Israel	11	7	32	*40*	23	*30*	57	*53*
91 Singapore	4	2	18	35	12	25	78	63
92 Spain	21	9	39	38	27	30	40	53
Industrialized Countries (w)	**6**	**4**	**40**	**37**	**30**	**27**	**54**	**59**
93 Ireland	22	..	26	..	..	..	52	..
94 Italy	13	8	41	43	31	34	46	49
95 New Zealand	..	*12*	..	*31*	..	*22*	..	*57*
96 United Kingdom	4	3	43	37	32	25	53	60
97 Japan	13	*5*	42	*41*	33	*30*	45	*54*
98 Austria	11	5	49	42	38	30	40	53
99 Finland	18	10	35	39	24	27	47	51
100 Netherlands	9	4	44	34	34	25	47	62
101 France	10	5	39	37	30	27	51	58
102 Australia	12	5	37	32	26	19	51	63
103 Belgium	6	2	41	38	30	27	53	60
104 Denmark	14	..	39	..	30	..	47	..
105 Germany, Fed. Rep.	6	3	53	49	40	38	41	48
106 Canada	6	4	34	31	23	18	60	65
107 United States	4	3	38	34	29	24	58	63
108 Norway	9	6	36	35	25	20	55	59
109 Sweden	7	4	40	33	27	24	53	63
110 Switzerland	..	..	..	..	..	..	..	..
Capital Surplus Oil Exporters								
111 Saudi Arabia	..	*1*	..	*83*	..	*5*	..	*16*
112 Libya	14	3	9	71	9	3	77	26
113 Kuwait	..	..	..	..	..	..	..	..
Centrally Planned Economies (w)	..	..	..	..	..	..	..	..
114 China, People's Rep.	..	..	..	..	..	..	..	..
115 Albania	..	..	..	..	..	..	..	..
116 Korea, Dem. Rep.	..	..	..	..	..	..	..	..
117 Mongolia	..	..	..	..	..	..	..	..
118 Cuba	..	..	..	..	..	..	..	..
119 Romania	31	..	53	..	..	..	16	..
120 Bulgaria	..	..	..	..	..	..	..	..
121 Hungary	..	..	..	..	..	..	..	..
122 USSR	..	..	..	..	..	..	..	..
123 Poland	..	..	..	..	..	..	..	..
124 Czechoslovakia	..	..	..	..	..	..	..	..
125 German Dem. Rep.	..	..	..	..	..	..	..	..

[a] Manufacturing is a part of the industrial sector, but its share of GDP is also shown separately since it is typically the most dynamic part of the industrial sector.

[b] Figures in italics in these columns refer to 1961 rather than 1960.

[c] Figures in italics in these columns refer to 1976 rather than 1977.

Table 4: Growth of Selected Demand Aggregates

	Average Annual Growth Rates (percent)					
	Public Consumption		Private Consumption		Gross Domestic Investment	
	1960-70[a]	1970-77[b]	1960-70[a]	1970-77[b]	1960-70[a]	1970-77[b]
Low Income Countries (m)	5.4	2.4	3.5	3.0	5.7	2.3
1 Bhutan	..	..	..	..	..	..
2 Cambodia	2.6	..	3.2	..	0.3	..
3 Bangladesh	[c]	[c]	3.4	*1.7*	11.1	*—7.8*
4 Lao PDR	..	..	..	..	..	..
5 Ethiopia	4.7	*3.5*	4.7	*3.5*	5.7	*—0.9*
6 Mali	6.2	..	2.8	..	3.5	..
7 Nepal	..	..	..	..	..	..
8 Somalia	3.7	..	—0.5	..	4.3	..
9 Burundi	19.2	*2.4*	3.1	*1.7*	6.0	*8.0*
10 Chad	4.4	..	—0.7	..	2.3	..
11 Rwanda	1.1	*0.2*	2.8	*3.4*	3.5	*17.6*
12 Upper Volta	..	..	..	..	..	..
13 Zaire	8.5	*—0.2*	3.9	*—1.7*	9.6	*2.3*
14 Burma	[c]	[c]	2.8	3.6	3.6	1.2
15 Malawi	5.4	*—1.9*	4.3	*4.7*	13.3	*4.5*
16 India	—1.7	*0.8*	4.2	*2.3*	5.6	*2.1*
17 Mozambique	6.8	—5.1	4.4	—3.0	8.3	—11.0
18 Niger	1.9	..	3.5	..	3.0	..
19 Viet Nam	..	..	..	..	..	..
20 Afghanistan	[c]	*9.5*	2.5	*3.0*	—1.0	*11.1*
21 Pakistan	7.3	3.3	7.1	4.0	6.9	—0.7
22 Sierra Leone	..	6.0	..	1.5	..	—2.5
23 Tanzania	8.2	[c]	4.7	*3.3*	9.8	*2.7*
24 Benin	1.7	*—1.9*	4.9	*1.2*	4.2	*7.0*
25 Sri Lanka	[c]	[c]	3.5	2.9	6.6	0.9
26 Guinea	..	..	..	..	..	..
27 Haiti	[c]	—0.1	1.0	4.4	1.7	11.9
28 Lesotho	0.3	13.2	6.0	12.2	18.5	24.1
29 Madagascar	..	—1.4	..	—1.5	..	—3.2
30 Central African Emp.	2.5	..	1.9	..	1.8	..
31 Kenya	10.0	*5.5*	4.6	*6.1*	7.0	*—2.7*
32 Mauritania	..	17.7	..	4.4	9.7	5.1
33 Uganda	5.9	*0.5*	5.6	*0.3*	9.8	*—11.5*
34 Sudan	12.1	..	—0.8	..	—1.3	..
35 Angola	9.1	..	4.0	..	9.7	..
36 Indonesia	1.0	*11.6*	3.4	*8.1*	4.8	*16.6*
37 Togo	6.7	14.9	7.6	1.7	11.1	8.4
Middle Income Countries (m)	6.4	7.4	5.3	5.4	7.6	8.1
38 Egypt	10.3	*3.3*	4.2	*3.9*	3.1	*23.6*
39 Cameroon	8.9	4.3	3.4	2.9	8.4	6.3
40 Yemen, PDR	..	..	..	..	..	..
41 Ghana	6.1	—1.5	2.0	2.1	—3.2	—8.6
42 Honduras	4.6	7.7	4.6	4.0	11.0	4.7
43 Liberia	5.6	*1.5*	0.4	*3.2*	—4.5	*16.2*
44 Nigeria	10.0	26.9	0.9	4.8	6.5	22.9
45 Thailand	9.6	7.8	7.0	6.1	15.4	6.3
46 Senegal	4.6	*—1.4*	2.4	*1.2*	—1.0	*3.4*
47 Yemen Arab Rep.	..	..	..	..	..	..
48 Philippines	5.0	9.9	4.8	4.4	8.2	11.7
49 Zambia	11.0	5.0	5.8	0.3	10.6	—5.9
50 Congo, People's Rep.	5.0	*7.4*	0.4	*7.8*	2.9	*6.1*
51 Papua New Guinea	*6.5*	—2.3	*6.9*	1.7	*21.2*	—8.6
52 Rhodesia	..	..	..	..	..	..
53 El Salvador	5.7	6.0	6.1	5.6	3.6	11.8
54 Morocco	4.4	*8.2*	3.7	*3.1*	9.1	*18.2*
55 Bolivia	8.9	10.4	4.1	6.7	9.6	7.8
56 Ivory Coast	11.8	*8.6*	7.5	*5.0*	12.7	*9.0*
57 Jordan	8.9	..	5.4	..	9.9	..
58 Colombia	5.5	2.6	5.5	6.5	4.5	3.6
59 Paraguay	6.9	5.3	4.5	5.7	5.8	22.1
60 Ecuador	..	6.7	..	9.9	..	12.1
61 Guatemala	4.7	5.0	4.7	5.4	7.9	10.2
62 Korea, Rep. of	5.9	8.3	7.3	6.9	23.1	12.4
63 Nicaragua	3.6	12.7	6.8	4.9	10.7	8.6
64 Dominican Rep.	1.9	—0.9	6.1	6.2	11.4	13.5
65 Peru	8.8	6.3	6.7	6.2	2.4	7.1
66 Tunisia	*5.5*	8.9	*3.0*	8.9	*4.5*	13.6
67 Syrian Arab Rep.	..	*14.1*	..	*7.5*	..	*13.5*

	Average Annual Growth Rates (percent)					
	Public Consumption		Private Consumption		Gross Domestic Investment	
	1960-70[a]	1970-77[b]	1960-70[a]	1970-77[b]	1960-70[a]	1970-77[b]
68 Malaysia	7.4	6.0	4.2	10.0	7.2	10.0
69 Algeria	1.7	4.0	4.6	9.4	1.9	13.6
70 Turkey	6.7	5.3	5.1	7.4	8.8	12.7
71 Mexico	8.8	11.0	6.7	4.5	9.5	8.1
72 Jamaica	8.6	*11.1*	3.2	*2.3*	7.8	*—3.7*
73 Lebanon	5.9	..	4.4	..	6.2	..
74 Chile	4.7	2.9	4.7	—0.7	4.2	—8.9
75 China, Rep. of	4.5	4.6	8.3	6.7	16.2	9.1
76 Panama	7.8	6.2	6.7	3.0	12.4	—1.0
77 Costa Rica	7.2	[c]	6.1	*4.0*	7.1	*6.8*
78 South Africa	7.0	..	5.5	..	9.3	..
79 Brazil	3.6	[c]	5.4	9.1	5.3	12.6
80 Uruguay	4.4	[c]	0.7	—0.7	—1.8	3.7
81 Iraq	8.1	..	4.9	..	3.0	..
82 Argentina	1.0	[c]	4.1	2.9	4.1	1.6
83 Portugal	7.7	..	5.5	..	7.7	..
84 Yugoslavia	0.6	4.7	9.4	7.0	4.7	7.8
85 Iran	16.0	*23.0*	7.4	*14.3*	12.2	*22.6*
86 Trinidad and Tobago	6.2	10.4	4.3	—0.3	—2.8	5.3
87 Hong Kong	8.7	8.5	8.9	7.9	7.4	9.7
88 Venezuela	6.3	*8.6*	4.9	*7.6*	7.3	*9.8*
89 Greece	6.6	8.0	7.1	5.3	10.4	—0.1
90 Israel	13.8	7.1	7.4	5.6	5.7	2.2
91 Singapore	12.6	5.9	5.5	7.4	20.5	5.7
92 Spain	5.5	6.2	7.0	4.7	10.5	4.4
Industrialized Countries (m)	4.8	4.2	4.3	3.4	5.8	1.7
93 Ireland	3.9	6.3	3.7	2.7	8.8	1.7
94 Italy	3.9	3.3	6.1	3.0	3.8	0.1
95 New Zealand	..	..	..	..	..	..
96 United Kingdom	2.2	3.2	2.3	1.1	5.0	0.1
97 Japan	6.4	*5.3*	9.0	*5.9*	14.0	*2.4*
98 Austria	2.9	4.2	4.4	4.7	5.6	4.5
99 Finland	5.7	5.3	4.3	3.8	4.3	1.7
100 Netherlands	3.1	2.6	6.1	3.4	6.8	—1.4
101 France	3.4	3.3	5.5	4.6	7.3	2.2
102 Australia	6.8	6.0	2.7	4.9	6.2	1.5
103 Belgium	5.7	4.8	3.8	4.5	6.0	2.5
104 Denmark	6.0	4.4	4.3	3.0	6.7	0.1
105 Germany, Fed. Rep.	4.1	4.2	4.6	2.8	4.1	—1.0
106 Canada	6.2	3.5	4.9	6.0	5.8	5.6
107 United States	4.1	1.6	4.4	3.3	4.8	0.7
108 Norway	6.4	5.4	4.1	4.4	5.1	7.1
109 Sweden	5.4	3.1	3.8	2.6	5.0	1.8
110 Switzerland	4.8	2.2	4.3	1.4	4.1	—2.9
Capital Surplus Oil Exporters						
111 Saudi Arabia	..	[c]	..	*15.3*	..	*49.3*
112 Libya	..	21.6	..	19.0	..	15.2
113 Kuwait	..	..	..	..	..	..
Centrally Planned Economies (m)	..	..	..	..	..	..
114 China, People's Rep.	..	..	..	..	..	..
115 Albania	..	..	..	..	..	..
116 Korea, Dem. Rep.	..	..	..	..	..	..
117 Mongolia	..	..	..	..	..	..
118 Cuba	..	..	..	..	..	..
119 Romania	..	..	..	..	..	..
120 Bulgaria	..	..	..	..	..	..
121 Hungary	..	..	..	..	..	..
122 USSR	..	..	..	..	..	..
123 Poland	..	..	..	..	..	..
124 Czechoslovakia	..	..	..	..	..	..
125 German Dem. Rep.	..	..	..	..	..	..

[a] Figures in italics in these columns refer to 1961-1970 rather than 1960-70.

[b] Figures in italics in these columns refer to 1970-1976 rather than 1970-77.

[c] Separate figures are not available for public consumption, which is therefore included in private consumption.

Table 5: Structure of Demand

	Distribution of Gross Domestic Product (percent)											
	Public Consumption		Private Consumption		Gross Domestic Investment		Gross Domestic Savings		Exports of Goods and Non-factor Services		Resource Balance	
	1960[a]	1977[b]	1960[a]	1977[b]	1960[a]	1977[b]	1960[a]	1977[b]	1960[a]	1977[b]	1960[a]	1977[b]
Low Income Countries (w)	9	11	80	71	14	21	11	18	10	14	—3	—3
1 Bhutan	..	..	..	..	..	..	..	..	..	..	..	..
2 Cambodia	19	..	69	..	20	..	12	..	14	..	—8	..
3 Bangladesh	6	[c]	86	*101*	7	*6*	8	*—1*	10	*6*	1	*—7*
4 Lao PDR	..	21	..	58	..	40	..	21	..	2	..	—19
5 Ethiopia	8	*14*	81	*77*	12	*10*	11	*9*	9	*13*	—1	*—1*
6 Mali	12	*18*	79	*74*	14	*19*	9	*8*	12	*20*	—5	*—11*
7 Nepal	*3*	[c]	*94*	*95*	*8*	*10*	*3*	*5*	..	*8*	*—5*	*—5*
8 Somalia	20	..	73	..	15	..	7	..	21	..	—8	..
9 Burundi	3	*13*	92	*80*	6	*11*	5	*9*	13	*13*	—1	*—2*
10 Chad	13	[c]	82	*103*	11	*15*	5	*—3*	23	*28*	—6	*—18*
11 Rwanda	10	..	82	..	6	..	8	..	12	..	2	..
12 Upper Volta	17	*25*	87	*99*	10	*17*	—4	*—24*	9	*15*	—14	*—31*
13 Zaire	18	*18*	62	*62*	12	*26*	20	*20*	55	*32*	8	*—6*
14 Burma	[c]	[c]	89	91	12	13	11	9	20	7	—1	—4
15 Malawi	16	*13*	88	*77*	10	*16*	—4	*10*	21	*28*	—14	*—6*
16 India	7	[c]	79	78	17	21	14	22	5	8	—3	1
17 Mozambique	11	14	81	79	10	13	8	7	14	11	—2	—6
18 Niger	13	..	79	..	8	..	8	..	10	..	(.)	..
19 Viet Nam	..	..	..	..	..	..	..	..	..	..	..	..
20 Afghanistan	[c]	[c]	87	*89*	16	*13*	13	*11*	4	*13*	—3	*—2*
21 Pakistan	11	11	84	81	12	19	5	8	8	10	—7	—11
22 Sierra Leone	..	16	..	78	..	14	..	6	..	20	..	—8
23 Tanzania	9	15	72	68	14	20	19	17	31	22	5	—3
24 Benin	16	*12*	75	*83*	15	*17*	9	*5*	12	*27*	—6	*—12*
25 Sri Lanka	14	10	75	70	15	17	11	20	30	23	—4	3
26 Guinea	14	..	79	..	5	..	7	..	23	..	2	..
27 Haiti	[c]	8	93	83	9	18	7	9	20	21	—2	—9
28 Lesotho	17	21	108	168	2	26	..	..	12	21	..	..
29 Madagascar	20	16	75	72	11	15	5	12	12	22	—6	—3
30 Central African Emp.	19	..	68	..	18	..	13	..	24	..	—5	..
31 Kenya	11	17	72	58	20	21	17	25	31	34	—3	4
32 Mauritania	..	38	..	55	..	44	..	7	..	41	..	—37
33 Uganda	9	[c]	75	*92*	11	*6*	16	*8*	26	*11*	5	*2*
34 Sudan	6	..	85	..	9	..	9	..	12	..	(.)	..
35 Angola	9	26	77	56	12	7	14	19	20	40	2	12
36 Indonesia	12	*10*	80	*68*	8	*21*	8	*22*	13	*22*	(.)	*1*
37 Togo	8	17	88	82	11	32	4	1	19	..	—7	—31
Middle Income Countries (w)	11	13	69	63	21	25	20	24	16	20	—1	—1
38 Egypt	17	22	71	63	13	24	12	15	20	20	—1	—9
39 Cameroon	14	14	72	67	11	22	14	19	29	31	3	—3
40 Yemen, PDR	..	..	..	..	..	..	..	..	..	..	..	..
41 Ghana	10	13	73	82	24	6	17	5	28	8	—7	—1
42 Honduras	11	14	77	68	14	24	12	18	22	38	—2	—6
43 Liberia	7	*12*	65	*57*	21	*27*	28	*31*	42	*62*	7	*5*
44 Nigeria	6	15	87	56	13	31	7	29	15	32	—6	—2
45 Thailand	10	11	73	68	16	26	17	21	17	22	1	—5
46 Senegal	13	*15*	73	*85*	15	*16*	14	*0*	39	*31*	—1	*—16*
47 Yemen Arab Rep.	..	*12*	..	*88*	..	*2*	..	*0*	..	*5*	..	*—2*
48 Philippines	8	11	76	64	16	30	16	25	11	19	(.)	—5
49 Zambia	11	31	50	48	24	26	39	21	56	40	15	—5
50 Congo, People's Rep.	23	*35*	98	*70*	45	*21*	..	..	21	*41*	..	..
51 Papua New Guinea	*28*	30	*70*	51	*14*	18	*2*	19	*17*	45	*—12*	1
52 Rhodesia	11	..	66	..	23	..	23	..	..	..	(.)	..
53 El Salvador	10	11	79	68	16	22	11	21	20	40	—5	—1
54 Morocco	13	*17*	75	*76*	11	*29*	12	*7*	27	*21*	1	*—22*
55 Bolivia	7	11	86	72	14	20	7	17	13	20	—7	—3
56 Ivory Coast	4	14	79	60	15	25	17	26	37	39	2	1
57 Jordan	28	..	90	..	17	..	..	..	13	..	..	..
58 Colombia	7	7	68	75	22	21	25	18	16	16	3	—3
59 Paraguay	8	7	76	75	17	25	16	18	18	21	—1	—7
60 Ecuador	10	10	74	64	14	29	16	26	17	26	2	—3
61 Guatemala	8	6	84	76	10	20	8	18	13	24	—2	—2
62 Korea, Rep. of	15	13	85	62	11	26	(.)	25	3	40	—11	—1
63 Nicaragua	9	8	79	73	15	25	12	19	24	33	—3	—6
64 Dominican Rep.	13	5	68	73	12	25	19	22	24	22	7	—3
65 Peru	8	15	68	74	22	15	24	11	24	17	2	—6
66 Tunisia	*17*	17	*76*	61	*17*	32	*7*	22	*20*	29	*—10*	—10
67 Syrian Arab Rep.	..	*25*	..	*65*	..	*30*	..	*10*	..	*21*	..	*—20*

	Distribution of Gross Domestic Product (percent)											
	Public Consumption		Private Consumption		Gross Domestic Investment		Gross Domestic Savings		Exports of Goods and Non-factor Services		Resource Balance	
	1960[a]	1977[b]	1960[a]	1977[b]	1960[a]	1977[b]	1960[a]	1977[b]	1960[a]	1977[b]	1960[a]	1977[b]
68 Malaysia	11	17	62	52	14	23	27	31	54	50	13	8
69 Algeria	16	17	50	45	42	49	34	38	28	33	—8	—11
70 Turkey	11	*13*	76	*71*	16	*24*	13	*16*	3	*5*	—3	—*8*
71 Mexico	6	12	76	68	20	20	18	20	10	10	—2	(.)
72 Jamaica	7	22	67	66	30	11	26	12	34	32	—4	1
73 Lebanon	10	..	85	..	16	..	5	..	27	..	—11	..
74 Chile	11	12	75	80	17	9	14	8	14	17	—3	—1
75 China, Rep. of	19	17	68	52	20	27	13	31	11	54	—7	4
76 Panama	11	14	78	71	16	22	11	15	31	38	—5	—7
77 Costa Rica	10	16	76	65	18	23	14	19	22	33	—4	—4
78 South Africa	9	..	64	..	22	..	27	..	30	..	5	..
79 Brazil	12	[c]	67	88	22	22	21	12	5	8	—1	—10
80 Uruguay	9	[c]	79	87	18	14	12	13	14	20	—6	—1
81 Iraq	18	..	48	..	20	..	34	..	42	..	14	..
82 Argentina	9	[c]	71	77	22	19	20	23	10	13	—2	4
83 Portugal	11	15	77	75	19	25	12	10	17	17	—7	—15
84 Yugoslavia	19	[c]	49	74	37	33	32	26	14	18	—5	—7
85 Iran	10	*21*	69	*38*	17	*30*	21	*41*	19	..	4	*11*
86 Trinidad and Tobago	9	14	61	53	28	25	30	33	37	47	2	8
87 Hong Kong	7	7	92	73	19	25	1	20	79	98	—18	—5
88 Venezuela	14	*15*	53	*48*	21	*32*	33	*37*	32	*33*	12	*5*
89 Greece	12	16	77	68	19	26	11	16	9	16	—8	—10
90 Israel	18	37	68	56	27	23	14	7	14	36	—13	—16
91 Singapore	8	10	89	61	11	34	3	29	163	160	—8	—5
92 Spain	7	10	70	69	21	23	23	21	10	15	2	—2
Industrialized Countries (w)	15	17	63	62	21	22	22	21	12	18	1	—1
93 Ireland	12	19	77	65	16	25	11	16	31	52	—5	—9
94 Italy	12	14	64	66	24	21	24	20	15	26	(.)	—1
95 New Zealand	13	*17*	65	*58*	24	*28*	22	*25*	23	*28*	—2	—*3*
96 United Kingdom	17	21	66	59	19	19	17	20	21	31	—2	1
97 Japan	9	*11*	57	*57*	34	*32*	34	*32*	11	*14*	(.)	(.)
98 Austria	13	17	59	57	28	29	28	26	24	35	(.)	—3
99 Finland	13	20	58	51	30	27	29	29	23	31	—1	2
100 Netherlands	14	18	57	58	27	23	29	24	50	54	2	1
101 France	13	16	61	61	24	24	26	23	15	20	2	—1
102 Australia	10	16	65	59	29	28	25	25	15	16	—4	—3
103 Belgium	13	17	69	62	19	22	18	21	33	48	—1	—1
104 Denmark	12	24	66	56	23	23	22	20	34	29	—1	—3
105 Germany, Fed. Rep.	14	20	57	56	27	22	29	24	19	26	2	2
106 Canada	14	20	65	57	23	23	21	23	18	24	—2	(.)
107 United States	17	18	64	66	18	18	19	16	5	8	1	—2
108 Norway	14	19	58	56	30	36	28	25	41	40	—2	—11
109 Sweden	16	28	60	54	25	20	24	18	23	28	—1	—2
110 Switzerland	9	13	62	64	29	21	29	23	29	37	(.)	2
Capital Surplus Oil Exporters												
111 Saudi Arabia	..	*18*	..	*12*	..	*23*	..	*70*	..	*78*	..	*47*
112 Libya	..	21	..	28	..	26	..	51	..	5	..	25
113 Kuwait	16	..	23	..	10	..	61	..	69	..	51	..
Centrally Planned Economies (w)	..	..	..	..	..	..	..	..	..	..	..	..
114 China, People's Rep.	..	..	..	..	..	..	..	..	..	..	..	..
115 Albania	..	..	..	..	..	..	..	..	..	..	..	..
116 Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
117 Mongolia	..	..	..	..	..	..	..	..	..	..	..	..
118 Cuba	..	..	..	..	..	..	..	..	..	..	..	..
119 Romania	..	..	..	..	..	..	..	..	..	..	..	..
120 Bulgaria	..	..	..	..	..	..	..	..	..	..	..	..
121 Hungary	..	..	..	..	..	..	..	..	..	..	..	..
122 USSR	..	..	..	..	..	..	..	..	..	..	..	..
123 Poland	..	..	..	..	..	..	..	..	..	..	..	..
124 Czechoslovakia	..	..	..	..	..	..	..	..	..	..	..	..
125 German Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..

[a] Figures in italics in these columns refer to 1961 rather than 1960.
[b] Figures in italics in these columns refer to 1976 rather than 1977.
[c] Separate figures are not available for public consumption, which is therefore included in private consumption.

Table 6: Industrialization

	Distribution of Value Added, 1975 (percent)					Value Added in Manufacturing (million 1970 US dollars)		Gross Manufacturing Output Per Capita (1970 US dollars)	
	Food and Agriculture	Textiles and Clothing	Machinery and Transport Equipment	Chemicals	Other Manufacturing	1970	1975	1970	1976
Low Income Countries									
1 Bhutan	..	..	..	..	..	..	..	..	..
2 Cambodia	..	..	..	..	..	..	..	..	..
3 Bangladesh	..	..	..	..	..	324	283	11	9
4 Lao PDR	..	..	..	..	..	..	..	..	..
5 Ethiopia	..	..	..	..	..	149	174	12	13
6 Mali	..	..	..	..	..	26	40	..	..
7 Nepal	..	..	..	..	..	78	..	..	..
8 Somalia	..	..	..	..	..	11	..	6	..
9 Burundi	..	..	..	..	..	19	24	..	..
10 Chad	..	..	..	..	..	18	23	..	..
11 Rwanda	..	..	..	..	..	6	..	4	..
12 Upper Volta	..	..	..	..	..	34	47	..	..
13 Zaire	59	10	5	4	22	155	184	..	..
14 Burma	43	13	..	..	44	225	251	..	..
15 Malawi	73	9	..	..	18	38	53	29	..
16 India	14	30	12	11	33	7,093	8,280	51	..
17 Mozambique	68	13	..	4	15	104	87	28	..
18 Niger	..	..	..	..	..	40	66	..	..
19 Viet Nam	..	..	..	..	..	..	..	..	..
20 Afghanistan	..	..	..	..	..	..	..	..	..
21 Pakistan	40	43	..	9	8	1,462	1,645	59	..
22 Sierra Leone	..	..	..	..	..	22	26	..	..
23 Tanzania	..	..	..	..	..	116	146	27	..
24 Benin	44	38	..	..	18	19	45	..	..
25 Sri Lanka	17	23	..	9	51	208	228	..	..
26 Guinea	..	..	..	..	..	..	..	..	..
27 Haiti	71	12	..	1	16	..	..	..	..
28 Lesotho	..	..	..	..	..	2	2	..	..
29 Madagascar	91	..	..	..	9	119	131	40	..
30 Central African Emp.	31	..	..	..	69	24	32	..	47
31 Kenya	18	13	19	8	42	174	311	55	106
32 Mauritania	..	..	..	..	..	18	211	..	..
33 Uganda	53	..	..	..	47	108	87	..	..
34 Sudan	41	36	3	11	9	252	328	51	..
35 Angola	67	..	..	..	33	80	49	..	..
36 Indonesia	46	18	..	..	36	854	1,489	28	31
37 Togo	..	..	..	..	..	24	..	28	..
Middle Income Countries									
38 Egypt	17	34	11	13	25	1,326	1,651	146	..
39 Cameroon	64	..	..	..	36	119	162	..	..
40 Yemen, PDR	..	..	..	..	..	7	13	..	..
41 Ghana	75	..	..	..	25	253	457	58	..
42 Honduras	53	15	1	3	28	91	115	..	..
43 Liberia	..	..	..	..	..	15	22	..	..
44 Nigeria	91	..	..	..	9	529	941	17	..
45 Thailand	45	17	8	15	15	1,034	1,754	132	..
46 Senegal	56	15	..	16	13	110	140	..	98
47 Yemen Arab Rep.	..	..	..	..	..	14	24	..	..
48 Philippines	41	12	6	17	24	1,579	2,208	108	..
49 Zambia	54	8	6	5	27	179	244	107	..
50 Congo, People's Rep.	68	..	..	..	32	32	40	60	..
51 Papua New Guinea	..	..	..	..	..	..	..	..	..
52 Rhodesia	23	14	12	11	40	308	..	145	..
53 El Salvador	49	29	..	11	11	194	250	..	..
54 Morocco	42	14	5	7	32	421	551	..	..
55 Bolivia	35	22	5	4	34	151	209	94	134
56 Ivory Coast	..	..	..	..	..	200	500	..	..
57 Jordan	..	..	..	..	..	55	..	33	..
58 Colombia	33	18	10	12	27	1,143	1,636	127	171
59 Paraguay	47	16	3	4	30	99	129	..	..
60 Ecuador	32	17	8	4	39	271	420	119	..
61 Guatemala	50	37	..	4	9	..	..	..	..
62 Korea, Rep. of	17	24	23	8	28	1,431	3,385	111	282
63 Nicaragua	64	26	..	..	10	159	211	..	..
64 Dominican Rep.	68	5	(.)	4	23	275	428	133	192
65 Peru	31	10	13	14	32	982	1,408	177	206
66 Tunisia	65	10	..	22	3	115	212	90	157
67 Syrian Arab Rep.	46	36	..	3	15	238	341	117	100

	Distribution of Value Added, 1975 (percent)					Value Added in Manufacturing (million 1970 US dollars)		Gross Manufacturing Output Per Capita (1970 US dollars)	
	Food and Agriculture	Textiles and Clothing	Machinery and Transport Equipment	Chemicals	Other Manufacturing	1970	1975	1970	1976
68 Malaysia	30	5	10	10	45	543	931	178	..
69 Algeria	29	18	11	6	36	735	913	..	..
70 Turkey	48	22	..	..	30	1,896	3,426	104	247
71 Mexico	21	14	19	14	32	8,636	11,633	..	..
72 Jamaica	86	..	..	..	14	221	247	348	..
73 Lebanon	..	..	..	..	..	202	..	..	..
74 Chile	18	9	7	4	62	2,373	1,868	423	..
75 China, Rep. of	..	..	..	..	..	1,873	3,401	..	..
76 Panama	40	7	3	3	47	166	190	276	403
77 Costa Rica	42	12	6	10	30	133	..	..	..
78 South Africa	16	12	17	12	43	3,959	..	432	..
79 Brazil	15	10	30	12	33	9,972	17,312	229	..
80 Uruguay	40	21	3	9	27	515	556	..	..
81 Iraq	34	25	..	3	38	325	503	77	144
82 Argentina	16	13	24	13	34	6,777	8,635	..	..
83 Portugal	17	19	24	9	31	1,847	2,323	..	708
84 Yugoslavia	9	14	24	10	43	3,235	6,168	411	991
85 Iran	11	26	26	6	31	1,501	3,240	140	..
86 Trinidad and Tobago	59	..	..	4	37	184	155	..	..
87 Hong Kong	..	98	..	..	2	899	1,047	..	..
88 Venezuela	29	12	11	6	42	1,827	2,434	..	423
89 Greece	15	27	10	7	41	1,642	2,365	498	782
90 Israel	11	17	26	6	40	1,101	1,517	833	..
91 Singapore	8	5	46	7	34	388	638	764	1,085
92 Spain	22	8	18	9	43	9,339	15,234	868	1,510
Industrialized Countries									
93 Ireland	33	16	12	9	30	..	..	..	..
94 Italy	12	13	27	11	37	29,059	31,763	1,251	1,372
95 New Zealand	26	15	12	5	42	..	..	..	..
96 United Kingdom	13	9	32	11	35	34,317	35,004	1,493	1,589
97 Japan	8	7	36	11	38	70,628	91,770	1,753	2,470
98 Austria	16	12	22	8	42	5,056	5,916	1,770	2,234
99 Finland	13	10	25	6	46	2,788	3,446	1,731	2,057
100 Netherlands	21	6	22	17	34	9,192	10,846	2,137	..
101 France	13	6	35	8	38	40,502	49,380	..	2,245
102 Australia	17	9	25	8	41	8,498	..	1,712	..
103 Belgium	19	10	29	9	33	8,226	9,938	..	..
104 Denmark	25	8	26	7	34	4,218	4,587	2,020	2,149
105 Germany, Fed. Rep.	9	7	33	11	40	75,765	79,071	2,184	2,430
106 Canada	15	8	26	8	43	16,802	20,311	1,947	2,366
107 United States	12	8	31	11	38	252,000	264,195	2,586	2,866
108 Norway	13	5	26	6	50	2,442	2,829	1,606	..
109 Sweden	9	5	35	6	45	8,863	9,860	2,413	2,611
110 Switzerland	11	7	42	13	27	..	..	..	..
Capital Surplus Oil Exporters									
111 Saudi Arabia	..	..	..	..	..	372	453	..	..
112 Libya	..	..	..	..	..	82	154	88	142
113 Kuwait	..	..	..	..	..	106	..	199	..
Centrally Planned Economies									
114 China, People's Rep.	..	..	..	..	..	..	..	..	..
115 Albania	..	..	..	..	..	..	..	..	..
116 Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..
117 Mongolia	..	..	..	..	..	..	..	..	..
118 Cuba	72	..	..	..	28	..	..	..	..
119 Romania	15	18	32	9	26	..	..	..	..
120 Bulgaria	23	15	25	5	32	..	..	..	..
121 Hungary	12	11	32	5	40	..	..	..	..
122 USSR	12	6	..	7	75	..	..	..	..
123 Poland	18	16	26	10	30	..	..	..	..
124 Czechoslovakia	8	11	36	7	38	..	..	..	..
125 German Dem. Rep.	11	12	36	11	30	..	..	..	..

