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BEYOND ECONOMIC GROWTH

Meeting the Challenges of Global Development

Tatyana P. Soubbotina
with Katherine A. Sheram

WBI LEARNING RESOURCES SERIES

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WASHINGTON, D.C.

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Introduction

This book is designed primarily to help readers broaden their knowledge of global issues, gain insight into their country's situation in a global context, and understand the problems of sustainable development—both national and global. Because development is a comprehensive process involving economic as well as social and environmental changes, this book takes an interdisciplinary approach. It attempts to describe and explain the complex relationships among various aspects of development, including population growth, economic growth, improvements in education and health, urbanization, and globalization. Teachers, students, and learners of all ages are invited to explore these relationships even further using the statistical data and theoretical concepts presented in this book.

Difficult Questions, Different Answers

The book starts with three difficult questions: What is development? How can we compare the levels of development achieved by different countries? And what does it take to make development sustainable? The authors do not claim to have all the answers to these and other questions posed directly or indirectly in the book. Instead, students together with their teachers are encouraged to suggest their own answers by analyzing and synthesizing the information presented here. They should engage in open discussions of problems that have no simple solutions, in order to formulate their own opinions and support them with objective data and rational arguments.

Many of the answers inevitably involve value judgments, which makes absolute objectivity impossible. Even the authors have differing views on some of the issues addressed here, but they have based this book on one fundamental idea: development should be a tool for improving the lives of all people. It is up to readers to define for themselves the meaning of a better life and to prioritize the goals of development.

Data and Development

Perhaps, the main strength of this book is that it is based on abundant statistical data for most countries, presented in data tables at the end of the book as

well as in figures, maps, and references in the text. Statistics can be powerful tools for learning. They can help paint a more accurate picture of reality, identify issues and problems, and suggest possible explanations and solutions. But statistics have their limitations too. They are more reliable for some countries than for others. And because it takes a long time to collect and verify some statistics, they may be out of date before they are even published. The statistics presented here were the most recent available when this book was written.

It is also important to remember that many aspects of development cannot be accurately measured by statistics. Examples include people's attitudes, feelings, values, ideas, freedoms, and cultural achievements. Thus statistical data can tell us only part of the story of development—but it is an important part.

Comparing statistical data on your country with those on other countries can be extremely revealing for several reasons. First, seeing one's country in a global context and learning how it is different from or similar to other countries can improve understanding of the country's status and of its development prospects and priorities. Second, because the economies of the world are becoming increasingly interdependent, development processes in all countries are becoming more interrelated. The authors hope that this book will help satisfy popular demand for information about national and global development processes and contribute to a better understanding of sustainability issues, from local to international.

A word of caution is warranted here. The authors hope that a better understanding of the complex interrelations among the economic, social, and environmental aspects of development will help readers avoid oversimplified conclusions based on just one or two statistical indicators. Readers would be wise to explore each issue in more detail by finding additional data, questioning their accuracy, and taking into account social processes that might be hard to measure and quantify.

About This Book

This book was prepared as part of an international project under the World Bank Institute's Development Education Program (DEP). The objective was to create a template text about the global issues of sustainable development—social, economic, and environmental—that could then be customized for various countries by teams of local educators and published in their respective national languages. Work on

these national adaptations has already begun.

The first national adaptation of this international template was *The World and Russia* student book, published in Russian, which was officially approved by the Russian Ministry of General and Professional Education for students in the 10th and 11th grades studying economics, social studies, geography, and environmental studies. The authors of the Russian adaptation represent several leading research and educational institutions in Moscow. Those of you who might be interested in seeing how the adaptation was performed but cannot read Russian will find its English translation on the Development Education Program's Web site at www.worldbank.org/depweb. You will see that the portions of the text adapted for Russia are highlighted. The Russian language text of *The World and Russia* can be found on the Web site of its Russian publisher, the St. Petersburg Institute, School of Economics, at www.ise.spb.ru.

The Latvian adaptation, *The World and Latvia,* is currently being prepared by a local team led by two professors at the University of Latvia. The English translation of this second adaptation will also appear on the DEP Web site with the Latvia-specific portions of the text highlighted.

We hope that the Russian and Latvian examples will inspire educators from other countries to use this international template to develop customized student materials that meet the needs of their national curricula. Alternatively, students and other readers interested in development issues could use this international template without adaptation as a source of relatively current statistical data and widely accepted concepts for purposes of research and classroom discussions.

How to Use The Book

Because all development issues are intricately interrelated, there is no single, best sequence in which to study them. Thus the structure of this book allows the readers to start with almost any chapter that they might find the most intriguing. The authors, however, would advise not skipping Chapters 1 and 2 since they serve as a general introduction to the book and present some important basic concepts on which the following chapters build. Chapters 15 and 16 can be read as a continuation of the conceptual discussion started in the first two chapters. And the final chapter, Chapter 17, should preferably be saved for last even though, rather than presenting conclusions, it invites the reader to explore some additional issues.

As you read this book, you should keep in mind the multiplicity of interconnections among all aspects of the development process. In some cases, these interconnections will be explicitly pointed out in the text (including cross-references to other chapters), while in other cases readers may need to identify them on their own. Questions in the margins are intended to help readers see the larger picture behind the specific data.

Suppose you are most interested in environmental issues. Chapters 10 and 14 are devoted to two different environmental challenges: local particulate air pollution in large cities and global air pollution from carbon dioxide emissions. But to gain a better understanding of these issues you will also need to read about population growth and economic growth (Chapters 3 and 4), industrialization and postindustrialization (Chapter 9), income inequality and poverty (Chapters 5 and 6), and health and longevity (Chapter 8). These are the most obvious links, and they are relatively easy to identify while reading the environmental chapters. You could also, however, look into links with all the other chapters in the book. For example, how does globalization (Chapters 12 and 13) affect air pollution in large cities in developed and developing countries? Or how does globalization help international efforts to minimize the risk of global climate change? You could then explore the links between privatization and energy efficiency (Chapter 11) or between education (Chapter 7) and environmental protection. Eventually, it becomes clear that development is so comprehensive that understanding any one issue inevitably requires studying all the rest.

Although teachers of various school subjects can use this book to help their students understand specific development issues, students should always be made aware that no single issue exists in isolation from the others. Ideally, teachers would use most or all of the book's content to build one or more learning modules centered around given curricular topics. For example, an Air Pollution module might look like this:

Air Pollution

1. Introduction: Concepts of "development" and "sustainable development." Chapters 1 and 2
2. Local and global air pollution. Chapters 10 and 14
3. What are the major courses of the increasing air pollution?
    - Population growth—Chapter 3
    - Economic growth—Chapter 4
    - Industrialization—Chapter 9
    - Urbanization—Chapter 10
    - Income inequality—Chapter 5
    - Poverty—Chapter 6

4. Aggravating factors or new opportunities?
    - International trade—Chapter 12
    - Foreign investment—Chapter 13
    - Foreign aid—Chapter 13
    - Privatization—Chapter 11
5. Air pollution as a threat to development sustainability:
    - Healthy environment as one of the goals of development—Chapters 1and 15
    - Natural capital as a component of national wealth—Chapter 16
    - The role of government policies—Chapter 17.

You will note that most of a module's components can be formulated as questions for discussion. It is up to the reader to conclude whether, for example, the effects of economic growth are more detrimental to environment than are the effects of poverty or whether foreign investment in developing countries contributes to pollution rather than helps reduce it. The book provides helpful (although not exhaustive) data and concepts but does not provide any easy answers.

When discussing questions arising from this book, it is important to make full use of the statistics contained in the data tables (at the end of this book). Comparing data on different countries and looking for correlation among various indicators can often provide more insights and food for thought than simply reading a text. Most of the statistics in the data tables, figures, and maps are from the *World Development Indicators* (1997, 1998), the *World Development Report* (various years), and other statistical and analytical studies published by the World Bank. Figures 4.4 and 9.2 as well as some data in chapters 12 and 13 have been included with permission from the International Monetary Fund.

The authors hope that the discussions generated by this book will help readers understand how global and national development relate to issues in their own lives, and that this understanding will lead to practical action at the local level. Teachers and other educators can use this book to inform discussion about local development challenges not only among their students but also among parents and other community members. Students can use the knowledge gained to make better informed life choices and to become more active, involved citizens of their countries.

1

What Is Development?

Are you sure that you know what "development" really means with respect to different countries? And can you determine which countries are more developed and which are less?

It is somewhat easier to say which countries are richer and which are poorer. But indicators of wealth, which reflect the quantity of resources available to a society, provide no information about the allocation of those resources—for instance, about more or less equitable distribution of income among social groups, about the shares of resources used to provide free health and education services, and about the effects of production and consumption on people's environment. Thus it is no wonder that countries with similar average incomes can differ substantially when it comes to people's **quality of life**: access to education and health care, employment opportunities, availability of clean air and safe drinking water, the threat of crime, and so on. With that in mind, how do we determine which countries are more developed and which are less developed?

Goals and Means of Development

Different countries have different priorities in their development policies. But to compare their development levels, you would first have to make up your mind about what development really means to you, what it is supposed to achieve. Indicators measuring this achievement could then be used to judge countries' relative progress in development.

Is the goal merely to increase national wealth, or is it something more subtle? Improving the well-being of the majority of the population? Ensuring people's freedom? Increasing their economic security?

Recent United Nations documents emphasize "human development," measured by life expectancy, adult literacy, access to all three levels of education, as well as people's average income which is a necessary condition of their freedom of choice. In a broader sense the notion of human development incorporates all aspects of individuals' well-being, from their health status to their economic and political freedom. According to the *Human Development Report 1996,* published by the United Nations Development Program, "human development is the end—economic growth a means" (p.1).

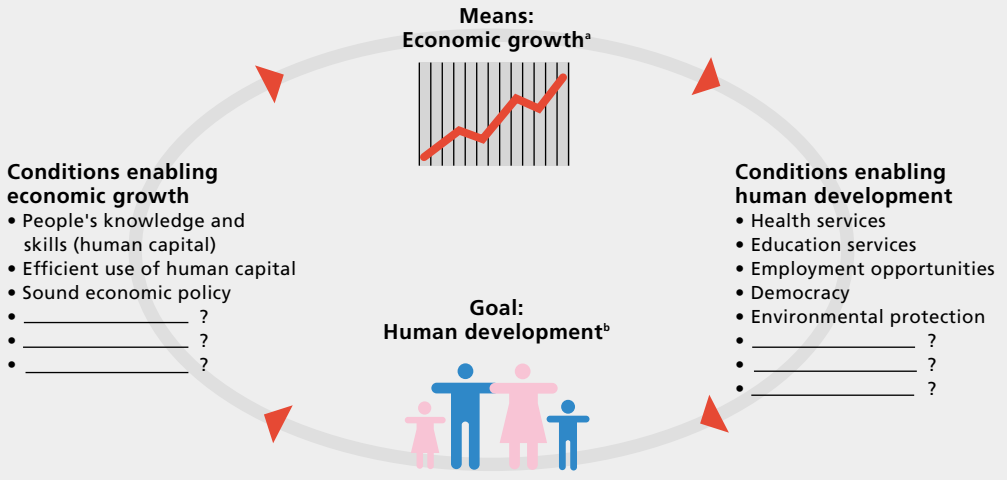
It is true that **economic growth,** by increasing a nation's total wealth, also

How do we determine which countries are more developed and which less?

enhances its potential for reducing poverty and solving other social problems. But history offers a number of examples where economic growth was not followed by similar progress in human development. Instead growth was achieved at the cost of greater inequity, higher unemployment, weakened democracy, loss of cultural identity, or overconsumption of resources needed by future generations. As the links between economic growth and social and environmental issues are better understood, experts including economists tend to agree that this kind of growth is inevitably unsustainable—that is, it cannot continue along the same line for long.

To be sustainable, economic growth must be constantly nourished by the fruits of human development such as improvements in workers' knowledge and skills along with opportunities for their efficient use: more and better jobs, better conditions for new businesses to grow, and greater democracy at all levels of decisionmaking (Figure 1.1). Conversely, slow human development can put an end to fast economic growth. According to *Human Development Report 1996,* "during 1960–1992 not a single country succeeded in moving from lopsided development with slow human development and rapid growth to a virtuous circle in which human development and growth can become mutually reinforcing." Since slower human development has invariably been followed by slower economic growth, this growth pattern was labeled a "dead end."

Figure 1.1 **Economic growth and human development**



a. See the Glossary about the difference between economic growth and economic development.
b. One should distinguish between indicators that measure components of human development (such as health and literacy) and those that measure its conditions (such as health services and education).

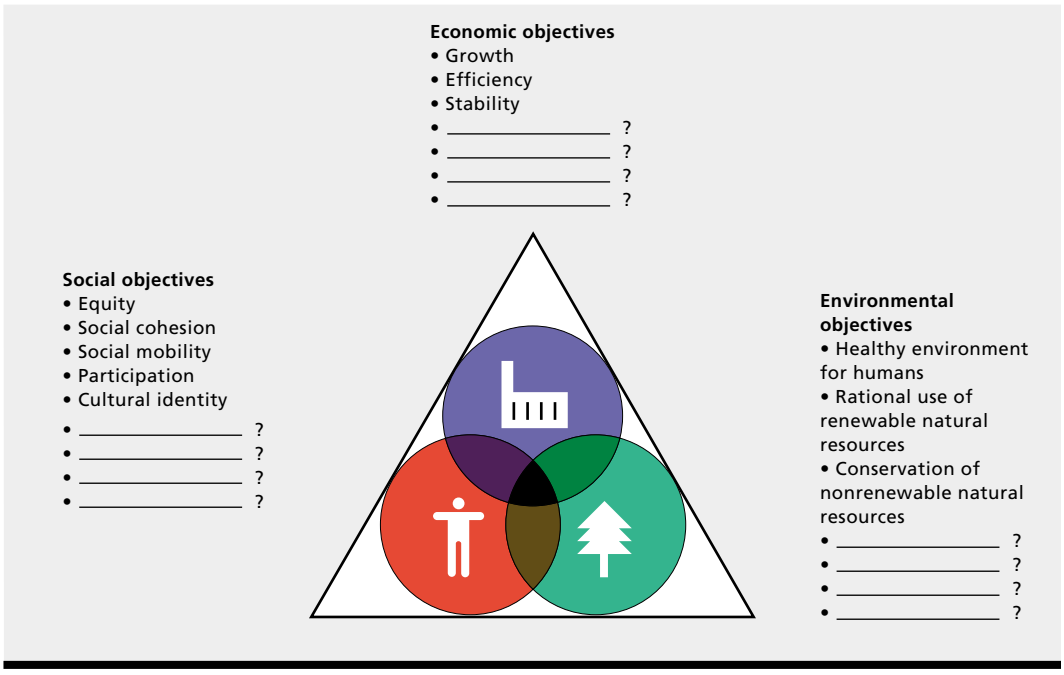
Sustainable Development

Sustainable development is a term widely used by politicians all over the world even though the notion is still rather new and lacks a uniform interpretation. Important as it is, the concept of sustainable development is still being developed and the definition of the term is constantly being revised, extended, and refined. Using this book, you can try to improve the definition as you learn more about the relationships among its main components—the economic, social, and environmental factors of sustainable development—and as you decide on their relative significance based on your own system of values.

According to the classical definition, given by the United Nations World Commission on Environment and Development in 1987, development is sustainable if it "meets the needs of the present without compromising the ability of future generations to meet their own needs." It is usually understood that this "intergenerational" justice would be impossible to achieve in the absence of present-day social justice, if the economic activities of some groups of people continue to jeopardize the well-being of people belonging to other groups or living in other parts of the world. Imagine, for example, that continuing deforestation of the Amazon basin, known for its outstanding biodiversity, leads to the extinction of an unresearched plant species that could help cure acquired immune deficiency syndrome (AIDS), a lethal disease threatening people all over the world. Or

What are the necessary conditions for sustainable development?

Figure 1.2 **Objectives of sustainable development**



consider emissions of greenhouse gases, generated mainly by industrial countries, which can lead to global warming and flooding of certain low-lying islands—resulting in the displacement and impoverishment of entire nations.

Social justice defined as equality of opportunities for well-being, both within and among generations of people, can be seen as having at least three aspects: economic, social, and environmental. Only development that manages to balance these three groups of objectives can be sustained for long (Figure 1.2). Conversely, ignoring one of the aspects can threaten economic growth as well as the entire development process.

2

Comparing Levels of Development

Countries are unequally endowed with **natural capital.** For example, some countries benefit from fertile agricultural soils, while others have to put a lot of effort into artificial soil amelioration. Some countries have discovered rich oil and gas deposits within their territories, while others have to import most fossil fuels. In the past a lack or wealth of natural capital made a big difference in countries' development. But today a wealth of natural capital is not the most important determinant of development success. Consider such high-income countries as the Republic of Korea or Japan. Their high economic development allows them to use their limited natural resources much more productively (efficiently) than would be possible in many less developed countries. The **productivity** with which countries use their productive resources—**physical capital, human capital,** and **natural capital**—is widely recognized as the main indicator of their level of **economic development.**

Theoretically, then, economists comparing the development of different countries should calculate how productively they are using their capital. But such calculations are extremely challenging, primarily because of the difficulty of putting values on elements of natural and human capital. In practice economists use **gross national product (GNP) per capita** or **gross domestic product (GDP) per capita** for the same purpose. These statistical indicators are easier to calculate, provide a rough measure of the relative productivity with which different countries use their resources, and measure the relative material welfare in different countries, whether this welfare results from good fortune with respect to land and natural resources or superior productivity in their use.

Gross Domestic Product and Gross National Product

GDP is calculated as the value of the total final output of all goods and services produced in a single year within a country's boundaries. GNP is GDP plus incomes received by residents from abroad minus incomes claimed by nonresidents.

There are two ways of calculating GDP and GNP:

- By adding together all the incomes in the economy—wages, interest, profits, and rents.
- By adding together all the expenditures in the economy—consumption,

investment, government purchases of goods and services, and net exports (exports minus imports).

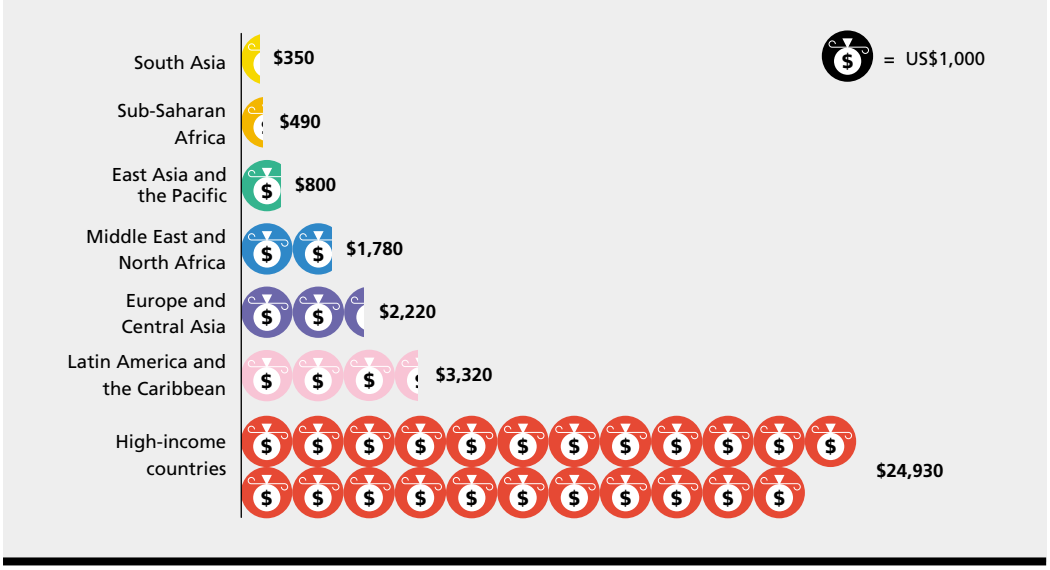
In theory, the results of both calculations should be the same. Because one person's expenditure is always another person's income, the sum of expenditures must equal the sum of incomes. When the calculations include only incomes received or expenditures made by a country's citizens, the result is GNP. When the calculations are made of all incomes (or all expenditures) that originated within a country's boundaries, including those of foreign citizens, the result is GDP.

GNP may be much less than GDP if much of the income from a country's production flows to foreign persons or firms. For example, in 1994 Chile's GNP was 5 percent smaller than its GDP. If a country's citizens or firms hold large amounts of the stocks and bonds of other countries' firms or governments, and receive income from them, GNP may be greater than GDP. In Saudi Arabia, for instance, GNP exceeded GDP by 7 percent in 1994. For most countries, however, these statistical indicators differ insignificantly.

GDP and GNP can serve as indicators of the scale of a country's economy. But to judge a country's level of economic development, these indicators have to be divided by the country's population. **GDP per capita** and **GNP per capita** show the approximate amount of goods and services that each person in a country would be able to buy in a year if incomes were divided equally (Figure 2.1). That is why these measures are also often called "per capita incomes."

In the data tables at the end of this book GNP per capita is shown not only in

Figure 2.1 **GNP per capita, 1995**



U.S. dollars but also in PPP dollars—that is, adjusted with the help of a **purchasing power parity (PPP)** conversion factor. The PPP conversion factor shows the number of units of a country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States. By applying this conversion factor, one can, for example, convert a country's **nominal** GNP per capita (expressed in U.S. dollars in accordance with the market exchange rate of the national currency) into its **real** GNP per capita (an indicator adjusted for the difference in prices for the same goods and services between this country and the United States, and independent of the fluctuations of the national currency exchange rate). GNP in PPP terms thus provides a better comparison of average income or consumption between economies.

In developing countries real GNP per capita is usually higher than nominal GNP per capita, while in developed countries it is often lower (Table 2.1). Thus the gap between real per capita incomes in developed and developing countries is smaller than the gap between nominal per capita incomes.

Although they reflect the average incomes in a country, GNP per capita and GDP per capita have numerous limitations when it comes to measuring people's actual well-being. They do not show how equitably a country's income is distributed. They do not account for pollution, environmental degradation, and resource depletion. They do not register unpaid work done within the family and community, or work done in the **shadow (gray) economy.** And they attach equal importance to "goods" (such as medicines) and "bads" (cigarettes, chemical weapons) while ignoring the value of leisure and human freedom. Thus, to judge the relative quality of life in different countries, one should also take into account other indicators showing, for instance, the distribution of income and incidence of poverty (see Chapters 5 and 6), people's health and longevity (Chapter 8), access to education (Chapter 7), the quality of the environment (Chapter 10), and more. Experts also use composite statistical indicators of development (Chapter 16).

What are the main limitations of per capita income as a measure of development?