Table 7: Energy

	Average Annual Energy Growth Rates (percent)				Per Capita Energy Consumption (kilograms of coal equivalent)		Energy Consumption Per Dollar GDP (kilograms of coal equivalent)		Energy Imports as a Percentage of Merchandise Export Earnings	
	Production		Consumption							
	1960-74[a]	1974-76	1960-74[a]	1974-76	1960	1976	1960	1976	1960	1976
Low Income Countries (g)	**6.8**	**6.3**	**5.7**	**4.6**	**113**	**166**	**0.9**	**1.1**	**9**	**19**
1 Bhutan	..	..	..	..	..	..	..	..	..	..
2 Cambodia	..	..	—0.1	(.)	31	16	..	..	9	..
3 Bangladesh	..	5.4	..	9.7	..	33	..	0.3	..	29
4 Lao PDR	..	—1.0	13.4	(.)	18	61	..	..	..	..
5 Ethiopia	14.1	2.0	14.7	—10.3	8	27	0.1	0.3	11	27
6 Mali	..	19.7	5.5	5.4	15	27	0.2	0.3	13	25
7 Nepal	27.2	8.2	12.3	1.3	5	11	(.)	0.1	..	..
8 Somalia	..	..	7.4	10.1	19	47	0.2	0.4	4	13
9 Burundi	..	19.6	..	0.3	..	12	..	0.1	..	..
10 Chad	..	..	7.2	10.5	10	23	0.1	0.2	23	27
11 Rwanda	..	3.0	..	11.3	..	17	..	0.2	..	11
12 Upper Volta	..	..	6.5	5.1	5	18	0.1	0.2	..	19
13 Zaire	3.0	54.4	4.3	—6.4	87	62	0.9	0.7	3	16
14 Burma	4.8	8.2	3.6	0.5	55	49	0.5	0.4	4	12
15 Malawi	..	17.5	..	9.8	..	56	..	0.4	..	18
16 India	4.4	9.8	4.9	7.0	142	218	1.3	1.6	11	26
17 Mozambique	3.2	32.1	5.7	0.8	114	133	0.4	0.5	11	28
18 Niger	..	..	14.3	8.4	5	35	(.)	0.2	..	..
19 Viet Nam	..	..	..	..	..	124	..	..	..	..
20 Afghanistan	39.7	—6.0	9.4	2.9	15	41	0.2	0.4	12	12
21 Pakistan	10.0	1.1	5.9	1.0	61	181	1.3	1.2	..	..
22 Sierra Leone	..	..	10.3	—3.5	31	112	0.3	0.5	11	10
23 Tanzania	10.6	29.6	10.4	12.9	41	68	0.3	0.4	..	22
24 Benin	..	..	8.8	—11.2	39	49	0.2	0.3	..	43
25 Sri Lanka	10.4	0.7	6.2	—1.9	107	106	0.7	0.5	8	24
26 Guinea	*16.1*	(.)	3.2	1.6	65	93	0.3	0.4	7	..
27 Haiti	..	18.6	2.8	4.3	36	28	0.2	0.1	..	14
28 Lesotho	..	..	..	..	..	..	..	..	..	..
29 Madagascar	6.8	4.3	8.9	4.4	38	66	0.2	0.3	9	22
30 Central African Emp.	14.2	2.0	7.4	7.4	37	41	0.1	0.2	12	1
31 Kenya	9.3	19.6	4.2	1.2	143	152	0.8	0.6	18	54
32 Mauritania	..	..	16.8	2.9	18	102	0.1	0.4	39	6
33 Uganda	5.2	—6.3	9.5	—6.0	30	48	0.1	0.2	5	4
34 Sudan	..	20.2	13.2	—2.7	52	143	0.2	0.6	8	26
35 Angola	35.8	—26.6	8.8	—6.6	86	166	0.2	0.5	6	2
36 Indonesia	8.5	6.1	4.2	22.1	129	218	0.8	0.9	3	5
37 Togo	..	..	12.5	11.9	23	85	0.1	0.3	10	19
Middle Income Countries (g)	**7.6**	**0.8**	**7.6**	**5.2**	**393**	**916**	**0.7**	**1.2**	**10**	**22**
38 Egypt	9.8	45.1	2.7	20.3	298	473	1.7	1.8	12	15
39 Cameroon	1.1	6.4	4.0	7.6	55	98	0.2	0.3	7	10
40 Yemen, PDR	..	..	—13.6	24.4	299	324	..	1.6	..	..
41 Ghana	..	1.2	6.6	—4.1	106	157	0.2	0.3	7	18
42 Honduras	29.5	9.8	8.9	1.4	155	264	0.5	0.7	10	12
43 Liberia	31.8	2.0	19.3	—5.1	86	418	0.2	1.0	3	12
44 Nigeria	37.4	—3.5	10.2	5.8	34	94	0.1	0.2	..	..
45 Thailand	28.0	21.4	16.9	4.4	64	308	0.3	0.8	12	28
46 Senegal	..	..	4.6	5.5	121	156	0.3	0.4	8	15
47 Yemen Arab Rep.	..	..	12.7	38.9	7	41	..	0.3	..	..
48 Philippines	5.6	9.1	9.6	7.7	147	329	0.6	0.8	..	..
49 Zambia	..	6.0	..	10.1	..	548	..	1.3	..	5
50 Congo, People's Rep.	15.7	—9.6	5.2	—2.0	119	142	0.3	0.3	25	8
51 Papua New Guinea	..	..	..	..	51	289	0.2	0.6	..	..
52 Rhodesia	1.9	—1.0	..	—0.7	..	634	..	1.2	..	..
53 El Salvador	5.1	17.6	7.7	10.1	127	260	0.4	0.6	6	10
54 Morocco	1.9	—0.2	7.7	2.7	148	273	0.4	0.6	9	23
55 Bolivia	17.2	—1.8	7.0	12.4	147	318	0.5	0.7	4	1
56 Ivory Coast	9.7	17.1	15.5	3.9	76	380	0.2	0.4	5	10
57 Jordan	..	..	6.5	20.8	197	527	0.7	1.0	79	54
58 Colombia	3.4	—2.4	6.3	3.6	491	685	1.3	1.2	3	2
59 Paraguay	..	21.2	8.5	7.6	87	189	0.2	0.3	..	..
60 Ecuador	19.0	2.7	8.3	15.6	201	455	..	0.7	2	7
61 Guatemala	9.9	6.3	6.1	7.7	174	257	0.4	0.4	12	15
62 Korea, Rep. of	6.3	3.4	13.2	6.7	258	1,020	1.2	1.7	70	23
63 Nicaragua	26.6	4.8	10.0	5.6	174	478	0.4	0.6	..	..
64 Dominican Rep.	4.4	—3.5	14.6	2.4	157	683	0.3	0.9	..	24
65 Peru	3.5	2.0	6.2	5.7	445	642	0.8	0.7	..	..
66 Tunisia	73.4	—4.8	9.5	5.4	190	456	..	0.6	15	23
67 Syrian Arab Rep.	86.2	25.9	9.0	18.2	321	744	0.7	1.0	16	16

	Average Annual Energy Growth Rates (percent)				Per Capita Energy Consumption (kilograms of coal equivalent)		Energy Consumption Per Dollar GDP (kilograms of coal equivalent)		Energy Imports as a Percentage of Merchandise Export Earnings	
	Production		Consumption							
	1960-74[a]	1974-76	1960-74[a]	1974-76	1960	1976	1960	1976	1960	1976
68 Malaysia	37.4	41.3	11.1	0.4	242	602	0.6	0.7	2	9
69 Algeria	11.7	7.4	12.2	21.4	252	729	0.3	0.8	14	2
70 Turkey	7.6	4.2	9.9	12.8	245	743	0.5	0.8	16	58
71 Mexico	6.0	11.5	7.7	1.5	770	1,227	0.9	1.0	3	10
72 Jamaica	—0.7	9.0	11.2	4.2	426	1,937	0.2	1.5	11	34
73 Lebanon	12.7	—1.2	6.3	—26.0	548	533	..	..	68	4
74 Chile	4.0	—2.9	6.1	—4.7	845	987	1.2	1.2	10	25
75 China, Rep. of	2.3	6.0	8.6	12.8	583	1,797	1.4	1.8	..	..
76 Panama	14.8	1.9	10.5	7.1	448	885	0.7	0.8	..	..
77 Costa Rica	9.5	7.8	10.4	2.1	233	488	0.4	0.5	7	14
78 South Africa	3.8	8.1	..	8.1	..	2,985	..	..	9	..
79 Brazil	8.1	6.4	8.6	7.2	332	731	0.6	0.6	21	43
80 Uruguay	3.7	—5.5	3.1	2.5	825	1,000	0.7	0.8	35	39
81 Iraq	4.9	7.9	5.9	7.5	487	727	0.7	0.5	(.)	(.)
82 Argentina	6.5	0.8	5.7	1.5	1,129	1,804	0.9	1.0	14	14
83 Portugal	4.4	—20.3	8.3	4.6	382	1,050	0.5	0.6	17	38
84 Yugoslavia	4.7	3.6	7.1	3.7	872	2,016	1.3	1.3	8	22
85 Iran	14.5	—0.9	15.6	9.8	270	1,490	0.4	0.8	..	..
86 Trinidad and Tobago	2.8	6.0	4.8	16.6	1,775	4,272	1.0	1.7	35	51
87 Hong Kong	..	..	6.8	5.6	468	1,313	0.7	0.7	5	7
88 Venezuela	1.2	—10.8	6.6	3.4	1,694	2,838	1.1	1.2	1	..
89 Greece	14.3	20.3	13.2	6.2	460	2,250	0.5	0.9	26	48
90 Israel	41.9	—86.6	9.6	—1.4	1,270	2,541	0.7	0.7	17	28
91 Singapore	..	..	16.8	3.9	372	2,262	0.4	0.9	17	38
92 Spain	2.5	—4.6	8.5	4.1	756	2,399	0.6	0.8	22	59
Industrialized Countries (g)	3.2	0.7	4.9	1.3	4,462	7,079	1.2	1.1	11	24
93 Ireland	0.1	6.5	4.7	0.6	1,838	3,170	1.2	1.2	17	17
94 Italy	2.2	1.6	8.3	1.3	1,086	3,284	0.6	1.0	18	30
95 New Zealand	5.2	8.2	5.7	2.0	2,277	3,617	0.7	0.8	..	..
96 United Kingdom	—1.2	10.0	1.7	—1.4	4,861	5,268	1.6	1.3	14	22
97 Japan	—1.7	3.5	10.7	—0.7	1,171	3,679	0.8	0.8	18	42
98 Austria	1.5	—4.6	5.1	1.4	2,129	4,013	0.8	0.8	12	17
99 Finland	3.3	—10.0	9.1	1.6	1,529	5,177	0.5	0.9	11	25
100 Netherlands	16.2	6.2	8.7	2.5	2,504	6,224	0.7	1.0	..	..
101 France	—1.3	—3.1	5.8	—0.5	2,474	4,380	0.7	0.7	16	26
102 Australia	11.1	7.2	5.6	4.6	3,857	6,657	0.8	0.9	12	8
103 Belgium	—7.2	16.8	4.9	0.2	3,851	6,049	1.1	0.9	11	15
104 Denmark	—20.1	45.6	5.5	4.6	2,830	5,320	0.6	0.7	15	23
105 Germany, Fed. Rep.	—0.7	—0.7	4.5	2.0	3,695	5,922	0.9	0.8	7	16
106 Canada	8.9	—3.1	6.0	2.1	5,750	9,950	1.3	1.3	9	11
107 United States	3.5	—0.5	4.1	1.7	8,172	11,554	1.6	1.5	8	30
108 Norway	6.8	28.0	5.9	4.4	2,702	5,263	0.7	0.7	..	..
109 Sweden	3.6	9.3	4.9	5.4	3,572	6,046	0.7	0.7	16	18
110 Switzerland	4.2	—1.6	5.9	—2.8	1,873	3,342	0.3	0.4	10	11
Capital Surplus Oil Exporters										
111 Saudi Arabia	14.1	0.6	14.4	31.4	267	1,901	..	0.4	..	(.)
112 Libya	29.1	13.0	17.9	26.6	251	1,589	0.1	0.3	83	1
113 Kuwait	4.6	—7.9	6.7	6.1	10,396	9,198	0.4	0.6	..	..
Centrally Planned Economies (g)	4.8	5.3	4.8	5.2	1,378	2,047	2.2	2.0	..	..
114 China, People's Rep.	4.5	5.4	3.6	4.8	683	706	3.5	2.0	..	..
115 Albania	10.1	6.9	12.5	17.1	302	867	1.1	1.6	..	..
116 Korea, Dem. Rep.	9.1	10.4	9.1	10.6	989	3,072	3.8	4.9	..	..
117 Mongolia	10.4	10.1	7.3	8.6	540	1,166	0.8	1.5	..	..
118 Cuba	20.6	—8.0	4.4	5.7	912	1,225	1.0	1.5	..	39
119 Romania	5.8	4.5	8.0	7.5	1,342	4,036	3.8	3.0	..	..
120 Bulgaria	3.3	7.7	9.8	5.0	1,303	4,710	1.2	2.0	7	..
121 Hungary	1.8	2.5	3.9	5.3	2,072	3,553	1.5	1.6	13	14
122 USSR	5.6	5.6	5.3	4.4	2,839	5,259	1.9	2.0	4	4
123 Poland	3.9	5.0	4.1	7.7	3,107	5,253	2.1	1.9	..	..
124 Czechoslovakia	1.3	2.7	3.1	4.2	4,741	7,397	1.9	2.1	..	15
125 German Dem. Rep.	0.5	0.7	2.1	2.5	4,950	6,789	1.8	1.6	..	..

[a] Figures in italics in these columns refer to 1961-74 rather than 1960-74.

Table 8: Growth of Merchandise Trade

	Merchandise Trade (million US dollars)		Average Annual Growth Rates[a] (percent)				Terms of Trade 1970 = 100	
	Exports	Imports	Exports		Imports			
	1977	1977	1960-70	1970-77	1960-70	1970-77	1960	1977
Low Income Countries (m)			5.0	—1.7	5.0	2.3		
1 Bhutan	..	..	..	..	..	..	..	..
2 Cambodia	..	..	—3.3	..	—3.0	..	102	..
3 Bangladesh	451	1,181	6.6	—7.3	7.0	—5.0	155	68
4 Lao PDR	9	64	..	..	..	..	..	..
5 Ethiopia	333	352	3.7	—3.8	6.2	—3.0	75	177
6 Mali	124	159	3.1	7.4	—0.4	7.0	91	101
7 Nepal	81	168	..	..	..	..	..	..
8 Somalia	100	160	2.3	10.0	2.6	13.0	107	75
9 Burundi	92	91	..	..	..	..	..	..
10 Chad	40	150	5.9	—2.0	5.0	2.2	106	133
11 Rwanda	92	114	15.9	4.3	8.0	10.8	89	169
12 Upper Volta	55	209	14.4	9.2	7.8	8.0	75	95
13 Zaire	981	610	—1.8	—3.2	5.5	—8.8	61	67
14 Burma	226	309	—11.6	0.6	—5.7	—6.2	101	83
15 Malawi	195	235	11.6	3.0	7.7	3.0	116	127
16 India	6,222	6,593	3.1	6.4	—0.9	3.1	104	83
17 Mozambique	220	283	6.0	—13.5	7.8	—13.3	103	102
18 Niger	110	150	6.0	15.0	11.9	2.4	90	78
19 Viet Nam	..	..	..	..	..	..	..	..
20 Afghanistan	306	380	2.4	3.3	0.8	9.8	99	135
21 Pakistan	1,149	2,447	8.2	—3.0	4.2	4.4	93	80
22 Sierra Leone	127	187	0.3	—6.8	1.9	—5.2	89	83
23 Tanzania	543	748	3.5	—7.2	6.0	—1.3	96	127
24 Benin	31	246	5.0	—4.2	7.5	5.0	89	89
25 Sri Lanka	763	695	4.6	—5.3	—0.3	—4.9	175	141
26 Guinea	314	..	..	..	..	..	..	..
27 Haiti	143	..	..	..	..	..	..	..
28 Lesotho	..	..	..	..	..	..	..	..
29 Madagascar	500	350	5.4	—0.8	4.0	—5.3	118	112
30 Central African Emp.	82	63	8.1	—1.3	4.5	—2.8	93	124
31 Kenya	1,213	1,284	7.2	1.2	6.3	—2.4	112	132
32 Mauritania	157	207	55.2	2.5	4.6	8.4	112	79
33 Uganda	590	241	5.0	—9.6	6.2	—10.4	95	159
34 Sudan	661	1,060	2.1	—4.9	1.1	6.5	100	97
35 Angola	500	340	9.0	—12.4	11.6	—7.4	89	179
36 Indonesia	10,853	6,230	3.5	7.5	1.9	18.4	138	253
37 Togo	159	284	10.5	—3.9	8.4	8.4	95	136
Middle Income Countries (m)			5.4	5.1	7.1	5.9		
38 Egypt	1,726	4,808	3.2	—3.3	—0.9	15.2	104	93
39 Cameroon	705	764	6.9	0.6	9.3	4.9	90	126
40 Yemen, PDR	177	335	..	..	..	..	..	..
41 Ghana	1,300	1,100	0.1	—1.9	—1.6	2.0	92	93
42 Honduras	511	580	11.1	0.6	11.7	1.0	91	91
43 Liberia	447	464	18.3	0.9	2.8	3.1	194	93
44 Nigeria	11,823	11,306	6.1	1.3	1.7	26.3	97	331
45 Thailand	3,484	4,635	5.2	12.1	11.2	4.8	118	75
46 Senegal	520	670	1.2	7.2	2.7	5.1	91	95
47 Yemen Arab Rep.	11	1,040	..	..	..	..	..	..
48 Philippines	3,151	4,270	2.2	5.0	7.2	4.4	73	68
49 Zambia	897	828	2.2	—2.3	9.8	—5.7	50	59
50 Congo, People's Rep.	173	282	5.1	13.7	—1.0	6.9	98	121
51 Papua New Guinea	611	492	..	..	..	..	..	..
52 Rhodesia	..	..	..	..	..	..	..	..
53 El Salvador	959	950	5.6	2.6	6.4	8.2	94	151
54 Morocco	1,300	3,194	2.5	2.1	3.3	11.9	103	90
55 Bolivia	641	618	9.7	3.5	8.1	11.5	69	127
56 Ivory Coast	2,155	1,752	8.8	7.1	9.7	9.5	89	118
57 Jordan	249	1,381	10.1	20.8	3.6	15.9	99	85
58 Colombia	2,302	1,563	2.2	—1.2	2.4	—0.8	90	154
59 Paraguay	279	302	5.4	9.1	7.5	8.3	92	101
60 Ecuador	1,218	1,508	3.7	9.0	11.6	12.3	110	158
61 Guatemala	1,160	1,079	9.0	3.4	7.1	7.8	97	142
62 Korea, Rep. of	10,047	10,811	35.2	30.7	20.1	12.4	78	76
63 Nicaragua	608	755	9.7	5.2	10.3	5.7	88	110
64 Dominican Rep.	780	992	—2.3	6.9	10.0	5.8	77	79
65 Peru	1,564	1,911	1.9	—4.4	3.6	4.8	63	84
66 Tunisia	921	1,825	4.1	2.5	2.2	12.9	104	137
67 Syrian Arab Rep.	1,063	2,657	3.2	8.6	4.2	17.4	94	149

	Merchandise Trade (million US dollars)		Average Annual Growth Rates[a] (percent)				Terms of Trade 1970 = 100	
	Exports	Imports	Exports		Imports			
	1977	1977	1960-70	1970-77	1960-70	1970-77	1960	1977
68 Malaysia	6,088	4,633	6.1	5.2	2.7	6.1	139	114
69 Algeria	5,809	7,126	4.1	—0.9	—1.0	18.4	115	315
70 Turkey	1,753	5,694	1.6	0.8	5.5	13.1	..	80
71 Mexico	4,066	5,489	3.3	1.9	6.4	3.9	87	119
72 Jamaica	856	861	4.7	—1.4	8.2	—5.3	100	87
73 Lebanon	632	1,631	14.1	7.5	5.1	—0.1	78	83
74 Chile	2,190	2,035	0.6	7.7	4.7	—3.8	53	50
75 China, Rep. of	9,349	8,522	23.7	16.7	17.9	13.5	79	80
76 Panama	243	861	10.4	..	9.9	..	89	81
77 Costa Rica	798	1,021	9.4	4.2	10.0	3.7	103	114
78 South Africa	6,158	5,893	5.5	6.7	8.2	—0.7	100	80
79 Brazil	12,054	13,229	5.0	6.5	9.7	7.9	88	118
80 Uruguay	608	730	2.1	5.5	—2.8	1.7	99	74
81 Iraq	9,664	3,898	7.3	—0.5	1.3	24.3	112	449
82 Argentina	5,651	4,162	3.3	5.5	0.3	—0.2	101	87
83 Portugal	2,023	4,963	9.6	—2.1	14.1	0.9	83	86
84 Yugoslavia	5,254	9,634	7.8	5.4	9.0	4.9	96	94
85 Iran	24,245	13,750	12.7	—0.2	11.3	25.9	108	414
86 Trinidad and Tobago	2,180	1,809	5.0	—0.8	3.2	—4.9	115	113
87 Hong Kong	9,626	10,457	12.7	6.5	9.2	5.9	..	104
88 Venezuela	9,548	10,353	2.0	—10.5	4.3	14.0	112	334
89 Greece	2,724	6,778	10.7	13.8	10.9	6.2	92	86
90 Israel	2,959	4,663	10.9	10.2	8.7	4.7	91	79
91 Singapore	8,241	10,471	4.2	9.8	5.9	8.1	..	..
92 Spain	10,230	17,846	11.6	10.4	18.4	4.7	93	80
Industrialized Countries (m)			8.7	6.2	9.4	4.7		
93 Ireland	4,396	5,378	7.2	7.6	8.2	4.7	94	101
94 Italy	45,063	47,580	13.5	6.8	9.7	2.3	104	78
95 New Zealand	3,142	3,363	4.6	2.4	3.0	3.7	115	94
96 United Kingdom	57,547	63,677	4.8	5.8	5.0	4.7	95	85
97 Japan	80,470	70,660	17.5	10.5	13.7	5.1	102	76
98 Austria	9,808	14,248	9.6	6.7	9.7	7.7	100	97
99 Finland	7,670	7,603	6.7	2.8	7.1	2.8	98	102
100 Netherlands	43,703	45,616	9.9	6.5	9.4	4.3	100	91
101 France	63,560	70,498	8.3	7.4	10.9	7.0	93	93
102 Australia	13,002	12,175	6.5	3.7	7.2	5.3	116	88
103 Belgium	37,457	40,142	10.8	6.2	10.3	6.4	110	93
104 Denmark	10,117	13,239	7.1	4.2	8.1	3.6	108	92
105 Germany, Fed. Rep.	117,895	100,672	10.2	7.0	10.0	6.2	90	101
106 Canada	41,452	39,561	9.9	3.7	9.3	8.0	98	106
107 United States	119,042	156,758	6.0	6.9	9.8	4.6	93	79
108 Norway	8,717	12,877	9.1	6.2	9.5	6.2	91	101
109 Sweden	18,823	19,566	7.7	2.5	7.3	3.6	109	97
110 Switzerland	17,682	17,979	9.0	4.9	8.5	1.5	91	104
Capital Surplus Oil Exporters								
111 Saudi Arabia	43,465	14,651	9.5	8.0	11.1	38.5	107	422
112 Libya	10,113	5,258	61.0	—8.5	15.4	22.3	98	316
113 Kuwait	9,798	4,484	6.9	—10.9	10.4	20.3	105	449
Centrally Planned Economies (m)			..	..	..	..		
114 China, People's Rep.	..	..	..	..	..	..	..	..
115 Albania	..	..	..	..	..	..	..	..
116 Korea, Dem. Rep.	..	..	..	..	..	..	..	..
117 Mongolia	..	..	..	..	..	..	..	..
118 Cuba	4,000	4,700	3.9	9.4	5.5	5.7	112	71
119 Romania	7,021	7,579	9.9	..	10.5	..	..	..
120 Bulgaria	6,329	6,329	14.5	10.6	12.8	11.6	..	..
121 Hungary	5,832	6,522	9.7	9.3	9.1	6.6	..	82
122 USSR	45,161	40,817	..	8.0	..	10.3	..	..
123 Poland	12,336	14,674	10.0	9.9	8.9	13.2	..	103
124 Czechoslovakia	10,818	11,149	6.6	6.5	6.9	6.2	..	..
125 German Dem. Rep.	12,024	14,334	8.3	8.0	8.6	8.1	..	..

[a] See Technical Notes.

Table 9: Structure of Merchandise Exports

	Percentage Shares of Merchandise Exports									
	Fuels, Minerals, and Metals		Other Primary Commodities		Textiles and Clothing		Machinery and Transport Equipment		Other Manufactures	
	1960[a]	1976	1960[a]	1976	1960[a]	1976	1960[a]	1976	1960[a]	1976
Low Income Countries										
1 Bhutan	..	..	..	..	..	..	..	..	..	..
2 Cambodia	0	..	100	..	0	..	0	..	0	..
3 Bangladesh	..	0	..	39	..	50	..	0	..	11
4 Lao PDR	..	..	..	..	..	..	..	..	..	..
5 Ethiopia	0	0	100	98	0	0	0	1	0	1
6 Mali	*0*	0	*96*	99	*1*	1	*1*	(.)	*2*	(.)
7 Nepal	..	..	..	..	..	..	..	..	..	..
8 Somalia	*0*	..	*88*	..	*0*	..	*8*	..	*4*	..
9 Burundi	..	..	..	..	..	..	..	..	..	..
10 Chad	65	..	32	..	0	..	0	..	3	..
11 Rwanda	..	..	..	..	..	..	..	..	..	..
12 Upper Volta	0	..	100	..	0	..	0	..	(.)	..
13 Zaire	42	..	57	..	0	..	0	..	1	..
14 Burma	4	13	95	86	0	0	0	0	1	1
15 Malawi	..	0	..	96	..	1	..	(.)	..	3
16 India	10	12	45	35	35	20	1	6	9	27
17 Mozambique	0	..	100	..	0	..	0	..	0	..
18 Niger	0	..	100	..	0	..	0	..	0	..
19 Viet Nam	..	..	..	..	..	..	..	..	..	..
20 Afghanistan	(.)	..	82	..	14	..	3	..	1	..
21 Pakistan	0	3	73	40	23	32	1	1	3	24
22 Sierra Leone	15	..	20	..	0	..	0	..	65	..
23 Tanzania	(.)	5	87	86	0	3	0	0	13	6
24 Benin	0	..	100	..	0	..	(.)	..	0	..
25 Sri Lanka	(.)	7	99	79	0	1	0	(.)	1	13
26 Guinea	..	..	..	..	..	..	..	..	..	..
27 Haiti	0	2	100	47	0	7	0	2	0	42
28 Lesotho	..	..	..	..	..	..	..	..	..	..
29 Madagascar	4	..	90	..	1	..	1	..	4	..
30 Central African Emp.	12	0	86	82	..	0	1	(.)	1	18
31 Kenya	*1*	18	*87*	70	*0*	(.)	*0*	(.)	*12*	12
32 Mauritania	*4*	..	*69*	..	*1*	..	*20*	..	*6*	..
33 Uganda	*8*	2	*92*	98	*0*	0	*0*	0	*(.)*	(.)
34 Sudan	0	..	100	..	0	..	0	..	0	..
35 Angola	..	..	..	..	..	..	..	..	..	..
36 Indonesia	33	74	67	24	0	0	(.)	1	(.)	1
37 Togo	0	..	96	..	0	..	0	..	4	..
Middle Income Countries										
38 Egypt	4	25	84	48	9	17	(.)	1	3	9
39 Cameroon	19	6	77	84	0	3	2	2	2	5
40 Yemen, PDR	..	..	..	..	..	..	..	..	..	..
41 Ghana	7	11	83	88	0	(.)	0	(.)	10	1
42 Honduras	5	9	93	81	0	2	0	0	2	8
43 Liberia	45	..	55	..	0	..	0	..	0	..
44 Nigeria	8	94	89	5	0	0	0	0	3	1
45 Thailand	7	7	91	74	0	8	0	2	2	9
46 Senegal	3	..	94	..	1	..	1	..	1	..
47 Yemen Arab Rep.	..	1	..	86	..	3	..	0	..	10
48 Philippines	10	18	86	58	1	4	0	1	3	19
49 Zambia	..	..	..	..	..	..	..	..	..	..
50 Congo, People's Rep.	7	77	84	10	(.)	0	5	2	4	11
51 Papua New Guinea	0	61	92	38	0	(.)	0	(.)	8	1
52 Rhodesia	71	..	25	..	1	..	(.)	..	3	..
53 El Salvador	0	..	94	..	3	..	(.)	..	3	..
54 Morocco	38	47	54	37	1	10	1	(.)	6	6
55 Bolivia	..	..	..	..	..	..	..	..	..	..
56 Ivory Coast	1	4	98	88	0	2	(.)	2	1	4
57 Jordan	0	41	96	38	0	4	0	1	4	16
58 Colombia	19	4	79	74	0	8	(.)	2	2	12
59 Paraguay	0	..	100	..	0	..	0	..	0	..
60 Ecuador	0	59	99	39	0	2	0	(.)	1	0
61 Guatemala	2	..	95	..	1	..	0	..	2	..
62 Korea, Rep. of	30	3	56	9	8	36	(.)	17	6	35
63 Nicaragua	3	1	95	83	0	3	0	1	2	12
64 Dominican Rep.	6	..	92	..	0	..	0	..	2	..
65 Peru	49	..	50	..	0	..	0	..	1	..
66 Tunisia	24	53	66	21	1	12	1	1	8	13
67 Syrian Arab Rep.	0	66	81	24	2	6	0	2	17	2

	Percentage Shares of Merchandise Exports									
	Fuels, Minerals, and Metals		Other Primary Commodities		Textiles and Clothing		Machinery and Transport Equipment		Other Manufactures	
	1960[a]	1976	1960[a]	1976	1960[a]	1976	1960[a]	1976	1960[a]	1976
68 Malaysia	20	27	74	57	(.)	2	(.)	6	6	8
69 Algeria	12	96	81	3	0	0	1	(.)	6	1
70 Turkey	8	7	89	69	0	17	0	1	3	6
71 Mexico	24	26	64	43	4	5	1	7	7	19
72 Jamaica	50	23	45	21	2	1	0	1	3	54
73 Lebanon	..	..	..	..	..	..	..	..	..	..
74 Chile	92	83	4	12	0	0	0	1	4	4
75 China, Rep. of	..	2	..	13	..	30	..	21	..	34
76 Panama	..	..	..	..	..	..	..	..	..	..
77 Costa Rica	0	1	95	70	0	5	0	3	5	21
78 South Africa	29	..	42	..	2	..	4	..	23	..
79 Brazil	8	13	89	62	0	4	(.)	10	3	11
80 Uruguay	..	(.)	..	66	..	14	..	2	..	18
81 Iraq	97	99	3	1	0	0	0	0	0	(.)
82 Argentina	1	1	95	74	0	2	(.)	10	4	13
83 Portugal	8	4	37	28	18	26	3	13	34	29
84 Yugoslavia	18	10	45	20	4	9	15	28	18	33
85 Iran	88	97	9	2	0	0	0	0	3	1
86 Trinidad and Tobago	82	91	14	3	0	(.)	0	1	4	5
87 Hong Kong	5	1	15	2	45	44	4	15	31	38
88 Venezuela	74	..	26	..	0	..	0	..	(.)	..
89 Greece	9	15	81	36	1	17	1	5	8	27
90 Israel	4	2	35	20	8	7	2	11	51	60
91 Singapore	1	31	73	23	5	6	7	25	14	15
92 Spain	21	6	57	25	7	6	2	25	13	38
Industrialized Countries										
93 Ireland	5	3	67	44	6	9	4	14	18	30
94 Italy	8	7	19	9	17	11	29	34	27	39
95 New Zealand	(.)	5	97	80	0	3	(.)	3	3	9
96 United Kingdom	7	9	9	9	8	5	44	40	32	37
97 Japan	11	1	10	3	28	6	23	53	28	37
98 Austria	26	4	22	12	10	10	16	28	26	46
99 Finland	3	5	50	20	1	7	13	25	33	43
100 Netherlands	15	21	34	25	8	5	18	19	25	30
101 France	9	6	18	18	10	6	25	38	38	32
102 Australia	13	32	79	47	(.)	(.)	3	5	5	16
103 Belgium	15	10	9	12	12	9	13	25	51	44
104 Denmark	2	5	63	38	3	5	19	28	13	24
105 Germany, Fed. Rep.	9	6	4	6	4	5	44	48	39	35
106 Canada	33	27	37	24	1	1	8	31	21	17
107 United States	10	7	27	24	3	2	35	44	25	23
108 Norway	22	33	34	14	2	1	10	26	32	26
109 Sweden	10	6	29	16	1	3	31	44	29	31
110 Switzerland	2	3	8	5	12	7	30	34	48	51
Capital Surplus Oil Exporters										
111 Saudi Arabia	100	100	0	0	0	0	0	(.)	0	(.)
112 Libya	6	100	84	0	0	0	0	0	10	0
113 Kuwait	..	97	..	0	..	(.)	..	2	..	1
Centrally Planned Economies										
114 China, People's Rep.	..	..	..	..	..	..	..	..	..	..
115 Albania	..	..	..	..	..	..	..	..	..	..
116 Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..
117 Mongolia	..	..	..	..	..	..	..	..	..	..
118 Cuba	2	..	93	..	1	..	(.)	..	4	..
119 Romania	..	..	..	..	..	..	..	..	..	..
120 Bulgaria	..	..	..	..	..	..	..	..	..	..
121 Hungary	6	7	28	26	7	8	38	34	21	25
122 USSR	24	..	28	..	1	..	21	..	26	..
123 Poland	..	..	..	..	..	..	..	..	..	..
124 Czechoslovakia	..	7	..	6	..	6	..	50	..	31
125 German Dem. Rep.	..	..	..	..	..	..	..	..	..	..

[a] Figures in italics in these columns refer to 1961 rather than 1960.

Table 10: Structure of Merchandise Imports

	Percentage Shares of Merchandise Imports									
	Food		Fuel		Other Primary Commodities		Machinery and Transport Equipment		Other Manufactures	
	1960[a]	1976	1960[a]	1976	1960[a]	1976	1960[a]	1976	1960[a]	1976
Low Income Countries										
1 Bhutan	..	..	..	..	..	..	..	..	..	..
2 Cambodia	..	..	..	..	..	..	..	..	..	..
3 Bangladesh	..	42	..	13	..	6	..	14	..	25
4 Lao PDR	..	..	..	..	..	..	..	..	..	..
5 Ethiopia	..	6	..	15	..	3	..	34	..	42
6 Mali	*20*	19	*5*	14	*4*	2	*18*	30	*53*	35
7 Nepal	..	..	..	..	..	..	..	..	..	..
8 Somalia	*27*	..	*4*	..	*0*	..	*18*	..	*51*	..
9 Burundi	..	19	..	9	..	9	..	28	..	35
10 Chad	19	..	12	..	4	..	19	..	46	..
11 Rwanda	..	..	..	..	..	..	..	..	..	..
12 Upper Volta	*21*	..	*4*	..	*1*	..	*24*	..	*50*	..
13 Zaire	..	..	..	..	..	..	..	..	..	..
14 Burma	14	..	4	..	9	..	17	..	56	..
15 Malawi	..	10	..	14	..	2	..	31	..	43
16 India	21	28	6	26	28	8	30	19	15	19
17 Mozambique	..	..	..	..	..	..	..	..	..	..
18 Niger	*24*	..	*5*	..	*4*	..	*18*	..	*49*	..
19 Viet Nam	..	..	..	..	..	..	..	..	..	..
20 Afghanistan	14	..	7	..	4	..	14	..	61	..
21 Pakistan	*22*	21	*10*	18	*2*	6	*27*	26	*39*	29
22 Sierra Leone	23	..	12	..	5	..	15	..	45	..
23 Tanzania	..	10	..	18	..	5	..	35	..	32
24 Benin	17	17	10	8	1	0	18	30	54	45
25 Sri Lanka	39	36	7	25	5	4	15	13	34	22
26 Guinea	..	..	..	..	..	..	..	..	..	..
27 Haiti	..	31	..	9	..	1	..	17	..	42
28 Lesotho	..	..	..	..	..	..	..	..	..	..
29 Madagascar	17	..	6	..	3	..	23	..	51	..
30 Central African Emp.	15	17	9	1	2	2	26	35	48	45
31 Kenya	*12*	7	*11*	27	*8*	3	*27*	29	*42*	34
32 Mauritania	*5*	..	*3*	..	*3*	..	*39*	..	*50*	..
33 Uganda	..	11	..	1	..	3	..	44	..	41
34 Sudan	17	..	8	..	3	..	14	..	58	..
35 Angola	..	..	..	..	..	..	..	..	..	..
36 Indonesia	23	15	5	8	10	5	17	41	45	31
37 Togo	16	13	6	6	3	10	32	24	43	47
Middle Income Countries										
38 Egypt	23	28	11	6	16	7	25	30	25	29
39 Cameroon	20	10	8	9	3	2	17	37	52	42
40 Yemen, PDR	..	..	..	..	..	..	..	..	..	..
41 Ghana	19	..	5	..	4	..	26	..	46	..
42 Honduras	13	10	9	11	3	3	24	29	51	47
43 Liberia	16	..	4	..	7	..	34	..	39	..
44 Nigeria	14	10	5	3	6	2	24	48	51	37
45 Thailand	10	5	11	23	11	9	25	30	43	33
46 Senegal	30	..	5	..	2	..	19	..	44	..
47 Yemen Arab Rep.	..	28	..	2	..	4	..	31	..	35
48 Philippines	15	10	10	24	5	5	36	30	34	31
49 Zambia	..	..	..	..	..	..	..	..	..	..
50 Congo, People's Rep.	18	17	6	9	1	1	31	35	44	38
51 Papua New Guinea	30	23	5	14	4	1	23	32	38	30
52 Rhodesia	..	..	..	..	..	..	..	..	..	..
53 El Salvador	17	..	6	..	6	..	26	..	45	..
54 Morocco	27	20	8	11	7	7	19	35	39	27
55 Bolivia	..	..	..	..	..	..	..	..	..	..
56 Ivory Coast	18	14	6	13	2	3	27	33	47	37
57 Jordan	..	26	..	11	..	3	..	30	..	30
58 Colombia	8	12	3	3	15	8	43	42	31	35
59 Paraguay	..	..	..	..	..	..	..	..	..	..
60 Ecuador	13	8	3	1	9	2	33	46	42	43
61 Guatemala	12	..	10	..	7	..	26	..	45	..
62 Korea, Rep. of	10	9	7	20	25	19	12	27	46	25
63 Nicaragua	9	9	10	13	5	2	22	26	54	50
64 Dominican Rep.	..	..	..	..	..	..	..	..	..	..
65 Peru	16	..	5	..	5	..	37	..	37	..
66 Tunisia	20	14	9	12	4	7	23	35	44	32
67 Syrian Arab Rep.	24	17	8	10	5	4	15	34	48	35

	Percentage Shares of Merchandise Imports									
	Food		Fuel		Other Primary Commodities		Machinery and Transport Equipment		Other Manufactures	
	1960[a]	1976	1960[a]	1976	1960[a]	1976	1960[a]	1976	1960[a]	1976
68 Malaysia	29	17	16	14	13	7	14	33	28	29
69 Algeria	26	18	4	2	2	3	14	47	54	30
70 Turkey	7	3	11	23	16	6	42	38	24	30
71 Mexico	4	8	2	6	10	7	52	50	32	29
72 Jamaica	22	23	8	23	9	4	24	17	37	33
73 Lebanon	..	..	..	..	..	..	..	..	..	..
74 Chile	..	..	..	..	..	..	..	..	..	..
75 China, Rep. of	..	11	..	17	..	14	..	31	..	27
76 Panama	15	8	10	35	1	0	22	22	52	35
77 Costa Rica	13	8	6	9	6	4	26	29	49	50
78 South Africa	6	..	7	..	9	..	37	..	41	..
79 Brazil	14	8	19	32	13	6	36	29	18	25
80 Uruguay	..	6	..	35	..	8	..	27	..	24
81 Iraq	..	15	..	(.)	..	4	..	47	..	34
82 Argentina	3	5	13	18	11	12	44	26	29	39
83 Portugal	15	20	10	16	28	11	26	25	21	28
84 Yugoslavia	11	10	5	15	25	12	37	34	22	29
85 Iran	14	11	1	(.)	1	3	23	45	61	41
86 Trinidad and Tobago	16	8	34	57	7	1	18	17	25	17
87 Hong Kong	27	18	3	6	16	9	10	18	44	49
88 Venezuela	18	..	1	..	10	..	36	..	35	..
89 Greece	11	8	8	20	16	8	44	41	21	23
90 Israel	20	14	7	17	18	6	28	22	27	41
91 Singapore	21	10	15	27	38	10	7	26	19	27
92 Spain	16	13	22	30	25	13	22	21	15	23
Industrialized Countries										
93 Ireland	18	13	12	13	11	6	21	25	38	43
94 Italy	20	17	14	26	31	15	13	18	22	24
95 New Zealand	8	6	8	15	16	6	29	34	39	39
96 United Kingdom	36	17	11	18	27	12	8	21	18	32
97 Japan	17	17	17	44	49	21	9	6	8	12
98 Austria	16	8	10	12	20	9	29	32	25	39
99 Finland	13	8	10	22	20	7	33	33	24	30
100 Netherlands	18	16	13	20	14	8	22	22	33	34
101 France	25	12	17	22	25	10	14	23	19	33
102 Australia	6	5	10	10	16	5	31	38	37	42
103 Belgium	15	13	10	14	26	11	21	26	28	36
104 Denmark	18	11	12	16	11	6	23	28	36	39
105 Germany, Fed. Rep.	26	16	8	18	28	11	10	18	28	37
106 Canada	12	8	9	11	12	5	36	48	31	28
107 United States	24	10	10	28	25	8	10	25	31	29
108 Norway	12	7	9	11	13	7	36	42	30	33
109 Sweden	13	9	14	18	13	7	26	31	34	35
110 Switzerland	18	12	8	11	13	8	21	23	40	46
Capital Surplus Oil Exporters										
111 Saudi Arabia	..	12	..	1	..	3	..	44	..	40
112 Libya	13	15	5	3	10	3	40	35	32	44
113 Kuwait	..	..	..	..	..	..	..	..	..	..
Capital Surplus Oil Exporters										
114 China, People's Rep.	..	..	..	..	..	..	..	..	..	..
115 Albania	..	..	..	..	..	..	..	..	..	..
116 Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..
117 Mongolia	..	..	..	..	..	..	..	..	..	..
118 Cuba	..	..	..	..	..	..	..	..	..	..
119 Romania	..	..	..	..	..	..	..	..	..	..
120 Bulgaria	..	..	..	..	..	..	..	..	..	..
121 Hungary	8	10	12	12	28	13	28	31	24	34
122 USSR	12	..	4	..	18	..	30	..	36	..
123 Poland	..	..	..	..	..	..	..	..	..	..
124 Czechoslovakia	..	12	..	14	..	15	..	36	..	23
125 German Dem. Rep.	..	..	..	..	..	..	..	..	..	..

[a] Figures in italics in these columns refer to 1961 rather than 1960.

Table 11: Destination of Merchandise Exports (percentage of total)

From \ To	Developed Countries		Developing Countries		Centrally Planned Economies		Capital Surplus Oil Exporters	
	1960	1977	1960	1977	1960	1977	1960	1977
Low Income Countries (g)	63	66	30	24	7	8	(.)	2
1 Bhutan	..	..	..	..	..	..	..	..
2 Cambodia	..	..	..	..	..	..	..	..
3 Bangladesh	..	45	..	42	..	13	..	(.)
4 Lao PDR	90	23	(.)	75	10	0	0	2
5 Ethiopia	69	72	30	20	1	4	(.)	4
6 Mali	93	60	7	21	0	19	(.)	0
7 Nepal	..	25	..	75	..	(.)	..	0
8 Somalia	85	27	15	31	0	9	(.)	33
9 Burundi	..	94	..	2	..	4	..	0
10 Chad	73	57	27	42	0	0	0	1
11 Rwanda	..	94	..	6	..	(.)	..	(.)
12 Upper Volta	4	80	96	19	0	1	0	0
13 Zaire	94	81	6	19	(.)	(.)	0	0
14 Burma	23	28	71	69	6	1	0	2
15 Malawi	..	78	..	22	..	(.)	..	0
16 India	66	55	25	23	8	12	1	10
17 Mozambique	29	70	71	30	(.)	(.)	(.)	(.)
18 Niger	74	83	26	17	0	0	0	(.)
19 Viet Nam	..	..	..	..	..	..	..	..
20 Afghanistan	48	34	24	23	28	43	0	(.)
21 Pakistan	56	42	35	37	8	5	1	16
22 Sierra Leone	99	96	1	4	0	0	0	(.)
23 Tanzania	74	64	25	30	1	6	0	(.)
24 Benin	..	56	..	44	..	0	..	0
25 Sri Lanka	71	46	18	37	11	12	0	5
26 Guinea	63	..	19	..	18	..	(.)	..
27 Haiti	98	..	(.)	..	2	..	0	..
28 Lesotho	..	..	..	..	..	..	..	..
29 Madagascar	79	76	20	24	1	0	(.)	(.)
30 Central African Emp.	83	78	17	22	0	0	0	0
31 Kenya	76	65	24	33	0	1	0	1
32 Mauritania	89	80	11	20	0	0	0	(.)
33 Uganda	63	81	33	14	4	4	0	1
34 Sudan	59	44	25	36	14	15	2	5
35 Angola	64	47	34	53	2	0	0	0
36 Indonesia	54	77	38	22	8	1	0	0
37 Togo	74	79	26	12	0	9	0	0
Middle Income Countries (g)	71	67	24	28	5	4	(.)	1
38 Egypt	26	62	27	11	45	25	2	2
39 Cameroon	93	83	6	14	1	3	0	0
40 Yemen, PDR	46	33	35	43	18	7	1	17
41 Ghana	89	76	4	12	7	12	(.)	(.)
42 Honduras	77	83	23	17	0	(.)	0	0
43 Liberia	100	86	(.)	13	0	1	0	0
44 Nigeria	95	71	4	29	1	0	0	(.)
45 Thailand	47	54	48	41	2	3	3	2
46 Senegal	89	85	11	15	0	(.)	0	(.)
47 Yemen Arab Rep.	45	27	23	44	18	24	14	5
48 Philippines	94	81	5	10	1	8	(.)	1
49 Zambia	..	80	..	16	..	4	..	0
50 Congo, People's Rep.	93	79	7	21	0	(.)	0	0
51 Papua New Guinea	..	93	..	6	..	1	..	0
52 Rhodesia	..	..	..	..	..	..	..	..
53 El Salvador	88	79	12	21	0	0	0	0
54 Morocco	74	62	22	28	4	9	(.)	1
55 Bolivia	88	60	12	35	0	5	0	0
56 Ivory Coast	84	81	16	17	0	2	0	(.)
57 Jordan	1	7	66	55	11	4	22	34
58 Colombia	94	78	6	17	(.)	5	0	(.)
59 Paraguay	61	64	39	36	0	0	0	0
60 Ecuador	91	54	9	42	0	4	0	(.)
61 Guatemala	94	75	6	25	0	0	0	(.)
62 Korea, Rep. of	89	73	11	17	0	(.)	0	10
63 Nicaragua	91	68	9	30	(.)	2	0	0
64 Dominican Rep.	92	91	8	9	0	0	0	0
65 Peru	84	66	16	23	(.)	11	0	(.)
66 Tunisia	76	69	19	25	3	3	2	3
67 Syrian Arab Rep.	34	55	31	18	24	21	11	6

From \ To	Developed Countries		Developing Countries		Centrally Planned Economies		Capital Surplus Oil Exporters	
	1960	1977	1960	1977	1960	1977	1960	1977
68 Malaysia	58	62	36	32	6	5	0	1
69 Algeria	92	95	7	4	1	1	0	0
70 Turkey	71	69	17	20	12	9	(.)	2
71 Mexico	93	79	7	20	(.)	1	0	(.)
72 Jamaica	96	84	4	15	0	1	0	0
73 Lebanon	24	13	29	26	6	8	41	53
74 Chile	91	65	9	33	(.)	1	0	1
75 China, Rep. of	56	70	43	26	0	0	1	4
76 Panama	99	68	1	32	0	(.)	0	(.)
77 Costa Rica	93	68	7	29	0	3	0	(.)
78 South Africa	71	78	27	22	2	(.)	(.)	0
79 Brazil	81	61	13	30	6	8	(.)	1
80 Uruguay	82	48	8	46	10	6	0	(.)
81 Iraq	85	56	14	44	1	(.)	(.)	(.)
82 Argentina	75	46	19	45	6	8	0	1
83 Portugal	56	77	42	20	2	3	(.)	(.)
84 Yugoslavia	48	37	19	22	33	38	(.)	3
85 Iran	62	74	35	26	3	0	(.)	(.)
86 Trinidad and Tobago	80	83	20	17	0	(.)	(.)	(.)
87 Hong Kong	54	70	43	26	3	1	(.)	3
88 Venezuela	62	61	38	39	0	(.)	0	(.)
89 Greece	65	57	13	21	22	11	(.)	11
90 Israel	77	75	21	25	2	(.)	0	0
91 Singapore	38	47	55	48	7	2	0	3
92 Spain	80	63	17	30	3	3	(.)	4
Industrialized Countries (g)	**67**	**67**	**30**	**26**	**3**	**4**	**(.)**	**3**
93 Ireland	96	88	4	9	(.)	1	(.)	2
94 Italy	65	65	28	24	6	5	1	6
95 New Zealand	92	71	7	22	1	7	(.)	(.)
96 United Kingdom	57	65	40	27	3	3	(.)	5
97 Japan	45	45	52	43	2	6	1	6
98 Austria	69	67	16	17	15	14	(.)	2
99 Finland	69	67	12	10	19	22	(.)	1
100 Netherlands	78	83	20	13	2	2	(.)	2
101 France	53	63	43	31	4	4	(.)	2
102 Australia	75	66	20	25	5	7	(.)	2
103 Belgium	78	83	18	13	4	2	(.)	2
104 Denmark	83	81	13	14	4	3	(.)	2
105 Germany, Fed. Rep.	70	70	25	21	5	6	(.)	3
106 Canada	90	89	9	9	1	2	(.)	(.)
107 United States	61	57	38	37	1	2	(.)	4
108 Norway	80	78	15	18	5	4	(.)	(.)
109 Sweden	79	77	16	17	5	5	(.)	1
110 Switzerland	72	67	24	25	4	5	(.)	3
Capital Surplus Oil Exporters								
111 Saudi Arabia	75	75	25	25	0	(.)	0	(.)
112 Libya	67	79	26	21	7	(.)	0	(.)
113 Kuwait	91	62	9	30	0	(.)	0	8
Centrally Planned Economies (g)	..	..	..	..	..	..	..	..
114 China, People's Rep.	..	..	..	..	..	..	0	..
115 Albania	..	..	..	..	..	..	0	..
116 Korea, Dem. Rep.	..	..	..	..	..	..	..	..
117 Mongolia	..	..	..	..	..	..	..	..
118 Cuba	72	..	9	..	19	..	0	..
119 Romania	20	26	9	21	71	50	0	3
120 Bulgaria	13	..	3	..	84	..	0	..
121 Hungary	23	..	6	..	71	..	0	..
122 USSR	18	..	7	..	75	..	0	..
123 Poland	30	..	7	..	63	..	0	..
124 Czechoslovakia	17	..	11	..	72	..	0	..
125 German Dem. Rep.	20	..	4	..	76	..	0	..

Table 12: Trade in Manufactured Goods

	Destination of Manufactured Exports (percentage of total)								Total Manufactured Exports (million US dollars)	
To / From	Developed Countries		Developing Countries		Centrally Planned Economies		Capital Surplus Oil Exporters			
	1963	1976	1963	1976	1963	1976	1963	1976	1963	1976
Low Income Countries (g)	..	52	..	30	..	11	..	7		
1 Bhutan	..	..	..	..	..	..	..	..	..	..
2 Cambodia	58	..	42	..	0	..	0	..	1	..
3 Bangladesh	..	54	..	40	..	6	..	0	..	222
4 Lao PDR	..	..	..	..	..	..	..	..	(.)	..
5 Ethiopia	..	30	..	55	..	0	..	15	(.)	6
6 Mali	14	46	66	54	20	0	0	0	(.)	1
7 Nepal	..	38	..	62	..	(.)	..	0	..	16
8 Somalia	..	13	..	30	..	0	..	57	2	2
9 Burundi	..	5	..	95	..	0	..	0	..	1
10 Chad	12	32	77	68	11	0	(.)	0	1	3
11 Rwanda	..	30	..	70	..	0	..	0	(.)	2
12 Upper Volta	12	32	88	68	0	0	0	0	1	3
13 Zaire	..	98	..	2	..	(.)	..	0	1	290
14 Burma	..	28	..	59	..	11	..	2	1	6
15 Malawi	..	7	..	93	..	0	..	0	..	6
16 India	56	49	35	27	7	13	2	11	677	2,801
17 Mozambique	..	..	..	..	..	..	..	..	..	6
18 Niger	23	67	77	33	0	0	0	0	1	8
19 Viet Nam	..	..	..	..	..	..	..	..	..	..
20 Afghanistan	98	88	2	1	0	10	0	1	7	32
21 Pakistan	49	..	48	..	1	..	2	..	109	629
22 Sierra Leone	100	97	(.)	3	0	0	0	0	23	75
23 Tanzania	..	80	..	19	..	1	..	0	16	38
24 Benin	18	18	82	82	0	0	0	0	1	7
25 Sri Lanka	70	..	28	..	2	..	(.)	..	4	76
26 Guinea	..	16	..	84	..	0	..	0	..	39
27 Haiti	..	98	..	2	..	0	..	0	..	43
28 Lesotho	..	..	..	..	..	..	..	..	..	..
29 Madagascar	82	82	18	18	0	0	0	0	4	25
30 Central African Emp.	50	67	50	33	0	0	0	0	11	11
31 Kenya	..	13	..	84	..	1	..	2	12	76
32 Mauritania	95	85	5	15	0	0	0	0	3	7
33 Uganda	..	94	..	(.)	..	0	..	6	(.)	8
34 Sudan	35	..	54	..	0	..	11	..	(.)	4
35 Angola	..	80	..	19	..	0	..	1	..	49
36 Indonesia	..	54	..	46	..	(.)	..	(.)	2	130
37 Togo	45	35	55	65	0	0	0	0	1	7
Middle Income Countries (g)	..	64	..	27	..	5	..	4		
38 Egypt	..	13	..	14	..	67	..	6	88	386
39 Cameroon	23	34	77	66	0	(.)	0	0	4	50
40 Yemen, PDR	..	..	..	..	..	..	..	..	..	12
41 Ghana	82	64	17	35	0	1	1	0	3	12
42 Honduras	3	25	97	75	0	0	0	0	2	39
43 Liberia	100	78	(.)	22	0	0	0	0	3	9
44 Nigeria	81	98	17	2	1	0	1	0	16	58
45 Thailand	41	67	59	29	0	1	0	3	16	572
46 Senegal	74	43	26	57	(.)	0	0	0	9	14
47 Yemen Arab Rep.	..	(.)	..	79	..	1	..	20	..	1
48 Philippines	92	84	8	14	0	(.)	(.)	2	34	608
49 Zambia	..	2	..	98	..	0	..	0	..	1
50 Congo, People's Rep.	93	45	7	55	0	(.)	0	0	22	23
51 Papua New Guinea	..	..	..	..	..	..	..	..	2	..
52 Rhodesia	..	..	..	..	..	..	..	..	..	..
53 El Salvador	1	27	99	73	0	0	0	0	18	209
54 Morocco	..	78	..	17	..	1	..	4	..	202
55 Bolivia	91	93	9	7	0	0	0	0	6	20
56 Ivory Coast	40	40	60	60	0	(.)	0	0	7	124
57 Jordan	..	..	..	..	..	..	..	..	1	72
58 Colombia	45	51	55	48	0	1	0	0	17	384
59 Paraguay	85	59	15	41	0	0	0	0	4	26
60 Ecuador	52	30	48	70	0	0	0	0	3	34
61 Guatemala	..	9	..	91	..	0	..	0	15	218
62 Korea, Rep. of	57	78	43	15	0	(.)	0	7	39	6,770
63 Nicaragua	..	15	..	85	..	0	..	0	3	87
64 Dominican Rep.	..	100	..	(.)	..	0	..	0	1	120
65 Peru	45	36	55	49	(.)	15	(.)	0	6	101
66 Tunisia	42	81	53	16	0	1	5	2	12	203
67 Syrian Arab Rep.	..	6	..	23	..	38	..	33	21	108

	Destination of Manufactured Exports (percentage of total)								Total Manufactured Exports (million US dollars)	
From \ To	Developed Countries		Developing Countries		Centrally Planned Economies		Capital Surplus Oil Exporters			
	1963	1976	1963	1976	1963	1976	1963	1976	1963	1976
68 Malaysia	..	36	..	54	..	10	..	0	63	824
69 Algeria	..	57	..	29	..	14	..	0	..	48
70 Turkey	73	76	14	18	13	3	(.)	3	6	466
71 Mexico	69	75	31	23	(.)	2	(.)	0	147	1,010
72 Jamaica	83	68	17	29	0	3	0	0	13	345
73 Lebanon	..	19	..	38	..	4	..	39	8	196
74 Chile	38	63	62	26	(.)	11	(.)	0	22	142
75 China, Rep. of	..	73	..	24	..	0	..	3	129	6,922
76 Panama	5	81	95	19	0	0	0	0	(.)	18
77 Costa Rica	..	17	..	82	..	1	..	0	5	180
78 South Africa	..	..	..	..	..	..	..	..	318	1,788
79 Brazil	59	55	40	42	1	2	(.)	1	45	2,500
80 Uruguay	..	60	..	36	..	4	..	0	31	181
81 Iraq	(.)	16	21	39	(.)	0	79	45	5	5
82 Argentina	52	32	46	64	2	4	(.)	(.)	79	975
83 Portugal	53	81	46	16	(.)	2	1	1	246	1,231
84 Yugoslavia	37	31	29	19	33	47	1	3	468	3,395
85 Iran	64	40	28	23	1	21	7	16	33	160
86 Trinidad and Tobago	40	58	60	42	0	(.)	0	(.)	10	122
87 Hong Kong	71	83	28	13	0	1	1	3	617	7,882
88 Venezuela	79	51	21	49	(.)	0	(.)	0	43	103
89 Greece	60	60	34	19	2	4	4	17	27	1,252
90 Israel	72	68	26	32	2	(.)	0	0	203	1,880
91 Singapore	5	50	95	44	(.)	1	(.)	5	352	3,020
92 Spain	62	58	35	35	2	4	1	3	227	6,025
Industrialized Countries (g)	**65**	**64**	**31**	**28**	**3**	**5**	**1**	**3**		
93 Ireland	94	92	6	6	(.)	1	(.)	1	133	1,745
94 Italy	64	63	29	25	5	6	2	6	3,842	31,078
95 New Zealand	..	79	..	20	..	(.)	..	1	40	526
96 United Kingdom	57	62	39	30	3	3	1	5	9,412	38,051
97 Japan	44	44	50	43	5	7	1	6	4,812	64,600
98 Austria	66	63	17	19	17	16	(.)	2	985	7,116
99 Finland	59	62	13	9	28	28	(.)	1	634	4,736
100 Netherlands	79	79	18	16	2	3	1	2	2,693	21,737
101 France	58	60	39	32	2	6	1	2	5,744	42,198
102 Australia	59	50	40	45	1	4	(.)	1	332	2,665
103 Belgium	85	83	13	12	1	3	1	2	3,572	25,652
104 Denmark	73	78	19	16	8	4	(.)	2	752	5,068
105 Germany, Fed. Rep.	75	68	22	23	2	7	1	2	12,812	90,400
106 Canada	87	89	13	10	(.)	(.)	(.)	1	2,165	18,821
107 United States	56	57	42	37	(.)	1	2	5	12,453	80,008
108 Norway	78	74	19	21	3	4	(.)	1	529	4,185
109 Sweden	78	74	19	19	3	5	(.)	2	2,143	14,514
110 Switzerland	72	66	25	25	2	6	1	3	2,163	13,440
Capital Surplus Oil Exporters										
111 Saudi Arabia	..	11	..	82	..	(.)	..	7	0	4
112 Libya	33	..	22	..	45	..	0	..	(.)	..
113 Kuwait	..	..	..	..	..	..	..	..	..	819
Centrally Planned Economies (g)	**..**	**14**	**..**	**18**	**..**	**68**	**..**	**(.)**		
114 China, People's Rep.	..	32	..	53	..	12	..	3	..	3,124
115 Albania	..	40	..	10	..	50	..	0	..	32
116 Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..
117 Mongolia	..	..	..	..	..	..	..	..	..	..
118 Cuba	..	15	..	40	..	45	..	0	..	95
119 Romania	..	..	..	..	..	..	..	..	..	3,834
120 Bulgaria	..	6	..	13	..	81	..	0	..	3,396
121 Hungary	..	20	..	21	..	58	..	1	..	3,328
122 USSR	..	11	..	22	..	67	..	0	..	15,773
123 Poland	..	18	..	9	..	72	..	1	..	7,119
124 Czechoslovakia	..	14	..	12	..	74	..	0	..	7,902
125 German Dem. Rep.	..	11	..	10	..	79	..	0	..	9,452