Grouping Countries by Their Level of Development

Different organizations use different criteria to group countries by their level of

Table 2.1 Nominal and real GNP per capita in various countries, 1995

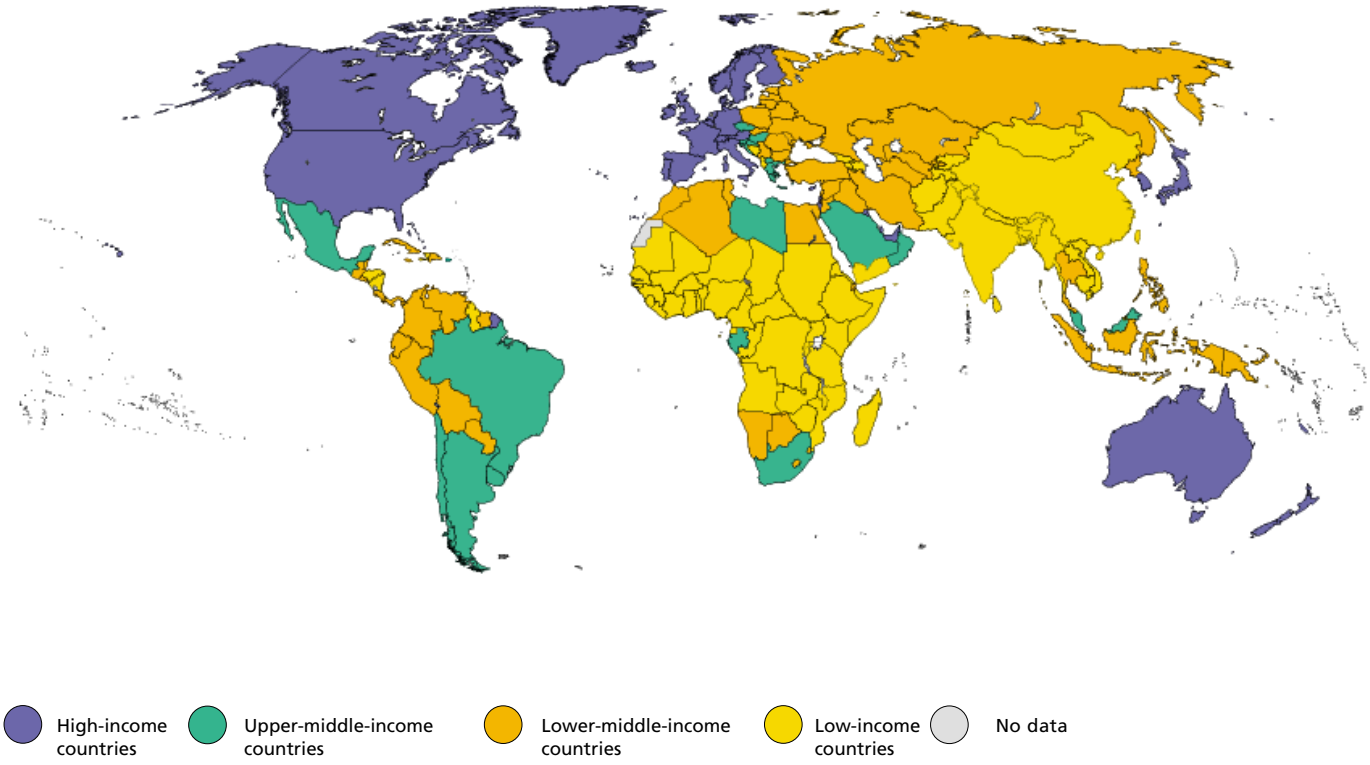
Country	*GNP per capita (U.S. dollars)*	*GNP per capita (PPP dollars)*
India	340	1,400
China	620	2,920
Russia	2,240	4,480
United States	26,980	26,980
Germany	27,510	20,070
Japan	39,640	22,110

development. The World Bank, for instance, uses GNP per capita to classify countries as low-income (GNP per capita of $765 or less in 1995), middle-income (including lower-middle-income, $766 to $3,035, and upper-middle-income, $3,036 to $9,385), or high-income ($9,386 or more; Map 2.1).

A more popular, though apparently more disputable, approach involves dividing all countries into "developing" and "developed"—despite the general understanding that even the most developed countries are still undergoing development. Dividing countries into "less developed" and "more developed" does not help much either, because it is unclear where to draw the line between the two groups. In the absence of a single criterion of a country's development, such divisions can only be based on convention among researchers. For example, it is conventional in the World Bank to refer to low-income and middle-income countries as "developing," and to refer to high-income countries as "industrial" or "developed."

The relatively accurate classification of countries into "developing" and "devel-

Map 2.1 **Gross national product per capita, 1995**



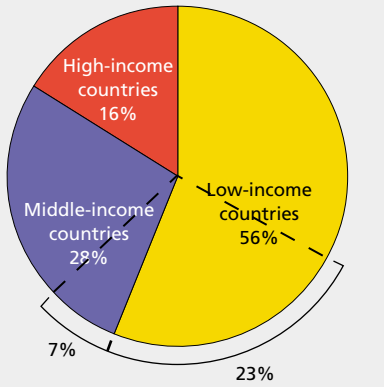
oped" based on their per capita income does not, however, work well in all cases. There is, for instance, a group of "high-income developing countries" that includes Israel, Kuwait, Singapore, and the United Arab Emirates. These countries are considered developing because of their economic structure or because of the official opinion of their governments, although their incomes formally place them among developed countries.

Another challenge is presented by many of the countries with "transition" or "formerly planned" economies—that is, countries undergoing a transition from centrally planned to market economies. On the one hand, none of these countries has achieved the established threshold of high per capita income. But on the other, many of them are highly industrialized. This is one reason their classification by the World Bank is currently "under review." Note that in the World Bank's *World Development Report 1982* these same countries were classified as "industrial nonmarket," and in current United Nations publications most of them are still grouped among "industrial" countries.

What are some of the problems associated with grouping countries into "developed" and "developing"?

In 1995 less than 1 of every 6 people in the world lived in high-income (developed) countries, and almost 2 of every 6 lived in **transition countries**—including 21 percent of the world population in China alone (Figure 2.2).

Figure 2.2 **Distribution of world population among countries grouped by GNP per capita, 1995**



3

World Population Growth

Why is world population growing faster than ever before?

Population dynamics are one of the key factors to consider when thinking about development. In the past 50 years the world has experienced an unprecedented increase in population growth (Figure 3.1). Do you know why?

Global Trends in Natural Population Increase

A "natural population increase" occurs when the **birth rate** is higher than the **death rate.** While a country's **population growth rate** depends on the natural increase *and* on migration, world population growth is determined exclusively by the natural increase.

Around the world, death rates gradually decreased in the late 19th and the 20th centuries, with death rates in the developing world plummeting after World War II thanks to the spread of modern medicine. In much of the developing world the decline in death rates preceded the decline in birth rates by 20 years or more, resulting in record-high rates of population growth of 3 percent or even 4 percent a year. Since the 1960s birth rates have also been declining rapidly in most **developing countries** except those in Sub-Saharan Africa and the Middle East. This trend in birth rates in the developing world is comparable to what took place in Europe and the United States in the 19th century (Figure 3.2).

Figure 3.1 **World population, 1750–2050**

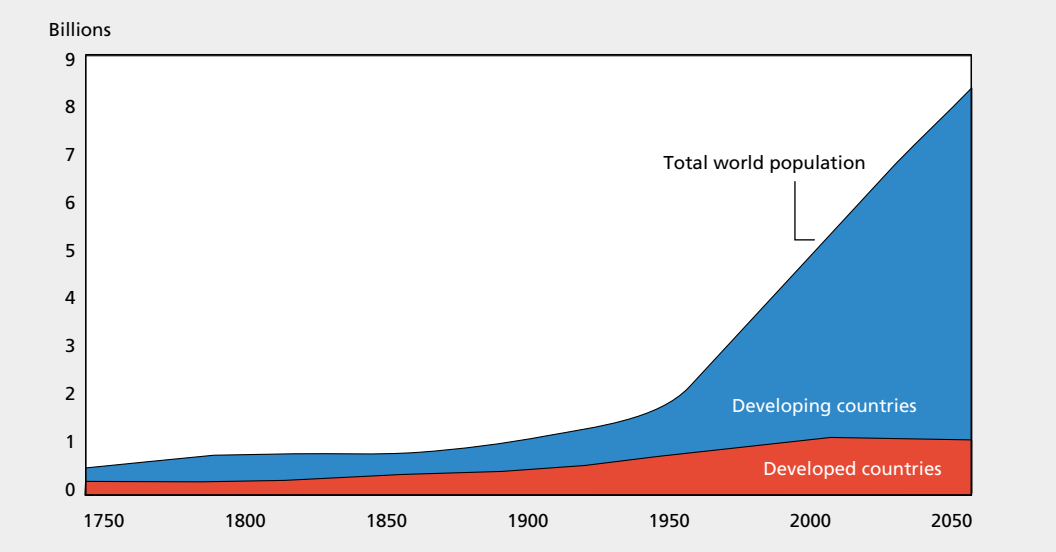
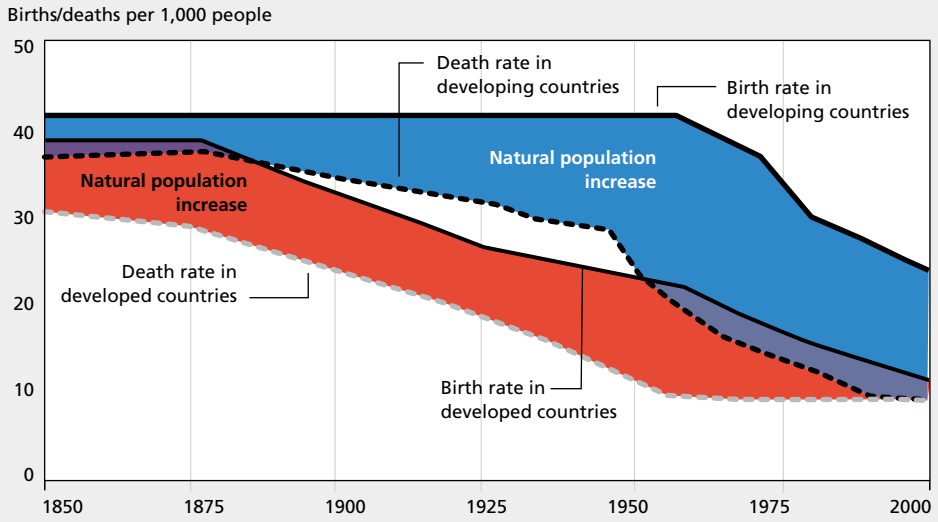


Figure 3.2 **Trends in birth and death rates, 1850–2000**



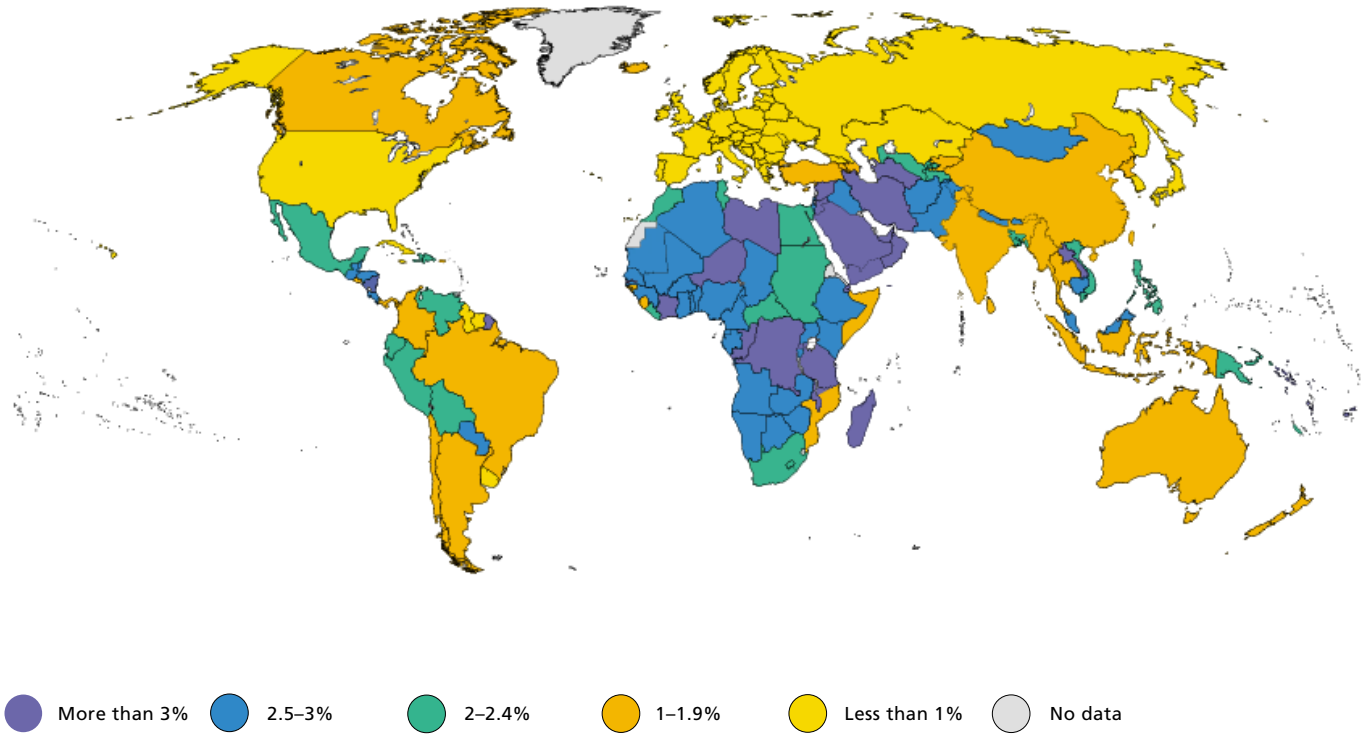
Note: Developed countries include high-income countries and present-day transition economies.

Today's low-income countries still have the world's highest birth rates (see Map 3.1), although women tend to have fewer children than before. The reasons for lower **fertility** are varied, but most are related to developing countries' **economic growth** and human development (Figure 3.3; see also Chapters 4 and 7). Parents choose to have smaller families when health conditions improve so that they no longer have to fear that many of their babies might die, and when they do not have to rely on their children to work on the family farm or business or to take care of them in their old age. In addition, more parents are sending their daughters to school, which is important also because women with basic education tend to produce healthier children and smaller families. More women now have opportunities to work outside the home, so they are starting their families later and having fewer children. On top of all that, access to family planning is improving, so parents can control the number and spacing of their children.

A lower fertility rate may not immediately lead to a lower birth rate and lower population growth if a country has a larger number of men and women in their reproductive years than before. Population growth caused by more women giving birth even though each has the same number of or fewer children is called "demographic momentum." Demographic momentum is particularly significant in developing countries that had the highest fertility rates 20–30 years ago.

The decline in birth rates over the past few decades has lowered population

Map 3.1 **Population growth rates, 1985–95**

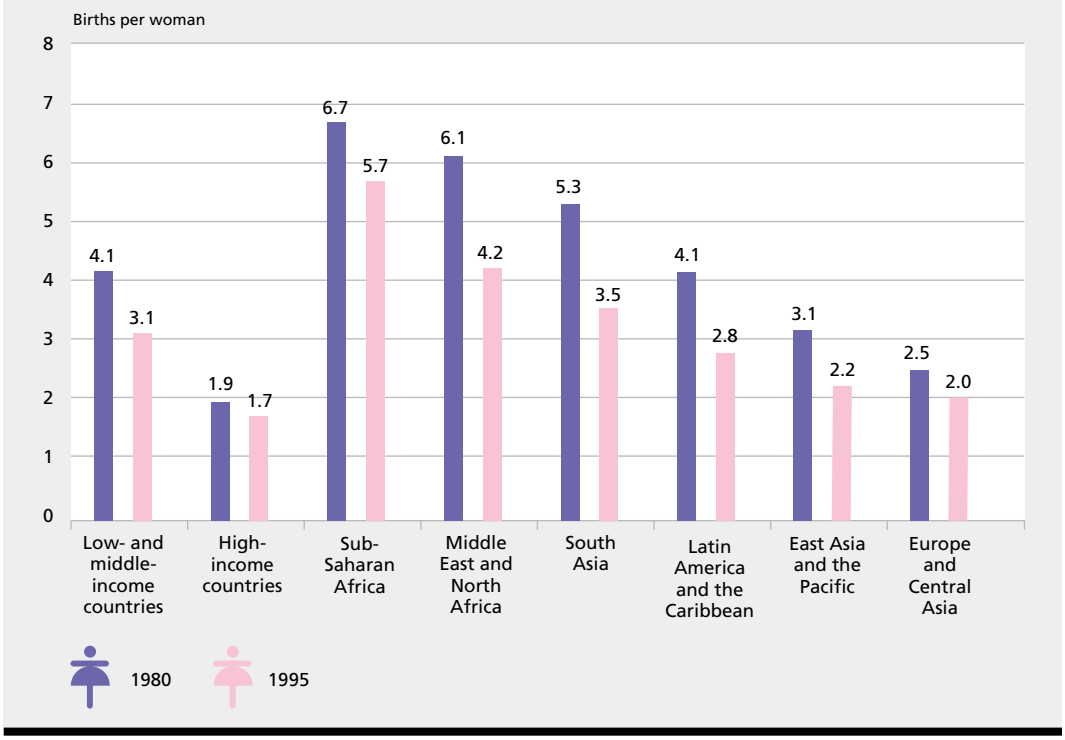


growth rates in developing countries despite a continuing decline in death rates. Population growth is even slower in developed countries (Figure 3.4). Stabilizing birth rates and increasing death rates (the latter being a result of aging populations; see Chapter 8) have already led to a natural population decrease in Italy and Germany. Japan and Spain are expected to follow soon (see birth rates and death rates in Data Table 1).

Over the past 30 years the worldwide population growth rate fell from more than 2.0 percent to 1.5 percent a year, and experts expect this trend to continue. But in absolute numbers the world's population is growing faster than ever before—by about 230,000 people a day in mid-1995. This is happening because of the larger than ever population base. In 1995 there were about 5.7 billion people on earth, almost twice as many as in 1970. The next 35 years are projected to add another 2.5 billion people—90 percent of them in developing countries. The share of developing countries in the world population is expected to increase from 84 percent to 88 percent.

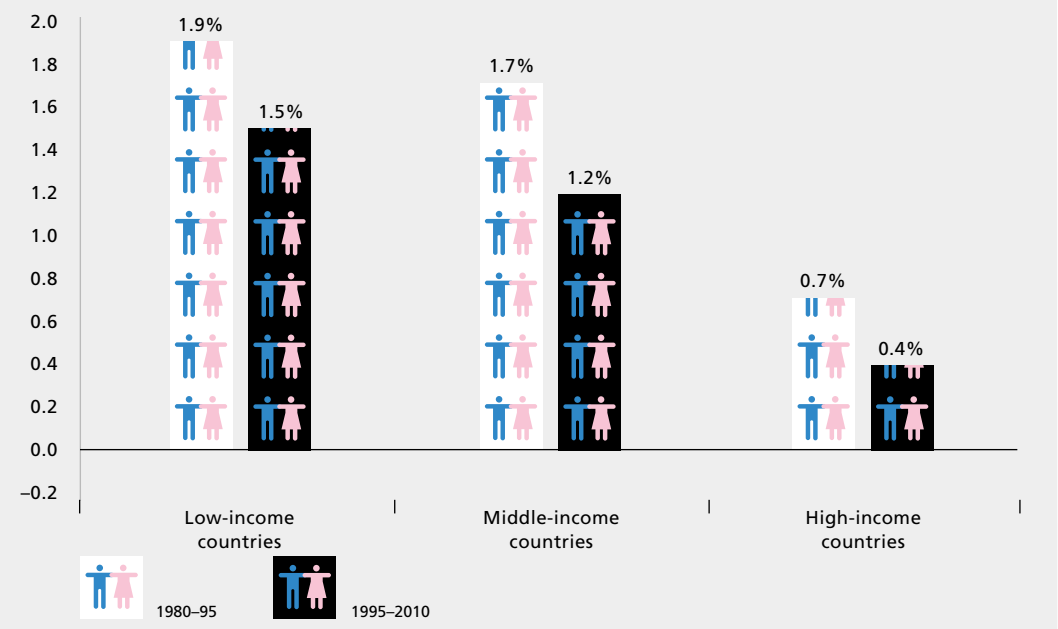
In the short run, rapid population growth in poor countries leads to lower

Figure 3.3 **Average fertility rates, 1980 and 1995**



Why are fertility and population growth rates different in different countries?

Figure 3.4 **Average annual population growth rates, 1980–2010**



GNP per capita, allowing fewer resources to be invested in each person's **human capital**—the key to increasing labor productivity. But in the long run, provided that labor **productivity** does in fact increase, having more workers could contribute to the economic strength of developing countries.

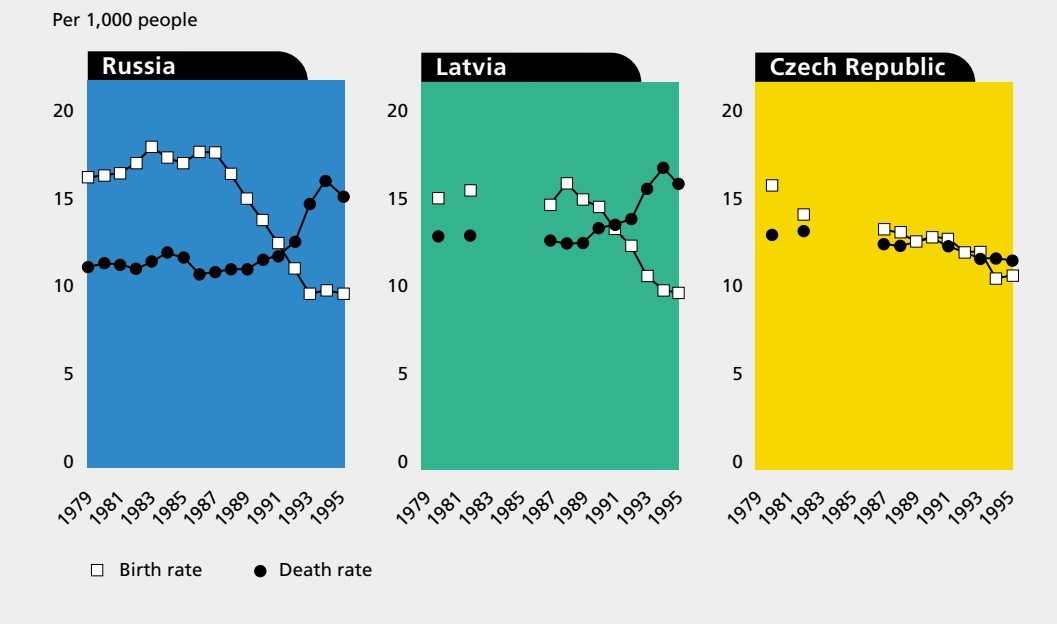
Why are demographic changes in transition countries of Europe different from those occurring in most developing countries?

Demographic Changes in Transition Countries of Europe

The formerly socialist countries of Central and Eastern Europe present a major exception to the broad similarity of demographic trends in developed and developing countries. The rapid decline in death rates that occurred in the 1950s and 1960s slowed down in the 1970s and 1980s. In the 1990s death rates actually increased in Russia and some other **transition countries,** including Belarus, Bulgaria, Estonia, Latvia, Lithuania, Moldova, Romania, and Ukraine. In 1995 the death rate in Russia equaled the average for Sub-Saharan Africa—15 deaths per 1,000 people—while the average death rate for developing countries was 9 per 1,000 and for developed countries was 8 per 1,000.

This dramatic and historically unprecedented reversal in mortality trends is primarily explained by higher adult male mortality: among older men mainly because of the increase in cardiovascular disease, among younger men because of more accidents, suicides, and murders.

Figure 3.5 **Demographic changes in three countries with transition economies, 1979–95**



Many of these factors can be related to substance abuse—heavy drinking and smoking, which in turn can be linked to worsening living conditions and the greater uncertainty and stress that have accompanied the transition. But rapid economic reforms have not necessarily been detrimental to people's health in all transition countries. For example, in the Czech Republic the death rate has continued to decline (Figure 3.5), while in Hungary and Poland it has held steady.