Table 13: Balance of Payments and Debt Service Ratios

	Current Account Balance before Interest Payments on External Public Debt (million US dollars)		Interest Payments on External Public Debt (million US dollars)		Debt Service as Percentage of:[a] GNP		Debt Service as Percentage of:[a] Exports of Goods and Services	
	1970	1977	1970	1977	1970	1977	1970	1977
Low Income Countries (g)					1.3	1.8	12.4	7.6
1 Bhutan	..	..	..	..	..	..	..	..
2 Cambodia	..	..	..	..	..	..	..	..
3 Bangladesh	..	—265	..	25	..	1.2	..	11.7
4 Lao PDR	..	75	..	..	..	..	..	..
5 Ethiopia	—26	—70	6	12	1.2	0.9	11.3	6.4
6 Mali	—2	5	(.)	2	0.2	1.0	1.2	4.0
7 Nepal	..	—5	(.)	1	0.3	0.2	10.9	1.4
8 Somalia	—6	—31	..	2	0.5	2.6	2.1	10.7
9 Burundi	..	9	(.)	1	0.3	0.5	2.5	2.8
10 Chad	2	—26	(.)	3	1.0	2.5	3.1	9.3
11 Rwanda	7	21	(.)	1	0.2	0.2	1.3	1.0
12 Upper Volta	9	—71	(.)	2	0.6	0.9	3.9	3.8
13 Zaire	—55	—486	9	67	2.0	2.4	4.4	10.0
14 Burma	—60	—93	3	11	1.0	0.8	16.1	13.2
15 Malawi	—32	—34	3	4	1.8	1.5	7.0	5.0
16 India	—203	1,874	189	297	0.9	0.8	22.0	10.5
17 Mozambique	..	..	..	..	..	..	..	..
18 Niger	1	—6	1	3	0.6	1.2	3.8	4.0
19 Viet Nam	..	..	..	..	..	..	..	..
20 Afghanistan	..	(.)	9	12	2.5	1.2	25.6	8.2
21 Pakistan	—591	—578	76	141	1.9	2.1	21.6	13.6
22 Sierra Leone	—14	—33	2	5	2.9	2.8	9.8	9.8
23 Tanzania	—30	3	10	22	2.1	1.5	8.2	7.1
24 Benin	—1	—94	(.)	2	0.7	1.5	2.2	5.9
25 Sri Lanka	—47	158	12	22	2.1	4.4	10.3	14.6
26 Guinea	..	—15	4	24	2.9	14.3	21.3	43.5
27 Haiti	2	—51	(.)	3	1.0	1.1	7.7	7.1
28 Lesotho	..	11	(.)	(.)	0.5	0.2	8.8	3.3
29 Madagascar	2	—16	2	5	0.8	0.7	3.5	3.1
30 Central African Emp.	—11	18	(.)	1	0.9	1.3	3.2	4.5
31 Kenya	—37	88	17	39	2.6	1.8	7.8	4.6
32 Mauritania	—5	—113	(.)	9	2.0	10.0	3.2	22.6
33 Uganda	24	71	5	5	0.8	0.6	3.4	3.9
34 Sudan	—30	—443	12	25	1.2	1.5	10.1	8.7
35 Angola	..	..	..	..	..	..	..	..
36 Indonesia	—289	423	21	473	0.8	2.9	6.4	11.9
37 Togo	4	—73	1	7	0.9	3.3	2.9	11.8
Middle Income Countries (g)					1.7	2.4	9.1	9.2
38 Egypt	—116	—529	38	285	4.1	8.8	28.7	22.8
39 Cameroon	—26	—40	4	30	0.9	2.5	3.1	6.6
40 Yemen, PDR	—9	—92	..	(.)	..	..	..	..
41 Ghana	—56	—26	12	16	1.1	0.3	5.0	3.7
42 Honduras	—61	—113	3	21	0.8	2.9	2.8	6.9
43 Liberia	..	—145	6	8	5.8	3.3	7.2	5.1
44 Nigeria	—348	—853	20	44	0.7	0.3	4.1	0.8
45 Thailand	—234	—1,039	16	60	0.6	0.7	3.3	3.0
46 Senegal	—14	—73	2	21	0.8	2.7	2.7	8.4
47 Yemen Arab Rep.	..	303	..	1	..	..	..	0.2
48 Philippines	—22	—724	26	105	1.4	1.3	7.5	6.4
49 Zambia	131	—157	23	60	3.1	7.7	5.5	18.6
50 Congo, People's Rep.	..	—182	3	11	3.2	4.6	7.4	9.6
51 Papua New Guinea	..	76	1	19	0.1	1.9	..	4.3
52 Rhodesia	..	..	..	..	..	..	..	..
53 El Salvador	13	20	4	11	0.9	2.4	3.6	5.9
54 Morocco	—101	—1,743	23	129	1.8	2.4	7.7	10.9
55 Bolivia	—17	—120	6	56	2.2	4.3	10.9	20.6
56 Ivory Coast	—26	—295	12	104	2.7	5.1	6.7	12.2
57 Jordan	—15	30	2	16	0.7	1.7	3.6	3.2
58 Colombia	—249	562	44	132	1.2	1.6	11.6	8.7
59 Paraguay	—13	—52	3	10	1.7	1.3	11.1	6.3
60 Ecuador	—106	—322	7	43	1.5	1.9	9.1	7.7
61 Guatemala	—2	—50	6	10	1.4	0.3	7.4	1.3
62 Korea, Rep. of	—553	447	70	437	3.2	3.7	18.9	8.7
63 Nicaragua	—33	—122	7	54	3.0	4.7	10.4	13.8
64 Dominican Rep.	—99	—242	4	22	1.1	1.5	6.4	7.0
65 Peru	245	—670	43	248	2.4	5.4	11.6	30.3
66 Tunisia	—36	—476	17	59	4.4	3.1	17.1	8.8
67 Syrian Arab Rep.	—64	—137	6	27	2.1	1.4	10.8	6.7

	Current Account Balance before Interest Payments on External Public Debt (million US dollars)		Interest Payments on External Public Debt (million US dollars)		Debt Service as Percentage of:[a] GNP		Debt Service as Percentage of:[a] Exports of Goods and Services	
	1970	1977	1970	1977	1970	1977	1970	1977
68 Malaysia	29	675	21	124	1.7	3.6	3.6	6.5
69 Algeria	—116	—1,935	10	387	0.8	5.3	3.2	15.5
70 Turkey	—28	—3,155	42	169	1.3	0.8	16.3	11.0
71 Mexico	—851	—547	217	1,232	2.1	5.2	23.6	48.1
72 Jamaica	—145	—9	8	59	1.1	4.7	2.5	14.9
73 Lebanon	..	—23	1	2	0.2	..	0.5	0.7
74 Chile	—13	—290	78	201	2.8	5.9	18.9	32.4
75 China, Rep. of	24	1,162	23	188	1.4	2.4	4.5	4.3
76 Panama	57	—82	7	79	3.0	7.5	7.7	12.2
77 Costa Rica	—67	—189	7	36	2.9	3.1	9.7	9.0
78 South Africa	—1,215	538	..	..	..	..	..	..
79 Brazil	—725	—3,787	112	1,063	0.9	1.5	13.3	18.4
80 Uruguay	—29	—40	16	58	2.6	5.9	21.5	27.7
81 Iraq	110	1,209	9	13	0.9	0.6	2.2	1.1
82 Argentina	—43	1,594	120	308	1.9	2.0	21.4	15.0
83 Portugal	..	—1,402	28	71	1.3	0.9	4.4	5.3
84 Yugoslavia	—276	—1,432	72	171	1.7	1.3	8.2	6.7
85 Iran	—422	5,371	85	289	3.0	1.1	12.2	3.2
86 Trinidad and Tobago	—74	338	6	8	1.9	0.5	2.6	0.5
87 Hong Kong	..	317	..	..	..	..	..	..
88 Venezuela	—64	—1,828	40	222	0.8	2.3	2.8	7.5
89 Greece	—364	—1,108	41	169	1.0	2.0	7.2	9.6
90 Israel	—572	—250	41	309	3.1	6.5	12.3	16.1
91 Singapore	—566	—414	6	45	0.6	1.3	0.6	0.8
92 Spain	151	—2,055	72	403	0.5	0.7	3.6	4.5
Industrialized Countries[a]								
93 Ireland	—189	—261						
94 Italy	902	2,285						
95 New Zealand	—29	—630						
96 United Kingdom	1,755	596						
97 Japan	1,970	10,911						
98 Austria	—18	—3,003						
99 Finland	—240	—151						
100 Netherlands	—381	363						
101 France	67	—3,296						
102 Australia	—832	—2,512						
103 Belgium	715	—373						
104 Denmark	—544	—1,681						
105 Germany, Fed. Rep.	842	3,799						
106 Canada	1,078	—3,930						
107 United States	2,357	—15,276						
108 Norway	—242	4,937						
109 Sweden	—265	—2,815						
110 Switzerland	70	3,333						
Capital Surplus Oil Exporters								
111 Saudi Arabia	71	12,791	..	..	..	..	..	..
112 Libya	645	2,905	..	..	..	..	..	..
113 Kuwait	..	5,483	..	..	..	..	..	..
Centrally Planned Economies[a]								
114 China, People's Rep.	..	..						
115 Albania	..	..						
116 Korea, Dem. Rep.	..	..						
117 Mongolia	..	..						
118 Cuba	..	..						
119 Romania	106	..						
120 Bulgaria	..	..						
121 Hungary	..	..						
122 USSR	..	..						
123 Poland	..	..						
124 Czechoslovakia	..	..						
125 German Dem. Rep.	..	..						

[a] See Technical Notes.

Table 14: Flows of External Capital

	Public and Publicly Guaranteed Medium- and Long-term Loans (million US dollars)						Net Direct Private Investment (million US dollars)	
	Gross Inflow		Repayment of Principal		Net Inflow			
	1970	1977	1970	1977	1970	1977	1970	1977
Low Income Countries								
1 Bhutan	..	..	..	..	..	..	..	..
2 Cambodia	..	..	..	..	..	..	..	..
3 Bangladesh	..	327	..	41	..	286	..	..
4 Lao PDR	..	..	..	..	..	..	..	..
5 Ethiopia	27	51	15	17	12	34	4	6
6 Mali	21	55	(.)	4	21	51	..	—5
7 Nepal	1	29	2	1	—1	28	..	..
8 Somalia	4	124	1	9	3	115	5	8
9 Burundi	1	15	(.)	2	1	13	..	..
10 Chad	6	38	2	11	4	27	1	21
11 Rwanda	(.)	28	(.)	1	(.)	27	(.)	6
12 Upper Volta	2	50	2	4	(.)	46	(.)	..
13 Zaire	31	464	28	53	3	411	42	..
14 Burma	16	159	18	22	—2	137	..	..
15 Malawi	38	57	3	8	35	49	9	6
16 India	890	1,151	307	523	583	628	6	—8
17 Mozambique	..	..	..	..	..	..	..	..
18 Niger	12	37	2	6	10	31	1	..
19 Viet Nam	..	..	..	..	..	..	..	..
20 Afghanistan	35	151	14	26	21	125	..	..
21 Pakistan	482	755	114	175	368	580	23	15
22 Sierra Leone	8	32	10	12	—2	20	8	5
23 Tanzania	50	170	17	27	33	143	..	..
24 Benin	2	37	1	7	1	30	7	..
25 Sri Lanka	61	150	28	102	33	48	(.)	—1
26 Guinea	97	55	10	130	87	—75	10	..
27 Haiti	4	59	4	10	(.)	49	3	8
28 Lesotho	(.)	7	(.)	(.)	(.)	7	..	..
29 Madagascar	11	23	5	8	6	15	20	—2
30 Central African Emp.	2	23	2	5	(.)	18	1	—3
31 Kenya	30	170	24	34	6	136	14	54
32 Mauritania	4	86	3	32	1	54	—1	4
33 Uganda	26	9	6	17	20	—8	4	1
34 Sudan	46	132	20	47	26	85	..	20
35 Angola	..	..	..	..	..	..	..	..
36 Indonesia	393	1,989	55	826	338	1,163	83	235
37 Togo	5	115	2	19	3	96	1	..
Middle Income Countries								
38 Egypt	302	3,028	247	750	55	2,278	..	98
39 Cameroon	28	234	4	36	24	198	16	—3
40 Yemen, PDR	1	59	..	0	1	59	..	..
41 Ghana	40	108	12	21	28	87	68	17
42 Honduras	29	120	3	20	26	100	8	9
43 Liberia	7	77	11	15	—4	62	..	..
44 Nigeria	62	89	36	62	26	27	205	245
45 Thailand	55	253	23	67	32	186	43	105
46 Senegal	18	114	5	38	13	76	5	..
47 Yemen Arab Rep.	2	36	1	2	1	34	2	..
48 Philippines	132	903	73	163	59	740	—29	213
49 Zambia	351	222	32	120	319	102	—297	18
50 Congo, People's Rep.	30	86	6	24	24	62	..	2
51 Papua New Guinea	50	41	0	9	50	32	..	46
52 Rhodesia	..	..	..	..	..	..	..	..
53 El Salvador	8	58	6	52	2	6	4	22
54 Morocco	162	1,273	36	105	126	1,168	20	54
55 Bolivia	54	444	17	92	37	352	—76	9
56 Ivory Coast	77	920	27	187	50	733	31	53
57 Jordan	14	211	3	22	11	189	..	11
58 Colombia	235	367	75	173	160	194	39	42
59 Paraguay	15	107	7	16	8	91	4	17
60 Ecuador	42	596	16	74	26	522	89	34
61 Guatemala	37	49	20	8	17	41	29	95
62 Korea, Rep. of	441	2,218	198	717	243	1,501	66	73
63 Nicaragua	44	267	16	47	28	220	15	10
64 Dominican Rep.	44	143	12	43	32	100	72	46
65 Peru	148	1,283	100	404	48	879	—70	55
66 Tunisia	82	729	44	93	38	636	16	93
67 Syrian Arab Rep.	60	551	30	77	30	474	..	..

	Public and Publicly Guaranteed Medium- and Long-term Loans (million US dollars)						Net Direct Private Investment (million US dollars)	
	Gross Inflow		Repayment of Principal		Net Inflow			
	1970	1977	1970	1977	1970	1977	1970	1977
68 Malaysia	44	645	45	318	—1	327	94	481
69 Algeria	292	2,721	33	640	259	2,081	45	173
70 Turkey	328	761	128	195	200	566	58	184
71 Mexico	782	6,146	475	2,560	307	3,586	323	555
72 Jamaica	15	96	6	88	9	8	161	—7
73 Lebanon	12	6	2	6	10	(.)	17	..
74 Chile	397	570	163	651	234	—81	—79	—8
75 China, Rep. of	154	612	54	282	100	330	61	42
76 Panama	67	345	24	88	43	257	33	9
77 Costa Rica	30	236	21	50	9	186	26	63
78 South Africa	..	..	..	..	..	..	318	—190
79 Brazil	975	4,623	302	1,442	673	3,181	407	1,719
80 Uruguay	37	199	47	187	—10	12	..	..
81 Iraq	63	488	18	103	45	385	24	..
82 Argentina	489	1,171	341	696	148	475	11	54
83 Portugal	20	485	62	85	—42	400	..	57
84 Yugoslavia	180	403	168	433	12	—30	..	..
85 Iran	940	2,320	235	601	705	1,719	25	802
86 Trinidad and Tobago	8	159	10	7	—2	152	83	140
87 Hong Kong	(.)	206	..	..	(.)	206	..	..
88 Venezuela	224	2,064	42	607	182	1,457	—23	270
89 Greece	164	543	61	364	103	179	50	24
90 Israel	663	217	131	595	532	—378	40	76
91 Singapore	51	257	6	36	45	221	93	343
92 Spain	268	2,391	123	440	145	1,951	179	161
Industrialized Countries[a]								
93 Ireland							32	173
94 Italy							496	585
95 New Zealand							22	163
96 United Kingdom							—463	—989
97 Japan							—261	—1,622
98 Austria							85	41
99 Finland							—34	—24
100 Netherlands							—14	—1,292
101 France							248	570
102 Australia							787	905
103 Belgium							162	727
104 Denmark							75	93
105 Germany, Fed. Rep.							—278	—1,327
106 Canada							566	—222
107 United States							—6,125	—8,878
108 Norway							32	503
109 Sweden							—105	—595
110 Switzerland							..	..
Capital Surplus Oil Exporters								
111 Saudi Arabia	..	..	..	..	..	..	20	822
112 Libya	..	..	..	..	..	..	139	—425
113 Kuwait	..	..	..	..	..	..	..	153
Centrally Planned Economies[a]								
114 China, People's Rep.							..	..
115 Albania							..	..
116 Korea, Dem. Rep.							..	..
117 Mongolia							..	..
118 Cuba							..	..
119 Romania							..	..
120 Bulgaria							..	..
121 Hungary							..	..
122 USSR							..	..
123 Poland							..	..
124 Czechoslovakia							..	..
125 German Dem. Rep.							..	..

[a] See Technical Notes.

Table 15: External Public Debt and International Reserves

	External Public Debt Outstanding and Disbursed				Gross International Reserves		
	(million US dollars)		As Percentage of GNP		(million US dollars)		In months of import coverage
	1970	1977	1970	1977	1970	1977	1977
Low Income Countries (g)			**20.3**	**25.0**			**3.7**
1 Bhutan	..	..	..	..	..	..	..
2 Cambodia	..	..	..	..	..	..	..
3 Bangladesh	..	2,291	..	41.8	..	235	2.2
4 Lao PDR	..	75	..	..	6	6	1.0
5 Ethiopia	169	471	9.5	14.4	71	225	4.6
6 Mali	238	449	88.1	67.5	1	6	0.3
7 Nepal	3	71	0.3	5.4	94	148	8.1
8 Somalia	77	401	41.1	92.6	21	121	5.9
9 Burundi	7	37	3.0	7.0	15	95	13.1
10 Chad	32	117	11.8	22.0	2	19	0.9
11 Rwanda	2	78	0.9	13.1	8	83	5.4
12 Upper Volta	21	135	6.3	18.6	36	57	2.2
13 Zaire	311	2,666	17.1	52.8	186	145	0.9
14 Burma	102	500	4.7	12.5	94	113	3.8
15 Malawi	121	292	38.7	35.9	29	88	3.4
16 India	7,935	14,531	14.8	14.7	1,006	5,184	9.0
17 Mozambique	..	..	..	..	..	..	..
18 Niger	32	122	8.7	15.8	19	101	3.5
19 Viet Nam	..	..	..	..	..	..	..
20 Afghanistan	529	1,059	58.0	34.9	47	316	7.8
21 Pakistan	3,057	6,772	30.5	44.9	190	518	2.0
22 Sierra Leone	59	190	14.3	32.0	39	33	1.7
23 Tanzania	249	1,005	19.4	32.0	65	282	4.2
24 Benin	41	134	16.0	20.5	16	21	0.8
25 Sri Lanka	317	787	17.1	27.8	43	292	4.5
26 Guinea	320	718	65.2	66.5	..	..	..
27 Haiti	40	126	10.3	10.7	4	34	1.4
28 Lesotho	8	23	9.2	7.5	..	..	..
29 Madagascar	94	203	10.9	11.1	37	69	1.7
30 Central African Emp.	19	115	9.1	25.0	1	26	1.7
31 Kenya	313	821	20.3	19.7	220	523	3.9
32 Mauritania	27	457	16.8	111.7	3	50	1.5
33 Uganda	128	215	9.8	5.9	57	..	..
34 Sudan	302	1,732	11.3	35.4	22	23	0.3
35 Angola	..	..	..	..	..	..	..
36 Indonesia	2,405	11,409	26.7	25.6	160	2,516	2.7
37 Togo	40	285	15.3	38.1	35	46	1.6
Middle Income Countries (g)			**14.7**	**18.6**			**3.8**
38 Egypt	1,639	8,099	23.7	69.2	159	534	1.1
39 Cameroon	131	749	13.0	28.6	81	43	0.5
40 Yemen, PDR	1	291	0.3	50.3	59	101	2.3
41 Ghana	489	785	22.6	5.5	58	162	1.7
42 Honduras	90	436	12.9	30.7	20	180	3.0
43 Liberia	156	266	52.5	37.6	..	27	0.5
44 Nigeria	478	891	6.4	2.2	222	4,259	3.7
45 Thailand	322	1,051	4.9	5.8	906	1,915	4.3
46 Senegal	102	441	12.1	20.5	22	34	0.5
47 Yemen Arab Rep.	..	147	..	14.6	..	1,240	16.8
48 Philippines	630	2,985	9.2	14.4	251	1,524	3.5
49 Zambia	596	1,392	34.2	59.5	514	74	0.8
50 Congo, People's Rep.	127	480	48.6	64.4	9	14	0.3
51 Papua New Guinea	61	338	10.4	23.2	..	431	7.1
52 Rhodesia	..	..	..	..	..	..	..
53 El Salvador	88	266	8.6	10.2	63	233	2.5
54 Morocco	703	3,469	21.1	36.0	140	532	1.5
55 Bolivia	477	1,361	46.4	39.2	46	237	3.1
56 Ivory Coast	256	1,973	18.2	34.6	119	186	0.9
57 Jordan	119	645	19.0	29.4	256	678	4.9
58 Colombia	1,249	2,622	18.1	13.5	206	1,821	7.0
59 Paraguay	98	317	16.7	15.4	18	268	6.7
60 Ecuador	213	1,157	13.3	19.2	83	671	4.0
61 Guatemala	106	253	5.7	4.6	78	690	5.3
62 Korea, Rep. of	1,797	8,472	21.5	26.9	610	4,307	3.9
63 Nicaragua	146	864	19.3	40.3	49	149	1.9
64 Dominican Rep.	215	607	14.7	14.6	32	185	1.8
65 Peru	848	4,659	14.0	38.4	336	421	1.6
66 Tunisia	524	1,943	37.3	39.9	60	358	1.9
67 Syrian Arab Rep.	232	1,528	13.7	20.7	55	546	2.3

	External Public Debt Outstanding and Disbursed				Gross International Reserves		
	(million US dollars)		As Percentage of GNP		(million US dollars)		In months of import coverage
	1970	1977	1970	1977	1970	1977	1977
68 Malaysia	390	2,053	10.0	16.7	664	2,858	5.6
69 Algeria	937	8,165	18.5	42.5	339	1,917	2.6
70 Turkey	1,854	4,323	14.4	9.5	431	774	1.3
71 Mexico	3,228	19,208	9.7	26.5	744	1,723	2.1
72 Jamaica	154	896	11.5	28.7	139	48	0.5
73 Lebanon	64	39	4.2	..	386	1,961	16.5
74 Chile	2,066	3,583	24.0	24.6	389	484	1.8
75 China, Rep. of	601	2,613	10.6	13.4	622	1,447	1.8
76 Panama	194	1,349	19.0	60.9	16	71	0.6
77 Costa Rica	134	735	13.8	26.5	16	194	1.9
78 South Africa	..	..	..	..	1,012	829	0.8
79 Brazil	3,405	19,221	7.6	11.8	1,187	7,256	4.7
80 Uruguay	267	707	11.0	17.1	175	459	5.6
81 Iraq	274	761	8.8	4.0	462	6,996	8.9
82 Argentina	1,872	4,900	7.5	10.0	673	3,331	7.2
83 Portugal	473	1,455	7.0	8.3	1,504	1,391	3.0
84 Yugoslavia	1,199	2,824	8.5	6.3	140	2,108	2.3
85 Iran	2,193	6,198	20.8	7.5	208	12,266	6.4
86 Trinidad and Tobago	101	252	12.5	8.6	43	1,483	7.0
87 Hong Kong	..	..	..	..	..	..	..
88 Venezuela	728	4,463	6.7	12.2	1,021	8,214	7.7
89 Greece	905	2,635	8.9	9.9	310	1,020	1.8
90 Israel	2,274	6,568	41.4	46.9	449	1,571	2.3
91 Singapore	145	994	7.6	15.5	1,012	3,858	4.1
92 Spain	1,209	7,003	3.3	6.1	1,817	6,590	3.8
Industrialized Countries[a] (g)							2.3
93 Ireland					697	2,372	6.0
94 Italy					5,352	11,629	2.5
95 New Zealand					258	445	1.2
96 United Kingdom					2,827	21,057	3.1
97 Japan					4,840	23,261	3.3
98 Austria					1,758	4,244	2.7
99 Finland					454	570	0.7
100 Netherlands					3,241	8,065	1.9
101 France					4,960	10,194	1.4
102 Australia					1,693	2,384	1.6
103 Belgium					2,847	5,761	1.6
104 Denmark					484	1,671	1.2
105 Germany, Fed. Rep.					13,610	39,737	3.7
106 Canada					4,679	4,608	1.0
107 United States					14,487	19,392	1.2
108 Norway					811	2,200	1.4
109 Sweden					761	3,668	1.8
110 Switzerland					5,132	13,830	7.7
Capital Surplus Oil Exporters							
111 Saudi Arabia	..	..	..	..	662	30,034	12.9
112 Libya	..	..	..	..	1,590	4,891	7.6
113 Kuwait	..	..	..	..	203	2,990	6.4
Centrally Planned Economies[a] (g)							..
114 China, People's Rep.					..	..	..
115 Albania					..	..	..
116 Korea, Dem. Rep.					..	..	..
117 Mongolia					..	..	..
118 Cuba					..	..	..
119 Romania					..	..	..
120 Bulgaria					..	..	..
121 Hungary					..	..	..
122 USSR					..	..	..
123 Poland					..	..	..
124 Czechoslovakia					..	..	..
125 German Dem. Rep.					..	..	..

[a] See Technical Notes.

Table 16: Net Flows of Official Development Assistance from Members of the OECD and OPEC

	1960	1965	1970	1975	1976	1977	Estimated 1978	1979	1980	1981
OECD	**In Millions of US Dollars**									
94 Italy	77	60	147	182	226	186	175	255	280	285
95 New Zealand	..	..	14	66	53	53	55	61	67	76
96 United Kingdom	407	472	447	863	835	914	1,226	1,443	1,610	1,814
97 Japan	105	244	458	1,148	1,105	1,424	2,215	2,698	3,159	3,704
98 Austria	..	10	11	64	48	118	156	180	206	235
99 Finland	..	2	7	48	51	49	56	70	82	96
100 Netherlands	35	70	196	604	720	900	1,070	1,332	1,557	1,780
101 France	823	752	971	2,093	2,146	2,267	2,689	3,279	3,670	4,143
102 Australia	59	119	202	507	385	427	491	543	614	694
103 Belgium	101	102	120	378	340	371	513	592	675	795
104 Denmark	5	13	59	205	214	258	386	408	470	546
105 Germany, Fed. Rep.	223	456	599	1,689	1,384	1,386	1,977	2,328	2,631	2,928
106 Canada	75	96	346	880	887	992	1,053	1,084	1,212	1,369
107 United States	2,702	3,418	3,050	4,007	4,334	4,159	4,857	5,162	5,677	6,209
108 Norway	5	11	37	184	218	295	355	438	497	567
109 Sweden	7	38	117	566	608	779	772	947	1,074	1,192
110 Switzerland	4	12	30	104	112	119	176	192	215	248
TOTAL	4,628	5,875	6,811	13,588	13,666	14,697	18,222	21,012	23,696	26,681
OECD	**In National Currencies**									
94 Italy (billion lire)	48	38	92	119	188	148	149	215		
95 New Zealand (million dollars)	..	..	13	55	53	52	53	58		
96 United Kingdom (million pounds)	145	168	186	390	462	524	638	728		
97 Japan (billion yen)	38	88	165	341	328	383	466	530		
98 Austria (million schillings)	..	260	286	1,115	865	1,947	2,262	2,480		
99 Finland (million markkaa)	..	6	29	177	195	196	232	281		
100 Netherlands (million guilders)	133	253	710	1,528	1,904	2,206	2,315	2,719		
101 France (million francs)	4,063	3,713	5,393	8,975	10,255	11,762	12,135	14,166		
102 Australia (million dollars)	53	106	180	387	314	385	429	476		
103 Belgium (million francs)	5,050	5,100	6,000	13,903	13,129	13,234	16,103	17,635		
104 Denmark (million kroner)	35	90	443	1,178	1,296	1,529	2,131	2,143		
105 Germany, Fed. Rep. (million deutsche mark)	937	1,824	2,192	4,157	3,484	3,218	3,971	4,383		
106 Canada (million dollars)	73	104	362	895	874	1,057	1,201	1,279		
107 United States (million dollars)	2,702	3,418	3,050	4,007	4,334	4,159	4,857	5,162		
108 Norway (million kroner)	36	78	264	962	1,190	1,570	1,861	2,232		
109 Sweden (million kronor)	36	196	605	2,350	2,647	3,504	3,487	4,146		
110 Switzerland (million francs)	17	52	131	260	281	284	315	322		
OECD	**Summary**									
ODA (billion US dollars, nominal prices)	4.6	5.9	6.8	13.6	13.7	14.7	18.2	21.0	23.7	26.7
ODA as Percentage of GNP	.51	.45	.34	.35	.33	.31	.32	.33	.34	.34
ODA (billion US dollars, constant 1977 prices)	12.2	13.1	12.7	15.2	14.8	14.7	15.8	16.6	17.5	18.4
GNP (trillion US dollars, nominal prices)	.9	1.3	2.0	3.8	4.2	4.7	5.6	6.4	7.1	7.9
ODA Deflator[a]	.38	.45	.54	.89	.92	1.00	1.16	1.27	1.36	1.45

[a] See Technical Notes.