Birth rates in the transition countries of Europe have dropped sharply in the past 5–10 years. The reasons for that drop are different from those in most developing countries: they are believed to be closely associated with a lower **quality of life** caused by the social and economic crisis of transition. As a result fertility rates in these countries are now far below the "replacement level" (equaling slightly more than two children per family) and lower than those in most developed countries (see Figure 3.3).

Because of these unusual demographic trends—increasing death rates combined with dropping birth rates—many of the transition countries of Europe (for example, Russia and Latvia, see Figure 3.5) have experienced natural decreases in population.

4

Economic Growth Rates

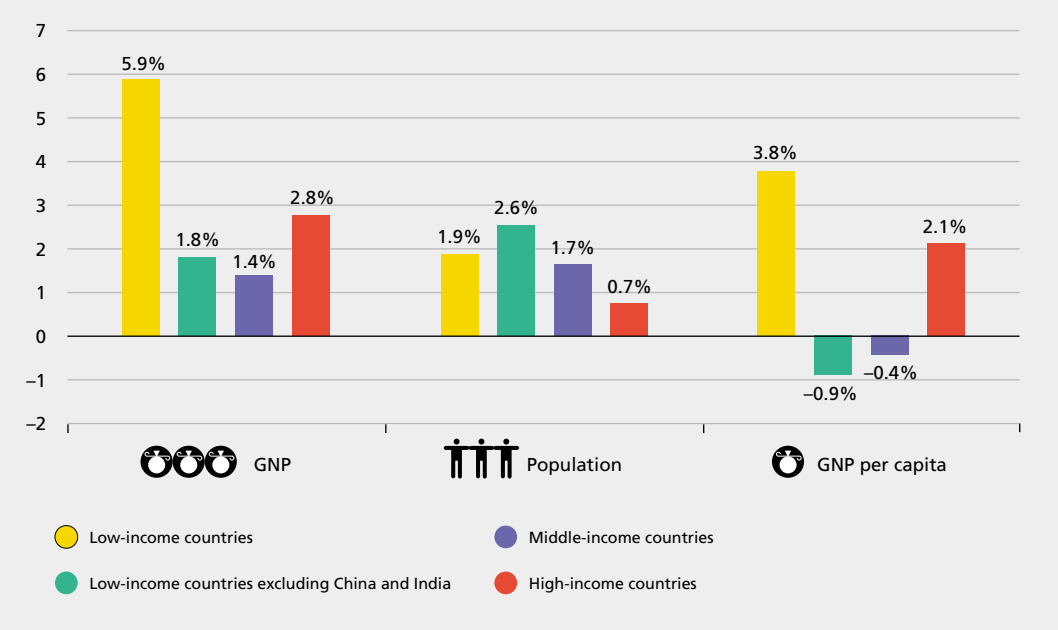
Will the poor countries catch up with the rich?

GDP and **GNP** growth rates in **developing countries** are on average higher than those in **developed countries.** Moreover, the difference became even larger in recent years because GNP growth in developed countries slowed from more than 3 percent a year in the 1980s to about 2 percent a year in the first half of the 1990s. Low-income countries, by contrast, appear to have performed much better during this period, with GNP growing by almost 6 percent a year in 1980–95. So, will the poor countries soon catch up with the rich?

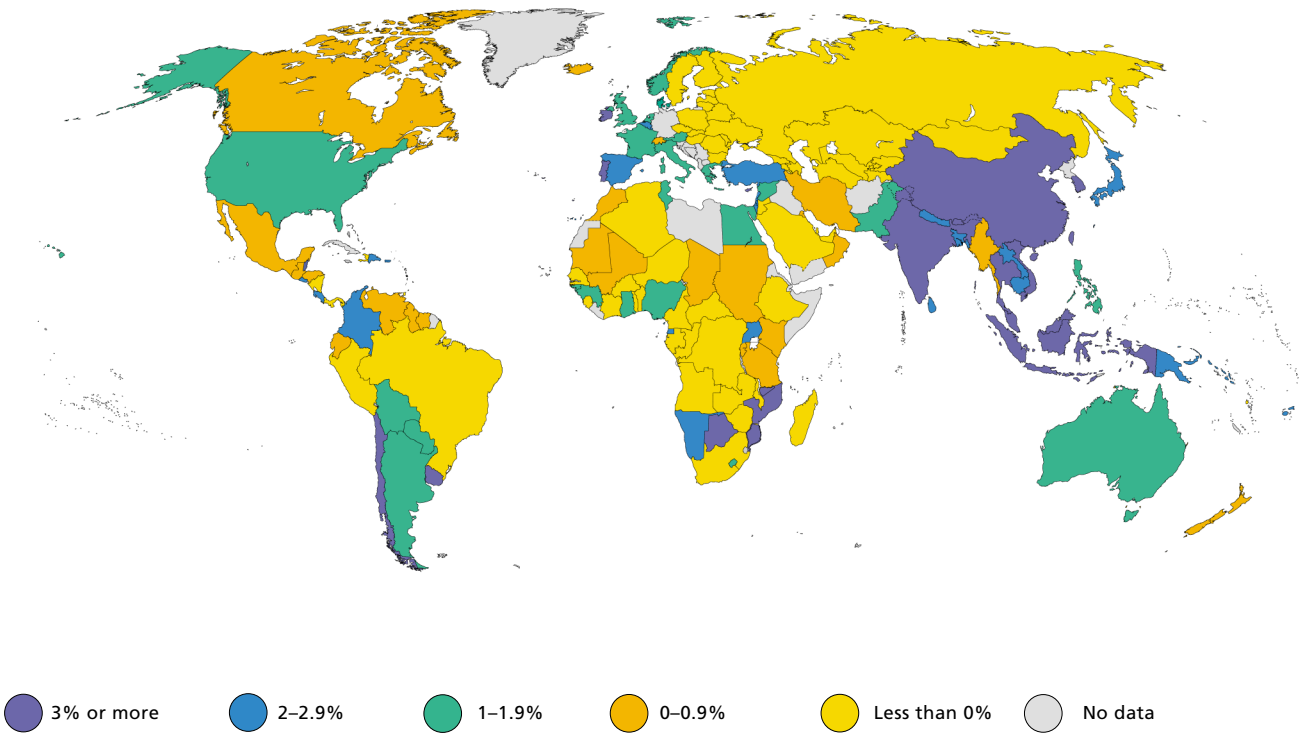
Unfortunately, the **economic growth** patterns described above do not mean that the world is on its way to "convergence"—that is, to the gradual elimination of the economic gap between rich and poor countries. Much faster population growth in most developing countries is offsetting comparatively faster GNP growth, causing GNP *per capita* growth rates in these countries to be low or even negative (Figure 4.1; Map 4.1).

As a result the gulf between the average GNP per capita in developing and developed countries continues to widen.

Figure 4.1 **Average annual growth rates of GNP, population, and GNP per capita, 1980–95**



Map 4.1 **GNP per capita growth rates, 1985–95**



According to a World Bank study, per capita income in the richest countries was 11 times greater than in the poorest countries in 1870, 38 times greater in 1960, and 52 times greater in 1985. In the early 1990s, of $23 trillion in global GDP, only $5 trillion—less than 20 percent—was generated in developing countries—even though these countries accounted for about 80 percent of the world's population.

The rapid average growth in developing countries also masks growing disparities among these countries. Between 1985 and 1995 East Asia experienced the fastest growth of GNP per capita—more than 7 percent a year (Figure 4.2). But in two other regions of the developing world, the average annual growth rate was negative: –1.1 percent in Sub-Saharan Africa, and –0.3 percent in the Middle East and North Africa,. The biggest drop in GNP per capita growth occurred in Eastern Europe and Central Asia because of the economic crisis caused by the transition from planned to market economies.

The news is not all bad for developing countries, however. The two developing

Figure 4.2 **Average annual GNP per capita growth rates, 1985–95**

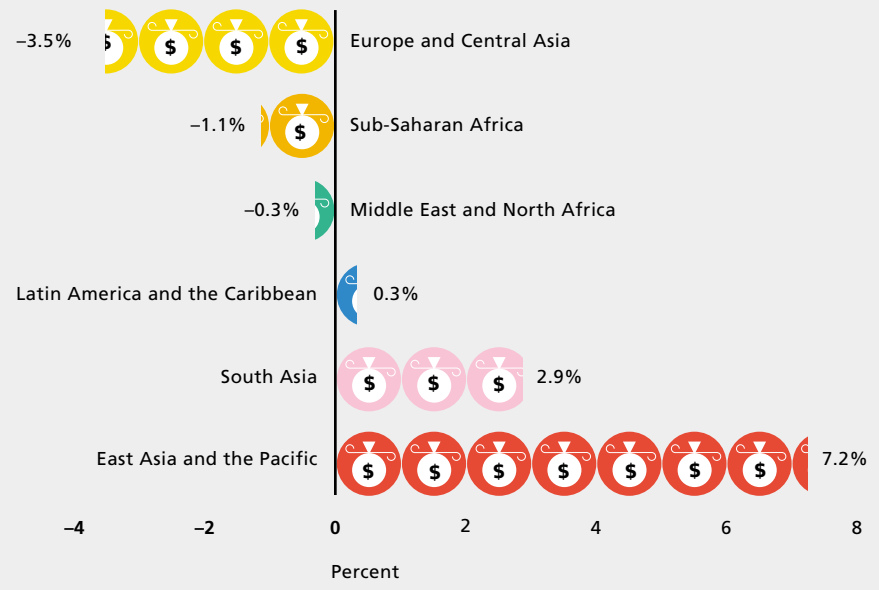
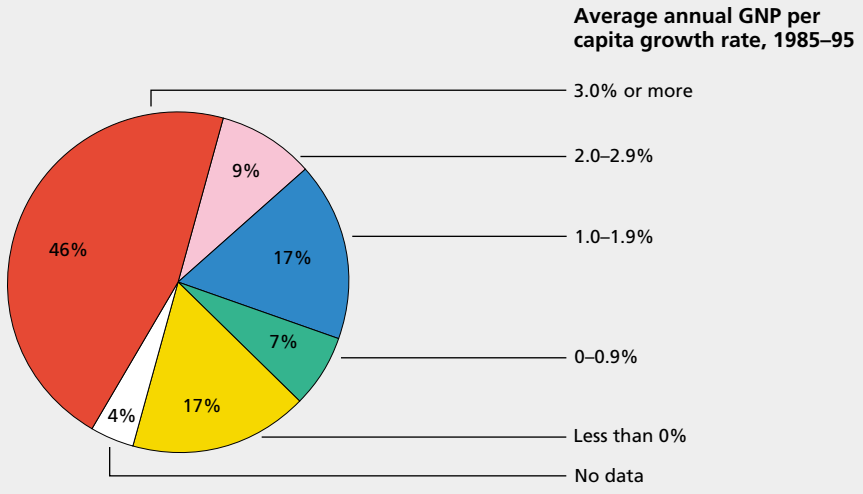


Figure 4.3 **Shares of 1995 world population by groups of countries with different GNP per capita growth rates**



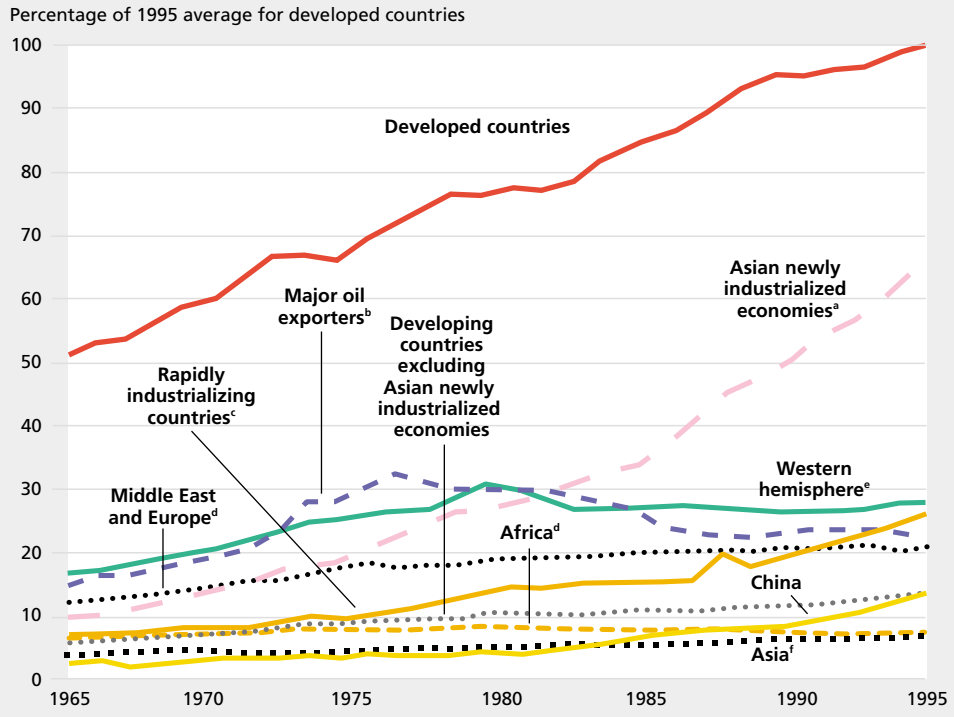
countries with the biggest populations did comparatively well in 1985–95. In India GNP per capita grew by about 3.2 percent a year, and in China by an unprecedented 8.3 percent a year. Rapid growth in China and India explains why more than half of the world's population lives in economies growing faster than 2 percent a year (Figure 4.3). But when China and India are excluded from the

sample of low-income countries, average annual growth in this group turns negative (see Figure 4.1). In 1985–95 more than half of developing countries had negative growth rates, and four-fifths of those with positive growth rates were growing slower than high-income countries (see Map 4.1).

Between 1965 and 1995 the gap between developed countries and most developing countries widened considerably (Figure 4.4). Asia was the only major region to achieve significant convergence toward developed countries' level of GNP per capita. Per capita income in the newly industrialized economies of Asia—Hong Kong (China), the Republic of Korea, Singapore, and Taiwan (China)—increased from 18 percent of the developed countries' average in 1965 to 66 percent in 1995. At the same time Africa, for instance, became even poorer in relative terms. The average per capita income in African countries equaled 14

How has the economic gap between developed and developing countries changed over the past few decades?

Figure 4.4 **Real GDP per capita in developed and developing countries, 1965–95**



a. Asian newly industrialized economies: Hong Kong (China), Republic of Korea, Singapore, and Taiwan (China).
b. Excluding Iraq.
c. Consists of Chile, Indonesia, Malaysia, and Thailand.
d. Excluding major oil exporters.
e. Excluding major oil exporters and Chile.
f. Excluding China, Hong Kong (China), Indonesia, Republic of Korea, Malaysia, Singapore, Taiwan (China), and Thailand.

percent of the developed countries' level in 1965 and just 7 percent in 1995. You can mark the 1995 position of your country on Figure 4.4 using Data Table 1 at the end of this book (see the PPP estimates of GNP per capita and use the average of $24,930 for GNP per capita in developed countries).

Today only about 10 developing countries—those with GNP per capita growth rates more than 1 percentage point higher than the average for developed countries—can look forward to catching up with developed countries within the next hundred years. And those 10 countries will only catch up if they can maintain their high growth rates. Doing so will be a challenge. In fact, the poorer a country is, the harder it is to maintain the high investment needed for growth (see Chapter 6).

5

Income Inequality

How does income inequality affect poverty and quality of life in a country?

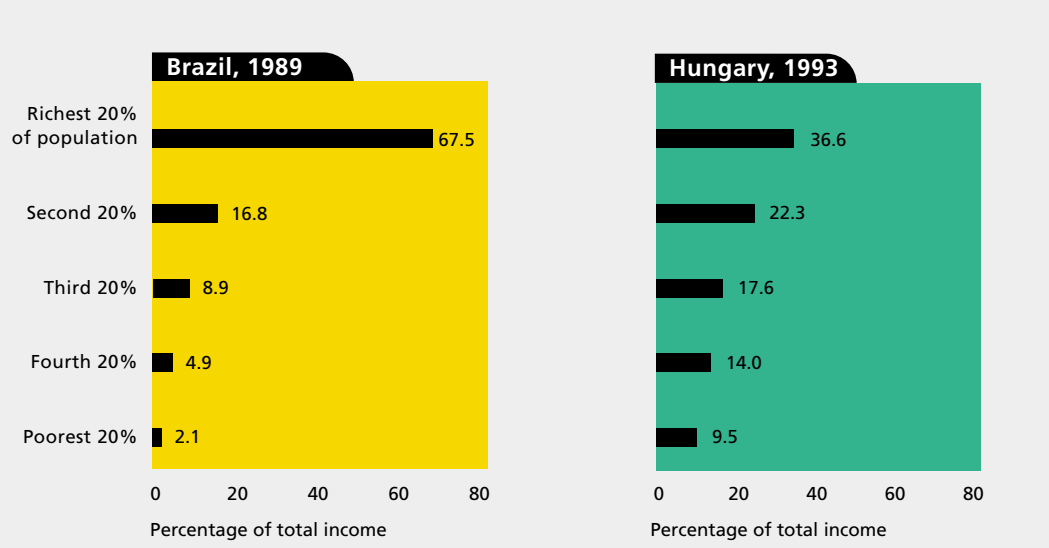
To begin to understand what life is like in a country—to know, for example, how many of its inhabitants are poor—it is not enough to know that country's per capita income. The number of poor people in a country and the average **quality of life** also depend on how equally—or unequally—income is distributed.

Cross-country Comparisons of Income Inequality

In Brazil and Hungary, for example, GNP per capita levels are quite comparable, but the incidence of poverty in Brazil is much higher. This observation can be explained with the help of Figure 5.1, which shows the percentages of national income received by equal percentiles of individuals or households ranked by their income levels. In Hungary the richest 20 percent (quintile) of the population receives about 4 times more than the poorest quintile, while in Brazil the richest quintile receives more than 30 times more than the poorest quintile.

Compare these ratios to an average of about 6:1 in high-income countries. In the developing world income inequality, measured the same way, varies by region: it is 4:1 in South Asia, 6:1 in East Asia and the Middle East and North Africa,

Figure 5.1 Income distributed by population quintile in Brazil and Hungary



10:1 in Sub-Saharan Africa, and 12:1 in Latin America.

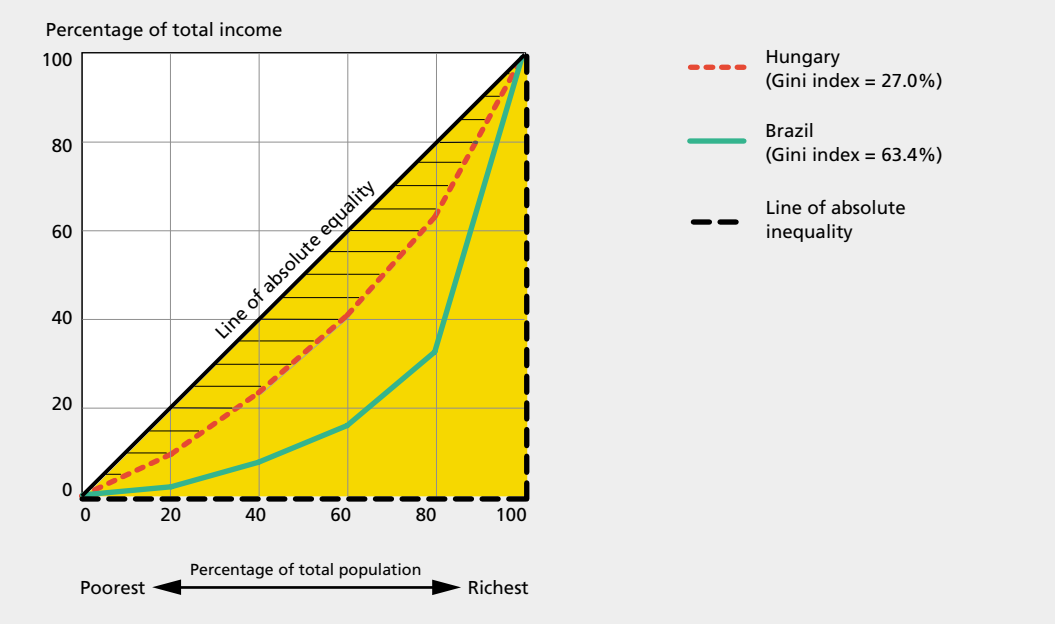
Lorenz Curves and Gini Indexes

To measure income inequality in a country and compare this phenomenon among countries more accurately, economists use Lorenz curves and Gini indexes. A Lorenz curve plots the cumulative percentages of total income received against the cumulative percentages of recipients, starting with the poorest individual or household (Figure 5.2). How is it constructed?

First, economists rank all the individuals or households in a country by their income level, from the poorest to the richest. Then all of these individuals or households are divided into 5 groups (20 percent in each) or 10 groups (10 percent in each) and the income of each group is calculated and expressed as a percentage of GDP (see Figure 5.1). Next economists plot the shares of GDP received by these groups cumulatively—that is, plotting the income share of the poorest quintile against 20 percent of population, the income share of the poorest quintile and the next (fourth) quintile against 40 percent of population, and so on, until they plot the aggregate share of all five quintiles (which equals 100 percent) against 100 percent of the population. After connecting all the points on the chart—starting with the 0 percent share of income received by 0 percent of the population—they get the Lorenz curve for this country.

The deeper a country's Lorenz curve, the less equal its income distribution. For

Figure 5.2 **Lorenz curves and Gini indexes for Brazil, Russia, and Hungary**



comparison, see on Figure 5.2 the "curve" of absolutely equal income distribution. Under such a distribution pattern, the first 20 percent of the population would receive exactly 20 percent of the income, 40 percent of the population would receive 40 percent of the income, and so on. The corresponding Lorenz curve would therefore be a straight line going from the lower left corner of the figure (x = 0 percent, y = 0 percent) to the upper right corner (x = 100 percent, y = 100 percent). Figure 5.2 shows that Brazil's Lorenz curve deviates from the hypothetical line of absolute equality much further than that of Hungary. This means that of these two countries, Brazil has the highest income inequality.

A Gini index is even more convenient than a Lorenz curve when the task is to compare income inequality among many countries. The index is calculated as the area between a Lorenz curve and the line of absolute equality, expressed as a percentage of the triangle under the line (see the two shaded areas on Figure 5.2). Thus a Gini index of 0 percent represents perfect equality—the Lorenz curve coincides with the straight line of absolute equality. A Gini index of 100 implies perfect inequality—the Lorenz curve coincides with the x axis and goes straight upward against the last entry (that is, the richest individual or household; see the thick dotted line on Figure 5.2). In reality, neither perfect equality, nor perfect inequality is possible. Thus Gini indexes are always greater than 0 percent but less than 100 percent (see Figure 5.3 and Data Table 1).

Costs and Benefits of Income Inequality

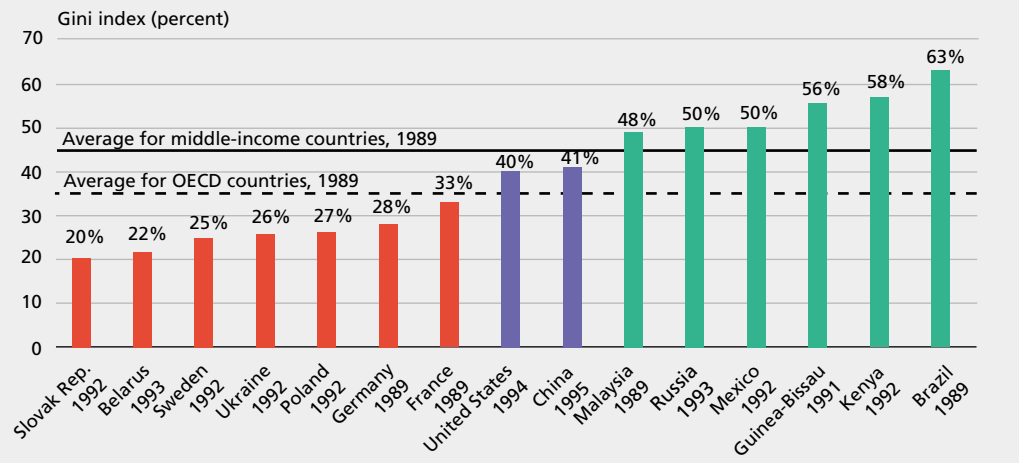
Is a more equal distribution of income good or bad for a country's development?

Is a less equal distribution of income good or bad for a country's development? There are different opinions about the best patterns of distribution—about whether, for example, the Gini index should be closer to 25 percent (as in Sweden) or to 40 percent (as in the United States). Consider the following arguments.

An excessively equal income distribution can be bad for economic efficiency. Take, for example, the experience of socialist countries, where deliberately low inequality (with no private profits and minimal differences in wages and salaries) deprived people of the incentives needed for their active participation in economic activities—for diligent work and vigorous entrepreneurship. Among the consequences of socialist equalization of incomes were poor discipline and low initiative among workers, poor quality and limited selection of goods and services, slow technical progress, and eventually, slower economic growth leading to more poverty.

On the other hand, excessive inequality adversely affects people's quality of life, leading to a higher incidence of poverty and so impeding progress in health and

Figure 5.3 **Income inequality in selected countries, various years**



Note: An index value of 0 percent represents absolute equality in income distribution; 100 percent represents absolute inequality.

education and contributing to crime. Think also about the following effects of high income inequality on some major factors of **economic growth:**

- High inequality threatens a country's political stability because more people are dissatisfied with their economic status, which makes it harder to reach political consensus among population groups with higher and lower incomes. Political instability increases the risks of investing in a country and so significantly undermines its development potential (see Chapter 6).
- High inequality limits the use of important market instruments such as changes in prices and fines. For example, higher rates for electricity and hot water might promote **energy efficiency** (see Chapter 15), but in the face of serious inequality, governments introducing even slightly higher rates risk causing extreme deprivation among the poorest citizens.
- High inequality may discourage certain basic norms of behavior among economic agents (individuals or enterprises) such as trust and commitment. Higher business risks and higher costs of contract enforcement impede economic growth by slowing down all economic transactions.

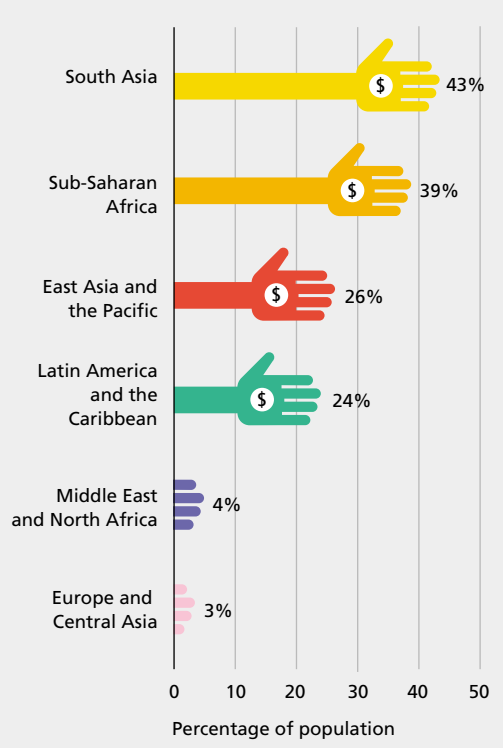
These are among the reasons some international experts recommend decreasing income inequality in developing countries to help accelerate economic and human development.

6

Poverty

The notion of poverty varies by country. Generally speaking, the richer a country is, the higher is its national poverty line. To allow for international comparisons, the World Bank has established an international poverty line of $1 a day per person in 1985 purchasing power parity (PPP) prices. According to this measure the portion of poor people in the world's population—those living on less than $1 a day—fell slightly between 1987 and 1993, from 30 percent to 29 percent. But the absolute number of poor people increased, from 1.2 billion to 1.3 billion. Another 2 billion are only a little better off.

Figure 6.1 **Population living on less than $1 a day, 1993**



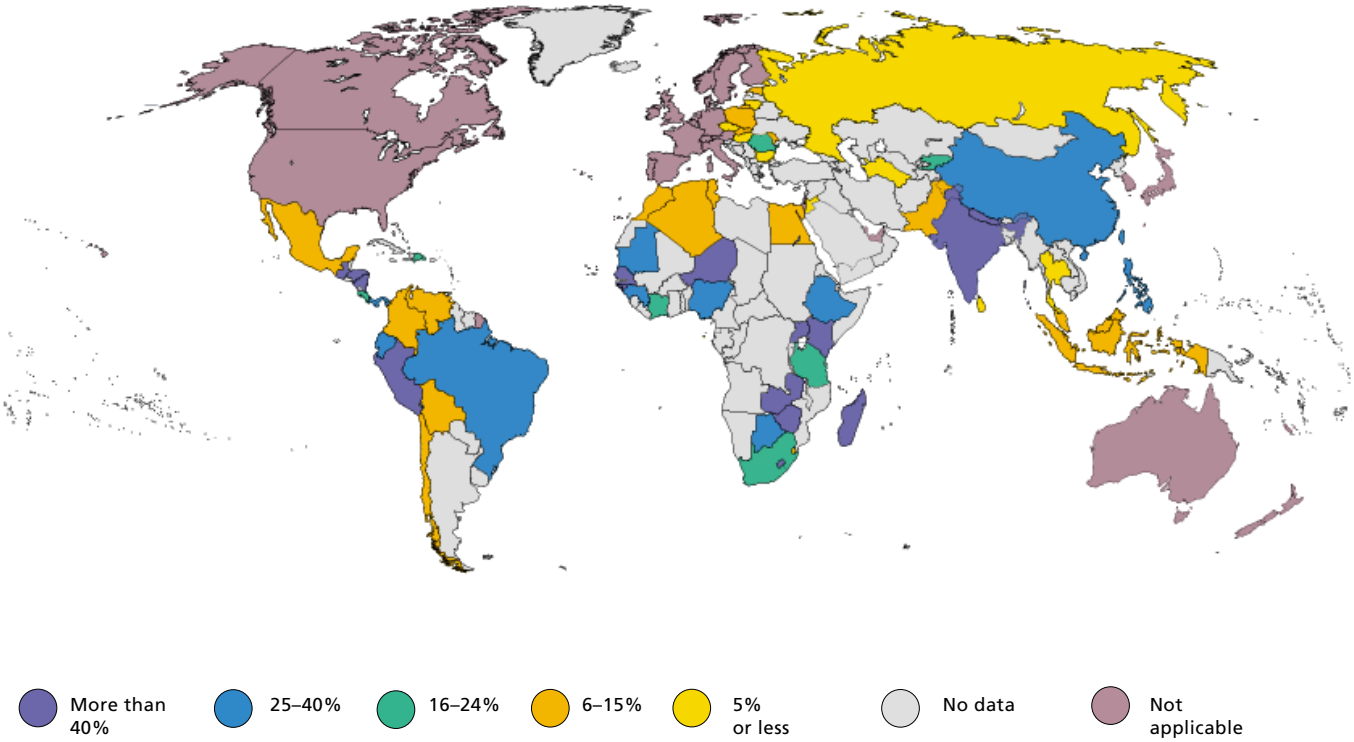
The Geography of Poverty

Most of the world's poor live in South Asia (39 percent), East Asia (33 percent, mostly in China and Indochina), and Sub-Saharan Africa (17 percent). South Asia also has the highest incidence of poverty (43 percent of its population), followed by Sub-Saharan Africa (39 percent; Figure 6.1). Countries in which more than half the population lives below the international poverty line include Guatemala, Guinea-Bissau, India, Kenya, Lesotho, Madagascar, Nepal, Niger, Senegal, and Zambia (Map 6.1 and Data Table 1).

Analysts have found a strong positive relationship between **economic growth** and poverty reduction. For example, East Asia (excluding China),which contains the world's fastest-growing economies, reduced the share of its population living in poverty from 23 percent in 1987 to less than 14 percent in 1993. But in Sub-Saharan Africa, where

How can poverty in different countries be compared?

Map 6.1 **Percentage of population living on less than US$1 a day, 1981–95**



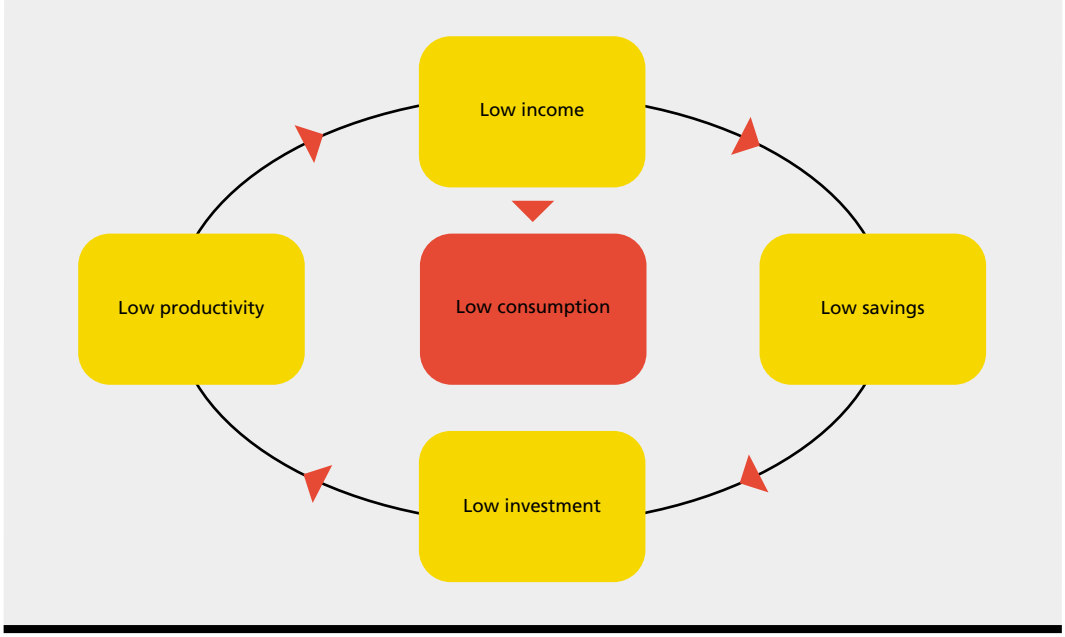
negative growth of GNP per capita predominated during that period, the incidence of poverty hardly changed.

The Vicious Circle of Poverty

Economists generally assume that people's willingness to save for future consumption grows with their incomes. The poorer people are, the less they can afford to plan for the future and save. The same logic applies to businesses and governments. Thus in poor countries, where most incomes have to be spent to meet current—often urgent—needs, national **saving** tends to be low. Low saving hinders desperately needed domestic **investment** in both **physical capital** and **human capital.** Without new investment, an economy's **productivity** cannot be increased and incomes cannot be raised. That closes the vicious circle of poverty (Figure 6.2). So are poor countries doomed to remain poor?

Recent data on gross domestic investment in East Asia suggest that the answer is no. Despite low initial GNP per capita, **gross domestic saving** and **gross domestic investment** in the region were high and growing until the 1998 financial crisis

Figure 6.2 **The vicious circle of poverty**



Can poor countries break the vicious circle of poverty?

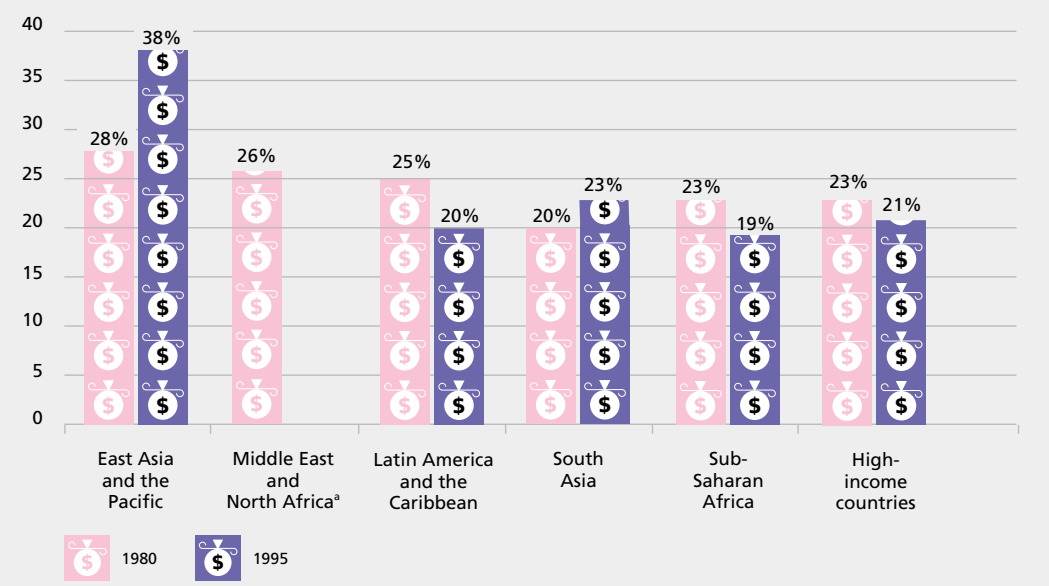
(Figure 6.3). Experts are still trying to explain this phenomenon. Generally speaking, however, many of the factors that encourage people to save and invest are well known, including political and economic stability, a reliable banking system, and favorable government policy.

In addition to domestic investment, foreign investment can help developing countries break out of the vicious circle of poverty, particularly if such investment is accompanied by transfers of advanced technology from developed countries. The opportunity to benefit from foreign investment and technology is sometimes referred to as the "advantage of backwardness," which should (at least theoretically) enable poor countries to develop faster than did today's industrial countries. However, many of the conditions needed to attract foreign investment to a country are the same as those needed to stimulate domestic investment.

A favorable investment climate includes many factors that make investing in one country more profitable and less risky than in another country. Political stability is one of the most important of these factors. Both domestic and foreign investors are discouraged by the threat of political upheaval and by the prospect of a new regime that might impose punitive taxes or expropriate capital assets. As a result a country can fall into another vicious circle, one seen historically in some Latin American countries (Figure 6.4). Political instability scares away new investments, which prevents faster economic growth and improvements in people's economic welfare, causing even

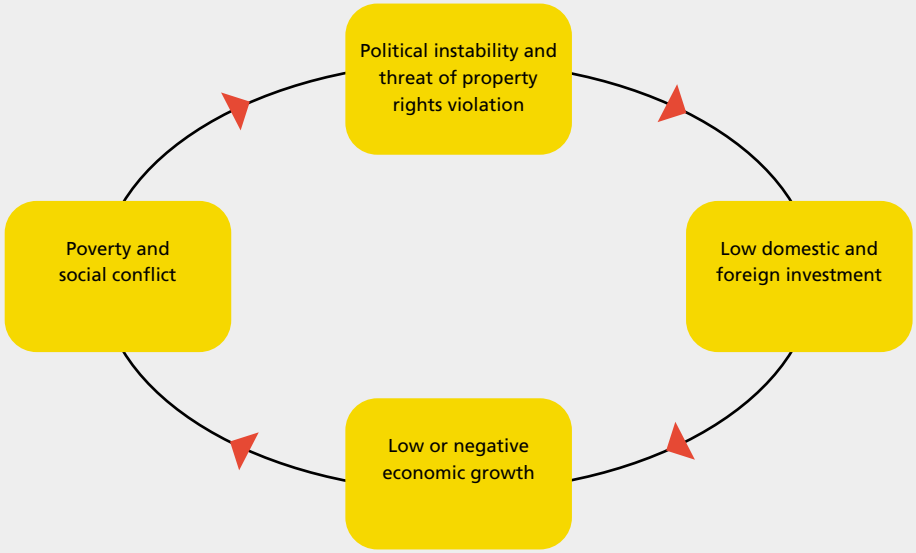
What is the relationship between poverty and political instability?

Figure 6.3 Gross domestic investment as a percentage of GDP, 1980 and 1995



a. 1995 data are not available.

Figure 6.4 The vicious circle of political instability



more dissatisfaction with the political regime and increasing political instability. Falling into this vicious circle of political instability can seriously impede efforts to boost economic development and reduce poverty.

7

Education

Capital is a stock of wealth used to produce goods and **services.** Most often, by capital people mean physical capital: buildings, machines, technical equipment, stocks of raw materials, and goods. But "human capital"—people's knowledge and skills—is at least as important for production, and at least as valuable to people who have it. The importance of the "human factor" in modern production is reflected in the distribution of income among people who own physical capital and people who "own" knowledge and skills. For example, in the United States in the 1980s the income received on knowledge and skills (through wages and salaries) was about 14 times that received on physical capital (through dividends and undistributed corporate profits). This phenomenon led economists to acknowledge the existence of **human capital.**

Education and Human Capital

Most human capital is built up through education or training that increases a person's economic productivity—that is, enables him or her to earn a higher income. Governments, workers, and employers invest in human capital by devoting money and time to education and training (to accumulating knowledge and skills). Like any other investment, these investments in human capital require sacrifices. People agree to make these sacrifices if they expect to be rewarded with additional income in the future.

Governments spend public funds on education because they believe that a better-educated population will contribute to faster development. Employers pay for employee training because they expect to cover their costs and gain additional profits from increased **productivity.** And individuals are often prepared to spend time and money to get education and training, since in most countries people with better education and skills earn more. Educated and skilled people are usually able to deliver more output or output that is more valuable in the marketplace, and their employers tend to recognize that fact with higher wages.

Economic returns to education are not always the same, however. Returns to education may be lower if:

- The quality of education is low or knowledge and skills acquired at

How are human capital and physical capital similar? How are they different?

What are the best ways to build a country's human capital?

school do not match market demand. In this case investments in human capital were not efficient enough, resulting in less human capital and lower returns to individuals and society.

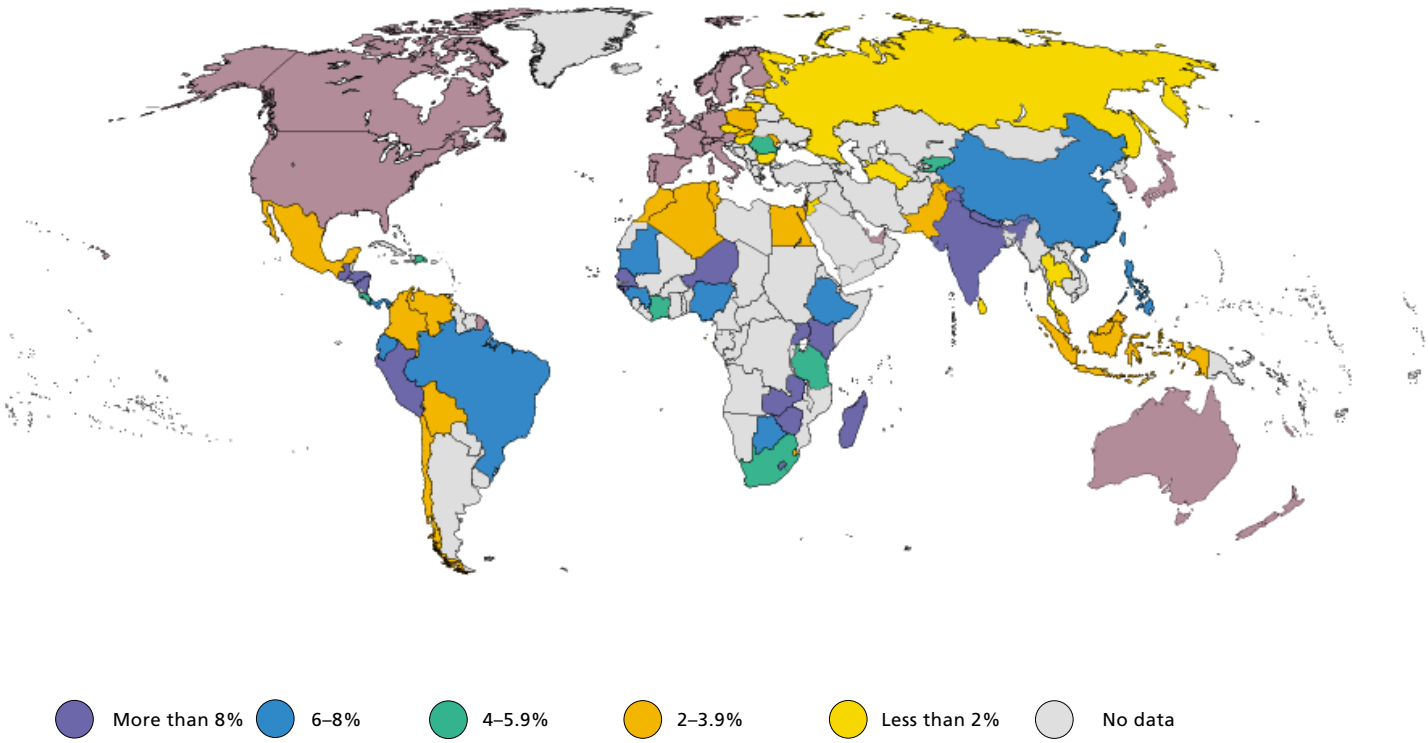
- There is insufficient demand for human capital because of slow economic growth. In this case workers' human capital may be underused and underrewarded.
- Workers with lower and higher education and skills are deliberately paid similar wages to preserve a relative equality of earnings—as used to happen in countries with centrally planned economies. These distortions in relative wages are being eliminated as part of these countries' transition to market economies.

The national stock of human capital and its rate of increase are critical to a country's level and rate of economic development, primarily because human capital is the most important determinant of a country's ability to produce and adopt technological innovations. But investing in human capital, although extremely important, is not sufficient for rapid economic growth. Such investment must be accompanied by the right development strategy.

Consider the Philippines and Vietnam. In both countries adult literacy is higher than in most other Southeast Asian countries (see Data Table 2). Nevertheless, until recently both countries were growing relatively slowly, largely because of development strategies that prevented them from taking full advantage of their stock of human capital. In Vietnam central planning stood in the way, and in the Philippines economic isolation from the global market was to blame. In recent years, however, both countries have realized a return on their investments in human capital—Vietnam by adopting a more market-based approach to development and radically improving its growth rate, and the Philippines by "exporting" many of its educated workers and "importing" their foreign exchange earnings.

Most governments are playing an increasingly active role in providing education (Map 7.1 and Data Table 2). Differences in public spending on education (relative to GDP) across countries reflect differences in government efforts to increase national stocks of human capital. Governments of developing countries devote a larger share of their GDP to education today than they did in 1980. But this share is still smaller than that in developed countries: 3.4 percent of GDP in low-income countries and 4.4 percent in middle-income counties compared with 5.6 percent in high-income countries. Using Data Tables 1 and 2, you can calculate the absolute gap between per capita public spending on education in developed and developing countries. This gap is an important man-

Map 7.1 **Public expenditure on education, percent of GDP, 1995**



ifestation of the vicious circle of poverty described in Chapter 6: low per capita income inhibits investment in human (as well as physical) capital, slows productivity growth, and so prevents per capita income from increasing significantly.