	1960	1965	1970	1975	1976	1977	Estimated 1978	1979	1980	1981
OECD				**As Percentage of Donor GNP**						
94 Italy	.22	.10	.16	.11	.13	.10	.08	.09	.09	.08
95 New Zealand	..	..	.23	.52	.41	.39	.34	.35	.34	.35
96 United Kingdom	.56	.47	.36	.37	.38	.37	.40	.41	.42	.43
97 Japan	.24	.27	.23	.23	.20	.21	.23	.24	.25	.26
98 Austria	..	.11	.07	.17	.12	.24	.28	.28	.29	.29
99 Finland	..	.02	.07	.18	.18	.17	.18	.19	.21	.22
100 Netherlands	.31	.36	.61	.75	.82	.85	.82	.91	.96	.99
101 France	1.38	.76	.66	.62	.62	.60	.57	.60	.60	.61
102 Australia	.38	.53	.59	.60	.42	.45	.45	.45	.47	.47
103 Belgium	.88	.60	.46	.59	.51	.46	.52	.54	.56	.59
104 Denmark	.09	.13	.38	.58	.56	.60	.75	.70	.73	.76
105 Germany, Fed. Rep.	.31	.40	.32	.40	.31	.27	.31	.33	.33	.33
106 Canada	.19	.19	.42	.55	.46	.50	.52	.49	.50	.50
107 United States	.53	.49	.31	.26	.25	.22	.23	.22	.22	.22
108 Norway	.11	.16	.32	.66	.70	.82	.90	.98	.99	1.00
109 Sweden	.05	.19	.38	.82	.82	.99	.88	.96	.99	.99
110 Switzerland	.04	.09	.15	.19	.19	.19	.20	.21	.21	.22
OPEC				**In Millions of US Dollars**						
44 Nigeria				14	83	64				
69 Algeria				41	54	47				
81 Iraq				218	232	53				
85 Iran				593	753	202				
88 Venezuela				31	96	72				
111 Saudi Arabia				1,997	2,407	2,373				
112 Libya				261	94	109				
113 Kuwait				975	614	1,442				
Qatar				339	195	118				
United Arab Emirates				1,046	1,060	1,262				
TOTAL				5,515	5,588	5,742				
OPEC				**As Percentage of Donor GNP**						
44 Nigeria				.05	.27	.19				
69 Algeria				.30	.33	.24				
81 Iraq				1.66	1.46	.28				
85 Iran				1.10	1.13	.24				
88 Venezuela				.12	.31	.20				
111 Saudi Arabia				6.01	5.84	4.82				
112 Libya				2.13	.61	.62				
113 Kuwait				6.52	4.34	10.18				
Qatar				15.62	7.95	4.71				
United Arab Emirates				11.79	10.94	10.97				

Table 17: Historical and Projected Population Growth, and Hypothetical Stationary Population[a]

	Mid-1977 Population (millions)	Average Annual Growth of Population (percent) 1960-70	1970-77	Projected Population in Year 2000 (millions)	Hypothetical Size of Stationary Population (millions)	Assumed Year when Net Reproduction Rate of 1 is Reached	Year when Stationary Population is Reached
Low Income Countries (g)		**2.4**	**2.3**				
1 Bhutan	1	2.0	2.2	2	4	2035	2175
2 Cambodia	8	2.8	2.5	16	37	2035	2160
3 Bangladesh	81	2.9	2.5	145	334	2035	2165
4 Lao PDR	3	2.2	1.1	5	11	2035	2175
5 Ethiopia	30	2.4	2.6	52	136	2045	2175
6 Mali	6	2.4	2.5	11	28	2040	2170
7 Nepal	13	2.0	2.2	23	51	2035	2160
8 Somalia	4	2.4	2.3	7	17	2045	2170
9 Burundi	4	2.4	2.0	7	20	2045	2160
10 Chad	4	1.9	2.2	7	17	2045	2170
11 Rwanda	4	2.6	2.9	8	25	2045	2160
12 Upper Volta	5	1.6	1.6	10	24	2040	2170
13 Zaire	26	2.0	2.7	46	122	2045	2160
14 Burma	32	2.2	2.2	51	92	2020	2145
15 Malawi	6	2.8	3.1	11	31	2045	2165
16 India	632	2.3	2.1	973	1,643	2020	2150
17 Mozambique	10	2.2	2.5	17	44	2040	2135
18 Niger	5	3.3	2.8	9	24	2040	2165
19 Viet Nam	51	3.1	3.1	87	149	2015	2105
20 Afghanistan	14	2.2	2.2	25	66	2045	2170
21 Pakistan	75	2.8	3.1	139	335	2035	2155
22 Sierra Leone	3	2.2	2.5	6	14	2035	2160
23 Tanzania	16	2.7	3.0	32	94	2045	2145
24 Benin	3	2.6	2.9	6	15	2035	2160
25 Sri Lanka	14	2.4	1.7	21	30	2010	2070
26 Guinea	5	2.9	3.0	9	23	2045	2170
27 Haiti	5	1.5	1.7	8	16	2030	2130
28 Lesotho	1	2.2	2.4	2	5	2045	2155
29 Madagascar	8	2.2	2.5	15	39	2045	2160
30 Central African Emp.	2	2.2	2.2	3	8	2045	2165
31 Kenya	15	3.4	3.8	31	94	2045	2135
32 Mauritania	2	2.5	2.7	3	7	2040	2150
33 Uganda	12	3.7	3.0	23	58	2035	2130
34 Sudan	17	2.3	2.6	31	89	2045	2135
35 Angola	7	1.5	2.4	11	29	2040	2155
36 Indonesia	134	2.2	1.8	207	357	2020	2145
37 Togo	2	2.7	2.7	4	12	2040	2135
Middle Income Countries (g)		**2,5**	**2.6**				
38 Egypt	38	2.3	2.2	58	90	2010	2105
39 Cameroon	8	1.8	2.2	13	32	2040	2135
40 Yemen, PDR	2	1.9	1.9	3	7	2030	2125
41 Ghana	11	2.4	3.0	21	57	2040	2130
42 Honduras	3	3.1	3.3	7	15	2030	2090
43 Liberia	2	3.2	3.4	3	9	2040	2130
44 Nigeria	79	2.5	2.6	157	435	2040	2135
45 Thailand	44	3.1	2.9	69	105	2005	2095
46 Senegal	5	2.4	2.6	9	24	2040	2155
47 Yemen Arab Rep.	5	1.8	1.9	9	20	2030	2155
48 Philippines	44	3.0	2.7	76	128	2015	2075
49 Zambia	5	2.8	3.1	10	29	2040	2130
50 Congo, People's Rep.	1	2.1	2.5	3	7	2045	2115
51 Papua New Guinea	3	2.3	2.4	5	9	2025	2120
52 Rhodesia	7	3.9	3.4	13	37	2040	2105
53 El Salvador	4	2.9	2.9	8	14	2015	2075
54 Morocco	18	2.7	2.8	34	71	2025	2090
55 Bolivia	5	2.6	2.9	9	19	2030	2100
56 Ivory Coast	7	3.8	5.9	14	36	2040	2130
57 Jordan	3	3.1	3.3	6	12	2025	2090
58 Colombia	25	3.0	2.1	38	55	2005	2065
59 Paraguay	3	2.6	2.9	5	9	2015	2070
60 Ecuador	7	3.0	3.0	14	26	2020	2080
61 Guatemala	6	2.8	2.9	12	23	2025	2085
62 Korea, Rep. of	36	2.4	2.0	49	64	2005	2065
63 Nicaragua	2	3.0	3.3	5	9	2020	2110
64 Dominican Rep.	5	2.9	2.9	9	15	2015	2075
65 Peru	16	2.9	2.8	29	55	2025	2085
66 Tunisia	6	2.0	2.0	9	14	2010	2070
67 Syrian Arab Rep.	8	3.2	3.3	15	33	2025	2085

	Mid-1977 Population (millions)	Average Annual Growth of Population (percent) 1960-70	1970-77	Projected Population in Year 2000 (millions)	Hypothetical Size of Stationary Population (millions)	Assumed Year when Net Reproduction Rate of 1 is Reached	Year when Stationary Population is Reached
68 Malaysia	13	2.9	2.7	20	29	2005	2065
69 Algeria	17	2.1	3.5	34	94	2040	2100
70 Turkey	42	2.5	2.5	64	98	2010	2070
71 Mexico	63	3.3	3.3	116	204	2015	2075
72 Jamaica	2	1.4	1.7	3	5	2005	2065
73 Lebanon	3	2.9	2.5	5	8	2010	2070
74 Chile	11	2.1	1.7	14	19	2005	2070
75 China, Rep. of	17	2.7	2.0	23	30	2005	2065
76 Panama	2	2.9	2.7	3	4	2005	2065
77 Costa Rica	2	3.4	2.5	3	5	2005	2065
78 South Africa	27	2.6	2.7	49	107	2030	2090
79 Brazil	116	2.9	2.9	200	341	2015	2075
80 Uruguay	3	1.1	0.3	3	4	2005	2065
81 Iraq	12	3.2	3.4	23	49	2025	2085
82 Argentina	26	1.4	1.3	33	41	2005	2065
83 Portugal	10	0.0	0.8	11	14	2005	2095
84 Yugoslavia	22	1.0	0.9	26	29	2005	2100
85 Iran	35	2.8	3.0	58	101	2015	2105
86 Trinidad and Tobago	1	2.0	1.2	1	2	2005	2065
87 Hong Kong	5	2.5	2.0	6	7	2005	2060
88 Venezuela	14	3.4	3.4	24	40	2010	2070
89 Greece	9	0.5	0.7	10	11	2005	2065
90 Israel	4	3.5	2.8	5	8	2020	2080
91 Singapore	2	2.4	1.5	3	4	2005	2035
92 Spain	36	1.1	1.0	43	50	2005	2065
Industrialized Countries (g)		**1.0**	**0.8**				
93 Ireland	3	0.4	1.2	4	5	2005	2060
94 Italy	56	0.7	0.7	61	63	2005	2035
95 New Zealand	3	1.7	1.6	4	5	2005	2070
96 United Kingdom	56	0.5	0.1	58	60	2005	2030
97 Japan	113	1.0	1.2	130	133	2005	2015
98 Austria	8	0.5	0.2	8	8	2005	2025
99 Finland	5	0.4	0.4	5	5	2005	2020
100 Netherlands	14	1.3	0.9	15	16	2005	2025
101 France	53	1.1	0.6	58	61	2005	2030
102 Australia	14	1.9	1.7	16	19	2005	2055
103 Belgium	10	0.5	0.2	10	10	2005	2025
104 Denmark	5	0.7	0.5	5	5	2005	2020
105 Germany, Fed. Rep.	61	0.9	0.2	61	61	2005	2005
106 Canada	23	1.8	1.2	28	30	2005	2030
107 United States	220	1.3	0.8	250	271	2005	2030
108 Norway	4	0.8	0.6	4	4	2005	2030
109 Sweden	8	0.7	0.4	8	8	2005	2005
110 Switzerland	6	1.6	0.1	7	7	2005	2005
Capital Surplus Oil Exporters							
111 Saudi Arabia	8	2.6	3.0	14	31	2030	2120
112 Libya	3	4.0	4.1	5	12	2030	2090
113 Kuwait	1	10.3	6.1	2	5	2030	2085
Centrally Planned Economies (g)		**1.7**	**1.2**				
114 China, People's Rep.	886	1.9	1.3	1,186	1,530	2005	2075
115 Albania	3	2.9	2.5	4	6	2005	2060
116 Korea, Dem. Rep.	17	2.8	2.6	27	43	2010	2070
117 Mongolia	2	3.0	3.0	2	4	2005	2090
118 Cuba	10	2.0	1.6	13	16	2005	2050
119 Romania	22	1.0	0.9	26	30	2005	2095
120 Bulgaria	9	0.8	0.6	10	10	2005	2080
121 Hungary	11	0.3	0.4	11	12	2005	2060
122 USSR	259	1.3	0.9	310	360	2005	2095
123 Poland	35	0.9	1.0	41	47	2005	2060
124 Czechoslovakia	15	0.5	0.7	17	19	2005	2090
125 German Dem. Rep.	17	—0.1	—0.2	17	18	2005	2025
TOTAL[b]	4,122			5,972	9,777		

[a] For the assumptions used in the projections, see Technical Notes.

[b] Excludes countries with present populations of under one million.

Table 18: Demographic and Fertility-Related Indicators

	Crude Birth Rate Per Thousand Population		Crude Death Rate Per Thousand Population		Percentage Change in:		Total Fertility Rate	Percentage of Women in Reproductive Age Group (Aged 15-44)	Percentage of Married Women Using Contraceptives[a]	
	1960	1977	1960	1977	Crude Birth Rate 1960-1977	Crude Death Rate 1960-1977	1977	1977	1970	1977
Low Income Countries (w)	**46**	**40**	**23**	**15**	**—11.9**	**—31.8**				
1 Bhutan	46	44	28	23	—4.3	—17.9	6.2	42	..	..
2 Cambodia	49	46	22	17	—6.1	—22.7	6.6	41	..	..
3 Bangladesh	49	46	23	18	—6.1	—21.7	6.5	41	..	9
4 Lao PDR	44	45	23	22	2.3	—4.4	6.4	41	..	..
5 Ethiopia	51	49	28	25	—3.9	—10.7	6.7	42	..	..
6 Mali	50	49	27	22	—2.0	—18.5	6.7	42	..	..
7 Nepal	46	45	29	19	—2.2	—34.5	6.5	42	1	*17*
8 Somalia	48	48	26	20	0.0	—23.1	6.1	44	..	..
9 Burundi	48	47	27	20	—2.1	—25.9	6.3	42	..	..
10 Chad	46	45	29	21	—2.2	—27.6	5.9	43	..	..
11 Rwanda	51	51	27	19	0.0	—29.6	6.9	41	..	..
12 Upper Volta	49	48	27	22	—2.0	—18.5	6.5	42	..	..
13 Zaire	48	46	24	19	—4.2	—20.8	6.1	42	..	*(.)*
14 Burma	43	39	22	15	—9.3	—31.8	5.5	42	..	..
15 Malawi	53	52	27	20	—1.9	—25.9	7.0	42	..	..
16 India	43	35	21	14	—18.6	—33.3	5.0	43	12	24
17 Mozambique	46	46	26	19	0.0	—26.9	6.1	42	..	..
18 Niger	52	52	27	22	0.0	—18.5	7.1	42	..	..
19 Viet Nam	42	37	23	9	—11.9	—60.9	5.5	41	..	..
20 Afghanistan	48	48	30	22	0.0	—26.7	6.9	41	..	*1*
21 Pakistan	49	45	23	15	—8.2	—34.8	6.7	40	*4*	*6*
22 Sierra Leone	47	46	27	19	—2.1	—29.6	6.1	42	..	..
23 Tanzania	47	48	22	16	2.1	—27.3	6.5	41	..	..
24 Benin	51	49	27	19	—3.9	—29.6	6.7	41	..	..
25 Sri Lanka	36	26	9	6	—27.8	—33.3	3.6	46	8	44
26 Guinea	48	46	28	21	—4.2	—25.0	6.2	42	..	..
27 Haiti	45	43	23	17	—4.4	—26.1	5.9	45	..	*5*
28 Lesotho	40	41	23	17	2.5	—26.1	5.4	43	..	..
29 Madagascar	47	45	27	19	—4.3	—29.6	6.1	42	..	..
30 Central African Emp.	43	44	26	19	2.3	—26.9	5.7	43	..	..
31 Kenya	51	51	19	14	0.0	—26.3	7.8	41	*2*	*4*
32 Mauritania	51	50	27	22	—2.0	—18.5	6.9	41	..	..
33 Uganda	45	45	21	14	0.0	—33.3	6.1	42	..	..
34 Sudan	45	45	25	19	0.0	—24.0	6.6	41	..	..
35 Angola	50	48	31	23	—4.0	—25.8	6.4	42	..	..
36 Indonesia	47	37	23	16	—21.3	—30.4	4.9	43	(.)	19
37 Togo	51	50	27	19	—2.0	—29.6	6.7	41	..	..
Middle Income Countries (w)	**42**	**35**	**15**	**11**	**—15.3**	**—28.7**				
38 Egypt	44	36	19	13	—18.2	—31.6	4.8	44	*9*	*21*
39 Cameroon	43	43	27	19	0.0	—29.6	5.7	42	..	..
40 Yemen, PDR	50	49	29	19	—2.0	—34.5	7.1	41	..	..
41 Ghana	49	48	24	17	—2.0	—29.2	6.7	41	1	2
42 Honduras	51	47	19	12	—7.8	—36.8	6.9	40	..	*9*
43 Liberia	51	51	25	18	0.0	—28.0	6.9	42	..	..
44 Nigeria	52	50	25	18	—3.8	—28.0	6.9	42	..	..
45 Thailand	46	32	17	8	—30.4	—52.9	4.5	42	..	32
46 Senegal	48	49	27	22	2.1	—18.5	6.5	42	..	..
47 Yemen Arab Rep.	50	49	29	19	—2.0	—34.5	7.2	41	..	..
48 Philippines	45	35	15	9	—22.2	—40.0	5.0	41	*8*	22
49 Zambia	51	50	24	17	—2.0	—29.2	6.9	41	..	..
50 Congo, People's Rep.	46	46	27	19	0.0	—29.6	6.0	42	..	..
51 Papua New Guinea	44	42	23	17	—4.5	—26.1	6.0	42	..	..
52 Rhodesia	47	48	20	14	2.1	—30.0	6.6	42	..	*5*
53 El Salvador	48	39	17	9	—18.8	—47.1	5.5	41	..	*10*
54 Morocco	50	45	21	13	—10.0	—38.1	6.5	42	*1*	5
55 Bolivia	48	44	23	15	—8.3	—34.8	6.5	42	..	..
56 Ivory Coast	50	50	27	19	0.0	—29.6	6.7	43	..	..
57 Jordan	47	47	20	13	0.0	—35.0	7.0	40	..	..
58 Colombia	46	30	14	8	—34.8	—42.9	3.7	47	..	49
59 Paraguay	43	39	13	9	—9.3	—30.8	5.8	41	..	16
60 Ecuador	47	41	17	10	—12.8	—41.2	6.3	41	..	*6*
61 Guatemala	48	41	18	12	—14.6	—33.3	5.7	42	..	*3*
62 Korea, Rep. of	41	21	13	8	—48.8	—38.5	2.8	47	32	44
63 Nicaragua	51	45	19	13	—11.8	—31.6	6.2	41	..	*19*
64 Dominican Rep.	50	37	16	9	—26.0	—43.8	5.3	41	..	30
65 Peru	47	39	19	12	—17.0	—36.8	5.6	43	..	*1*
66 Tunisia	47	32	19	12	—31.9	—36.8	4.6	42	*8*	18
67 Syrian Arab Rep.	47	46	18	13	—2.1	—27.8	7.0	40	..	(.)

	Crude Birth Rate Per Thousand Population		Crude Death Rate Per Thousand Population		Percentage Change in:		Total Fertility Rate	Percentage of Women in Reproductive Age Group	Percentage of Married Women Using Contra-ceptives[a]	
	1960	1977	1960	1977	Crude Birth Rate 1960-1977	Crude Death Rate 1960-1977	1977	(Aged 15-44) 1977	1970	1977
68 Malaysia	39	29	9	6	—25.6	—33.3	3.8	43	*7*	*34*
69 Algeria	51	48	20	13	—5.9	—35.0	7.3	40	..	..
70 Turkey	43	30	16	10	—30.2	—37.5	4.3	42	3	..
71 Mexico	45	38	12	8	—15.6	—33.3	5.7	41	..	*21*
72 Jamaica	39	29	9	7	—25.6	—22.2	4.2	38	..	*40*
73 Lebanon	43	32	14	8	—25.6	—42.9	4.7	41	..	..
74 Chile	37	22	12	7	—40.5	—41.7	2.7	46	..	..
75 China, Rep. of	40	21	7	5	—47.5	—28.6	2.5	49	36	61
76 Panama	41	31	10	6	—24.4	—40.0	4.1	42	..	*44*
77 Costa Rica	47	28	10	5	—40.4	—50.0	3.6	45	..	*34*
78 South Africa	39	39	15	10	0.0	—33.3	5.1	43	..	..
79 Brazil	40	36	11	9	—10.0	—18.2	4.9	43	..	..
80 Uruguay	22	20	9	9	—9.1	0.0	2.9	41	..	..
81 Iraq	49	48	20	13	—2.0	—35.0	7.0	41	..	..
82 Argentina	24	21	9	8	—12.5	—11.1	2.9	43	..	..
83 Portugal	24	19	11	11	—20.8	0.0	2.5	42	..	..
84 Yugoslavia	24	18	10	9	—25.0	—10.0	2.2	45	59	..
85 Iran	47	40	21	14	—14.9	—33.3	5.9	41	*3*	23
86 Trinidad and Tobago	37	22	7	6	—40.5	—14.3	2.6	45	*44*	..
87 Hong Kong	35	19	7	6	—45.7	—14.3	2.6	46	50	64
88 Venezuela	46	36	10	7	—21.7	—30.0	4.9	43	..	..
89 Greece	19	15	8	11	—21.1	37.5	2.3	40	..	..
90 Israel	27	26	6	7	—3.7	16.7	3.5	43	..	..
91 Singapore	38	19	8	6	—50.0	—25.0	2.2	51	45	*77*
92 Spain	21	18	9	9	—14.3	0.0	2.6	40	..	..
Industrialized Countries (w)	**20**	**14**	**10**	**9**	**—31.2**	**—4.4**				
93 Ireland	22	22	12	10	0.0	—16.7	3.5	40	..	..
94 Italy	18	13	10	10	—27.8	0.0	1.9	41	..	..
95 New Zealand	26	17	9	8	—34.6	—11.1	2.2	43	..	..
96 United Kingdom	17	12	12	11	—29.4	—8.3	1.7	39	*72*	..
97 Japan	18	15	8	6	—16.7	—25.0	1.8	46	..	*61*
98 Austria	18	11	13	13	—38.9	0.0	1.6	38	..	..
99 Finland	19	14	9	10	—26.3	11.1	1.7	44	*77*	..
100 Netherlands	21	12	8	9	—42.9	12.5	1.6	43	*59*	*71*
101 France	18	14	12	11	—22.2	—8.3	1.9	41	*64*	..
102 Australia	22	16	9	8	—27.3	—11.1	2.1	43	*66*	..
103 Belgium	17	12	12	12	—29.4	0.0	1.8	40	..	*87*
104 Denmark	17	13	9	11	—23.5	22.2	1.7	41	67	..
105 Germany, Fed. Rep.	17	10	11	12	—41.2	9.1	1.4	40	..	..
106 Canada	28	16	8	8	—42.9	0.0	1.9	46	..	..
107 United States	24	15	9	9	—37.5	0.0	1.8	44	65	..
108 Norway	18	13	9	11	—27.8	22.2	1.8	39	..	..
109 Sweden	15	12	10	12	—20.0	20.0	1.7	40	..	..
110 Switzerland	18	11	10	10	—38.9	0.0	1.5	43	..	..
Capital Surplus Oil Exporters										
111 Saudi Arabia	51	49	28	18	—3.9	—35.7	7.2	41	..	..
112 Libya	49	48	19	14	—2.0	—26.3	7.4	41	..	..
113 Kuwait	44	45	10	5	2.3	—50.0	7.1	40	..	..
Centrally Planned Economies (w)	**32**	**21**	**13**	**9**	**—34.3**	**—28.6**				
114 China, People's Rep.	36	22	15	9	—38.9	—40.0	2.9	45	..	..
115 Albania	40	29	10	6	—27.5	—40.0	4.2	44	..	..
116 Korea, Dem. Rep.	41	33	13	8	—19.5	—38.5	4.5	44	..	..
117 Mongolia	41	37	15	8	—9.8	—46.7	5.4	42	..	..
118 Cuba	32	19	9	6	—40.6	—33.3	2.5	43	..	..
119 Romania	20	19	9	9	—5.0	0.0	2.6	43	..	..
120 Bulgaria	18	16	9	10	—11.1	11.1	2.2	42	..	..
121 Hungary	16	16	10	12	0.0	20.0	2.2	42	..	..
122 USSR	24	18	7	9	—25.0	28.6	2.4	43	..	..
123 Poland	24	19	8	9	—20.8	12.5	2.3	46	*57*	..
124 Czechoslovakia	17	18	10	11	5.9	10.0	2.4	42	66	..
125 German Dem. Rep.	17	13	13	13	—23.5	0.0	1.8	39	..	..

[a] Figures in italics are for years other than those specified. See Technical Notes.

Table 19: Labor Force

	Percentage of Population of Working Age (15-64 years)		Percentage of Labor Force in						Average Annual Growth of Labor Force		
			Agriculture		Industry		Services				
	1960	1977	1960	1977	1960	1977	1960	1977	1960-70	1970-77	1977-2000
Low Income Countries (g)	55	54	77	73	9	11	14	16	1.8	1.9	2.0
1 Bhutan	56	55	95	93	2	2	3	5	1.7	1.8	1.9
2 Cambodia	53	52	82	75	4	4	14	21	2.1	2.3	2.5
3 Bangladesh	53	51	87	78	3	7	10	15	2.4	2.3	2.7
4 Lao PDR	56	52	83	80	4	6	13	14	1.4	—0.6	2.0
5 Ethiopia	54	53	88	81	5	7	7	12	2.1	1.8	2.1
6 Mali	54	53	94	89	3	5	3	6	2.2	1.9	2.4
7 Nepal	56	55	95	93	2	2	3	5	1.8	2.0	2.3
8 Somalia	54	53	88	83	4	7	8	10	1.7	2.5	2.3
9 Burundi	55	54	90	85	3	5	7	10	2.0	1.2	2.2
10 Chad	53	57	94	87	2	6	4	7	1.7	1.8	2.1
11 Rwanda	52	51	95	92	1	3	4	5	2.3	2.5	2.8
12 Upper Volta	55	53	92	84	5	11	3	5	1.3	1.3	2.2
13 Zaire	53	54	83	76	9	13	8	11	1.4	1.9	2.2
14 Burma	59	55	68	55	11	19	21	26	1.1	1.4	1.9
15 Malawi	56	53	92	87	3	5	5	8	2.5	2.4	2.6
16 India	56	55	73	73	11	11	16	16	1.6	1.7	1.9
17 Mozambique	56	54	81	68	7	20	12	12	2.1	1.6	2.0
18 Niger	52	51	95	92	1	3	4	5	3.2	2.5	2.8
19 Viet Nam	..	52	81	70	5	9	14	21	1.5	2.3	2.3
20 Afghanistan	55	53	85	80	6	8	9	12	1.9	1.7	2.4
21 Pakistan	52	50	61	58	18	20	21	22	1.8	2.4	2.8
22 Sierra Leone	54	54	78	68	12	18	10	14	1.6	1.7	2.2
23 Tanzania	51	51	89	84	4	6	7	10	2.4	2.3	2.7
24 Benin	53	52	54	47	9	15	37	38	2.1	2.1	2.5
25 Sri Lanka	54	58	56	54	13	15	31	31	2.1	2.1	2.2
26 Guinea	55	54	88	83	6	10	6	7	2.4	2.1	2.1
27 Haiti	58	56	80	70	6	8	14	22	0.6	1.7	2.2
28 Lesotho	57	57	93	88	2	4	5	8	1.8	1.7	1.9
29 Madagascar	53	52	93	84	3	5	4	11	1.9	1.8	2.4
30 Central African Emp.	54	55	94	89	2	4	4	7	1.9	1.9	1.9
31 Kenya	51	50	86	79	5	9	9	12	3.3	2.8	3.0
32 Mauritania	55	51	91	84	3	5	6	11	2.2	1.8	2.6
33 Uganda	53	52	89	84	4	6	7	10	3.4	2.3	2.6
34 Sudan	53	52	86	79	6	10	8	11	2.0	2.3	2.7
35 Angola	55	53	69	61	12	16	19	23	1.2	1.9	2.4
36 Indonesia	56	56	75	60	8	12	17	28	1.8	2.0	1.9
37 Togo	53	51	79	69	8	14	13	17	2.3	1.9	2.5
Middle Income Countries (g)	55	55	59	46	17	22	24	32	2.0	2.7	2.8
38 Egypt	55	56	58	51	12	26	30	23	2.0	2.2	2.2
39 Cameroon	59	54	79	74	5	6	16	20	1.4	1.2	1.9
40 Yemen, PDR	54	52	70	62	15	20	15	18	1.6	1.5	2.5
41 Ghana	52	50	64	54	14	19	22	27	1.8	2.5	2.9
42 Honduras	52	50	70	63	11	15	19	22	2.8	2.7	3.2
43 Liberia	56	54	81	73	10	14	9	13	2.5	2.2	2.4
44 Nigeria	54	52	71	56	10	18	19	26	1.9	2.0	2.7
45 Thailand	53	52	84	77	4	8	12	15	2.1	2.5	2.3
46 Senegal	56	53	84	77	5	9	11	14	1.9	1.7	2.1
47 Yemen Arab Rep.	54	52	83	76	7	11	10	13	1.5	1.5	2.6
48 Philippines	52	51	61	51	15	15	24	34	2.1	2.1	2.6
49 Zambia	51	51	79	69	7	11	14	20	2.4	2.3	2.7
50 Congo, People's Rep.	55	54	52	36	17	26	31	38	1.7	2.0	2.6
51 Papua New Guinea	57	55	89	84	4	8	7	8	1.8	1.9	2.0
52 Rhodesia	49	51	69	61	11	15	20	24	3.3	2.6	2.9
53 El Salvador	51	51	60	47	13	15	27	38	2.8	3.2	3.1
54 Morocco	53	52	62	53	14	19	24	28	1.7	2.7	3.2
55 Bolivia	54	54	61	51	18	23	21	26	2.3	2.5	2.8
56 Ivory Coast	55	52	89	82	2	4	9	14	3.3	3.9	2.6
57 Jordan	52	50	44	28	26	39	30	33	2.7	2.8	3.1
58 Colombia	51	59	51	31	19	23	30	46	2.7	3.5	2.3
59 Paraguay	51	52	56	51	19	19	25	30	2.3	3.1	3.2
60 Ecuador	52	51	57	47	19	24	24	29	2.7	3.0	3.3
61 Guatemala	52	53	67	57	14	19	19	24	2.5	2.8	2.8
62 Korea, Rep. of	54	60	66	45	9	33	25	22	2.9	2.9	1.9
63 Nicaragua	50	49	62	44	16	14	22	42	2.6	3.2	3.4
64 Dominican Rep.	50	50	66	58	12	16	22	26	2.2	2.9	3.0
65 Peru	52	53	53	40	20	20	27	40	2.1	2.9	3.1
66 Tunisia	53	53	56	43	18	23	26	34	0.7	2.2	2.5
67 Syrian Arab Rep.	52	50	54	49	19	23	27	28	2.6	2.8	3.1