Data on public education spending does not, however, paint a complete picture of investment in human capital because in many countries private spending on education is considerable. Around the world, the difference between public and private spending on education varies enormously and does not seem to be correlated with a country's average income. Among low-income countries, for example, the share of private spending on education ranges from about 20 percent in Sri Lanka to 60 percent in Uganda and Vietnam, while among high-income countries it ranges from 5 percent in Austria to 50 percent in Switzerland.

There are, however, certain patterns in the balance between public and private spending on different levels of education. Most governments are committed to providing free primary and often secondary education because it is

believed that not just individuals but the entire country benefits significantly when most of its citizens can read, write, and fully participate in social and economic life. At the same time, tertiary education institutions, both private and public, usually charge tuition, because more of the benefits from this level of education are believed to accrue to graduates (in the form of much higher future earnings) rather than to society at large.

In vocational education, employers often play an important role in providing on-the-job training for employees and in financing training in vocational schools. Governments try to encourage employers' involvement in order to save public funds and to link vocational education to the needs of the labor market. Specific work skills are best developed through training during employment, especially in jobs involving substantial technological change.

Public financing of vocational training is generally considered justified when employer training capacity is weak (as in small and medium-size firms) or absent (as with retraining for unemployed workers). High-quality general pre-employment education is the best guarantee of an individual's ability to learn new skills throughout a career and of employers' willingness to invest in that individual's professional training. Most important, employees must be able to communicate clearly in writing and to use mathematics and science skills to diagnose and solve problems.

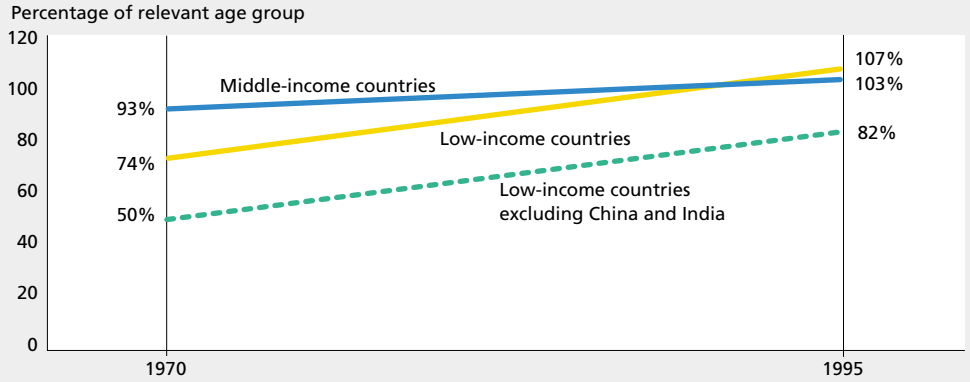
Primary Education and Literacy

Attending primary school helps children acquire basic literacy and numeracy as well as other knowledge and skills needed for their future education. In low-income countries primary education in itself often improves the welfare of the poor by making them more productive workers, enabling them to learn new skills throughout their working lives, and reducing the risk of unemployment. In addition, primary education—especially for girls and women—leads to healthier and smaller families and fewer infant deaths.

Despite rapid growth in the number of children of primary school age, since 1970 developing countries have succeeded in sharply increasing the percentage of children enrolled in primary school (Figure 7.1). But universal primary education, a goal being pursued by most governments of developing countries, is still far from being achieved in many of them (see Data Table 2). Low enrollments in many low-income countries may signal inadequacies in education system capacity as well as social conditions that prevent children from enrolling.

Because economic and social returns to society are known to be higher for pri-

Figure 7.1 **Primary school enrollment, 1970 and 1995**



Note: Enrollment ratios may exceed 100 percent because some students, including repeaters, are older than the standard primary school age group; others are younger. Therefore, ratios above 100 percent do not necessarily indicate better educational outcomes.

For low-income countries, what are the main obstacles to universal primary education?

mary education than for other levels of study, most governments are committed to providing free access to primary school to all children. But in low-income countries the public funds available for this purpose are often insufficient to meet the increasing demand of rapidly growing populations. These funds also tend to be allocated inequitably, with better education opportunities often provided to urban children relative to rural children, to well-off children relative to poor children, and to boys relative to girls. In some countries public financing of education favors the higher levels of study, benefiting mostly older, better-off children and thus exacerbating social inequity.

Even when primary education is accessible, poor children may be unable to benefit from it. Many of these children must work rather then attend school. Premature and extensive involvement in work damages their health and impedes development of their social skills, decreasing their future earning power as adults and perpetuating the vicious circle of poverty.

In addition, primary school enrollments are generally lower for girls than for boys. This gender gap is widest in South Asia, the Middle East, and Sub-Saharan Africa. The gap reflects cultural norms, early child-bearing, limited employment opportunities for women, and traditional expectations of girls' larger contribution to household work. As a result, of the 900 million adults in developing countries who are illiterate (nearly one in three), almost two-thirds are women (Figure 7.2).

Note that child labor is known to be a poverty issue—that is, its incidence declines as per capita income rises. That means that further economic growth will

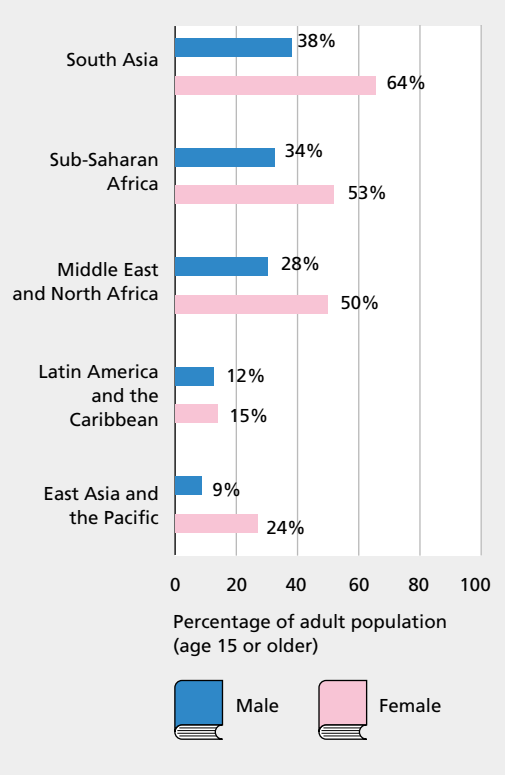
tend to remove this obstacle to universal primary education. By contrast, gender disparities in school enrollments are not correlated with overall living standards, so countries do not just "grow out of them." Narrowing the gender gap requires supportive national policies, such as reducing the direct and indirect costs of girls' schooling for their parents and building more schools for girls in education systems that are segregated by sex.

Issues in Secondary and Tertiary Education

In most developing countries enrollment in secondary schools is much lower than in primary schools (see Data Table 2). Although the situation has been improving over the past few decades, on average less than 60 percent of children of secondary school age in low- and middle-income countries are enrolled, while in high-income countries secondary education has become almost universal (Figure 7.3).

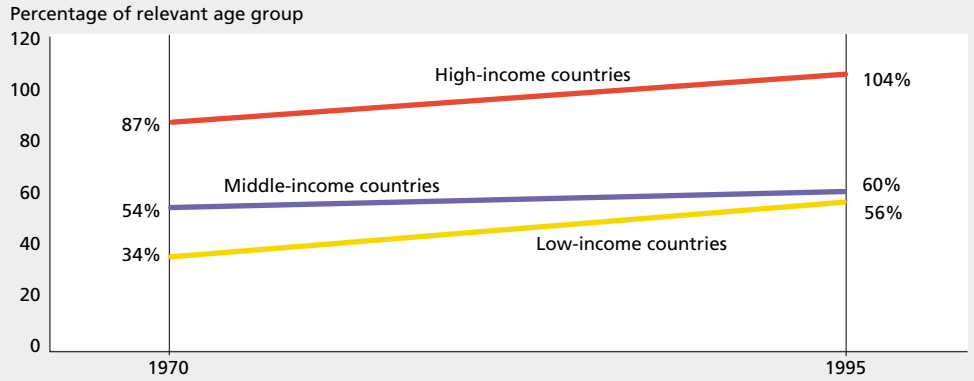
Among the world regions, Sub-Saharan Africa has the largest share of children not enrolled in secondary school. Check Data Table 2 for the indicator of child labor incidence—that is, the percentage of children ages 10–14 who work. Note that this indicator is highest in Sub-Saharan Africa too. Child labor remains the most formidable obstacle to education for children in low-income countries. According to available data, almost one-third of children 10–14 are in the labor force in low-income countries (excluding China and India), while in many Sub-Saharan countries this proportion is one-half. In fact, the situation may be even worse—in many countries data on child labor are underreported or not reported at all because officially the problem is presumed not to exist.

Figure 7.2 **Adult illiteracy, 1995**



The gap between developed and developing countries is particularly wide in tertiary education. In high-income countries tertiary enrollments have increased rapidly since 1980, but in low- and middle-income countries they have

Figure 7.3 **Secondary school enrollment, 1980 and 1995**



Note: Enrollment ratios may exceed 100 percent because some students, including repeaters, are older than the standard secondary school age group; others are younger. Therefore, ratios above 100 percent do not necessarily indicate better educational outcomes.

How does a country's economic situation determine its education needs?

improved only slightly (Figure 7.4 and Data Table 2).

The number of students enrolled at a level of study does not indicate the quality of their education and thus provides only a rough idea of a country's educational achievements. To generate economic returns, education and training have to meet the ever-changing demands of the labor market—that is, they have to equip graduates with the knowledge and skills needed at each stage of a country's economic development. For example, countries moving from planned to market economies usually need more people trained in economics and business management to work in emerging private sectors as well as in reformed public sectors. Today's information revolution requires more people with computer skills, and globalization (see Chapters 13 and 14) has increased the demand for foreign language skills. Overall, innovative people are needed everywhere, and an education system that fails to develop this quality in its graduates can hardly be considered fully effective.

Figure 7.5 illustrates some differences in the quality of education between countries with transition and with established market economies. Relative to their counterparts in Canada, France, Israel, and the United Kingdom, children in Hungary, Slovenia, and the former Soviet Union were better at demonstrating their knowledge of facts but worse at using that knowledge in new and different circumstances. In a competitive market economy, graduates who lack innovation and problem-solving skills run a higher risk of becoming unemployed and poor.

Investing in education is not only an important way to build a nation's human

Figure 7.4 **Tertiary education enrollment, 1980 and 1995**

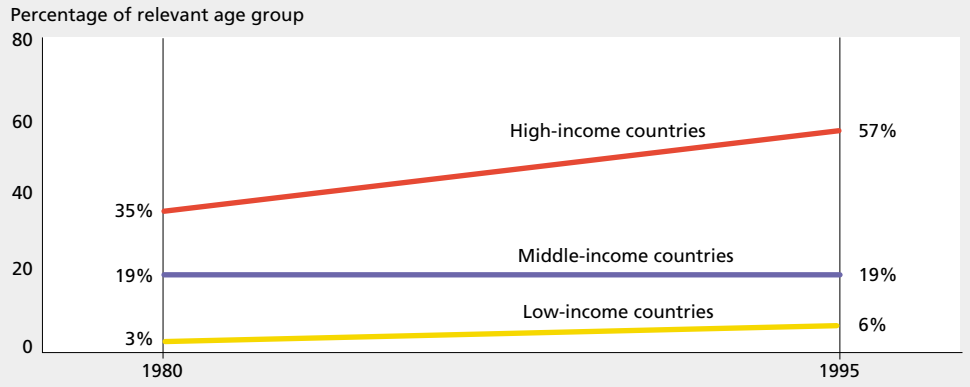
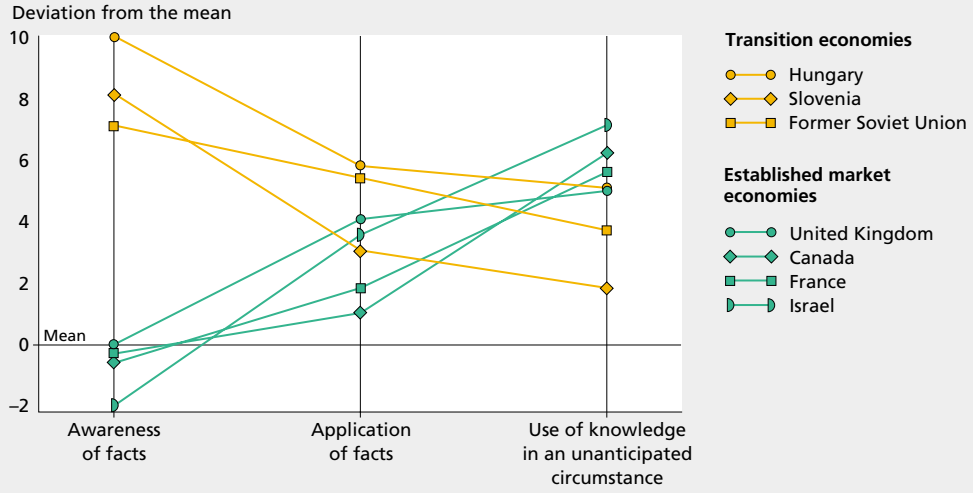


Figure 7.5 **Science and mathematics test performance of children in selected countries, 1991**



Note: The data shown here are the scores of 9- to 13-year-olds on the Second International Assessment of Educational Progress, conducted in 1991. A value of 0 represents the mean score for the 19 countries in the sample. The countries shown are those whose performance was generally above the sample mean.

capital and to improve its prospects for economic growth and higher **living standards.** It also has a value in its own right because education broadens people's horizons and helps them to live healthier, more financially secure, and more fulfilling lives. This is why experts use data on literacy, for example, as an important indicators of the **quality of life** in a country.

8

Health and Longevity

The health of a country's population is often monitored using two statistical indicators: life expectancy at birth and the under-5 mortality rate. These indicators are also often cited as overall measures of a population's **quality of life** because they indirectly reflect many aspects of people's welfare, including their levels of income and nutrition, the quality of their environment, and their access to health care, safe water, and sanitation.

Life expectancy at birth indicates the number of years a newborn baby would live if health conditions prevailing at the time of its birth were to stay the same throughout its life. This indicator does not tell how long a baby will actually live, but rather how long a baby born in a certain year is likely to live. The under-5 mortality rate indicates the number of children who are likely to die before reaching age five per 1,000 live births.

Because infants and children are most vulnerable to malnutrition and poor hygienic living conditions, they account for the largest portion of deaths in most developing countries. Therefore, decreasing under-5 mortality is the most effective way of increasing life expectancy at birth in the developing world.

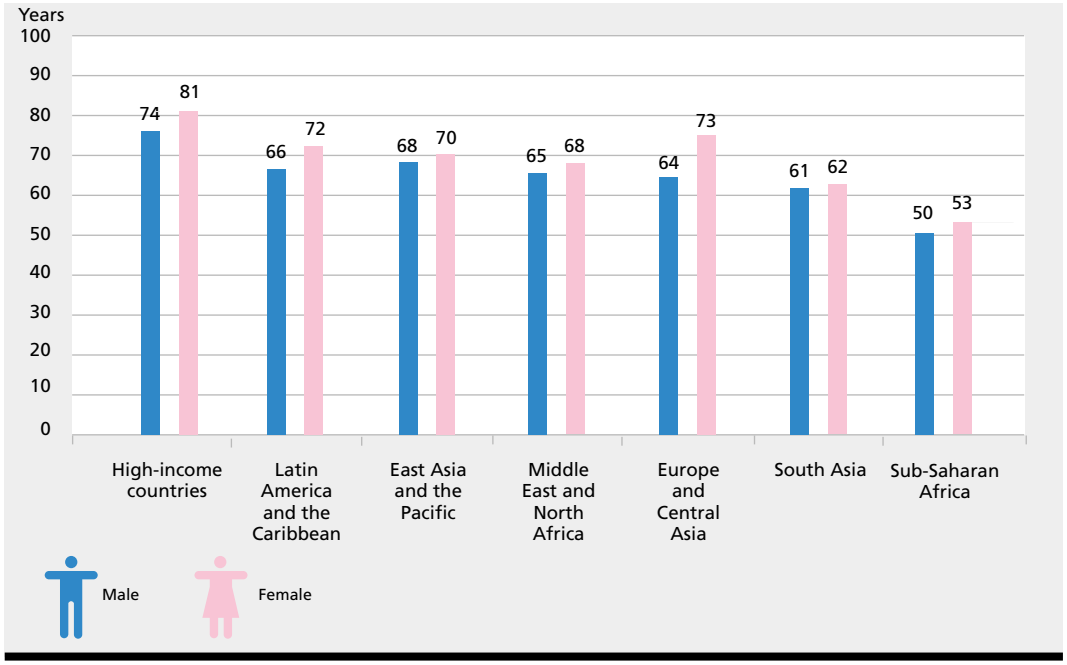
Global Trends

During the second half of the 20th century health conditions around the world improved more than in all previous human history. Average life expectancy at birth in **low-** and **middle-income countries** increased from 40 years in 1950 to 65 years in 1996. Over the same period the average under-5 mortality rate for this group of countries fell from 280 to 80 per 1,000. But these achievements are still considerably below those in **high-income countries,** where average life expectancy at birth is 77 years and the average under-5 mortality rate is 7 per 1,000.

Throughout the 20th century, national indicators of life expectancy have been strongly associated with **GNP per capita.** If you compare Figure 8.1 (Life expectancy at birth, 1995) with Figure 2.1 (GNP per capita, 1995), you will find that in general the higher a country's income per capita, the higher is its life expectancy—although this relationship does not explain all the differences among regions and countries. (See Data Tables 1 and 2 for country-specific data.) The two other factors believed to be the most important for increasing national and regional life expectancies

Which factors account for most of the health improvements in the 20th century?

Figure 8.1 **Life expectancy at birth, 1995**

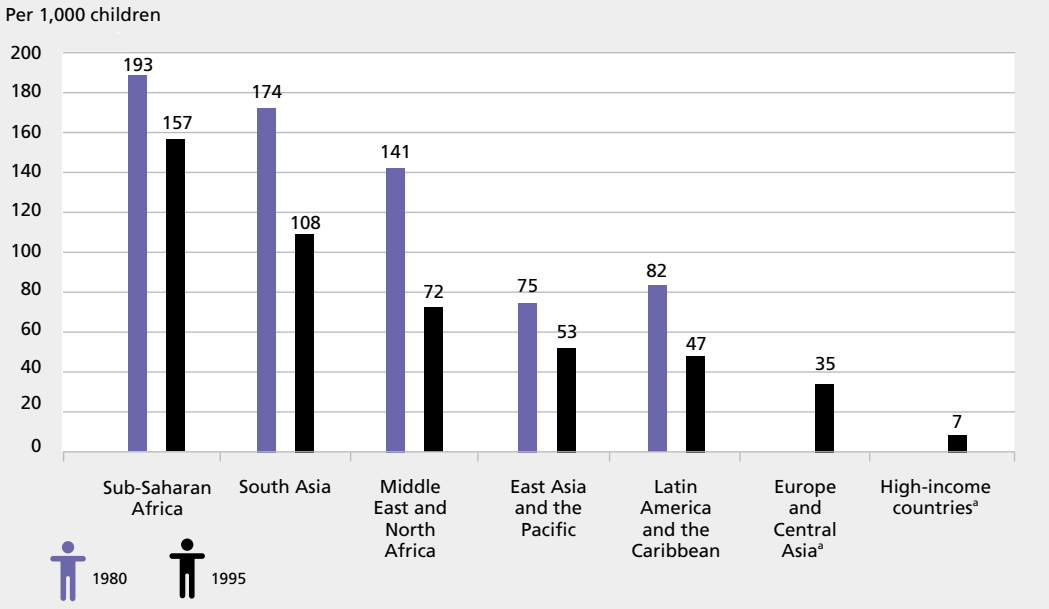


are improvements in medical technology (with some countries clearly making better use of it than others) and development of and better access to public health services (particularly clean water, sanitation, and food regulation). Education, especially of girls and women, makes a big difference too, because wives and mothers who are knowledgeable about healthier lifestyles play a crucial role in reducing risks to their families' health.

These other factors help explain how most **developing countries** are catching up with **developed countries** in terms of people's health even though they are generally not catching up in terms of per capita income (see Chapter 4). Progress in medical technology, public health services, and education allows countries to realize "more health" for a given income than before. For example, in 1900 life expectancy in the United States was about 49 years and income per capita was more than $4,000. In today's Sub-Saharan Africa life expectancy is more than 50 years even though GNP per capita is still less than $500.

In general, for nearly all countries, life expectancy at birth continued to grow in recent years (see Data Table 2). In developing countries this growth was largely due to much lower under-5 mortality (Figure 8.2). Better control of communicable diseases that are particularly dangerous for children, such as diarrhea and worm infections, accounts for most of the gains. In many countries higher per

Figure 8.2 **Mortality rate of children under age 5, 1980 and 1995**



a. 1980 data not available

capita incomes (see Chapter 4 and Data Table 1) also contributed to better nutrition and housing for most families.

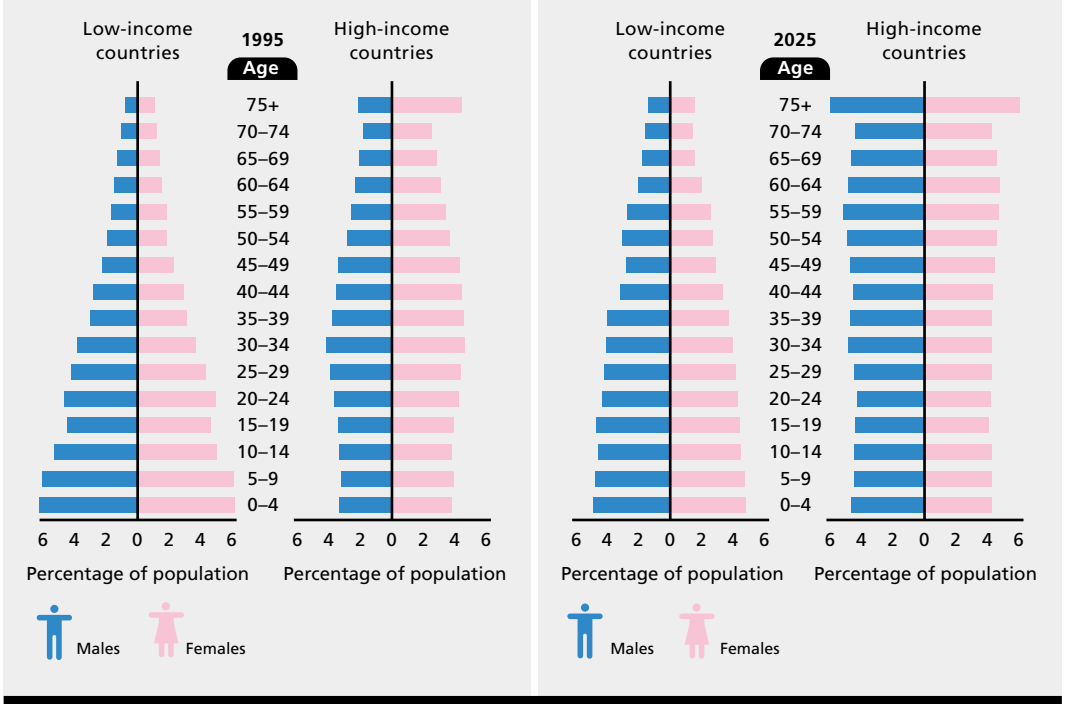
Governments of developing countries have invested in improving public health measures (safe drinking water, sanitation, mass immunizations), training medical personnel, building clinics and hospitals, and providing medical care. But much remains to be done. Malnutrition, especially among women and children, is still a big problem. And communicable, largely preventable diseases still claim millions of lives. For example, the average rate of measles immunization worldwide is just 80 percent, and every year more than 1 million children die of the disease. Many of those children are in Sub-Saharan Africa, where the rate of measles immunization is the lowest—about 60 percent. As many as 2 million people die every year as a result of malaria and malaria-related diseases, mostly in low income countries; and in Africa alone more than 2 million lives a year are claimed by AIDS.

Population Age Structures

The health and longevity of a country's people are reflected in its population age structure—that is, the percentages of different age groups in the population of the country. A population age structure can be shown by a population pyramid, also known as an age-sex pyramid. In such pyramids a country's population is divided into males and females as well as

What are the social and economic challenges that result from different population age structures?

Figure 8.3 **Population pyramids for low- and high-income countries, 1995 and 2025**



age groups (for example, five-year age groups, as in Figure 8.3). Figure 8.3 shows population pyramids typical of low- and high-income countries in 1995 and expected to be typical in 2025. Note how these shapes represent higher **birth rates,** higher **death rates** (particularly among children), and lower life expectancies in low-income countries. Think about why in poor countries the base of the pyramid is broader and the pyramid is basically triangular rather than pear-shaped or rectangular as in rich countries. Explain also the changes expected to happen to both pyramids by 2025.

As seen in Figure 8.3, in low-income countries more than one-third of the population is under 15, compared with less than one-fifth in high-income countries. From a demographic perspective, that means that larger age groups are about to enter childbearing age, and the increase in the number of parents will outweigh a decrease in the average number of children per family. This phenomenon, called population momentum, will keep birth rates high despite a drop in **fertility** (see Chapter 3). From a social and economic perspective, a high percentage of children in a population means that a large portion is too young to work and, in the short run, is dependant on those who do. This is the main reason for the relatively high **age dependency ratio** in most developing coun-

tries. While in high-income countries there are roughly 2 people of working age to support each person who is too young or too old to work, in low-income countries this number is around 1.0–1.5.

High-income countries currently face the problem of an aging population—that is, a growing percentage of elderly, nonworking people. In 1996 people 60 and above made up 18 percent of the population in these countries, and this portion is expected to grow to almost 22 percent by 2010. In several of these countries (Belgium, Germany, Greece, Italy, Japan, Sweden) the share of elderly people has already reached or surpassed 21 percent. An aging population puts greater pressure on a country's pension, health care, and social security systems.

As life expectancy continues to increase in developing countries, they too will face the problem of an aging population (see Figure 8.3). In fact, developing countries are expected to be hit even harder because they are financially less prepared to deal with it, because the rate of growth in life expectancy and therefore population aging is much faster than in developed countries, and because there will be a high dependency ratio of both children and elderly people.

Figure 8.3 also illustrates the issue of gender imbalance increasingly pronounced in older age groups due to the naturally higher longevity of females. In high-income countries on average there are 133 females per 100 males 60 and over. In low-income countries the imbalance is smaller (104 females per 100 males), but the reasons for this seeming "advantage" of poor countries are higher maternal mortality and gender discrimination, including discrimination in access to health care.

How are major health risks changing for different groups of countries?

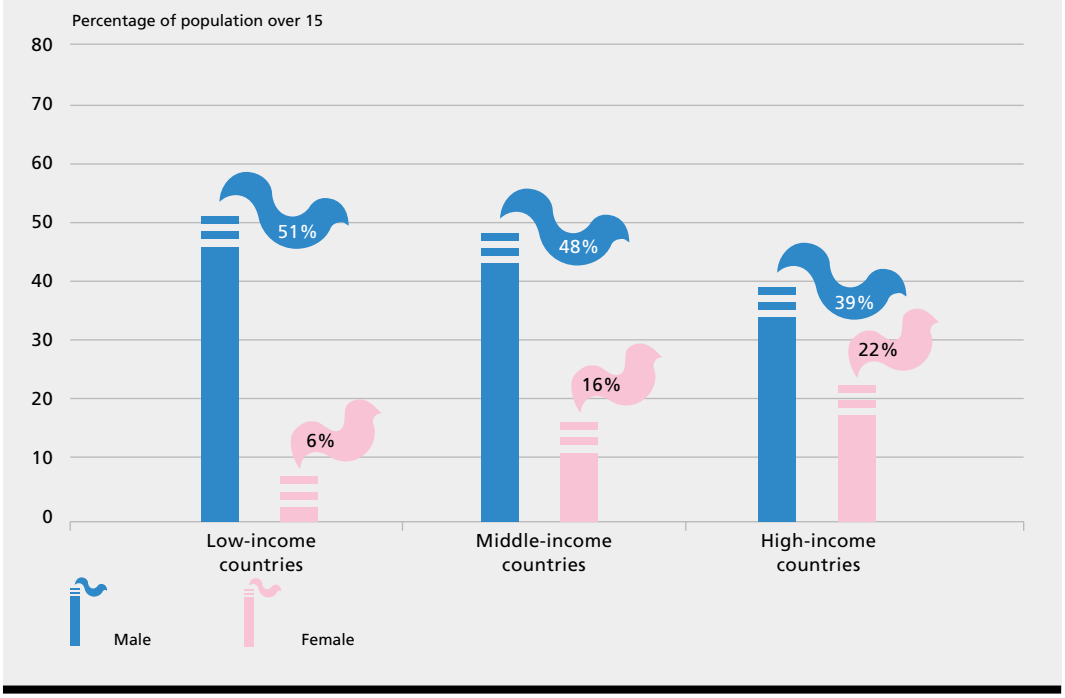
Future Challenges

As the health of the world population has improved, the burden of disease has declined. Simultaneously, the structure of disease has shifted rapidly from a preponderance of communicable disease (diarrhea, worm infections, measles), which are the main health risks for infants and children, to a preponderance of noncommunicable disease (heart and circulatory disease, cancer) that mostly affect adults. While there are inexpensive and effective ways to eliminate most communicable diseases, noncommunicable diseases are generally much more expensive to treat. Moreover, substantially reducing their incidence will require changing people's behaviors and lifestyles.

The importance of lifestyle choices can be illustrated by the health gap between Eastern and Western Europe. The largest contributors to this health gap are heart attacks and strokes, for which the main

Why is the incidence of smoking higher in poorer countries?

Figure 8.4 **Adult smoking, 1985–95**



risk factors include unhealthy diet, lack of exercise, excessive consumption of alcohol, and smoking. All these factors, particularly smoking, are more prevalent in Eastern Europe (Figure 8.4 and Data Table 2).

Cigarette smoke does more damage to human health than all air pollutants combined. Smoking is hazardous not only to smokers, about half of whom die prematurely from tobacco-related diseases including cancer, heart disease, and respiratory conditions, but also to "passive" smokers (those inhaling second-hand smoke). According to some estimates, passive smokers increase their risk of cancer by 30 percent and their risk of heart disease by 34 percent.

The governments of most developed countries have made efforts to reduce smoking and so lower its costs to society by introducing tobacco taxes, limiting tobacco advertising, and educating people about the risks of smoking. Cigarette taxes are highest in Western Europe. According to a 1998 report by the Worldwatch Institute, smokers in Norway pay $5.23 in taxes per pack of cigarettes, which is 74 percent of the total price. And in the United Kingdom smokers pay $4.30 in taxes, which is 82 percent of the total price. Experience in many countries has shown that tobacco taxes are effective in discouraging smoking: a 10 percent increase in cigarette prices leads to a 5 percent decrease in smoking among adults and a 6-8 percent

decrease among young adults (age 15 to 21), who usually have less disposable income.

According to the same report, while in Western Europe and the United States the number of smokers is declining, in most developing countries smoking is on the rise, particularly among women and young people. European and U.S. tobacco firms, facing declining demand in their home countries, have managed to increase sales by entering the underregulated and underinformed markets of less developed countries. In the past 10 years exports of cigarettes as a share of production have doubled to 60 percent in the United Kingdom and 30 percent in the United States, the two largest exporters. If current smoking trends persist, the number of tobacco-related deaths worldwide will soar from 3 million a year today to 10 million a year in 2020, with 70 percent of the deaths occurring in the developing world.

9

Growth of the Service Sector

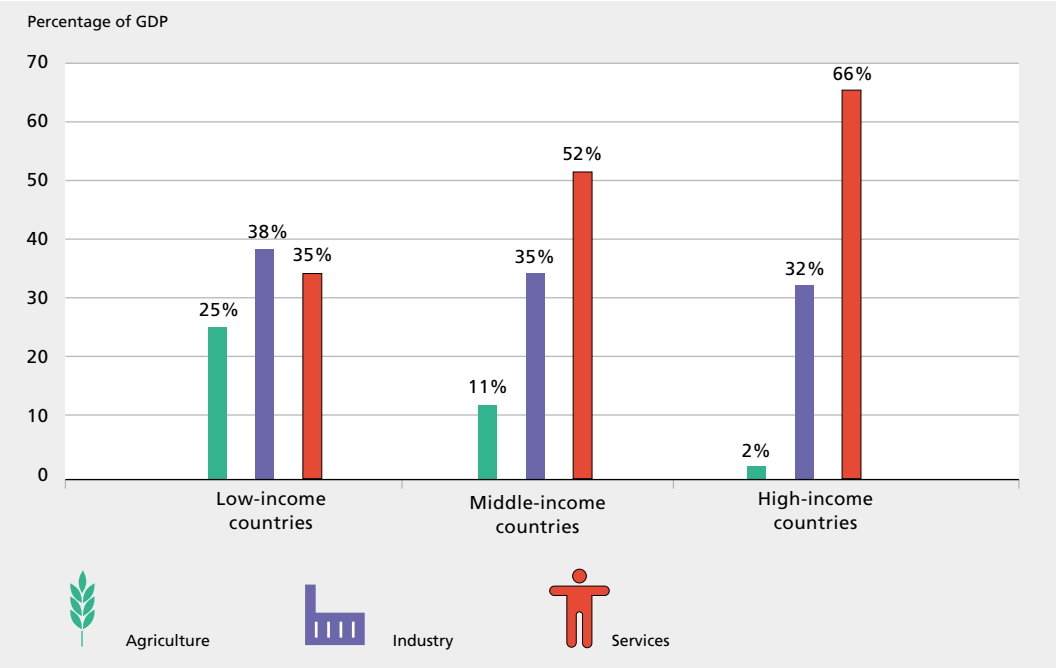
What are the economic reasons behind industrialization and postindustrialization?

Everything that grows also changes its structure. Just as a growing tree constantly changes the shape, size, and configuration of its branches, a growing economy changes the proportions and interrelations among its basic sectors—**agriculture, industry,** and **services** and between other sectors—rural and urban, public and private, domestic- and export-oriented (Chapters 10, 11, and 12). Are there common patterns in how growing economies change? Which changes should be promoted and which should be discouraged? Think about these questions while reading this chapter and the three that follow it.

Industrialization and Postindustrialization

One way to look at the structure of an economy is to compare the shares of its three main sectors—agriculture, industry, and services—in the country's total output (Figure 9.1) and employment.[1] Initially, agriculture is a developing economy's most important sector. But as

Figure 9.1 Sectoral structure of world economies, 1995



income per capita rises, agriculture loses its primacy, giving way first to a rise in the industrial sector, then to a rise in the service sector. These two consecutive shifts are called **industrialization** and **postindustrialization** (or "deindustrialization"). All growing economies are likely to go through these stages, which can be explained by structural changes in consumer demand and in the relative labor **productivity** of the three main economic sectors.

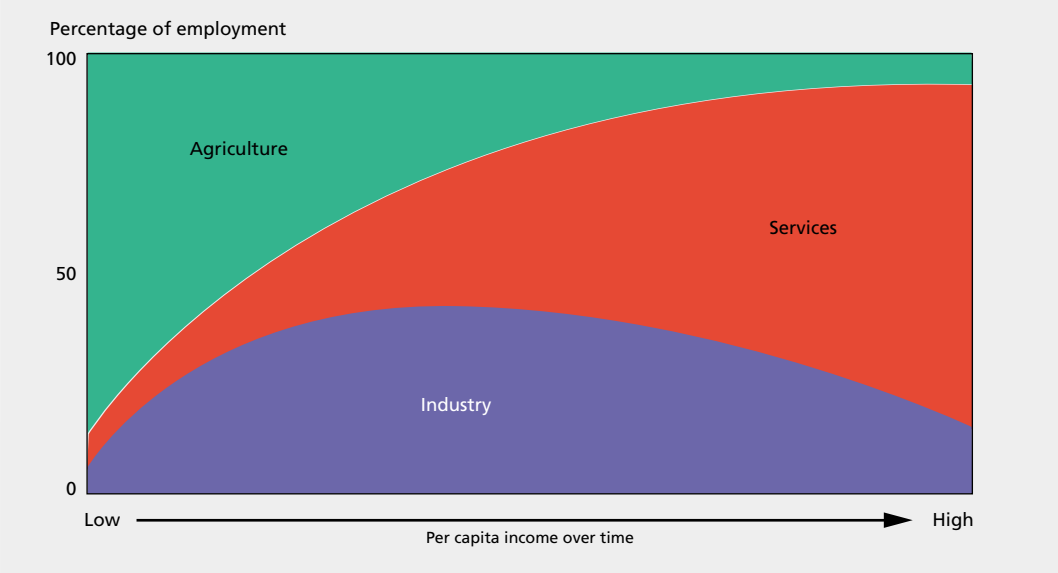
Industrialization

As people's incomes increase, their demand for food—the main product of agriculture—reaches its natural limit, and they begin to demand relatively more industrial goods. At the same time, because of new farm techniques and machinery, labor productivity increases faster in agriculture than in industry, making agricultural products relatively less expensive and further diminishing their share in **gross domestic product (GDP).** The same trend in relative labor productivity also diminishes the need for agricultural workers, while employment opportunities in industry grow. As a result industrial output takes over a larger share of GDP than agriculture and employment in industry becomes predominant.

Postindustrialization

As incomes continue to rise, people's needs become less "material" and they begin to demand more services—in health, education, entertainment, and

Figure 9.2 **The changing structure of employment during economic development**



many other areas. Meanwhile, labor productivity in services does not grow as fast as it does in agriculture and industry because most service jobs cannot be filled by machines. This makes services more expensive relative to agricultural and industrial goods, further increasing the share of services in GDP. The lower mechanization of services also explains why employment in the service sector continues to grow while employment in agriculture and industry declines because of technological progress that increases labor productivity and eliminates jobs. (Figure 9.2). Eventually the service sector replaces the industrial sector as the leading sector of the economy.

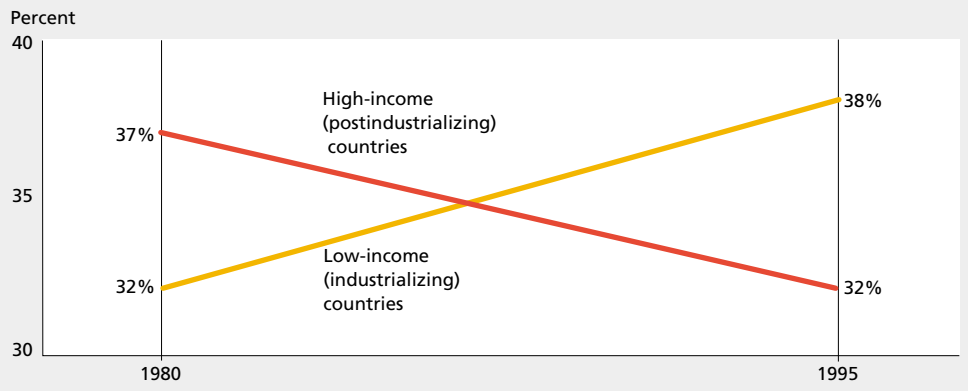
How can growth of the service sector help make development more sustainable?

Most **high-income countries** today are postindustrializing—becoming less reliant on industry—while most **low-income countries** are industrializing—becoming more reliant on industry (Figure 9.3). But even in countries that are still industrializing, the service sector is growing relative to the rest of the economy (Data Table 2). By the mid-1990s services accounted for almost two-thirds of world GDP (Map 9.1), up from about half in the 1980s.

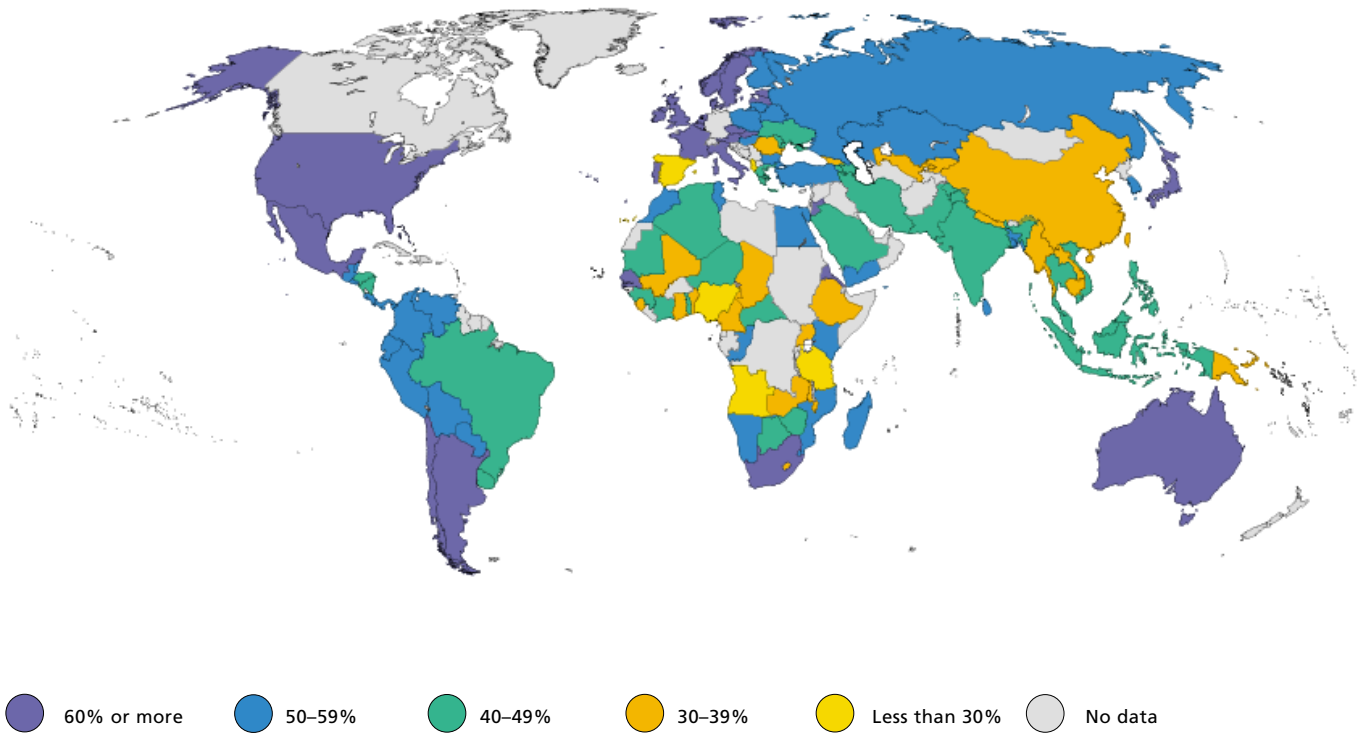
Service Sector Growth and Development Sustainability

The service sector produces "intangible" goods, some well known—government, health, education—and some quite new—modern communications, information, and business services. Producing services tends to require relatively less **natural capital** and more **human capital** than producing agricultural or industrial goods. As a result demand has grown for more educated workers, prompting countries to invest more in education—an overall benefit to their people. Another benefit of the growing service sector is that by using fewer **natural resources** than agriculture or industry, it puts less pressure on the local, regional, and global environment.

Figure 9.3 **Industrial output as a percentage of GNP, 1980 and 1995**



Map 9.1 **The share of services in GDP, 1995**



Conserving natural capital and building up human capital may help global development become more environmentally and socially **sustainable.** Growth of the service sector will not, however, be a miracle solution to the problem of sustainability, because agricultural and industrial growth are also necessary to meet the needs of the growing world population.

Challenges for Transition Economies

In formerly planned economies the service sector was previously underdeveloped because governments controlled supply and failed to respond to growing demand for services. In addition, many modern services that play an important role in market economies—such as financial, business, and real estate services—were not needed under socialism. During these countries' transition to market economies, their service sectors have grown rapidly to meet previously unfulfilled demand and the needs of the emerging private sector.

Growth of services in transition economies is particularly important

because it allows these economies to employ a share of the educated **labor force** that might otherwise be unemployed due to the economic crisis. So, in addition to continued public support for health and education, growth of services can help formerly socialist countries preserve the stock of human capital that will be crucial to their postindustrial development.

Think of the service industries that you consider particularly important for your country's sustainable development from different perspectives—economic, social, and environmental.

Note

1. Agriculture here refers to crop cultivation, livestock production, forestry, fishing, and hunting. Industry includes manufacturing, mining, construction, electricity, water, and gas. Services cover all other economic activities, including trade, transport, and communications; government, financial, and business services; and personal, social, and community services.

10

Urbanization and Urban Air Pollution

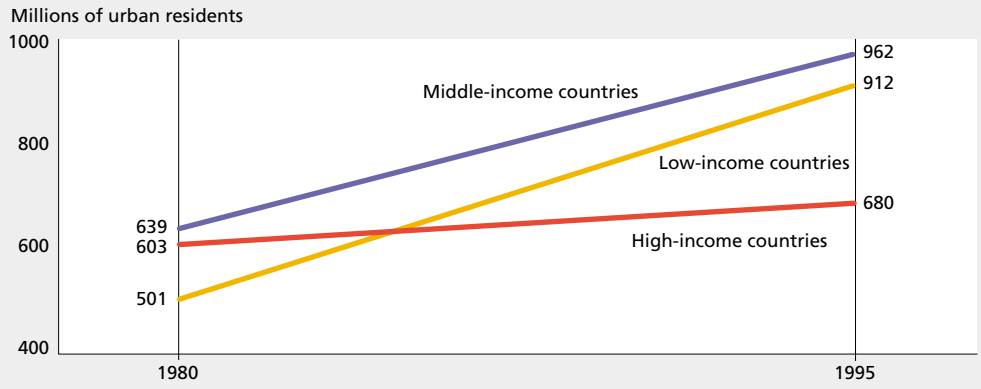
Can urbanization serve as an indicator of development?

Urbanization is a process of relative growth in a country's urban population accompanied by an even faster increase in the economic, political, and cultural importance of cities relative to rural areas. There is a worldwide trend toward urbanization. In most countries it is a natural consequence and stimulus of **economic development** based on **industrialization** and **postindustrialization** (see Chapter 9). Thus the level of urbanization, as measured by the share of a country's urban population in its total population, is highest in the most developed, **high-income countries** and lowest in the least developed, **low-income countries** (see Data Table 2).

At the same time, urbanization is progressing much faster in **developing countries** than in **developed countries** (Figure 10.1). In 1990–95 the average annual growth of the urban population in low-income countries was 3.8 percent and in **middle-income countries,** 3.1 percent, compared with 0.1 percent in high-income countries. Because the developing world has a larger population, percentages of its population also represent more people. As a result, by 1995 almost three-quarters of the world's 2.5 billion urban residents lived in developing countries. The share of the urban population in the total population of low- and middle-income countries increased from less than 22 percent in 1960 to 39 percent in 1995 and is expected to exceed 50 percent by 2015.