	Percentage of Population of Working Age (15-64 years)		Percentage of Labor Force in						Average Annual Growth of Labor Force		
			Agriculture		Industry		Services				
	1960	1977	1960	1977	1960	1977	1960	1977	1960-70	1970-77	1977-2000
68 Malaysia	51	54	63	44	12	20	25	36	2.7	3.6	3.0
69 Algeria	52	49	67	35	12	18	21	47	0.5	3.0	3.4
70 Turkey	55	54	78	62	10	14	12	24	1.3	1.8	2.0
71 Mexico	51	51	55	34	20	25	25	41	2.8	3.3	3.2
72 Jamaica	54	50	39	24	25	27	36	49	0.4	2.0	3.3
73 Lebanon	53	53	38	13	23	27	39	60	2.1	2.6	2.7
74 Chile	57	61	30	21	30	27	40	52	1.4	2.6	2.0
75 China, Rep. of	52	63	56	34	11	27	33	39	2.4	1.9	1.6
76 Panama	52	54	51	30	14	18	35	52	3.2	2.7	2.6
77 Costa Rica	49	56	51	30	18	29	31	41	3.5	3.6	2.7
78 South Africa	56	55	32	30	30	30	38	40	3.0	2.6	2.8
79 Brazil	54	55	52	42	15	20	33	38	2.7	2.8	2.8
80 Uruguay	64	63	21	12	29	32	50	56	0.7	0.4	1.2
81 Iraq	51	51	53	43	18	25	29	32	2.8	2.8	3.1
82 Argentina	64	63	20	14	36	29	44	57	1.2	1.2	1.2
83 Portugal	63	63	44	27	29	36	27	37	0.2	0.6	0.7
84 Yugoslavia	63	66	64	42	23	34	13	24	0.9	1.1	0.8
85 Iran	51	51	54	41	23	32	23	27	2.5	2.4	2.7
86 Trinidad and Tobago	53	58	22	13	34	37	44	50	1.9	2.8	2.4
87 Hong Kong	56	65	8	2	52	57	40	41	3.1	3.3	1.4
88 Venezuela	51	53	35	21	22	27	43	52	2.5	4.1	3.3
89 Greece	65	64	56	40	20	27	24	33	(.)	0.2	0.4
90 Israel	59	59	14	8	35	37	51	55	3.5	2.3	2.0
91 Singapore	55	65	8	2	23	32	69	66	2.7	3.1	1.4
92 Spain	64	63	42	19	31	42	27	39	0.2	0.9	0.8
Industrialized Countries (g)	**63**	**65**	**17**	**7**	**38**	**38**	**45**	**55**	**1.2**	**0.8**	**0.8**
93 Ireland	58	59	36	21	25	36	39	43	—0.1	1.2	1.4
94 Italy	66	65	31	13	40	47	29	40	—0.1	0.6	0.4
95 New Zealand	59	62	15	10	37	35	48	55	2.2	2.0	1.2
96 United Kingdom	65	63	4	2	48	43	48	55	0.6	0.2	0.4
97 Japan	64	68	33	14	30	37	37	49	1.8	1.3	0.8
98 Austria	66	62	24	11	46	41	30	48	—0.7	0.7	0.4
99 Finland	62	68	36	14	31	38	33	48	0.5	1.1	0.5
100 Netherlands	61	65	11	6	42	45	47	49	1.6	1.2	0.6
101 France	62	63	22	10	39	41	39	49	0.7	1.0	0.6
102 Australia	61	64	11	6	40	35	49	59	2.5	1.6	1.0
103 Belgium	65	64	8	4	48	43	44	53	0.3	0.5	0.3
104 Denmark	64	65	18	8	37	37	45	55	1.1	0.7	0.4
105 Germany, Fed. Rep.	68	65	14	5	48	48	38	47	0.2	0.8	0.1
106 Canada	59	66	13	6	35	30	52	64	2.5	2.1	1.0
107 United States	60	65	7	3	36	33	57	64	1.7	1.6	0.8
108 Norway	63	63	20	8	37	37	43	55	0.5	0.6	0.5
109 Sweden	66	64	14	5	45	37	41	58	0.9	0.2	0.2
110 Switzerland	66	66	11	6	50	48	39	46	2.0	0.7	0.3
Capital Surplus Oil Exporters											
111 Saudi Arabia	54	52	71	63	10	14	19	23	2.2	2.3	2.6
112 Libya	53	52	53	22	16	27	31	51	3.7	3.0	2.9
113 Kuwait	63	50	1	2	34	34	65	64	7.2	3.0	3.0
Centrally Planned Economies (g)	**60**	**62**	**44**	**25**	**29**	**43**	**27**	**32**	**0.8**	**1.4**	**1.0**
114 China, People's Rep.	58	61	75	63	15	24	10	13	1.7	1.5	1.3
115 Albania	54	56	71	63	17	24	12	13	2.3	2.9	2.4
116 Korea, Dem. Rep.	53	55	62	51	23	32	15	17	2.3	2.9	2.7
117 Mongolia	54	53	70	57	13	21	17	22	2.1	2.3	2.5
118 Cuba	61	57	39	26	22	31	39	43	0.9	1.7	1.9
119 Romania	65	65	64	51	20	31	16	18	0.8	0.5	0.7
120 Bulgaria	67	67	57	41	25	38	18	21	0.7	0.3	0.3
121 Hungary	66	67	38	19	35	58	27	23	0.5	0.4	0.2
122 USSR	63	66	42	19	29	46	29	35	0.7	1.4	0.7
123 Poland	61	67	48	34	29	38	23	28	1.7	1.7	0.9
124 Czechoslovakia	64	65	26	13	46	49	28	38	0.9	0.8	0.6
125 German Dem. Rep.	65	62	18	10	48	51	34	39	—0.2	0.2	0.4

Table 20: Urbanization

	Urban Population				Percentage of Urban Population				Number of Cities of Over 500,000 People	
	As Percentage of Total Population		Average Annual Growth (percent)		In Largest City		In Cities of Over 500,000 People			
	1960	1975	1960-70	1970-75	1960	1975	1960	1975	1960	1975
Low Income Countries (g)	15	19	3.4	4.2	14	16	24	36		
1 Bhutan	3	3	4.2	4.5	..	..	0	0	0	0
2 Cambodia	11	13	3.7	4.4	73	26	0	0	0	0
3 Bangladesh	5	9	6.7	6.3	20	28	20	43	1	2
4 Lao PDR	8	11	4.1	4.1	69	52	0	0	0	0
5 Ethiopia	6	12	6.1	7.0	30	35	0	35	0	1
6 Mali	11	17	5.4	5.3	32	34	0	0	0	0
7 Nepal	3	4	4.3	4.4	41	30	0	0	0	0
8 Somalia	17	27	5.3	5.0	..	29	0	0	0	0
9 Burundi	2	2	2.4	1.7	100	100	0	0	0	0
10 Chad	7	14	6.8	6.8	..	38	0	0	0	0
11 Rwanda	2	4	5.3	5.6	..	..	0	0	0	0
12 Upper Volta	5	8	5.3	3.6	..	36	0	0	0	0
13 Zaire	22	35	5.1	5.4	14	25	14	34	1	2
14 Burma	19	25	3.9	3.8	23	23	23	23	1	1
15 Malawi	4	20	12.7	18.4	..	23	0	0	0	0
16 India	18	21	3.3	3.1	7	6	26	35	11	28
17 Mozambique	4	7	6.6	6.8	75	83	0	83	0	1
18 Niger	6	10	7.0	6.8	..	29	0	0	0	0
19 Viet Nam	15	20	5.3	5.2	32	24	32	44	1	3
20 Afghanistan	8	13	5.4	5.5	33	22	0	22	0	1
21 Pakistan	22	26	4.0	4.1	20	21	33	50	2	6
22 Sierra Leone	13	21	5.5	5.6	37	45	0	0	0	0
23 Tanzania	5	9	6.3	8.5	34	47	0	47	0	1
24 Benin	10	23	7.9	10.4	..	57	0	0	0	0
25 Sri Lanka	18	24	4.3	3.7	28	17	0	17	0	1
26 Guinea	10	16	6.2	6.2	37	77	0	77	0	1
27 Haiti	16	22	3.9	3.9	42	54	0	54	0	1
28 Lesotho	2	4	7.7	8.1	100	100	0	0	0	0
29 Madagascar	11	16	5.1	4.3	44	38	0	0	0	0
30 Central African Emp.	23	36	5.3	5.1	40	37	0	0	0	0
31 Kenya	7	12	6.6	7.0	40	53	0	53	0	1
32 Mauritania	3	23	15.8	14.4	..	..	0	0	0	0
33 Uganda	5	10	6.3	8.5	38	50	0	50	0	1
34 Sudan	10	20	6.9	6.9	30	30	0	30	0	1
35 Angola	10	18	5.1	5.7	44	62	0	62	0	1
36 Indonesia	15	18	3.7	3.3	20	23	34	45	3	6
37 Togo	10	15	5.6	5.4	..	60	0	0	0	0
Middle Income Countries (g)	37	47	3.7	4.2	23	25	35	44		
38 Egypt	38	44	3.4	2.7	38	39	53	54	2	2
39 Cameroon	14	27	5.6	8.0	26	21	0	0	0	0
40 Yemen, PDR	28	34	3.2	3.2	61	53	0	0	0	0
41 Ghana	23	32	4.6	5.1	25	33	0	33	0	1
42 Honduras	23	32	5.4	5.3	31	33	0	0	0	0
43 Liberia	21	30	5.6	5.6	..	..	0	0	0	0
44 Nigeria	13	18	4.7	4.6	13	17	22	33	2	5
45 Thailand	12	14	3.6	3.5	65	69	65	69	1	1
46 Senegal	23	24	2.9	2.9	53	64	0	64	0	1
47 Yemen Arab Rep.	3	8	7.5	7.3	..	28	0	0	0	0
48 Philippines	30	34	3.8	3.5	27	30	27	33	1	2
49 Zambia	23	34	5.4	5.4	..	32	0	32	0	1
50 Congo, People's Rep.	33	36	2.6	3.0	77	61	0	0	0	0
51 Papua New Guinea	3	13	14.7	8.0	..	25	0	0	0	0
52 Rhodesia	13	20	6.8	6.4	40	48	0	48	0	1
53 El Salvador	38	40	3.2	3.1	26	23	0	0	0	0
54 Morocco	29	37	4.3	4.1	32	28	32	38	1	2
55 Bolivia	24	30	4.1	4.2	47	45	0	45	0	1
56 Ivory Coast	19	33	7.3	9.3	27	32	0	32	0	1
57 Jordan	43	53	4.5	4.5	31	36	0	36	0	1
58 Colombia	48	66	5.2	3.9	17	24	28	48	3	4
59 Paraguay	36	38	3.0	3.3	44	45	0	0	0	0
60 Ecuador	34	42	4.4	4.1	31	30	0	52	0	2
61 Guatemala	33	37	3.6	3.6	41	38	41	38	1	1
62 Korea, Rep. of	28	49	6.4	5.4	35	41	61	75	3	6
63 Nicaragua	41	50	4.2	4.5	41	46	0	46	0	1
64 Dominican Rep.	30	46	5.8	5.4	50	58	0	58	0	1
65 Peru	46	63	5.0	4.5	38	39	38	39	1	1
66 Tunisia	36	48	3.8	3.6	40	32	40	32	1	1
67 Syrian Arab Rep.	37	47	4.8	4.7	35	33	35	56	1	2

	Urban Population				Percentage of Urban Population				Number of Cities of Over 500,000 People	
	As Percentage of Total Population		Average Annual Growth (percent)		In Largest City		In Cities of Over 500,000 People			
	1960	1975	1960-70	1970-75	1960	1975	1960	1975	1960	1975
68 Malaysia	25	30	3.5	4.8	19	26	0	26	0	1
69 Algeria	30	54	6.1	6.8	27	14	27	14	1	1
70 Turkey	30	43	5.1	4.7	18	23	32	38	3	3
71 Mexico	51	63	4.8	4.6	28	32	36	47	3	6
72 Jamaica	34	46	3.5	3.6	77	67	0	67	0	1
73 Lebanon	44	70	6.2	4.9	64	77	64	77	1	1
74 Chile	68	79	3.1	2.5	38	43	38	43	1	1
75 China, Rep. of	36	51	5.1	4.4	..	..	..	..	..	..
76 Panama	41	51	4.4	4.1	61	65	0	65	0	1
77 Costa Rica	37	41	4.2	3.3	67	65	0	65	0	1
78 South Africa	47	48	2.8	2.9	16	13	44	51	4	6
79 Brazil	46	61	4.8	4.5	14	16	35	50	6	12
80 Uruguay	80	83	1.3	0.4	56	53	56	53	1	1
81 Iraq	43	66	6.2	5.6	35	53	35	62	1	2
82 Argentina	74	81	2.0	1.9	46	46	54	60	3	5
83 Portugal	23	28	1.5	2.3	47	44	47	44	1	1
84 Yugoslavia	28	38	3.2	3.0	11	11	11	18	1	2
85 Iran	34	45	4.7	5.0	26	29	26	41	1	4
86 Trinidad and Tobago	22	21	1.6	0.7	..	..	0	0	0	0
87 Hong Kong	89	90	2.5	2.1	100	100	100	100	1	1
88 Venezuela	67	80	4.7	4.4	26	27	26	34	1	2
89 Greece	43	57	2.6	2.4	51	57	51	69	1	2
90 Israel	77	87	4.3	3.3	46	37	46	37	1	1
91 Singapore	100	100	2.4	1.6	100	100	100	100	1	1
92 Spain	57	71	2.6	2.4	13	16	37	43	5	6
Industrialized Countries (g)	67	74	1.8	1.4	18	17	48	54		
93 Ireland	46	55	1.6	2.3	51	49	51	49	1	1
94 Italy	59	67	1.5	1.5	7	9	46	52	7	9
95 New Zealand	76	83	2.3	2.2	25	29	0	29	0	1
96 United Kingdom	86	90	0.9	0.5	24	21	61	56	15	16
97 Japan	62	75	2.4	2.4	18	21	35	41	5	9
98 Austria	50	53	0.9	0.6	51	42	51	42	1	1
99 Finland	38	57	3.2	2.8	28	27	0	27	0	1
100 Netherlands	80	76	1.0	0.5	9	10	27	26	3	3
101 France	62	75	2.4	1.7	25	23	34	34	4	6
102 Australia	81	87	2.5	2.0	26	25	62	68	4	5
103 Belgium	66	71	1.2	0.5	17	15	28	25	2	2
104 Denmark	74	82	1.5	1.1	40	33	40	33	1	1
105 Germany, Fed. Rep.	77	83	1.4	0.8	20	18	48	45	11	11
106 Canada	69	78	2.7	1.9	14	17	31	62	2	9
107 United States	66	70	1.7	1.3	13	13	61	75	40	57
108 Norway	32	47	3.5	3.1	50	34	50	34	1	1
109 Sweden	73	85	1.8	1.2	15	17	15	22	1	3
110 Switzerland	51	56	2.2	1.0	19	22	19	22	1	1
Capital Surplus Oil Exporters										
111 Saudi Arabia	30	59	7.5	6.7	15	17	0	22	0	2
112 Libya	23	44	8.0	8.8	57	62	0	62	0	1
113 Kuwait	72	84	10.4	7.8	75	33	0	0	0	0
Centrally Planned Economies (g)	29	34	2.9	2.7	9	8	31	32		
114 China, People's Rep.	19	23	3.4	3.1	6	6	42	43	38	56
115 Albania	31	35	3.8	3.4	27	26	0	0	0	0
116 Korea, Dem. Rep.	40	55	5.0	4.5	15	12	15	19	1	2
117 Mongolia	36	48	5.2	4.1	53	53	0	0	0	0
118 Cuba	55	63	2.9	2.5	38	32	38	32	1	1
119 Romania	34	44	2.8	2.5	22	18	22	18	1	1
120 Bulgaria	39	59	3.8	2.8	23	19	23	19	1	1
121 Hungary	40	50	1.7	2.3	45	39	45	39	1	1
122 USSR	49	61	2.7	2.4	6	5	21	22	25	38
123 Poland	48	54	1.8	1.7	17	16	41	45	5	7
124 Czechoslovakia	47	59	2.1	2.1	17	13	17	13	1	1
125 German Dem. Rep.	72	75	0.1	0.1	9	9	14	17	2	3

Table 21: Indicators Relating to Life Expectancy

	Life Expectancy at Birth		Infant Mortality Rate (Aged 0-1)[a]		Child Death Rate (Aged 1-4)[a]	
	1960	1977	1960	1977	1960	1977
Low Income Countries (w)	**42**	**50**	..	..	**30**	**19**
1 Bhutan	36	41	..	..	41	28
2 Cambodia	42	48	*120*	..	27	19
3 Bangladesh	42	47	..	..	29	23
4 Lao PDR	40	42	..	..	29	27
5 Ethiopia	36	39	126	..	43	37
6 Mali	37	42	210	..	41	32
7 Nepal	37	45	..	..	35	23
8 Somalia	36	43	..	..	43	31
9 Burundi	37	45	..	..	41	28
10 Chad	35	43	..	..	45	30
11 Rwanda	37	46	..	..	41	27
12 Upper Volta	37	42	263	..	41	32
13 Zaire	40	46	..	..	37	27
14 Burma	44	52	..	..	25	15
15 Malawi	37	46	..	..	41	27
16 India	43	51	..	..	28	18
17 Mozambique	37	46	..	..	41	27
18 Niger	37	42	212	..	41	32
19 Viet Nam	41	62	..	..	28	6
20 Afghanistan	34	42	..	..	42	27
21 Pakistan	44	51	..	..	27	17
22 Sierra Leone	37	46	..	..	41	27
23 Tanzania	42	51	..	..	32	20
24 Benin	37	46	206	..	41	27
25 Sri Lanka	62	69	63	..	7	2
26 Guinea	35	44	..	..	45	30
27 Haiti	42	51	..	..	39	23
28 Lesotho	42	50	..	..	34	21
29 Madagascar	37	46	..	..	41	27
30 Central African Emp.	37	46	190	..	40	27
31 Kenya	47	53	126	..	25	14
32 Mauritania	37	42	..	..	41	32
33 Uganda	44	53	..	..	30	17
34 Sudan	39	46	..	..	46	31
35 Angola	33	41	..	..	49	34
36 Indonesia	41	48	..	..	31	19
37 Togo	37	46	177	..	41	27
Middle Income Countries (w)	**53**	**60**	..	..	**19**	**11**
38 Egypt	46	54	..	..	31	18
39 Cameroon	37	46	167	..	40	27
40 Yemen, PDR	36	47	..	..	54	31
41 Ghana	40	48	155	..	36	23
42 Honduras	46	57	*130*	..	30	14
43 Liberia	40	48	..	..	36	23
44 Nigeria	39	48	..	..	38	24
45 Thailand	51	61	..	*68*	15	6
46 Senegal	37	42	..	..	41	32
47 Yemen Arab Rep.	36	47	..	..	55	31
48 Philippines	51	60	98	65	16	7
49 Zambia	40	48	..	..	36	23
50 Congo, People's Rep.	37	46	180	..	40	27
51 Papua New Guinea	41	48	..	..	32	19
52 Rhodesia	45	52	..	..	28	16
53 El Salvador	50	63	..	..	24	8
54 Morocco	47	55	..	..	30	17
55 Bolivia	43	52	..	*158*	36	22
56 Ivory Coast	37	46	..	..	41	27
57 Jordan	47	56	..	..	30	16
58 Colombia	53	62	..	*98*	17	9
59 Paraguay	56	63	..	..	16	8
60 Ecuador	51	60	140	..	23	10
61 Guatemala	47	57	..	*77*	31	15
62 Korea, Rep. of	54	63	62	..	13	5
63 Nicaragua	47	55	..	..	30	17
64 Dominican Rep.	51	60	..	..	23	10
65 Peru	48	56	..	..	28	16
66 Tunisia	48	57	..	..	29	15
67 Syrian Arab Rep.	48	57	..	..	29	14

	Life Expectancy at Birth		Infant Mortality Rate (Aged 0-1)[a]		Child Death Rate (Aged 1-4)[a]	
	1960	1977	1960	1977	1960	1977
68 Malaysia	57	67	..	*32*	9	3
69 Algeria	47	56	..	..	30	16
70 Turkey	51	61	..	*118*	24	10
71 Mexico	58	65	78	..	14	6
72 Jamaica	64	70	*63*	*22*	7	3
73 Lebanon	58	65	..	..	14	6
74 Chile	57	67	108	*61*	14	5
75 China, Rep. of	64	72	..	*25*	8	1
76 Panama	62	70	90	*47*	10	3
77 Costa Rica	62	70	..	*38*	10	3
78 South Africa	53	60	..	..	17	10
79 Brazil	57	62	..	..	13	9
80 Uruguay	68	71	..	*49*	4	3
81 Iraq	46	55	..	..	31	17
82 Argentina	65	71	..	..	6	3
83 Portugal	62	69	78	*39*	7	*2*
84 Yugoslavia	62	69	88	35	*4*	*2*
85 Iran	46	52	..	..	24	14
86 Trinidad and Tobago	63	70	45	27	8	3
87 Hong Kong	65	72	42	14	3	1
88 Venezuela	59	66	72	..	12	5
89 Greece	68	73	40	*23*	2	1
90 Israel	69	72	31	23	2	*1*
91 Singapore	64	70	35	*12*	4	1
92 Spain	68	73	44	*11*	2	1
Industrialized Countries (w)	69	74	29	14	1	1
93 Ireland	69	73	29	*15*	*1*	1
94 Italy	69	73	44	*18*	*2*	*1*
95 New Zealand	71	72	23	*16*	*1*	*1*
96 United Kingdom	70	73	22	14	1	*1*
97 Japan	68	76	31	*9*	3	*1*
98 Austria	68	72	38	17	*1*	*1*
99 Finland	68	72	21	*12*	1	*1*
100 Netherlands	73	74	18	10	1	*1*
101 France	70	73	27	11	1	*1*
102 Australia	70	72	20	*14*	1	*1*
103 Belgium	70	72	31	*14*	1	*1*
104 Denmark	72	74	22	9	1	*1*
105 Germany, Fed. Rep.	69	72	34	*17*	1	*1*
106 Canada	71	74	27	*14*	*1*	*1*
107 United States	70	73	26	*15*	*1*	*1*
108 Norway	73	75	19	*11*	1	*1*
109 Sweden	72	75	17	8	1	*1*
110 Switzerland	71	74	21	*11*	1	*1*
Capital Surplus Oil Exporters						
111 Saudi Arabia	38	48	..	..	48	28
112 Libya	47	55	..	..	30	17
113 Kuwait	60	69	..	*39*	12	2
Centrally Planned Economies (w)	58	66	..	..	10	3
114 China, People's Rep.	53	64	..	..	14	4
115 Albania	62	70	..	..	6	2
116 Korea, Dem. Rep.	54	63	..	..	13	5
117 Mongolia	52	63	..	..	14	5
118 Cuba	64	72	35	*23*	8	1
119 Romania	64	70	76	*31*	3	1
120 Bulgaria	67	72	45	24	3	1
121 Hungary	67	70	48	26	2	*1*
122 USSR	68	70	35	..	1	1
123 Poland	66	71	57	24	*2*	*1*
124 Czechoslovakia	69	71	24	20	1	*1*
125 German Dem. Rep.	68	73	39	13	2	*1*

[a] Figures in italics are for years other than those specified. See Technical Notes.

Table 22: Health-Related Indicators

	Population Per:				Percentage of Population with Access to Safe Water	Daily Per Capita Calorie Supply	
	Physician[a]		Nursing Person[a]				As Percentage of Requirement
	1960	1976	1960	1976	1975	1974	1974
Low Income Countries (w)	18,700	10,300	..	9,720	28	2,036	91
1 Bhutan	..	..	..	..	..	2,078	94
2 Cambodia	..	..	..	..	..	1,894	85
3 Bangladesh	..	11,350	..	53,700	53	2,024	92
4 Lao PDR	..	..	..	..	..	2,090	93
5 Ethiopia	91,000	84,850	..	25,670	6	1,914	82
6 Mali	*39,000*	*32,460*	*4,990*	3,040	9	1,774	75
7 Nepal	72,000	*38,650*	..	*52,770*	9	2,088	95
8 Somalia	30,000	..	2,010	..	33	1,822	79
9 Burundi	*63,000*	*45,430*	..	*6,240*	..	2,307	99
10 Chad	..	41,160	..	4,820	26	1,781	75
11 Rwanda	*144,000*	39,350	*11,680*	16,000	35	2,086	90
12 Upper Volta	100,000	*61,800*	..	*4,890*	25	1,859	78
13 Zaire	63,000	..	..	..	16	1,885	85
14 Burma	*9,900*	5,410	..	6,120	17	2,223	103
15 Malawi	..	*48,500*	..	*4,370*	33	2,397	103
16 India	*5,800*	*3,140*	*9,610*	6,320	33	1,976	89
17 Mozambique	20,000	..	*4,660*	..	..	1,975	84
18 Niger	*71,000*	42,970	*8,800*	8,220	27	1,827	78
19 Viet Nam	..	5,340	..	880	..	2,397	111
20 Afghanistan	40,000	*28,290*	*32,030*	*35,680*	6	2,022	83
21 Pakistan	11,000	*3,780*	..	*10,040*	29	2,146	93
22 Sierra Leone	26,000	..	..	..	..	2,224	97
23 Tanzania	21,000	*18,490*	8,300	*3,300*	39	2,003	86
24 Benin	47,000	34,380	..	3,100	20	2,007	87
25 Sri Lanka	4,500	*6,230*	*4,150*	*2,240*	20	2,019	91
26 Guinea	48,000	*15,500*	*3,890*	*2,330*	10	1,943	84
27 Haiti	*10,600*	11,170	*11,880*	4,170	14	2,026	90
28 Lesotho	..	17,800	..	*3,780*	17	2,287	99
29 Madagascar	8,800	10,780	..	3,760	26	2,386	105
30 Central African Emp.	37,000	29,410	*4,300*	5,880	16	2,305	102
31 Kenya	10,000	8,840	*2,320*	*1,070*	17	2,117	91
32 Mauritania	*30,000*	*14,140*	*7,130*	*3,200*	..	1,663	72
33 Uganda	*13,000*	*28,330*	*9,450*	*4,410*	35	2,096	90
34 Sudan	31,000	9,760	..	1,260	46	2,074	88
35 Angola	14,000	..	..	..	..	2,021	86
36 Indonesia	*41,000*	*16,430*	..	*4,670*	12	2,126	98
37 Togo	*34,000*	*18,360*	..	*2,040*	16	2,198	96
Middle Income Countries (w)	6,840	4,470	..	1,930	59	2,557	107
38 Egypt	2,600	1,190	..	1,150	66	2,637	113
39 Cameroon	*34,000*	*13,980*	*5,210*	*1,890*	26	2,373	102
40 Yemen, PDR	..	9,210	..	1,650	24	2,024	84
41 Ghana	21,000	10,200	..	860	35	2,318	101
42 Honduras	..	*3,300*	..	*1,420*	46	2,041	90
43 Liberia	..	*10,050*	..	*3,150*	20	2,010	87
44 Nigeria	32,000	*14,810*	..	*3,210*	..	2,085	88
45 Thailand	7,800	*8,460*	4,900	*1,970*	22	2,382	107
46 Senegal	35,000	16,450	..	1,660	37	2,309	97
47 Yemen Arab Rep.	..	18,770	..	7,220	4	1,976	83
48 Philippines	..	*3,150*	..	*4,990*	38	1,971	87
49 Zambia	12,860	10,370	..	..	42	2,052	90
50 Congo, People's Rep.	*13,000*	7,320	*1,460*	800	38	2,176	98
51 Papua New Guinea	..	11,990	..	2,190	20	2,245	98
52 Rhodesia	..	7,110	..	1,390	..	2,593	108
53 El Salvador	5,400	*3,460*	..	*1,310*	53	1,914	84
54 Morocco	9,400	11,100	..	1,700	55	2,611	108
55 Bolivia	3,900	*2,120*	..	*3,520*	34	1,849	77
56 Ivory Coast	..	*15,220*	..	*1,710*	19	2,654	115
57 Jordan	*5,900*	2,250	..	930	56	2,214	90
58 Colombia	2,400	*1,820*	*3,740*	..	64	2,183	94
59 Paraguay	*2,300*	*1,190*	..	*2,250*	13	2,723	118
60 Ecuador	2,600	*1,570*	*2,280*	..	40	2,123	93
61 Guatemala	*4,200*	*2,500*	..	..	40	1,994	91
62 Korea, Rep. of	*3,000*	1,680	..	520	62	2,630	112
63 Nicaragua	2,700	*1,540*	..	*760*	70	2,390	105
64 Dominican Rep.	..	1,870	..	1,330	55	2,213	98
65 Peru	..	*1,580*	..	..	47	2,360	100
66 Tunisia	10,000	4,800	..	1,070	70	2,440	102
67 Syrian Arab Rep.	4,600	*2,510*	..	*3,810*	75	2,597	104

	Population Per:				Percentage of Population with Access to Safe Water	Daily Per Capita Calorie Supply	
	Physician[a]		Nursing Person[a]				As Percentage of Requirement
	1960	1976	1960	1976	1975	1974	1974
68 Malaysia	7,660	*4,350*	*1,810*	1,210	62	2,574	115
69 Algeria	..	*5,590*	..	*1,560*	77	2,138	88
70 Turkey	*3,000*	1,720	..	1,430	75	2,849	113
71 Mexico	1,700	..	..	..	62	2,727	117
72 Jamaica	2,600	*3,510*	..	*540*	86	2,664	119
73 Lebanon	..	..	..	..	..	2,517	101
74 Chile	1,810	2,200	650	*450*	83	2,825	117
75 China, Rep. of	2,330	*1,590*	7,270	*1,830*	..	2,780	119
76 Panama	2,700	1,270	..	1,440	79	2,421	105
77 Costa Rica	2,600	1,550	1,700	580	77	2,537	113
78 South Africa	*1,900*	..	*490*	..	..	2,886	118
79 Brazil	*3,600*	*1,650*	..	..	77	2,516	105
80 Uruguay	*1,100*	*700*	..	..	98	3,080	116
81 Iraq	5,600	2,530	*6,680*	3,010	62	2,433	101
82 Argentina	660	*530*	..	..	66	3,408	129
83 Portugal	*1,200*	800	*1,430*	520	65	3,446	141
84 Yugoslavia	*1,400*	790	*1,350*	390	..	3,462	136
85 Iran	3,800	*2,570*	..	*1,910*	51	2,368	98
86 Trinidad and Tobago	*2,550*	*1,960*	..	*580*	..	2,530	105
87 Hong Kong	3,100	1,350	*3,040*	1,060	..	2,533	110
88 Venezuela	1,500	870	..	*420*	..	2,427	98
89 Greece	*790*	470	*2,080*	*1,170*	..	3,288	132
90 Israel	*410*	..	*360*	..	..	3,143	122
91 Singapore	2,400	1,340	*650*	380	100	2,819	122
92 Spain	*820*	560	..	900	..	3,302	135
Industrialized Countries (w)	820	630	440	210	..	3,342	130
93 Ireland	*950*	830	*180*	200	..	3,545	141
94 Italy	*610*	*490*	*920*	*330*	..	3,524	140
95 New Zealand	700	*730*	..	200	..	3,551	133
96 United Kingdom	960	670	*420*	180	..	3,349	133
97 Japan	*920*	850	*460*	290	..	2,835	121
98 Austria	*550*	440	*600*	270	..	3,450	131
99 Finland	1,600	670	*220*	110	..	3,204	118
100 Netherlands	900	600	..	300	..	3,350	124
101 France	930	680	..	200	..	3,411	135
102 Australia	860	..	..	..	..	3,310	124
103 Belgium	780	500	..	*250*	..	3,713	141
104 Denmark	810	510	*270*	170	..	3,407	127
105 Germany, Fed. Rep.	690	500	*450*	270	..	3,432	129
106 Canada	910	580	*300*	*130*	..	3,377	130
107 United States	780	600	*340*	150	..	3,504	133
108 Norway	840	560	*330*	120	..	3,213	120
109 Sweden	1,100	*580*	..	*140*	..	3,064	114
110 Switzerland	740	520	*390*	230	..	3,439	128
Capital Surplus Oil Exporters							
111 Saudi Arabia	13,000	2,220	..	..	64	2,476	102
112 Libya	5,800	1,020	..	290	100	2,761	117
113 Kuwait	*760*	850	*190*	280	89	..	..
Centrally Planned Economies (w)	650	400	410	240	..	2,670	110
114 China, People's Rep.	..	..	..	..	..	2,330	99
115 Albania	*2,800*	..	*530*	..	..	2,523	105
116 Korea, Dem. Rep.	..	..	..	..	..	2,641	113
117 Mongolia	*1,010*	*480*	*290*	*250*	..	2,475	102
118 Cuba	*1,200*	*1,100*	*910*	..	..	2,712	117
119 Romania	*780*	750	*620*	590	..	3,264	123
120 Bulgaria	710	450	*550*	240	..	3,457	138
121 Hungary	640	440	*440*	200	..	3,560	135
122 USSR	*520*	300	*340*	210	..	3,540	138
123 Poland	1,110	620	*660*	270	..	3,514	134
124 Czechoslovakia	570	400	*280*	160	..	3,496	142
125 German Dem. Rep.	950	520	..	..	..	3,488	133

[a] Figures in italics are for years other than those specified. See Technical Notes.