A rough indication of the urban contribution to GDP is the combined share of GDP produced in the industry and ser-

Figure 10.1 **Urban population, 1980 and 1995**



vice sectors relative to agriculture. Judging by this indicator, cities in developing countries are already more economically important than rural, primarily agricultural areas, because more than half of the developing world's GDP originates in cities. (This is not yet true for every country, as you can see in Data Table 2.)

Why is urban air pollution often higher in developing countries?

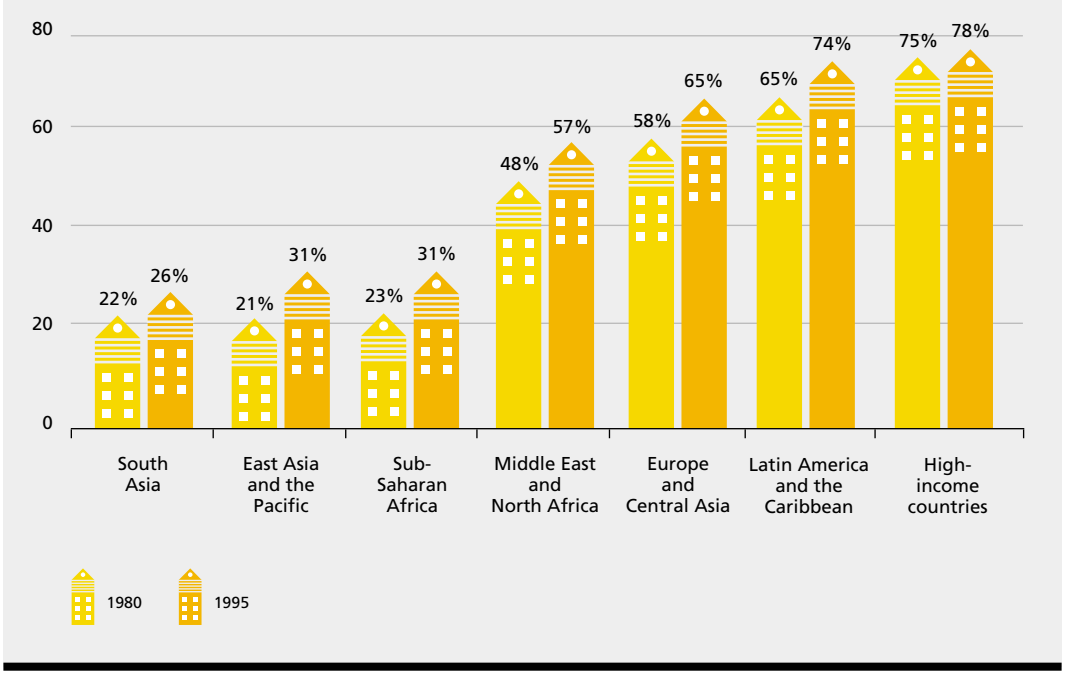
While urbanization is characteristic of nearly all developing countries, levels of urbanization vary quite significantly by region (Figure 10.2). Most Latin American countries are as urbanized as Europe, with 74 percent of the population living in urban areas. But South Asia, East Asia, and Sub-Saharan Africa remain predominantly rural, though they are urbanizing rapidly.

Most of the world's most populous cities are in developing countries. Many of these cities are in Asian countries with low per capita incomes but big populations, such as China, India, and Indonesia. These cities have high concentrations of poor residents and suffer from social and environmental problems including severe air pollution (Table 10.1).

Particulate Air Pollution

Suspended particulate matter is made up of airborne smoke, soot, dust, and liquid droplets from fuel combustion. The amount of suspended particulate matter, usually measured in micrograms per cubic meter of air, is one of the most important

Figure 10.2 Urban population as a percentage of total population, 1980 and 1995



indicators of the quality of the air that people breathe. According to the World Health Organization's air quality standards, the concentration of suspended particulates should be less than 90 micrograms per cubic meter. In many cities, however, this number is several times higher (Map 10.1; see also Table 10.1).

High concentrations of suspended particulates adversely affect human health, provoking a wide range of respiratory diseases and exacerbating heart disease and other conditions. Worldwide, in 1995 the ill health caused by such pollution resulted in at least 500,000 premature deaths and 4–5 million new cases of chronic bronchitis.

Most of the people at risk are urban dwellers in developing countries, especially China and India. In many Chinese cities air quality is so poor that nationwide, the costs of excess morbidity and mortality for urban residents are estimated at 5 percent of GDP. According to estimates for 18 cities in Central and Eastern Europe, 18,000 premature deaths a year could be prevented and $1.2 billion a year in working time lost to illness could be regained by achieving European Union pollution standards for dust and soot.

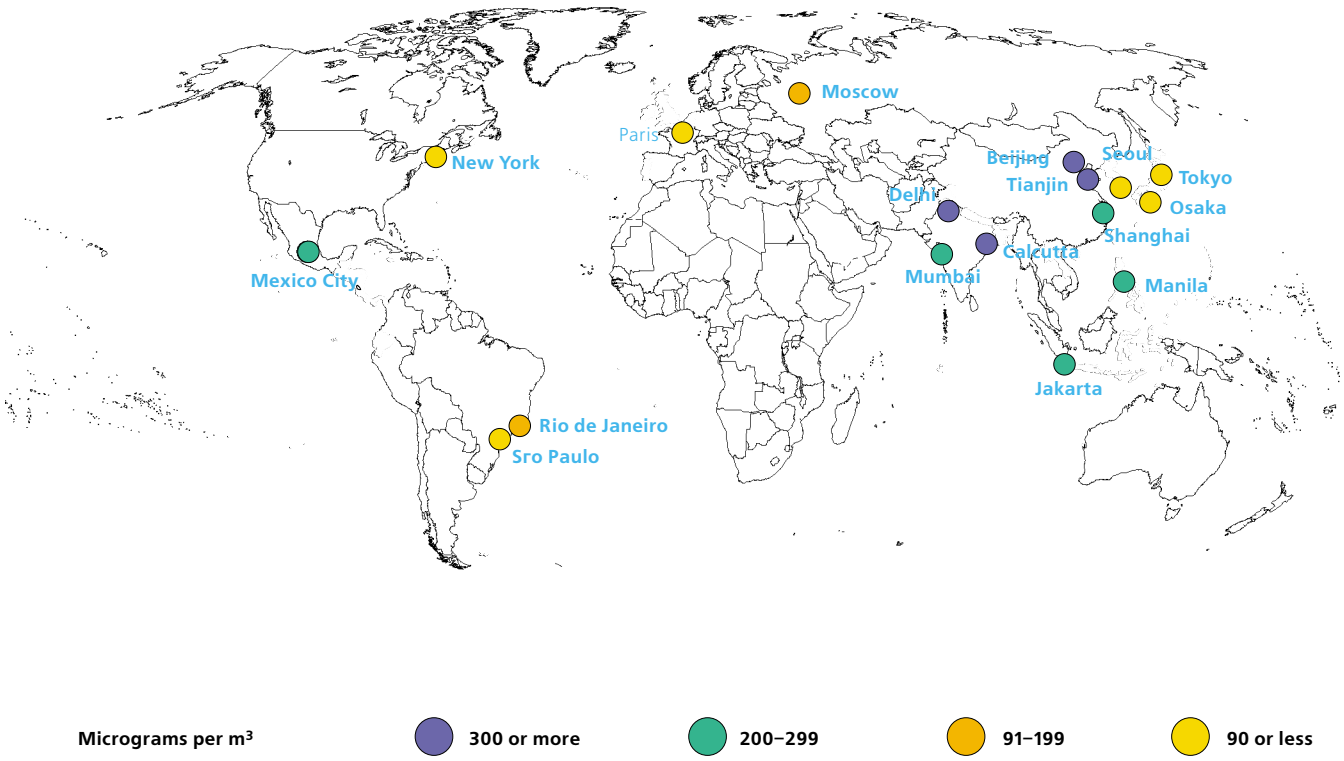
The level of air pollution depends on a country's technology and pollution control, particularly in energy production. Using cleaner **fossil fuels** (such as natural gas and higher-grade coal), burning these fuels more efficiently, and increasing reliance on even cleaner, renewable sources of energy (hydro, solar, geothermal, wind) are some of the best ways to control and reduce air pollution without limiting **economic growth.** See Figure 10.3 for the main sources of electricity in China, Russia, and the United States. Compare these data to the concentrations of suspended particulates in the

Table 10.1 Particulate air pollution in the largest cities, 1995

Country	City	City population (thousands)	SPM (micrograms per m^3)
Brazil	São Paolo	16,533	86
	Rio de Janeiro	10,187	139
China	Shanghai	13,584	246
	Beijing	11,299	377
	Tianjin	9,415	306
Egypt, Arab Rep.	Cairo	9,690	—
France	Paris	9,523	14
India	Mumbai	15,138	240
	Calcutta	11,923	375
	Delhi	9,948	415
Indonesia	Jakarta	8,621	271
Japan	Tokyo	26,959	49
	Osaka	10,609	43
Korea, Rep.	Seoul	11,609	84
Mexico	Mexico City	16,562	279
Philippines	Manila	9,286	200
Russian Federation	Moscow	9,269	100
Turkey	Istanbul	7,911	—
United Kingdom	London	7,640	—
United States	New York (1987–90)	16,332	61
	Los Angeles	12,410	—

— No data.
Note: Selected are the cities with more than 7 million residents.

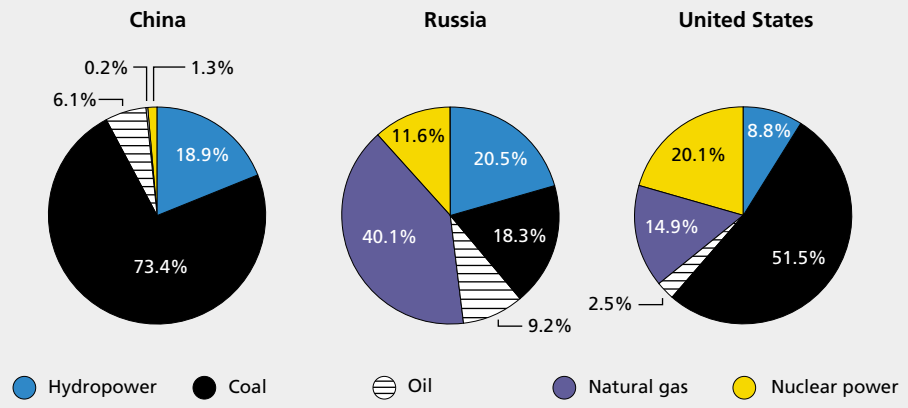
Map 10.1 **Particulate air pollution in selected cities, 1995 or most recent estimates**



biggest cities of these three countries as shown in Table 10.1. Note that coal is considered to be the "dirtiest" of the sources shown, although a lot depends on its quality and methods of combustion. In many ways nuclear energy is one of the "cleanest" sources of electricity, but safe disposal of nuclear waste and the risks of radioactive pollution in case of a serious accident are of major concern. Sources with the least environmental impact, such as solar energy, are not shown because they account for only a small fraction of generated electricity worldwide.

Fuel combustion by motor vehicles is another major source of suspended particulate emissions in urban areas. These emissions are particularly detrimental to human health because pollutants are emitted at ground level. Motor vehicles are much more common in developed countries: in 1996 there were 559 of them per 1,000 people in high-income countries compared with just 8 per 1,000 people in low-income countries and 91 in middle-income countries. (See Data Table 2 for the number of motor vehicles in individual countries.) But motor vehicles in developing countries

Figure 10.3 **Sources of electricity in selected countries, 1995**



Note: Percentages may not total 100 because of rounding and because other sources of electricity (such as geothermal power, solar power, and wind) are not shown.

Is it possible to reduce air pollution without slowing economic growth?

still cause serious air pollution because they are concentrated in a few large cities, many are in poor mechanical condition, and few emission standards exist.

According to World Bank estimates, demand for gasoline in developing countries tends to grow 1.2–1.9 times faster than **GNP per capita.** If per capita income growth rates of 6–8 percent a year are typical of industrializing and urbanizing countries, growth rates in motive fuel consumption of 10–15 percent a year are possible. In many transition countries in the late 1980s and early 1990s, the number of cars in use grew rapidly despite the contraction in economic activity and reduced per capita incomes. In Moscow (Russia) the passenger car fleet grew 10 percent a year during 1984–94 and 17.5 percent a year during 1990–94. Without effective policies to curb motor vehicle emissions, such dynamics can lead to grave health consequences for urban populations.

Airborne Lead Pollution

Airborne lead is one of the most harmful particulate pollutants. Young children are especially vulnerable: lead poisoning of children leads to permanent brain damage, causing learning disabilities, hearing loss, and behavioral abnormalities. In adults lead absorption causes hypertension, blood pressure problems, and heart disease. The main sources of airborne lead are motor vehicles using leaded gasoline, industrial processes such as ferrous and nonferrous metallurgy, and coal combustion.

While governments increasingly control large industrial sources of pollution, motor traffic is rapidly growing. In

many urban areas more than 80 percent of lead pollution is caused by vehicles using leaded gasoline. Therefore, since the 1970s—when medical evidence on the adverse health impacts of lead became available—many countries have reduced or eliminated lead additives in gasoline. The elimination of leaded gasoline has been achieved, for example, in Austria, Japan, and Sweden. But in much of the developing world lead additives are still widely used, especially in Africa. Experts suspect that in developing countries all children under 2 and more than 80 percent of those between 3 and 5 have blood lead levels exceeding World Health Organization standards.

Economists have calculated that, with the technological options available today, phasing out leaded gasoline is highly cost-effective. Shifting production from leaded to unleaded gasoline rarely costs more than 2 cents a liter, and countries can save 5 to 10 times as much as that, mostly in health savings from reduced morbidity and mortality. When the United States converted to unleaded gasoline, it saved more than $10 for every $1 it invested thanks to reduced health costs, savings on engine maintenance, and improved fuel **efficiency.** Recognizing the high costs of the damage to human health caused by lead emissions and adopting appropriate national policy are matters of high urgency for many developing countries.

International experience shows that in most countries air quality deteriorates in the early stages of industrialization and urbanization. But when countries become richer their priorities shift—they recognize the value of their **natural resources** (clean air, safe water, fertile topsoil, abundant forests), enact and enforce laws to protect those resources, and have the money to tackle environmental problems. As a result air quality and other environmental conditions start to improve. Certain experts have even calculated the average levels of per capita income at which levels of various pollutants peaked for a panel of countries between 1977 and 1988. Smoke, for example, tended to peak in the urban air when a country reached a per capita income of about $6,000, after which this kind of air pollution tended to decrease. For airborne lead, peak concentrations in urban air were registered at considerably lower levels of per capita income—about $1,900.

11

Public and Private Enterprises: Finding the Right Mix

During the 20th century the economic importance of the state grew all over the world. In **developed countries** central government spending accounted for less than 10 percent of **gross domestic product (GDP)** in the early 1900s, but by the 1990s that share had grown to nearly 50 percent in many of those countries (Figure 11.1; Data Table 3). Among the major historical factors contributing to this government expansion were the Russian Revolution of 1917 and the Great Depression of the 1930s. But the data suggest that this expansion continues even today: over the past 35 years the share of government spending in the GDP of developed countries roughly doubled.

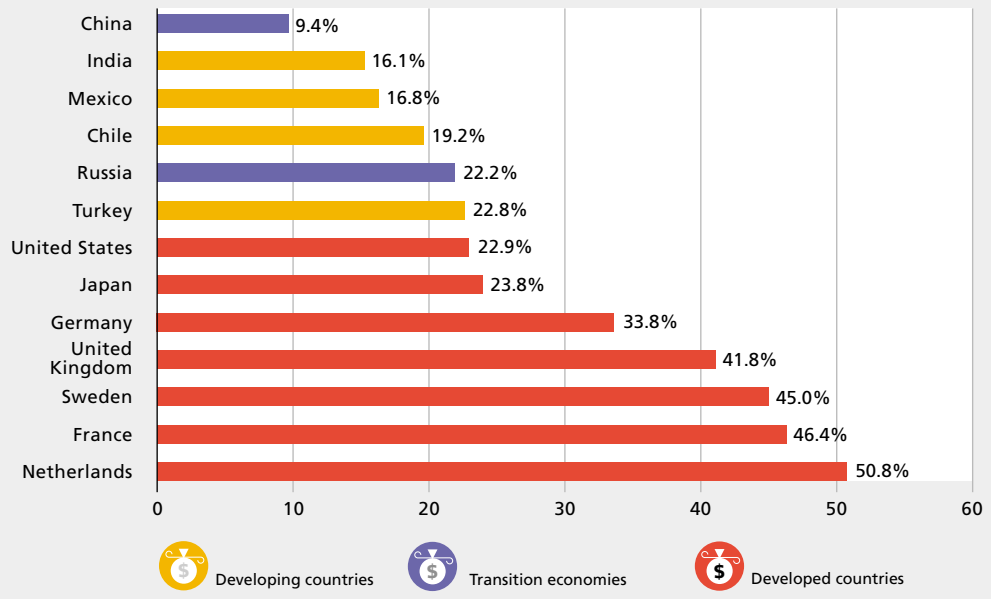
In **developing countries** the economic role of government grew dramatically in the second half of the 20th century, after the end of colonialism and in pursuit of such development goals as **industrialization** and social equity. In many of these countries the state was striving to mobilize resources and direct them toward rapid **economic growth,** rather than just to stabilize the economy, as in most developed countries. Until the 1980s the pattern of state-dominated development—which included centralized planning and state control of the economy—was widely followed. Still, the share of government spending in the GDP of developing countries is less than half that in developed countries (see Figure 11.1 and Data Table 3). Does this mean that a growing share of government spending in GDP should be seen as a sign of development?

Is a growing share of government spending a reliable indicator of development?

The Dilemma of Public-Private Ownership

Government budgets in developing countries are not only proportionately smaller, but they are also structured differently. In developed countries more than half of government spending is devoted to social services, including pensions, unemployment insurance, social security, and other **transfer payments.** In developing countries much less government spending goes for social services and much more is used to subsidize commercial (that is, selling goods and services) state-owned enterprises. Unlike other state-owned enterprises that provide free public services (for example, schools and health clinics), these state-owned enterprises could also be run for profit by private firms. Governments, however, sometimes prefer to keep them under their direct control. The share of commercial state enterprises in GDP and

Figure 11.1 **Central government expenditure as a percentage of GDP, 1995**



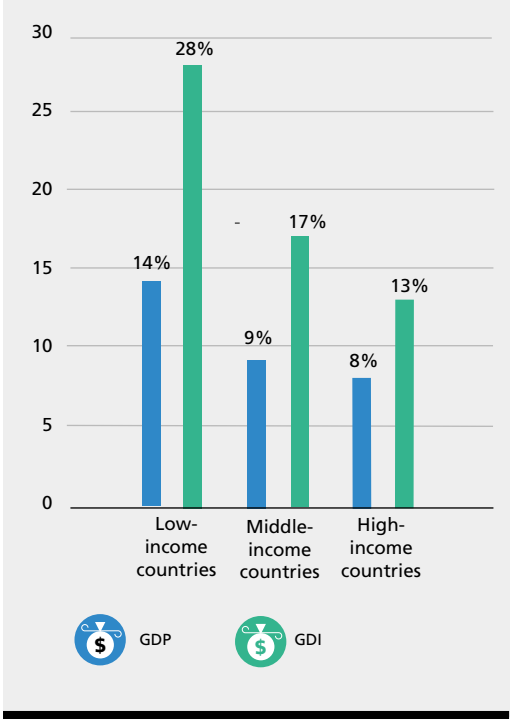
in **gross domestic investment** tends to be higher in poorer countries (Figure 11.2).

Is a high share of state enterprises a problem? Is it good or bad for the **economic growth** and development of developing countries? Those who want to preserve extensive state enterprises argue that:

- Only government is capable of providing sufficient investment for technical modernization of major national industries.
- Only direct government control over certain enterprises can prevent socially unacceptable high prices for basic goods and services such as energy, housing, and transportation.
- Only government ownership of the biggest enterprises can help avoid mass unemployment.

On the other hand, experience from many countries shows that state enterprises are normally less **efficient** than private firms. One of the main reasons is that state enterprise managers have little or no incentive to pursue profitability for their enterprises. Easy access to government subsidies and government-guaranteed loans effectively remove the threat of bankruptcy as a check on inefficiency. Besides, it is often hard to run state enterprises at a profit because governments tend to keep state enterprises' selling prices artificially low, and because rules often do not allow these enterprises to lay off excess employees.

Figure 11.2 **State-owned enterprises' share of GDP and gross domestic investment (GDI), 1986–91**



In countries where the share of state enterprises is high, their typically low efficiency can hinder economic growth. In addition, governments have to cover the financial losses of these inefficient enterprises. To meet the resulting budget deficits, governments often have to either print more money and thus cause inflation, or borrow and build up their domestic or foreign debt. In both cases national economies are destabilized and growth opportunities are lost.

Given all that, is it ever preferable to keep enterprises under government ownership? What is the ideal size and composition of a country's public sector? And can there be any general answers to these questions independent of ideological beliefs?

When should governments intervene in economic activities?

In fact, it is increasingly recognized that state intervention is justified only where markets fail. There are five basic situations, called **market failures,** where the private sector tends to underproduce or overproduce certain goods and services:

- Underproduction of **public goods** such as defense, law and order, roads, and environmental protection.
- Underproduction of goods and services with positive **externalities** (for example, public health and education) and overproduction of goods and services with negative externalities (for example, cigarettes).
- Overpricing and underproduction by **natural monopolies,** for example by electric and water utilities.
- Insufficient supply of social services such as pensions or medical and unemployment insurance.
- Insufficient information available to some parties affected by market processes (for example, information about the quality of food products and medicines available to consumers whose health is at risk).

These five situations call for some kind of government intervention. But even where markets clearly fail, government provision

of undersupplied goods and services is not necessarily the best option. We have already discussed the reasons for the typically low efficiency of state enterprise management. Add to that the possibility of corruption among bureaucrats and you get what came to be called "government failure". Increased awareness of this problem explains why some governments of developed countries are searching for alternatives to state ownership, such as new methods of regulation or government funding for private provision of public goods. A notable example of such an alternative solution to both market and government failures is provided by the new phenomenon of public funding for private prisons in the United States.[1]

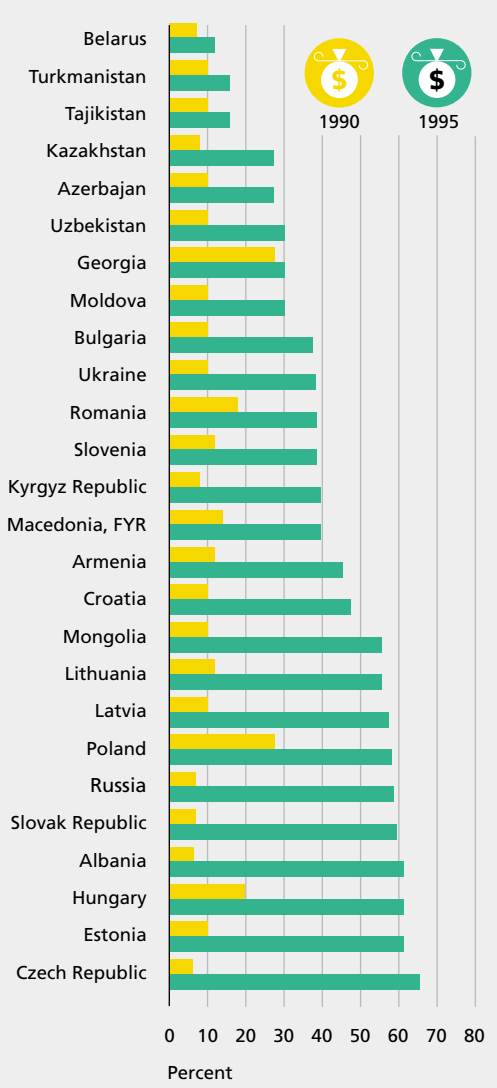
Is There a Trend toward Privatization?