Table 23: Education[a]

	Numbers Enrolled in Primary School as Percentage of Age Group						Numbers Enrolled in Secondary School as Percentage of Age Group		Numbers Enrolled in Higher Education as Percentage of Population Aged 20-24		Adult Literacy Rate (percent)	
	Total		Male		Female							
	1960	1976	1960	1976	1960	1976	1960	1976	1960	1975	1960	1975
Low Income Countries (w)	51	73	70	89	36	59	14	24	2	5	29	36
1 Bhutan	3	12	5	16	(.)	7	..	1	..	..	..	..
2 Cambodia	64	..	82	..	46	..	3	..	(.)	..	*36*	..
3 Bangladesh	47	83	66	106	26	60	8	23	1	*3*	*22*	*22*
4 Lao PDR	25	*85*	34	..	16	..	1	15	(.)	*(.)*	*28*	..
5 Ethiopia	5	*23*	8	*31*	3	*14*	1	*6*	(.)	*(.)*	..	*10*
6 Mali	10	*28*	14	*36*	6	*20*	1	7	..	1	*3*	10
7 Nepal	9	60	16	95	1	25	6	12	1	2	*9*	19
8 Somalia	9	*40*	13	*52*	5	*28*	1	*3*	(.)	1	*2*	50
9 Burundi	18	22	27	27	9	17	1	*3*	(.)	(.)	*14*	*10*
10 Chad	16	41	29	61	4	21	(.)	3	..	(.)	..	15
11 Rwanda	49	61	68	66	30	57	2	2	..	(.)	*16*	*23*
12 Upper Volta	8	16	12	20	5	12	(.)	2	..	(.)	*2*	*5*
13 Zaire	60	86	82	..	38	..	3	13	(.)	*1*	*31*	..
14 Burma	56	80	61	83	52	78	10	*22*	1	*2*	*60*	67
15 Malawi	63	63	81	76	45	50	1	4	..	(.)	..	*25*
16 India	61	79	80	94	40	63	20	28	3	7	*28*	36
17 Mozambique	48	..	60	..	36	..	2	..	..	..	8	..
18 Niger	5	21	7	28	3	15	(.)	3	..	(.)	1	8
19 Viet Nam	..	141	..	140	..	142	..	*51*	..	..	..	87
20 Afghanistan	9	18	15	30	2	5	1	12	(.)	1	8	12
21 Pakistan	30	*50*	46	*68*	13	*31*	11	*17*	1	*2*	*15*	21
22 Sierra Leone	23	*37*	30	*45*	15	*29*	3	*11*	(.)	1	..	15
23 Tanzania	28	*70*	37	*79*	20	*60*	2	*3*	..	(.)	*10*	*66*
24 Benin	26	*53*	38	*73*	15	*33*	2	*10*	..	1	*8*	*11*
25 Sri Lanka	95	77	100	80	90	73	27	55	1	*1*	*75*	..
26 Guinea	30	..	44	..	16	..	2	..	..	..	7	..
27 Haiti	46	..	50	..	42	..	4	8	(.)	..	15	23
28 Lesotho	83	119	63	98	102	139	3	15	(.)	*1*	..	40
29 Madagascar	52	*92*	58	..	45	..	4	*14*	(.)	1	..	*50*
30 Central African Emp.	32	*79*	53	*102*	12	*56*	1	*9*	..	(.)	*7*	..
31 Kenya	47	105	64	112	30	98	2	15	(.)	1	*20*	*40*
32 Mauritania	8	..	13	..	3	..	(.)	..	..	..	5	*17*
33 Uganda	49	51	65	61	32	42	3	7	(.)	1	*35*	..
34 Sudan	25	39	35	49	14	30	3	13	(.)	1	*13*	*20*
35 Angola	21	..	28	..	13	..	2	..	(.)	..	*5*	..
36 Indonesia	67	82	79	86	55	77	6	20	1	2	*39*	62
37 Togo	44	103	63	133	24	73	2	23	..	1	*10*	16
Middle Income Countries (w)	79	92	85	94	74	86	16	36	4	10	51	69
38 Egypt	66	*72*	80	*88*	52	*56*	16	*42*	5	14	26	*44*
39 Cameroon	65	120	87	133	43	106	2	17	..	1	*19*	..
40 Yemen, PDR	13	*78*	20	*107*	5	*48*	5	*19*	..	*1*	..	*27*
41 Ghana	59	44	80	50	39	38	3	50	(.)	1	27	30
42 Honduras	67	*89*	68	*89*	67	*88*	8	*13*	1	5	*45*	57
43 Liberia	31	*62*	45	*79*	18	*44*	2	*16*	(.)	2	*9*	..
44 Nigeria	36	*49*	46	*59*	27	*39*	3	*10*	(.)	*1*	*15*	..
45 Thailand	83	83	88	86	79	79	12	26	2	4	68	*82*
46 Senegal	27	*45*	36	*55*	17	*35*	3	*11*	1	2	*6*	10
47 Yemen Arab Rep.	8	26	14	45	(.)	7	(.)	4	..	(.)	*3*	*13*
48 Philippines	95	*105*	98	*102*	93	*108*	26	*56*	13	20	72	*87*
49 Zambia	48	*95*	58	*103*	38	*86*	1	*15*	..	2	..	*39*
50 Congo, People's Rep.	78	*155*	103	*166*	53	*143*	4	*52*	1	3	*16*	50
51 Papua New Guinea	32	58	..	71	..	45	1	12	..	*3*	29	32
52 Rhodesia	96	98	107	106	86	90	6	9	(.)	..	*39*	..
53 El Salvador	80	*77*	82	*79*	77	*75*	11	21	1	8	*49*	*62*
54 Morocco	47	65	67	82	27	47	5	17	1	3	14	*28*
55 Bolivia	64	80	78	88	50	72	12	32	4	10	39	*63*
56 Ivory Coast	46	*87*	68	*109*	24	*66*	2	*17*	(.)	2	*5*	20
57 Jordan	77	84	94	88	59	79	25	42	1	4	*32*	*59*
58 Colombia	77	*106*	77	*103*	77	*109*	12	*35*	2	8	*63*	*81*
59 Paraguay	98	*106*	105	*110*	90	*102*	11	*20*	2	*6*	*75*	*80*
60 Ecuador	83	102	87	104	79	101	12	49	3	..	*68*	74
61 Guatemala	45	..	50	..	39	..	7	..	2	4	32	46
62 Korea, Rep. of	94	*109*	99	*109*	89	*109*	27	63	5	*10*	71	91
63 Nicaragua	66	*85*	65	*83*	66	*86*	7	..	1	*9*	..	57
64 Dominican Rep.	98	*110*	99	*109*	98	*111*	7	*24*	1	*9*	65	67
65 Peru	83	*110*	95	*115*	71	*107*	15	49	4	*14*	*61*	72
66 Tunisia	66	*100*	88	*118*	43	*81*	12	20	1	4	*16*	55
67 Syrian Arab Rep.	65	*103*	89	121	39	85	16	50	4	12	30	53

	Numbers Enrolled in Primary School as Percentage of Age Group						Numbers Enrolled in Secondary School as Percentage of Age Group		Numbers Enrolled in Higher Education as Percentage of Population Aged 20-24		Adult Literacy Rate (percent)	
	Total		Male		Female							
	1960	1976	1960	1976	1960	1976	1960	1976	1960	1975	1960	1975
68 Malaysia	96	94	108	96	83	93	19	*45*	1	*3*	*53*	*60*
69 Algeria	46	*89*	55	*105*	37	*72*	8	*19*	(.)	3	*10*	*35*
70 Turkey	75	*104*	90	*114*	58	*94*	14	*29*	3	*7*	38	60
71 Mexico	80	116	82	117	77	114	11	37	3	10	65	76
72 Jamaica	82	*98*	82	*97*	83	*98*	43	*58*	2	*7*	82	86
73 Lebanon	102	..	105	..	99	..	19	..	6	..	..	..
74 Chile	109	117	111	118	107	116	24	*48*	4	17	84	88
75 China, Rep. of	67	..	..	..	47	..	37	..	..	..	54	*82*
76 Panama	96	*124*	98	*126*	94	*122*	29	53	5	*17*	73	78
77 Costa Rica	96	111	97	111	95	110	21	43	5	17	..	*88*
78 South Africa	89	..	94	..	85	..	15	..	3	*5*	57	..
79 Brazil	95	*90*	97	*89*	93	*90*	11	*18*	2	*10*	61	*76*
80 Uruguay	111	*95*	111	*95*	111	*94*	37	*62*	8	*11*	..	94
81 Iraq	65	99	94	125	36	72	19	38	2	9	*18*	..
82 Argentina	98	108	98	108	99	108	32	56	11	28	91	93
83 Portugal	131	*97*	132	*99*	129	*95*	20	*85*	4	12	62	70
84 Yugoslavia	96	*97*	100	*100*	91	*94*	34	*55*	9	20	*77*	85
85 Iran	41	98	56	119	27	77	12	48	1	*5*	16	*50*
86 Trinidad and Tobago	*78*	..	79	..	76	..	22	..	1	*3*	*93*	*95*
87 Hong Kong	87	121	93	123	79	119	24	*50*	4	10	70	90
88 Venezuela	100	104	100	105	100	103	21	38	4	19	*63*	82
89 Greece	105	*105*	107	*107*	103	*102*	41	*83*	4	*16*	*81*	..
90 Israel	98	*128*	99	*127*	97	*128*	48	*39*	10	*24*	*84*	88
91 Singapore	111	110	121	113	101	107	32	55	6	9	..	*75*
92 Spain	110	114	106	114	116	115	23	*73*	4	21	87	..
Industrialized Countries (w)	**114**	**102**	**110**	**103**	**106**	**104**	**58**	**82**	**16**	**34**	**..**	**99**
93 Ireland	110	109	107	110	112	109	35	90	9	16	..	*98*
94 Italy	111	105	112	106	109	105	34	*71*	7	25	*91*	98
95 New Zealand	108	111	110	112	106	110	73	85	13	27	..	*99*
96 United Kingdom	95	*105*	95	*105*	94	*105*	67	*81*	9	*17*	..	99
97 Japan	103	101	103	101	103	101	74	*92*	10	25	98	99
98 Austria	105	102	106	103	104	101	50	77	8	19	..	99
99 Finland	97	103	100	104	95	102	74	*97*	7	19	99	100
100 Netherlands	105	101	105	101	104	102	58	92	13	26	..	99
101 France	144	108	144	106	143	110	46	*85*	8	24	..	99
102 Australia	103	92	103	92	103	91	51	73	13	23	..	100
103 Belgium	109	106	111	107	108	105	69	89	9	22	..	99
104 Denmark	103	103	103	103	103	103	65	77	10	30	..	99
105 Germany, Fed. Rep.	133	..	..	..	134	..	53	..	6	20	..	99
106 Canada	104	106	107	108	102	105	52	*94*	16	39	..	98
107 United States	118	..	..	..	..	..	64	..	32	58	98	*99*
108 Norway	118	102	118	102	118	102	53	89	7	22	..	*99*
109 Sweden	98	96	95	96	96	97	55	70	9	28	..	*99*
110 Switzerland	118	90	118	90	118	89	26	*52*	7	14	..	99
Capital Surplus Oil Exporters												
111 Saudi Arabia	12	*47*	22	*58*	2	*34*	2	19	(.)	3	*3*	..
112 Libya	59	155	92	163	24	147	9	65	1	..	..	45
113 Kuwait	117	93	131	98	102	87	37	*60*	0	9	*47*	60
Centrally Planned Economies (w)	**101**	**100**	**101**	**100**	**101**	**99**	**62**	**69**	**11**	**20**	**..**	**..**
114 China, People's Rep.	..	..	..	..	..	..	..	..	..	..	..	..
115 Albania	94	..	102	..	86	..	20	..	5	..	..	..
116 Korea, Dem. Rep.	..	113	..	115	..	112	..	..	..	..	..	..
117 Mongolia	79	*108*	79	*111*	78	*105*	51	*81*	8	8	..	..
118 Cuba	109	122	109	125	109	119	14	*41*	3	11	..	*96*
119 Romania	98	*109*	101	*110*	95	*108*	24	*62*	5	9	..	98
120 Bulgaria	93	*97*	94	*97*	92	*96*	55	*88*	11	19	..	..
121 Hungary	101	99	103	99	100	99	46	*63*	7	12	97	98
122 USSR	100	97	100	98	100	97	73	73	11	22	98	99
123 Poland	109	100	110	102	107	99	50	55	9	17	95	98
124 Czechoslovakia	93	97	93	96	93	97	25	37	11	12	95	..
125 German Dem. Rep.	112	94	111	92	113	95	39	*90*	16	30	..	..

[a] Figures in italics are for years other than those specified. See Technical Notes.

Table 24: Income Distribution[a]

	Year	Percentage Shares of Household Income, by Percentile Groups of Households					
		Lowest 20 Percent	2nd Quintile	3rd Quintile	4th Quintile	Highest 20 Percent	Highest 10 Percent
Low Income Countries							
1 Bhutan		..	..	..	..	..	..
2 Cambodia		..	..	..	..	..	..
3 Bangladesh		..	..	..	..	..	..
4 Lao PDR		..	..	..	..	..	..
5 Ethiopia		..	..	..	..	..	..
6 Mali		..	..	..	..	..	..
7 Nepal		..	..	..	..	..	..
8 Somalia		..	..	..	..	..	..
9 Burundi		..	..	..	..	..	..
10 Chad		..	..	..	..	..	..
11 Rwanda		..	..	..	..	..	..
12 Upper Volta		..	..	..	..	..	..
13 Zaire		..	..	..	..	..	..
14 Burma		..	..	..	..	..	..
15 Malawi		..	..	..	..	..	..
16 India	1964-65	6.7	10.5	14.3	19.6	48.9	35.2
17 Mozambique		..	..	..	..	..	..
18 Niger		..	..	..	..	..	..
19 Viet Nam		..	..	..	..	..	..
20 Afghanistan		..	..	..	..	..	..
21 Pakistan		..	..	..	..	..	..
22 Sierra Leone		..	..	..	..	..	..
23 Tanzania		..	..	..	..	..	..
24 Benin		..	..	..	..	..	..
25 Sri Lanka	1969-70	7.5	11.7	15.7	21.7	43.4	28.2
26 Guinea		..	..	..	..	..	..
27 Haiti		..	..	..	..	..	..
28 Lesotho		..	..	..	..	..	..
29 Madagascar		..	..	..	..	..	..
30 Central African Emp.		..	..	..	..	..	..
31 Kenya		..	..	..	..	..	..
32 Mauritania		..	..	..	..	..	..
33 Uganda		..	..	..	..	..	..
34 Sudan		..	..	..	..	..	..
35 Angola		..	..	..	..	..	..
36 Indonesia		..	..	..	..	..	..
37 Togo		..	..	..	..	..	..
Middle Income Countries							
38 Egypt		..	..	..	..	..	..
39 Cameroon		..	..	..	..	..	..
40 Yemen, PDR		..	..	..	..	..	..
41 Ghana		..	..	..	..	..	..
42 Honduras	1967	2.3	5.0	8.0	16.9	67.8	50.0
43 Liberia		..	..	..	..	..	..
44 Nigeria		..	..	..	..	..	..
45 Thailand		..	..	..	..	..	..
46 Senegal		..	..	..	..	..	..
47 Yemen Arab Rep.		..	..	..	..	..	..
48 Philippines	1970-71	3.7	8.2	13.2	21.0	53.9	..
49 Zambia		..	..	..	..	..	..
50 Congo, People's Rep.		..	..	..	..	..	..
51 Papua New Guinea		..	..	..	..	..	..
52 Rhodesia		..	..	..	..	..	..
53 El Salvador		..	..	..	..	..	..
54 Morocco		..	..	..	..	..	..
55 Bolivia		..	..	..	..	..	..
56 Ivory Coast		..	..	..	..	..	..
57 Jordan		..	..	..	..	..	..
58 Colombia		..	..	..	..	..	..
59 Paraguay		..	..	..	..	..	..
60 Ecuador		..	..	..	..	..	..
61 Guatemala		..	..	..	..	..	..
62 Korea, Rep. of	1976	5.7	11.2	15.4	22.4	45.3	27.5
63 Nicaragua		..	..	..	..	..	..
64 Dominican Rep.		..	..	..	..	..	..
65 Peru	1972	1.9	5.1	11.0	21.0	61.0	42.9
66 Tunisia		..	..	..	..	..	..
67 Syrian Arab Rep.		..	..	..	..	..	..

	Year	Percentage Shares of Household Income, by Percentile Groups of Households					
		Lowest 20 Percent	2nd Quintile	3rd Quintile	4th Quintile	Highest 20 Percent	Highest 10 Percent
68 Malaysia	1970	3.3	7.3	12.2	20.7	56.6	39.6
69 Algeria		..	..	..	..	..	..
70 Turkey	1973	3.4	8.0	12.5	19.5	56.5	40.7
71 Mexico	1977	2.9	7.4	13.2	22.0	54.4	36.7
72 Jamaica		..	..	..	..	..	..
73 Lebanon		..	..	..	..	..	..
74 Chile	1968	4.4	9.0	13.8	21.4	51.4	34.8
75 China, Rep. of	1971	8.7	13.2	16.6	22.3	39.2	24.7
76 Panama		..	..	..	..	..	..
77 Costa Rica	1971	3.3	8.7	13.3	19.9	54.8	39.5
78 South Africa		..	..	..	..	..	..
79 Brazil	1972	2.0	5.0	9.4	17.0	66.6	50.6
80 Uruguay		..	..	..	..	..	..
81 Iraq		..	..	..	..	..	..
82 Argentina	1970	4.4	9.7	14.1	21.5	50.3	35.2
83 Portugal		..	..	..	..	..	..
84 Yugoslavia	1973	6.5	11.9	17.6	24.0	40.0	22.5
85 Iran		..	..	..	..	..	..
86 Trinidad and Tobago		..	..	..	..	..	..
87 Hong Kong		..	..	..	..	..	..
88 Venezuela	1970	3.0	7.3	12.9	22.8	54.0	35.7
89 Greece		..	..	..	..	..	..
90 Israel		..	..	..	..	..	..
91 Singapore		..	..	..	..	..	..
92 Spain	1974	6.0	11.8	16.9	23.1	42.2	26.7
Industrialized Countries							
93 Ireland		..	..	..	..	..	..
94 Italy	1969	5.1	10.5	16.2	21.7	46.5	30.9
95 New Zealand		..	..	..	..	..	..
96 United Kingdom	1973	6.3	12.6	18.4	23.9	38.8	23.5
97 Japan	1969	7.9	13.1	16.8	21.2	41.0	27.2
98 Austria		..	..	..	..	..	..
99 Finland		..	..	..	..	..	..
100 Netherlands	1967	6.5	11.6	16.4	22.7	42.9	27.7
101 France	1970	4.3	9.8	16.3	22.7	46.9	30.4
102 Australia	1966-67	6.6	13.5	17.8	23.4	38.8	23.7
103 Belgium		..	..	..	..	..	..
104 Denmark		..	..	..	..	..	..
105 Germany, Fed. Rep.	1973	6.5	10.3	15.0	22.0	46.2	30.3
106 Canada	1969	5.0	11.8	17.9	24.3	41.0	25.1
107 United States	1972	4.5	10.7	17.3	24.7	42.8	26.6
108 Norway	1970	6.3	12.9	18.8	24.7	37.3	22.2
109 Sweden	1972	6.6	13.1	18.5	24.8	37.0	21.3
110 Switzerland		..	..	..	..	..	..
Capital Surplus Oil Exporters							
111 Saudi Arabia		..	..	..	..	..	..
112 Libya		..	..	..	..	..	..
113 Kuwait		..	..	..	..	..	..
Centrally Planned Economies							
114 China, People's Rep.		..	..	..	..	..	..
115 Albania		..	..	..	..	..	..
116 Korea, Dem. Rep.		..	..	..	..	..	..
117 Mongolia		..	..	..	..	..	..
118 Cuba		..	..	..	..	..	..
119 Romania		..	..	..	..	..	..
120 Bulgaria		..	..	..	..	..	..
121 Hungary		..	..	..	..	..	..
122 USSR		..	..	..	..	..	..
123 Poland		..	..	..	..	..	..
124 Czechoslovakia		..	..	..	..	..	..
125 German Dem. Rep.		..	..	..	..	..	..

[a] These estimates should be treated with caution. See Technical Notes.

Technical Notes

These notes outline the scope and sources of the data presented in the tables and indicate the methodology and concepts used in their preparation. The sources cited in the Bibliography following the notes carry comprehensive definitions and descriptions of the concepts employed.[1]

While the statistics and measures in this volume have been selected carefully, consistent with coverage of a large number of countries over extended time periods, readers are urged to exercise great care in interpreting them, particularly in comparing indicators across countries, since statistical practices, definitions, methodology, and coverage differ widely among countries. The statistical systems in many developing countries still are weak, and this affects the reliability of the data.

Country Groupings and Coverage

The 125 countries covered are grouped as follows:

—*Developing Countries* with populations over a million[2] are divided on the basis of 1977 per capita gross national product (GNP) into:
  Low Income Countries—with per capita income of US$300 and below (37 countries)
  Middle Income Countries—with per capita income above US$300 (55 countries)
—*Industrialized Countries* (18 countries)
—*Major Capital Surplus Oil Exporting Countries* (3 countries)
—*Centrally Planned Economies* (12 countries).[2]

Within each group, countries are listed in ascending order of per capita GNP in 1977, except for Cambodia and Lebanon, for which 1974 estimates of per capita GNP are the most recent available. Countries are listed in this same order in all the tables. They are shown alphabetically, with their reference numbers, on the page preceding the Table of Contents. The country composition of the Low Income and Middle Income groups shown in the tables of the present volume differs somewhat from that used in *World Development Indicators, 1978,* since it reflects the per capita income levels of 1977, rather than 1976, and takes account of revisions to the underlying estimates of GNP and population.

Countries with populations under one million are not covered in the tables, but basic data for small countries that are members of the United Nations and/or the World Bank are given in the Notes to Table 1 below.

Calculation of Growth Rates

Most growth rates have been calculated for two time periods: 1960 to 1970, and 1970 to 1977, or 1976 when data for 1977 were not available. All growth rates shown are in real terms and have been computed using the least-squares method unless otherwise noted.[3]

By using the least-squares method, all observations within the relevant time period have been taken into account, and the resulting growth rates reflect general trends without being unduly influenced by cyclical factors or exceptional variations in a particular year.

Group Summary Statistics

Depending on the nature of the particular indicator and on the available data, the summary statistic given for the groups of countries is either a weighted average, an average based on grouped data, or a median value. Since the coverage of countries is not uniform for all the indicators, users should exercise due caution in comparing the summary measures, both among indicators and among country groups. Where there are insufficient data or it is otherwise im-

[1]Since the United Nations no longer reports data on the Republic of China, most of the indicators for this country are derived from national publications.

[2]Albania, People's Republic of China, Cuba, Democratic Republic of Korea, Mongolia, and Romania are grouped with centrally planned economies. Cambodia, Lao People's Democratic Republic, Socialist Republic of Viet Nam, and Yugoslavia are grouped with developing countries.

[3]The least-squares growth rate, r, is calculated by regressing all the values of the variable studied within the relevant period over time using the following logarithmic form:

$$\text{Log } X_t = a + bt + e_t$$

where:
X_t = variable
t = time
e_t = error term
b = slope coefficient

then, r = (antilog b) − 1

Thus, (ant. b) − 1 provides a least-squares estimate of the growth rate.

possible to derive a meaningful statistic, no indicator is shown at the group level.

The equation for the *weighted average*, $\overline{X}_w$, is

$$\overline{X}_w = \frac{\sum_{i=1}^{n} W_i x_i}{\sum_{i=1}^{n} W_i} \text{ where}$$

W = indicator used as the weight
x = indicator to be averaged
i = observations.

The weights used are given in the Notes on the individual indicators in question.

The equation for the *group average*, $\overline{X}_g$, is

$$\overline{X}_g = \frac{\sum_{i=1}^{n} j}{\sum_{i=1}^{n} k} \text{ where}$$

j and k are the component variables of the indicator to be averaged, and i = observations. For example, the group average energy consumption per capita is obtained by summing the energy consumption of all the countries in the group (in kilograms of coal equivalent) and then dividing this total by the sum of the countries' populations.

The median value is the central value of a set of values that have been arranged in order of magnitude. For each of the indicators and groups of countries in question, the values for individual countries are simply arranged from the largest to the smallest and the median located as that below and above which there is an equal number of values. Where there is an odd number of countries, the median is the middle item; where there is an even number, the median is halfway between (i.e., the mean of) the two middle items.

Table 1: Basic Indicators

The *population* estimates for mid-1977 are primarily from the UN Population Division, supplemented by data from the World Bank and the US Bureau of the Census.

The data on *area* are from the *UN Demographic Yearbook, 1977*.

Gross National Product (GNP) measures the total domestic and foreign output claimed by residents of a country. It comprises Gross Domestic Product (see below) plus factor incomes (such as investment receipts and workers' remittances) accruing to residents from abroad, less the income earned in the domestic economy accruing to persons abroad.

Gross Domestic Product (GDP) measures the total final output of goods and services produced by the country's economy—that is, within the country's territory by residents and non-residents, regardless of its allocation between domestic and foreign claims. The value of both GDP and GNP is calculated without making deductions for the value of expenditure on capital goods for replacement purposes.

Population, incomes and area of small UN/World Bank member countries are as follows:

UN/World Bank Members with Population Under 1 Million

	Population (millions) Mid-1977	GNP Per Capita (US dollars) 1977	Area (thousand square kilometers)
Maldives	0.1	90	(.)
Cape Verde	0.3	130	4
Comoros	0.4	190	2
Gambia, The	0.6	200	11
Solomon Islands	0.2	250	28
Guinea-Bissau	0.5	280	36
Equatorial Guinea	0.3	330	28
Western Samoa	0.2	360	3
Botswana	0.7	410	600
Sao Tomé and Principe	0.1	420	1
Grenada	0.1	520	(.)
Guyana	0.8	560	215
Djibouti	0.3	580	22
Swaziland	0.5	610	17
Seychelles	0.1	710	(.)
Mauritius	0.9	760	2
Fiji	0.6	1,210	18
Surinam	0.4	1,470	163
Barbados	0.2	1,770	(.)
Cyprus	0.6	1,830	9
Malta	0.3	1,870	(.)
Oman	0.8	2,540	212
Bahamas	0.2	3,520	14
Bahrain	0.3	3,790	1
Gabon	0.5	3,860	268
Iceland	0.2	7,070	103
Luxembourg	0.4	7,160	3
Qatar	0.2	11,670	11
United Arab Emirates	0.8	14,420	84

The estimates of GNP underlying the 1977 *GNP per capita* figures and the *real growth rates of GNP per capita* have been prepared by the

World Bank on the basis of national accounts series compiled by national statistical offices, supplemented by data gathered on World Bank missions, and population data from the UN Population Division, the World Bank, and the US Bureau of the Census.

The 1977 *GNP per capita* figures are calculated according to the *World Bank Atlas* methodology, in the following manner: 1977 GNP in national currency units is first expressed in weighted average prices for the base period 1975-77, converted into US dollars at the GNP-weighted average exchange rate for this period, and then adjusted for US inflation between the 1975-77 base period and the current year, 1977. The resulting estimate of GNP is then divided by the mid-1977 population. This method is designed to reduce the impact of temporary under- or over-valuations of a particular currency and generally assures a greater degree of comparability of GNP per capita estimates among countries. The country-group averages for GNP per capita are weighted by the size of country populations; those for the growth of GNP per capita are weighted by the size of countries' GNP per capita in 1970.

For many countries the estimates of GNP per capita and its growth differ substantially from those quoted in *World Development Indicators, 1978*. The differences partly reflect revisions to national accounts data made by the reporting countries. (Such revisions are common statistical practice, and can be far-reaching: for example, the US has recently revised its national accounts for all years since 1938.) However, they are mainly due to the use of new UN estimates of population, which take into account new data from censuses and surveys.

The conversion of the GNP of different countries to a common denominator is known to create distortions. The UN's International Comparison Project (ICP), in which the Bank has been a major participant, is designed to provide more realistic comparisons of income levels based on comparisons of purchasing power. To date work has been completed for 16 countries based on 152 detailed categories of expenditure in each country. Work is well advanced on the third phase of the ICP, which will yield data on purchasing power for about 18 more, mostly developing, countries.

The table above provides examples for 1970 and 1975 of the differences between GNP per capita as conventionally computed and incomes

Indexes of Per Capita GNP Converted to US Dollars at Official Exchange Rates, and Per Capita GDP in "International" Dollars, 1970 and 1975
(United States = 100)

	1970		1975	
	US Dollars (1)	International Dollars (2)	US Dollars (3)	International Dollars (4)
Kenya	3.3	6.3	3.2	6.1
India[a]	2.0	6.9	1.9	6.9
Philippines	4.8	12.0	5.3	13.9
Korea, Rep. of	6.1	12.1	8.2	16.9
Colombia	7.7	18.1	8.5	19.8
Malaysia	9.1	19.1	10.4	19.9
Iran	18.4	20.3	24.6	40.8
Hungary[b]	42.1	42.7	32.5	47.1
Italy	40.7	49.2	40.4	47.1
Japan	56.7	59.2	63.9	65.1
United Kingdom	53.5	63.5	53.6	62.0
Netherlands	81.1	68.7	84.2	70.5
Belgium	83.8	72.0	91.4	78.3
France	77.8	73.2	84.3	79.5
Germany, Fed. Rep.	93.3	78.2	93.3	79.2
United States	100.0	100.0	100.0	100.0

[a]1975 GDP in international dollars estimated from ICP figure for 1973 using growth rates computed from *World Bank Atlas* data.
[b]1970 GNP and 1975 GNP in US dollars are special World Bank estimates. The 1975 GDP in international dollars has been estimated from the ICP figure for 1974 using growth rates computed from *World Bank Atlas* data.

Sources: Col. (1) and (3)— *Atlas* method estimates based on 1975-77 average prices and exchange rates.
(2) and (4)— *International Comparisons of Real Product and Purchasing Power* (Baltimore and London: The Johns Hopkins University Press, 1978), page 14.

as calculated using the ICP methodology.[1]

The *average annual rate of inflation* is the "implicit GDP deflator", which is calculated by dividing, for each year of the period in question, the value of GDP in current market prices by the value of GDP in constant market prices, both in national currency. This measure of inflation has limitations, especially for the oil producing countries in the light of the drastic increase in oil prices in late 1973.

The *adult literacy rate* is the percentage of population aged 15 and over able to read and write. These rates are based primarily on information from the UN Educational, Scientific and Cultural Organization (Unesco), supplemented by World Bank data. For some countries the estimates shown are for years other than, though not more than two years distant from, those specified. Hence the series is not strictly comparable between countries. The country-group averages are weighted by country populations.

Life expectancy at birth indicates the number of years newborn children would live if subject to the mortality risks prevailing for the cross-section of population at the time of their birth. Data are from the UN Population Division, supplemented from World Bank data files. The country-group averages are weighted by country populations.

The *index of per capita food production* shows the average annual quantity of food produced per capita in the years 1975-77 as a percentage of the average annual amount produced in 1969-71. The estimates are derived from those of the UN Food and Agriculture Organization, which are calculated by dividing indexes of the quantity of food production (comprising cereals, starchy roots, sugar cane, sugar beet, pulses, edible oil crops, nuts, fruits, vegetables, livestock, and livestock products) by indexes of population. Food production is measured net of animal feed, seeds for use in agriculture, and quantities lost in processing and distribution. The country-group averages are weighted by country populations.

Tables 2 and 3: Growth and Structure of Production

National accounts series in national currency units have been used to calculate the indicators in these tables. The growth rates in Table 2 are calculated using constant-price series, while the shares of GDP in Table 3 are calculated from current-price series.

Gross Domestic Product (GDP) is defined in the Notes to Table 1 above. For most countries, GDP by industrial origin is measured at factor cost, but for some countries without complete national accounts series at factor cost, market-price data have been used. GDP at factor cost is equal to GDP at market prices, less net indirect taxes.

The *agricultural sector* covers agriculture, forestry, hunting, and fishing. The *industrial sector* comprises mining, *manufacturing*, construction, and electricity, water, and gas. All other branches of economic activity are regarded as services.

In Table 2, the average growth rates for the country groups are weighted, for both periods, by the size of countries' GDP at factor cost in 1970 US dollars. In Table 3, the average sectoral shares are weighted by the size of countries' GDP in current US dollars.

Changes in the national accounts series of individual countries are the main source of some substantial differences between the data in these two tables and the data quoted in *World Development Indicators, 1978*. These changes include revisions to historical national accounts series, and the adoption in some countries of the new UN *System of National Accounts* (1968).

Tables 4 and 5: Growth of Selected Demand Aggregates; Structure of Demand

National accounts series in national currency units have been used to compute the indicators in these tables. The growth rates in Table 4 are calculated in constant prices; the shares of GDP in Table 5 are expressed in current prices. Most of the definitions employed are those of the UN *System of National Accounts* (SNA).

Gross Domestic Product (GDP) is defined in the Notes to Table 1 above.

Public consumption (General Government consumption in SNA terminology) includes all current expenditures for purchases of goods and services by all levels of government. Capital expenditure on national defense and security is regarded as a consumption expenditure.

Private consumption consists of the market value of all goods and services purchased or received as income in kind, by households and non-profit institutions. It includes the imputed

[1]For a detailed description of the methodology, see I. B. Kravis, A. Heston, and R. Summers, *International Comparisons of Real Product and Purchasing Power* (Baltimore and London: The Johns Hopkins University Press, 1978). This book contains the results of Phase 2 of the United Nations International Comparison Project.

rent for owner-occupied dwellings.

Gross domestic investment consists of the outlays for additions to the fixed assets of both the private and public sectors, plus the net value of inventory changes.

Gross domestic savings shows the amount of gross domestic investment financed from domestic output. It is calculated as the difference between gross domestic investment and the deficit on current account of goods and non-factor services (excluding net current transfers). It comprises both public and private savings.

Exports of goods and non-factor services represent the value of all goods and non-factor services sold to the rest of the world; they include merchandise, freight insurance, travel, and other non-factor services. The value of factor services (such as investment receipts and workers' remittances from abroad) is excluded from this measure.

The resource *balance* is the difference between exports and imports of goods and non-factor services.

In Table 5, all the country-group averages are weighted by the size of countries' GDP, at market prices, in current US dollars.

Changes in the national accounts series of individual countries are the main source of some substantial differences between the data in these two tables and the data quoted in *World Development Indicators, 1978*. These changes include revisions to historical national accounts series, and the adoption in some countries of the new UN *System of National Accounts* (1968).

Table 6: Industrialization

The *percentage distribution of value added* among the manufacturing industries is calculated from United Nations Industrial Development Organization (UNIDO) data, with base values expressed in 1970 US dollars.

The classification of the manufacturing industries is in accordance with the UN International Standard Industrial Classification (ISIC) of all economic activities. *Food and agriculture* comprises ISIC Major Groups 311, 313, and 314. *Textiles and clothing* comprises ISIC Major Groups 321-324. *Machinery and transport equipment* refers to ISIC Major Groups 382-384. *Chemicals* comprises ISIC Major Groups 351 and 352. *Other Manufacturing* comprises ISIC Major Division 3 less all of the above.

To calculate gross *manufacturing output per capita*, ratios of gross output to value added in manufacturing, derived from the *UN Yearbook of Industrial Statistics*, were applied to data on value added in manufacturing from the World Bank's national accounts series in national currencies, converted into 1970 US dollars. Per capita values were then calculated using mid-year estimates of country populations.

Table 7: Energy

All data on energy are from UN sources. They refer to commercial forms of primary energy: coal and lignite, crude petroleum, natural gas and natural gas liquids, and hydro and nuclear electricity, converted into coal equivalent. The use of firewood and other traditional fuels, substantial in certain developing countries, is not taken into account since data are not available.

Energy consumption per dollar of GDP refers to the ratio of total energy consumption to GDP, in constant 1975 US dollars. This indicator shows the intensity of energy use in the economy.

Energy imports as a percentage of merchandise export earnings refers to the US dollar value of energy imports — Standard International Trade Classification (SITC) (Revised) Section 3 —as a percentage of total merchandise export earnings.

The data on energy imports do not permit a distinction to be drawn between petroleum imports for fuel and those for use in the petrochemical industry. Hence these percentages may overestimate the degrees of dependence on foreign energy.

Table 8: Growth of Merchandise Trade

The merchandise trade statistics are from the UN trade data system, including unpublished data and data from the *UN Monthly Bulletin of Statistics* and from the *UN Yearbook of International Trade Statistics*, supplemented by statistics from the UN Conference on Trade and Development (UNCTAD) and from the International Monetary Fund's (IMF) *Direction of Trade* and *International Financial Statistics*.

Merchandise exports and imports cover, with a few exceptions, all international changes in ownership of merchandise passing across the customs borders of the compiling countries. Exports are valued f.o.b. (free on board), imports c.i.f. (cost, insurance and freight). These values are expressed in current US dollars.

The *growth rates of merchandise exports and imports* are in real terms, and calculated from quantum indexes of exports and imports. For the majority of developing countries these indexes are taken from the UNCTAD *Handbook of International Trade and Development Statistics*, and computer printouts which show revised data. For industrialized countries, these quantum indexes are obtained from the *UN Yearbook of International Trade Statistics* and *UN Monthly Bulletin of Statistics*.

Revisions to the growth rates shown in *World Development Indicators, 1978* reflect, first, the use of different sources of underlying data which permit a change in methodology, so that all the growth rates shown this year have been computed from quantum indexes; and second, major data revisions by UNCTAD, as of March 1979.

The *terms of trade* (or the "net barter terms of trade") are calculated as the ratio of a country's export unit value index to the index of import unit values. The terms of trade index numbers shown here for 1960 and 1977, where 1970 = 100, thus indicate changes over time in the level of export prices expressed as a percentage of import prices. The unit value indexes are from the same UNCTAD and UN sources cited above, in connection with the growth rates of exports and imports.

Tables 9 and 10: Structure of Merchandise Trade

The trade shares in these tables are derived from trade values given in UN trade tapes and in the *UN Yearbook of International Trade Statistics*, expressed in current US dollars.

Merchandise exports and imports are defined in the Notes to Table 8 above.

In the categorization of exports in Table 9, *fuels, minerals and metals* refers to commodities in SITC (Rev.) Section 3, Divisions 27, 28 and the non-ferrous metals of SITC Division 68. *Other primary commodities* comprises SITC Sections 0, 1, 2, 4 (food and live animals, beverages and tobacco, inedible crude materials, oils, fats and waxes) less SITC Divisions 27 and 28 (minerals, crude fertilizers and metalliferous ores). *Textiles and clothing* refers to SITC Divisions 65 and 84 (textiles, yarn, fabrics, and clothing). *Machinery and transport equipment* refers to commodities in SITC Section 7. *Other manufactures*, calculated as the residual from the total value of manufactured exports, refers to SITC Sections 5 to 9 less 7 and Divisions 65, 68, and 84.

In the categorization of imports in Table 10, *food* commodities are those in SITC (Rev.) Sections 0, 1, 4, and Division 22 (food and live animals, beverages and tobacco, oils, and fats). *Fuels* refers to commodities in SITC Section 3. *Other primary commodities* comprises SITC Section 2 (crude materials excluding fuels) less SITC Division 22 (oilseeds and nuts), plus SITC Division 68 (non-ferrous metals). *Machinery and transport equipment* refers to commodities in SITC Section 7. *Other manufactures*, calculated as the residual from the total value of manufactured imports, refers to SITC Sections 5 to 9 less 7 and Division 68.

Table 11: Destination of Merchandise Exports

Merchandise exports are.defined in the Notes to Table 8 above. All trade shares in this table are based on statistics on the value of trade in current US dollars, published by the IMF in its *Direction of Trade*. Unallocated exports are distributed among the country groups in proportion to their respective shares of allocable trade. Reflecting the practice used in the data source, the country groups shown in this table differ somewhat from those used elsewhere in the volume. Specifically:

—*Developed Countries* include Gibraltar and Iceland in addition to those referred to as "industrialized" elsewhere in the volume

—*Developing Countries* include Cuba and Romania, referred to as centrally planned economies elsewhere in the volume

—*Capital Surplus Oil Exporting Countries* include Oman, Qatar and United Arab Emirates, in addition to Kuwait, Libya and Saudi Arabia

—*Centrally Planned Economies* exclude Cuba and Romania.

Table 12: Trade in Manufactured Goods

The data in this table are from the UN, and are among those used to compute Special Table B in the *UN Yearbook of International Trade Statistics*.

Manufactured goods refers to commodities in the SITC (Rev.) Sections 5 through 9 (chemicals and related products, manufactured articles, machinery and transport equipment), excluding Division 68 (non-ferrous metals).

The country groups used are the same as those in Table 11, and differ somewhat from those used elsewhere in the volume. Specifically:

—*Developed Countries* include Gibraltar and Iceland in addition to those referred to as "in-

dustrialized" elsewhere in the volume
—*Developing Countries* include Cuba and Romania, referred to as centrally planned economies elsewhere in the volume
—*Capital Surplus Oil Exporting Countries* include Oman, Qatar and United Arab Emirates, in addition to Kuwait, Libya and Saudi Arabia
—*Centrally Planned Economies* exclude Cuba and Romania.

Table 13: Balance of Payments and Debt Service Ratios

The current account balance is the difference between (i) exports of goods and services plus inflows of unrequited official and private transfers, and (ii) imports of goods and services plus unrequited transfers to the rest of the world. Excluded from this figure are all interest payments on external public and publicly guaranteed debt, which are shown separately. The latter represent interest payments on the disbursed portion of outstanding public and publicly guaranteed debt plus commitment charges on undisbursed debt. The current account estimates have been taken from the IMF's data files; estimates of interest payments are from the World Bank's Debt Reporting System.

Debt service is the sum of interest payments and repayments of principal on external public and publicly guaranteed debt. Debt service data are taken from the Bank's Debt Reporting System. The ratio of debt service to exports of goods and services is a commonly used rule of thumb for assessing debt-servicing capacity. It is important to note, however, that the debt service ratios shown here do not cover unguaranteed private debt, which for some countries is substantial. Also it should be noted that debt contracted for the purchase of military equipment is not usually reported. The average ratios of debt service to GNP for the country groups are weighted by the size of countries' GNP in current US dollars (as quoted in the *World Bank Atlas, 1978*). The average ratios of debt service to exports of goods and services are weighted by the size of countries' exports of goods and services.

Since the World Bank's Debt Reporting System is concerned solely with developing countries, data on external debt are not given here for other groups of countries. Neither are comparable data for those countries available from other sources.

Table 14: Flows of External Capital

The data on the gross inflow and repayment of principal (amortization) of public and publicly guaranteed medium- and long-term loans are from the World Bank's Debt Reporting System. The net inflow is the gross inflow less the repayment of principal.

Since the World Bank's Debt Reporting System is concerned solely with developing countries, data on external debt are not given here for other groups of countries. Neither are comparable data for those countries available from other sources.

Net direct private investment is the net amount invested by non-residents of the country in enterprises in which they (or other non-residents) exercise a significant degree of managerial control; these net figures also take account of the value of direct investment abroad by residents. The IMF's balance of payments data files have been used in compiling these estimates.

Table 15: External Public Debt and International Reserves

External public debt outstanding represents the amount of public and publicly guaranteed loans that has been disbursed, net of cancelled loan commitments and repayments of principal. The data shown refer to the end of the year indicated, and are from the World Bank's Debt Reporting System. In estimating external public debt as a percentage of GNP, GNP is converted from national currencies into US dollars at the official exchange rate for the year in question.

Since the World Bank's Debt Reporting System is concerned solely with developing countries, data on external debt are not given here for other groups of countries. Neither are comparable data for those countries available from other sources.

Gross international reserves comprise the sum of a country's holdings of gold, Special Drawing Rights (SDRs), the reserve position of IMF members in the Fund, and holdings of foreign exchange under the control of monetary authorities. The gold component of these reserves is valued throughout at SDR 35 per ounce. This is equivalent to US$35 per ounce before December 1971; US$38 per ounce from December 1971 through January 1973; US$42.22 per ounce from February 1973 through June 1974; and to the US dollar price of gold as measured by the market valuation of the SDR beginning in July 1974.

The data for holdings of international reserves are from the IMF data files. The reserve levels shown for 1970 and 1977 refer to the end of the year indicated and are expressed in current US dollars. The reserve holdings at the end of 1977 are also expressed in terms of the number of months' imports of goods and services they could pay for, with imports at the average level for 1977.

Table 16: Net Flows of Official Development Assistance from Members of the OECD and OPEC

Official development assistance (ODA) consists of net disbursements of loans or grants made at concessional financial terms by official agencies of the members of the Development Assistance Committee of the Organisation for Economic Co-operation and Development (OECD) and members of the Organization of Petroleum Exporting Countries (OPEC), with the objective of promoting economic development and welfare. It includes the value of technical cooperation.

Figures for 1977 and earlier years are actual figures published by the OECD; those for 1978 are preliminary estimates. All others are projections by World Bank staff, based on OECD and World Bank estimates of GNP growth, on information on budget appropriations for aid, and on aid policy statements by governments. They are projections, not predictions, of what will occur, based on present plans.

The nominal values of ODA for the OECD countries as a group have been converted into constant 1977 prices using the *US dollar GNP deflator*. This deflator is based on price increases in the OECD countries (excluding Greece, Portugal, Spain, and Turkey) measured in terms of the US dollar. It takes account of parity changes between the US dollar and national currencies. (For example, when the US dollar depreciates, price increases measured in national currencies have to be adjusted upward by the amount of the depreciation to obtain price increases measured in US dollar terms.)

Finland became a member of the Development Assistance Committee (DAC) in January 1975; New Zealand became a member in 1973. The majority of OPEC countries introduced sizeable aid programs only in late 1973 or early 1974.

Table 17: Historical and Projected Population Growth, and Hypothetical Stationary Population

The estimates of *mid-1977 population* are those of Table 1.

The *growth rates of total population* are end-point rates calculated from mid-year country populations.

The *projections of population* to the year 2000 and to the point where it will eventually become stationary are made for each country separately, starting with information on its total population, fertility and mortality rates in 1975, the base year, and projecting these parameters forward for five year intervals on the basis of generalized assumptions until the population becomes stationary. The base year estimates are from the UN ("Demographic Estimates and Projections for the World, Regions, and Countries as Assessed in 1978: Provisional Report," 1979), the World Bank, the US Bureau of the Census, and the Population Council.

The *net reproduction rate* (NRR) indicates the number of daughters that a newborn girl will bear during her lifetime, assuming fixed age-specific fertility rates and a fixed set of mortality rates. The NRR thus measures the extent to which a cohort of newborn girls will reproduce themselves under given schedules of fertility and mortality rates.

A *net reproduction rate of 1* indicates that fertility is at replacement level: at this rate child-bearing women, on average, bear only enough daughters to replace themselves in the population. A population will continue to grow after replacement level fertility has been reached, because its past higher birth rates will have produced an age distribution with a relatively high proportion of people currently in, or still to enter, the reproductive ages. This results in more births than deaths until the population changes to the older age distribution intrinsic in the low birth rate. The time taken for a country's population to become stationary after reaching replacement level fertility thus depends on its particular age structure and previous fertility patterns.

A *stationary population* is one in which age- and sex-specific mortality rates have remained unchanged over a long period, while, simultaneously, age-specific fertility rates have remained at replacement level (NRR = 1). In such a population, the birth rate will be constant and equal to the death rate, the age structure will be constant, and the growth rate will be zero.

To make the projections, assumptions about future mortality rates are made in terms of female life expectancy at birth (that is, the number of years a newborn girl would live if subject to the mortality risks prevailing for the cross-section of population at the time of her birth). Countries were first divided into income groups, according to their per capita income in 1975. Within each income group, a set of annual increments in female life expectancy was assumed, depending on the level of female life expectancy in 1975. For a given life expectancy at birth the annual increments during the projection period are larger in countries where 1975 per capita income was higher.

To project fertility rates, the first step was to estimate the year in which fertility will reach replacement level. These estimates are speculative, and are based on information on trends in crude birth rates, total fertility rates (both defined in the Notes to Table 18), and the performance of family planning programs. The years given in *World Development Indicators, 1978* were reviewed country by country and altered where necessary on the basis of new information on declines in crude birth rates in 1965-75, the recent performance of family planning programs, and total fertility rates in 1975. For most countries, it was assumed that the total fertility rate would decline between 1975 and the year in which the NRR=1, after which fertility would remain at replacement level. For countries in Sub-Saharan Africa, total fertility rates were assumed to remain constant until 1980-85 and then to decline until replacement level was reached. In several industrialized countries, fertility is at present below replacement level. Since a population will not become stationary if its net reproduction rate is other than one, to make estimates of the hypothetical stationary population in these countries it was necessary to assume that their fertility rates would regain replacement levels. For the sake of consistency with the estimates made for other countries, the total fertility rates in these industrialized countries were assumed to increase to replacement level by the years 2000-2005, and then remain constant.

Throughout the projections, it was assumed that international migration would have no impact.

According to the projections, the total world population would increase from 4.14 billion in 1977 to 6.01 billion in the year 2000. The average annual growth rate between 1977 and 2000 would be about 1.63 percent, decreasing from 1.72 percent in 1977 to 1.36 percent in the year 2000. The crude birth rate would decline by 6 points (from 28.8 to 22.8 births per thousand population per year) and the death rate by 2 points (from 11.6 to 9.2 per thousand population per year). The present estimate of world population in the year 2000 is slightly lower than that used in last year's *World Development Report* (6.01 billion in place of 6.05 billion); the birth rate is also slightly lower (22.8 per thousand in place of 23.6 per thousand), while the death rate is roughly the same.

The estimates of the hypothetical size of the stationary population, and of the years when replacement level fertility and stationary population size would be reached, are speculative. *They should not be regarded as predictions.* They are included to provide a summary indication of the long-run implications of recent trends, on the basis of highly stylized assumptions. In particular, no account is taken of the effects that countries' future income growth and family planning might have on their fertility rates. Countries have been ascribed certain fertility and mortality trends on the basis of their present income levels, demographic parameters, and family planning performance, but if, for example, a country with low per capita GNP at present achieved rapid income growth over the projection period, its fertility rate would probably decline more rapidly than projected here. The estimated hypothetical stationary population of the world according to the present projections is 9.84 billion, or 395 million less than the corresponding estimate in last year's report. There are two main reasons for this reduction: the data now available indicate that fertility has declined faster than expected in some Latin American and Asian countries, and the assessment of the population growth potential of some large Sub-Saharan African countries has been revised.

Table 18: Demographic and Fertility-Related Indicators

The *crude birth (and death) rates* indicate the number of live births (deaths) per thousand population in a year. They are derived from the Bank's population projections given in Table 17. The country-group averages for birth and death rates and changes in those rates are weighted by the size of country populations.

The *total fertility rate* (TFR) represents the number of children that would be born per woman, if she were to live to the end of her child-bearing years and bear children at each age in accordance with the prevailing age-specific fertility rates. Most of the TFR quoted are from the provisional UN population projections in "Demographic Estimates and Projections for the World, Regions and Countries, as Assessed in 1978" (1979), supplemented by data from the World Bank, the Population Council, and the US Bureau of the Census.

The *percentage of women in the reproductive age group* refers to women of child-bearing age (15-44 years) as a percentage of the total female population. The estimates are derived from the Bank's population projections given in Table 17.

The *percentage of married women using contraceptives* refers only to married women of child-bearing age (15-44 years). These data are mainly derived from D. Nortman and E. Hofstatler, *Population and Family Planning Programs: A Factbook*, various issues (New York: Population Council); D. Nortman, "Changing Contraceptive Patterns: A Global Perspective", in *Population Bulletin*, Vol. 32, No. 3 (Washington, D.C.: Population Reference Bureau, Inc.); and *Family Planning Service Statistics Annual Report, 1976* (Washington, D.C.: Office of Population, Agency for International Development). The data refer to a variety of years, not more than two years distant from those specified.

Table 19: Labor Force

The *working age population* refers to the total population between 15 and 64 years of age. These estimates are based on the Bank's population projections given in Table 17.

The *labor force* describes economically active persons, including the armed forces and the unemployed, but excluding housewives, students, and economically inactive groups. Agriculture, industry, and services are defined in the Notes to Table 2 above. The estimates of the sectoral distribution of the labor force in 1960 are from the International Labour Office (*Labour Force: Estimates 1950-1970 and Projections 1975-2000*, second edition, Geneva, 1977); most of those for 1977 are geometric extrapolations of ILO estimates for 1960 and 1970 given in the source just quoted.

The *labor force growth rates* are derived from the Bank's population projections and ILO data on activity rates, again from the source quoted above.

The application of ILO activity rates to the Bank's latest population projections may be inappropriate for some countries, where there have been important changes in levels of unemployment and underemployment, and/or in international and internal migration. The labor force estimates for 1977-2000 should thus be treated with caution.

Table 20: Urbanization

The data on *urban population as a percentage of total population* are taken from unpublished estimates and projections made by the UN Population Division.

The *growth rates of urban population* are calculated from the Bank's population projections and estimates of urban population shares from the UN Population Division.

Data on *urban agglomeration* are also from the UN.

Since the estimates in this table reflect the different definitions of "urban" used in different countries, cross-country comparisons should be interpreted with caution.

Table 21: Indicators Relating to Life Expectancy

Life expectancy at birth indicates the number of years newborn children would live if subject to the mortality risks prevailing for the cross-section of population at the time of their birth. The data are from the UN Population Division, supplemented from World Bank data files.

The *infant mortality rate* is the number of infants who die before 1 year of age, per thousand live births in a given year. The data are obtained from a variety of sources including UN Demographic Yearbooks and the US Bureau of the Census publication, *World Population: 1977*; they refer to a variety of years, not more than two years distant from those quoted.

The *child death rate* is the number of deaths among children 1 to 4 years of age, per thousand children in the same age group in a given year. For countries with reliable death registration, these rates are taken from UN Demographic Yearbooks; they refer to a variety of years, not more than two years distant from those quoted. For other countries, the rates have been derived from the appropriate Coale-Demeny Model life tables[1], to correspond to the expectation of life

[1]Ansley J. Coale and Paul Demeny, *Regional Model Life Tables and Stable Populations* (Princeton, N.J.: Princeton University Press, 1966).

at birth for 1960 and 1977.

All the country-group averages in this table are weighted by the size of country populations.

Table 22: Health-Related Indicators

The estimates of *population per physician and* per nursing person are derived from World Health Organization (WHO) data, some of which have been revised since *World Development Indicators, 1978* was issued, to reflect new information supplied by reporting countries. Nursing persons include graduate, practical and assistant nurses. Both because country definitions of nursing personnel vary, and because the data shown are for years other than, but not more than two years distant from, those specified, the data for these two indicators are not strictly comparable between countries.

The *percentage of total population with access to safe water*, estimated by WHO, is the proportion of people with reasonable access to safe water supplies, defined to include treated surface water or untreated but uncontaminated water such as that obtained from boreholes, springs and sanitary wells. Some of the WHO estimates have been revised since last year's *World Development Indicators* was issued.

The *daily per capita calorie supply* is calculated by dividing the calorie equivalent of the available food supplies in a country by its total population. The available food supplies comprise domestic production, imports less exports, and changes in stocks; they exclude animal feed, seeds for use in agriculture, and the quantities of food lost in processing and distribution. The *daily per capita calorie requirement* refers to the calories needed to sustain the population at normal levels of activity and health, taking account of its age and sex distributions, average body weights, and environmental temperatures. Both sets of estimates are from the UN Food and Agriculture Organization.

All the country-group averages in this table are weighted by the size of country populations.

Table 23: Education

The data in this table refer to a variety of years, not more than two years distant from those specified, and are mostly taken from the UN Educational, Scientific and Cultural Organization (Unesco). Some of the Unesco data have been revised since *World Development Indicators, 1978* was issued, to reflect new information supplied by reporting countries.

Estimates of *total, male, and female enrollment in primary school*, of students of all ages, are expressed as percentages of the total (or total male or female) population of primary school age, to give "gross primary enrollment ratios". Although primary school age is generally considered to be 6 to 11 years, countries' educational systems vary. These differences between countries in the ages and duration of schooling are reflected in the ratios given. For countries with universal primary education, the gross enrollment ratios may exceed 100 percent since some pupils may be below or above the official primary school age.

The *gross secondary enrollment ratios* are calculated in the same manner.

The data on *numbers enrolled in higher education as a percentage of the population aged 20-24* are from Unesco. The minimum condition of entry to higher education is the successful completion of education at the secondary level, or proof of equivalent knowledge or experience.

The *adult literacy rate* is the percentage of population aged 15 and over able to read and write. These rates are based largely on information from Unesco, supplemented by World Bank data.

All the country-group averages in this table are weighted by the size of country populations.

Table 24: Income Distribution

The data in this table refer to the distribution of total disposable household income accruing to percentile groups of households ranked by total household income. The distributions cover rural and urban areas and refer to different years between 1965 and 1977. Since the collection of income distribution data has not been systematically organized and integrated into the official statistical system in many countries, estimates are typically derived from surveys designed for other purposes (most often consumer expenditure surveys) that also collect some information on income. These surveys use a variety of concepts of income, and generally little effort is made to structure the questionnaires to ensure that income reporting is reasonably precise and accurate. Furthermore, the coverage of many of these surveys is seriously deficient for the purpose of obtaining reliable nationwide estimates of income distribution. Though the estimates given are considered the best available, they do not avoid all these problems, and hence should be interpreted with extreme caution.

The distributions for developing countries outside Latin America are from data gathered by the World Bank from national sources. Those for industrialized countries are taken from Malcolm Sawyer, *Income Distribution in OECD Countries* (Organisation for Economic Co-operation and Development Occasional Studies, July 1976); they refer to post-tax income, and conceptually are roughly comparable with the distributions for developing countries. The estimates for Latin American countries other than Mexico come from the preliminary results of a project on Measurement and Analysis of Income Distribution in Latin American Countries, being conducted by the UN Economic Commission for Latin America (ECLA) jointly with the World Bank. Those for Mexico are the first results from the 1977 Household Budget Survey.

Both the quality and the comparability of the estimates quoted are limited. The joint ECLA-World Bank project referred to above has investigated measurement errors in some of the estimates for Latin America. It compared data from household surveys and from national accounts and found substantial divergences between the two sources for incomes other than wages. Attempts have been made to adjust the observed distributions to make them consistent with national accounts estimates; these revisions typically increase the apparent degree of income inequality, as shown in the examples below:

	Income Share of Poorest 40 Percent		Income Share of Richest 20 Percent	
	Original	Adjusted	Original	Adjusted
Brazil	7.0	5.6	66.6	73.1
Chile	13.4	12.0	51.4	54.5
Honduras	7.3	6.6	67.8	69.7
Peru	7.0	5.7	61.0	64.7
Venezuela	10.3	9.8	54.0	54.9

It should be emphasized that these adjustments are themselves arbitrary. They are reported simply to indicate the range of variation that can be expected for these estimates.

The distribution of total household income shown in Table 24 is one of several distinct income distributions that are of interest. To measure the inequality of incomes that is directly attributable to the structure of production and ownership of assets, one should look at the distribution of income across income-earning individuals. However, for purposes of welfare analysis or poverty measurement, household income is more relevant, since the household is a redistributing unit that combines incomes from individuals at different income levels to provide a relatively uniform level of welfare for all its members.

Households vary in size, and hence a further distinction needs to be drawn between distributions in which households are ranked according to their total incomes, and distributions in which households are ranked according to per capita household income. The latter distribution ensures that households are treated as poor (rich) according to whether their per capita income is low (high) and not according to whether total household income is high. The distinction is important because households with low per capita incomes are frequently large households, whose total income may be relatively high. Furthermore, since households vary in size, poor households often being larger than rich, the poorest 40 percent of households ranked in terms of per capita household income will typically contain more than 40 percent of the total population. For this reason, if one wishes to compare two distributions (for example, those of two countries, or those of rural and urban areas within a country) for welfare purposes, it is best to use the distribution of individuals ranked by per capita household income. Unfortunately, this can so far be done only for a few countries; further work on these countries is in progress within the Bank. The following table gives examples of the differences among the three distributions:

Income Share of Poorest 40 Percent of:	Republic of China	Sri Lanka
Households ranked by household income	22.0	19.2
Households ranked by per capita household income	27.5	24.7
Individuals ranked by per capita household income	22.9	20.8

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