By privatizing all the enterprises that can be successfully run by private firms, governments can often make national economies more efficient, on the one hand, and free their budgets from the burden of subsidizing loss-making enterprises, on the other. As a result they are able to focus on tasks that cannot be handed over to markets, such as building **human capital** and providing for human development (see chapter 1). For example, according to some estimates, shifting budget funds from state enterprise subsidies to public health care would have allowed central governments to increase their health spending by about four times in Mexico and five times in India. Alternatively, Mexico's central government could have increased its education spending by 50 percent, and India's by 550 percent.

If governments are to shift away from supplying marketable goods and services, there must be active private sectors that are ready to take up these activities. In some cases reducing the economic prominence of state enterprises is even possible without extensive privatization, mainly by means of **market liberalization** that leads to accelerated growth of the private sector. That was the case in the Republic of Korea in the 1970s and 1980s, and in China in the 1980s and 1990s. But more often, particularly where public sectors are much larger than private sectors and so absorb a lot of scarce national resources, special privatization programs are needed.

Since the 1980s many developing and some developed countries have adopted privatization programs. You can attempt to judge their scale by examining data on government proceeds from privatization in Data Table 3. Note that these data depend not only on the scale of privatization but also on its methods. Selling state enterprises to outside owners normally brings more revenue than selling them to enterprise managers and employees, while voucher privatization (such as in Russia in 1991–93) brings no revenue at all.

Figure 11.3 **Private sector output as a share of GDP, 1990 and 1995**



The most impressive privatization process is currently under way in former socialist countries. Their transition to market-oriented economies requires unprecedented mass privatization of formerly dominant state enterprises. For the different starting points and speeds of privatization in this group of countries, see Figure 11.3. Among other regions of the developing world, privatization programs have accelerated in Latin America and Southeast Asia, while in Sub-Saharan Africa the process is less pronounced.

Unfortunately, in some transition countries—particularly those suffering from transitional economic crises—market reforms have resulted in neglect of the state's vital functions, such as law and order or critical social services. Important programs in education and health, for instance, have been cut along with or even instead of cutting subsidies to money-losing enterprises. Such policies not only damage people's welfare, they also erode the foundations of further national development.

Many experts argue that, although state-dominated development has failed, so would "stateless" development. Think about it: why are an effective state and viable private sector both important for development?

Note

1. Prisons were traditionally state-owned "enterprises" because they "produce" such public goods as obedience to the law and public safety.

12

Globalization and International Trade

"Globalization" refers to the growing interdependence of countries resulting from the increasing integration of trade, finance, people, and ideas in one global marketplace. International trade and cross-border **investment** flows are the main elements of this integration.

Globalization started after World War II but has accelerated considerably since the mid-1980s, driven by two main factors. One involves technological advances that have lowered the costs of transportation, communication, and computation to the extent that it is often economically feasible for a firm to locate different phases of production in different countries. The other factor has to do with the increasing **liberalization** of trade and capital markets: more and more governments are refusing to protect their economies from foreign competition or influence through **import tariffs** and nontariff barriers such as import quotas, export restraints, and legal prohibitions. A number of international institutions established in the wake of World War II—including the **World Bank, International Monetary Fund (IMF),** and **General Agreement on Tariffs and Trade (GATT),** succeeded in 1994 by the **World Trade Organization (WTO)**—have played an important role in promoting free trade in place of **protectionism.**

Empirical evidence suggests that globalization has significantly boosted **economic growth** in East Asian economies such as Hong Kong (China), the Republic of Korea, and Singapore. But not all **developing countries** are equally engaged in globalization or in a position to benefit from it. In fact, except for most countries in East Asia and some in Latin America, developing countries have been rather slow to integrate with the world economy. The share of Sub-Saharan Africa in world trade has declined continuously since the late 1960s, and the share of major oil exporters fell sharply with the drop in oil prices in the early 1980s. Moreover, for countries that are actively engaged in globalization, the benefits come with new risks and challenges. The balance of globalization's costs and benefits for different groups of countries and the world economy is one of the hottest topics in development debates.

Costs and Benefits of Free Trade

For participating countries the main benefits of unrestricted foreign trade

stem from the increased access of their producers to larger, international markets. For a national economy that access means an opportunity to benefit from the international division of labor, on the one hand, and the need to face stronger competition in world markets, on the other. Domestic producers produce more efficiently due to their international specialization and the pressure that comes from foreign competition, and consumers enjoy a wider variety of domestic and imported goods at lower prices.

In addition, an actively trading country benefits from the new technologies that "spill over" to it from its trading partners, such as through the knowledge embedded in imported production equipment. These technological spillovers are particularly important for developing countries because they give them a chance to catch up more quickly with the **developed countries** in terms of **productivity.** Former centrally planned economies, which missed out on many of the benefits of global trade because of their politically imposed isolation from market economies, today aspire to tap into these benefits by reintegrating with the global trading system.

But active participation in international trade also entails risks, particularly those associated with the strong competition in international markets. For example, a country runs the risk that some of its industries—those that are less competitive and adaptable—will be forced out of business. Meanwhile, reliance on foreign suppliers may be considered unacceptable when it comes to industries with a significant role in national security. For example, many governments are determined to ensure the so-called food security of their countries, in case food imports are cut off during a war.

Should all countries be equally open to foreign trade?

In addition, governments of developing countries often argue that recently established industries require temporary protection until they become more competitive and less vulnerable to foreign competition. Thus governments often prohibit or reduce selected imports by introducing quotas, or make imports more expensive and less competitive by imposing tariffs. Such protectionist policies can be economically dangerous because they allow domestic producers to continue producing less efficiently and eventually lead to economic stagnation. Wherever possible, increasing the economic efficiency and international competitiveness of key industries should be considered as an alternative to protectionist policies.

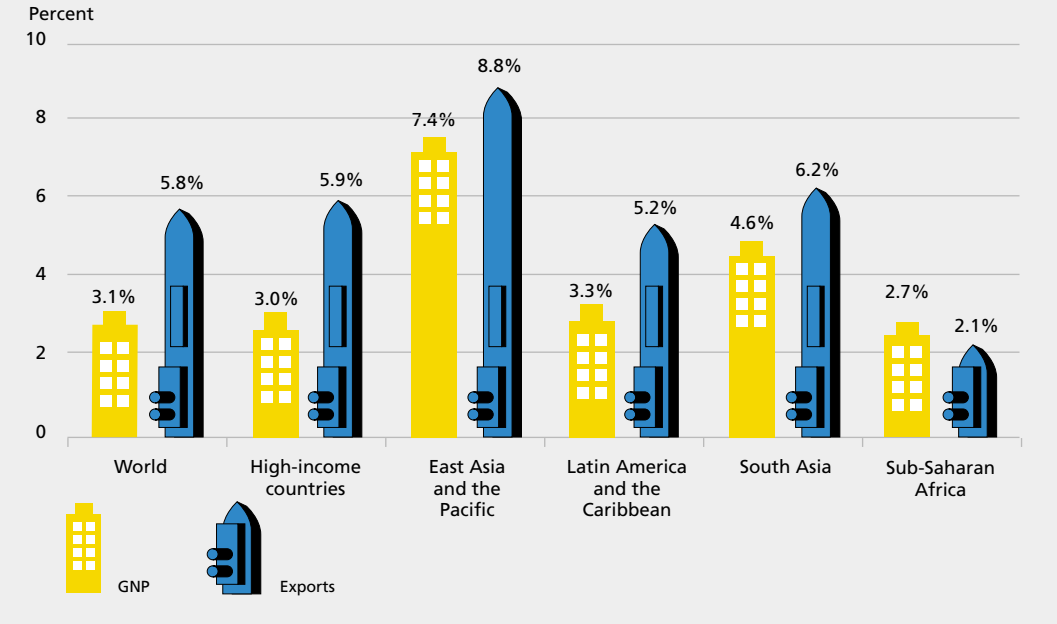
A country that attempts to produce almost everything it needs domestically deprives itself of the enormous economic benefits of international specialization. But narrow international specialization, which makes a country dependent on exports of one or a few goods, can also be

risky because of the possibility of sudden unfavorable changes in demand from world markets. Such changes can significantly worsen a country's **terms of trade.** Thus some diversification of production and exports can be prudent even if it entails a temporary decrease in trade. Every country has to find the right place in the international division of labor based on its **comparative advantages.**

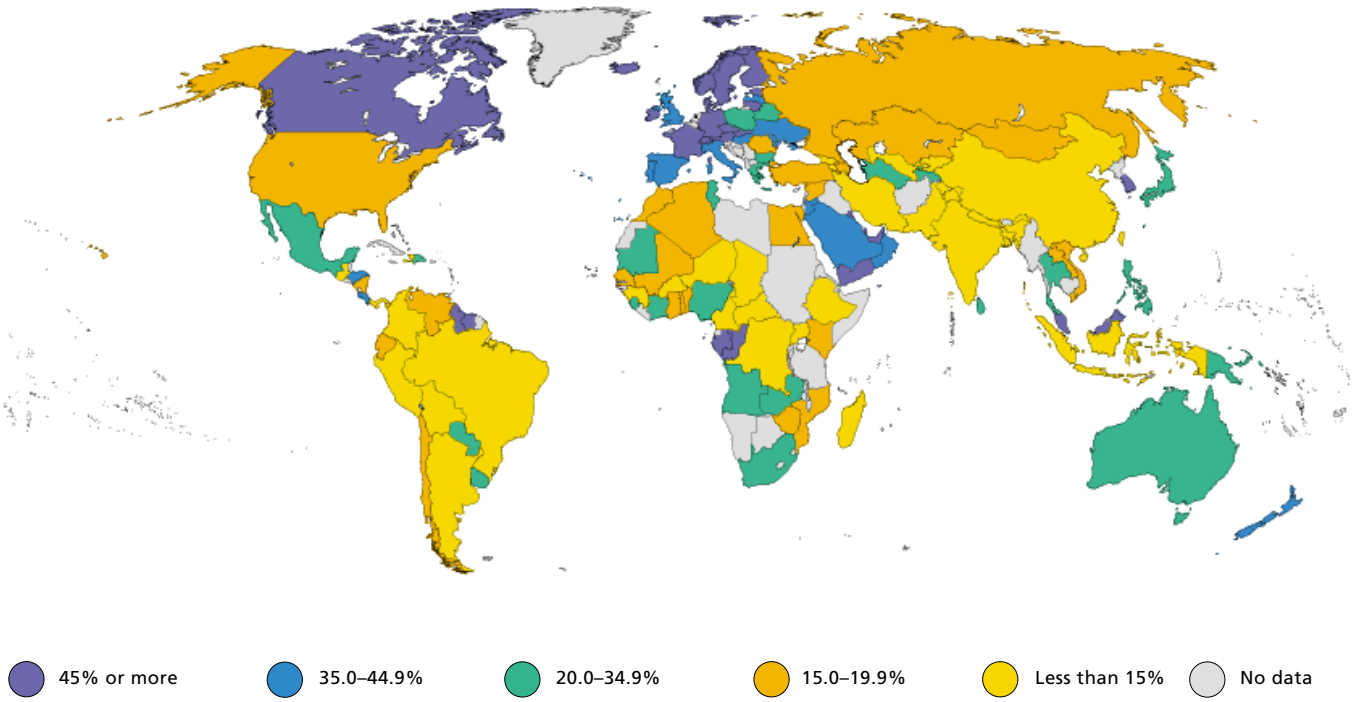
The costs and benefits of international trade also depend on factors such as the size of a country's domestic market, its natural resource endowment, and its location. For instance, countries with large domestic markets generally trade less. At the same time, countries that are well endowed with a few natural resources, such as oil, tend to trade more. Think of examples of countries whose geographic location is particularly favorable or unfavorable for their participation in global trade.

Despite the risks, many countries have been choosing to globalize their economies to a greater extent. One way to measure the extent of this process is by the ratio of a country's trade (exports plus imports) to its GDP or GNP. By this measure, globalization has roughly doubled on average since 1950. Over the past 30 years exports have grown about twice as fast as GNP (Figure 12.1). As a result, by 1996 the ratio of world trade to world GDP (in purchasing power parity terms) had reached almost 30 percent—on average about 40 percent in developed countries and about 15 per-

Figure 12.1 **Average annual growth rates of GNP and exports of goods and services, 1965–96**



Map 12.1 **Trade as a percentage of real GDP, 1996**



Note: The ratio of trade to purchasing power parity–adjusted GDP is considered the best available tool for comparing integration with the world economy across countries. But the use of this tool is complicated by the different shares of the service sector in the economies of different countries. For example, developed countries appear to be less integrated because a larger share of their output consists of services, a large portion of which are by their nature nontradable.

cent in developing countries (Map 12.1 and Data Table 3).

Geography and Composition of Global Trade

Over the past 10 years patterns of international trade have been changing in favor of trade between developed and developing countries. Developed countries still trade mostly among themselves, but the share of their exports going to developing countries grew from 20 percent in 1985 to 22 percent in 1995. At the same time, developing countries have increased trade among themselves. Still, developed countries remain their main trading partners, the best markets for their exports, and the main source of their imports.

Most developing countries' terms of trade deteriorated in the 1980s and 1990s because prices of **primary goods**—which used to make up the largest share of developing country exports—have fallen relative to prices of **manufactured goods.** For example, between 1980 and 1995 **real prices** of

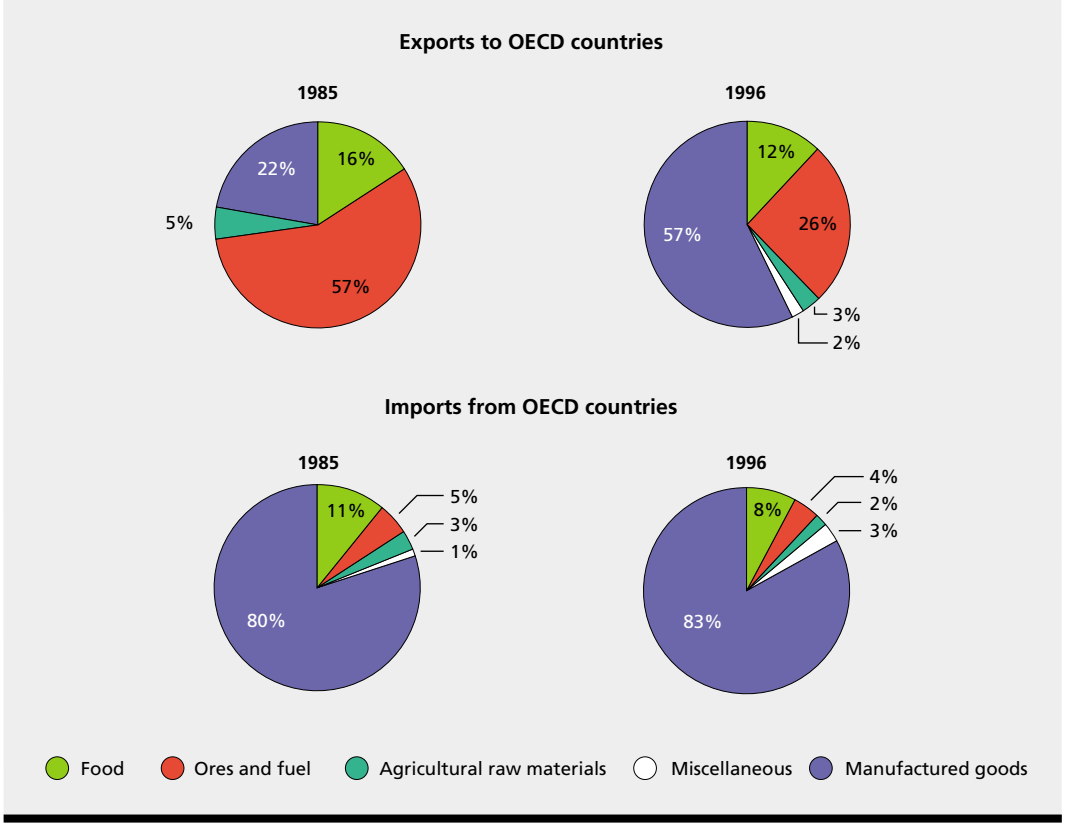
How is the role of developing countries in global trade changing?

oil dropped almost fourfold, prices of cocoa almost threefold, and prices of coffee about twofold. There is still debate about whether this relative decline in commodity prices is permanent or transitory, but developing countries that depend on these exports have already suffered heavy economic losses that have slowed their economic growth and development.

In response to these changes in their terms of trade, many developing countries are increasing the share of manufactured goods in their exports, including exports to developed countries (Figure 12.2). The most dynamic categories of their manufactured exports are labor-intensive, low-knowledge products (clothes, carpets, some manually assembled products) that allow these countries to create more jobs and make better use of their abundant labor resources.

By contrast, developing countries' imports from developed countries are mostly capital- and knowledge-intensive manufactured goods—primarily machinery and transport equipment—in which developed countries retain their comparative advantage.[1]

Figure 12.2 **Developing countries' trade with OECD countries, 1985 and 1996**



Trade Issues in Transition Countries

Countries in transition from planned to market economies have recognized the potential benefits of global integration, and most have significantly liberalized their trade regimes. As a result many Central and Eastern European countries saw the share of trade in GDP increase from 10 percent or less in 1990 to 20 percent or more in 1995. In Russia and other countries of the former Soviet Union the ratio of trade to GDP fell during this period, but this was a result of the collapse of trade within the former Soviet Union—trade with the rest of the world actually expanded. As market-determined patterns of trade replace government-determined patterns, a massive reorientation of trade is under way favoring closer links with established market economies.

Trade among transition countries is also recovering following a sharp, politically motivated decline at the start of the transition. A number of regional economic integration initiatives are unfolding—the Baltic Free Trade Area (comprising Estonia, Latvia, and Lithuania), Central Europe Free Trade Area (the Czech Republic, Hungary, Poland, the Slovak Republic, Slovenia, and countries of the Baltic Free Trade Area), and free trade initiatives within the Commonwealth of Independent States. One of these initiatives started in 1995 with negotiations about establishing a customs union for four members of the Commonwealth of Independent States—Russia, Belarus, Kazakhstan, and the Kyrgyz Republic. Russia and Belarus have since signed a treaty on forming an Interstate Commonwealth.

Regional trade blocs can contribute to transition countries' economic stabilization but they also carry risks of diverting trade from potentially more beneficial trade partnerships with other countries. Ten transition countries in Central and Eastern Europe and the Baltics have applied for membership in the **European Union,** and nearly all transition countries have applied to join the World Trade Organization (WTO). Membership in the WTO would provide these countries with protection from substantial barriers—particularly quotas—which still impede their exporting of so-called sensitive goods to developed countries. Among these goods are agricultural products, iron and steel, textiles, footwear, and others in which transition economies may have comparative advantages. Joining the WTO would not only confer rights on transition economies, it would also require them to meet certain obligations, such as maintaining low or moderate tariffs and abolishing nontariff barriers.

What problems do transition countries face as they join in global trade?

A major challenge for transition economies is finding their place in the worldwide division of labor. In many cases that implies diversifying the structure of exports, particularly to developed

countries. Some former Soviet Union countries are narrowly specialized in the production and export of a small number of commodities, such as cotton in Turkmenistan and Uzbekistan and food products in Moldova. For others, such as Russia and Belarus, the biggest problems are the quality and international competitiveness of their manufactured goods.

Note

1. A popular debate in many developed countries asks whether the growing competitive pressure of low-cost, labor-intensive imports from developing countries pushes down the wages of unskilled workers in developed countries (thus increasing the wage gap between skilled and unskilled workers, as in the United Kingdom and United States) and pushes up unemployment, especially among low-skill workers (as in Western Europe). But empirical studies suggest that although trade with developing countries affects the structure of industry and demand for industrial labor in developed countries, the main reasons for the wage and unemployment problems are internal and stem from labor-saving technological progress and postindustrial economic restructuring (see Chapters 7 and 9).

13

Foreign Aid and Foreign Investment

Financial flows to **developing countries** take two main forms—aid that comes from foreign governments, often called official development assistance, and investment from foreign private companies, known as private capital flows.

Official Development Assistance

After World War II and until the early 1990s, the main source of external finance for developing countries was official development assistance provided by the governments of high-income countries in the form of food aid, emergency relief, technical assistance, peacekeeping efforts, and financing for construction projects. Donor countries are motivated by the desire to support their political allies and trade partners, to expand the markets for their exports, and to reduce poverty and military conflicts threatening international security. After the breakup of the Soviet Union, former centrally planned economies also started to receive official assistance, aimed primarily at supporting market reforms. Table 13.1 shows the amounts of net official assistance provided to developing and transition countries by the member countries of the **Organization for Economic Co-operation and Development (OECD)** in 1996.

On average, the donor countries in Table 13.1 spend about one-third of 1 percent of their combined **gross domestic product (GDP)** on official development assistance. Use Table 14.1 and Data Table 1 to calculate which countries spend larger and smaller shares of their GDP on such assistance.

Official assistance to developing and **transition countries** has three main components:

- Grants, which do not have to be repaid.
- Concessional loans, which have to be repaid but at lower interest rates and over longer periods than commercial bank loans.
- Contributions to multilateral institutions promoting development, such as the **United Nations, International Monetary Fund, World Bank,** and regional development banks (Asian Development Bank, African Development Bank, Inter-American Development Bank).

Grants account for 95–100 percent of the official assistance of most donor

How can official development assistance be improved?

Table 13.1 Net capital flows from OECD countries, 1996
(millions of U.S. dollars)

	Official assistance		*Private capital flows*					
			Total		*Foreign direct investment*		*Portfolio investment*	
	Total to developing countries	*Total to transition countries*	*Total to developing countries*	*Total to transition countries*	*Total to developing countries*	*Total to transition countries*	*Total to developing countries*	*Total to transition countries*
Australia	1,121	10	0	0	0	0	0	0
Austria	557	226	938	355	247	355	0	0
Belgium	913	70	4,528	4,109	461	169	4,194	4,007
Canada	1,795	181	1,859	3	2,024	0	–154	0
Denmark	1,772	120	188	248	199	248	0	0
Finland	408	57	472	146	257	194	162	–64
France	7,451	709	11,115	4,860	4,657	1,192	5,352	3,886
Germany	7,601	1,329	12,336	4,671	3,456	3,648	6,980	171
Ireland	179	1	125	0	0	0	125	0
Italy	2,416	294	289	218	457	153	1,642	706
Japan	9,439	184	27,469	1,928	8,573	1,315	19,981	1,652
Luxembourg	82	2	0	0	0	0	0	0
Netherlands	3,246	13	5,858	–36	6,225	45	–912	–78
New Zealand	122	0	9	0	9	0	0	0
Norway	1,311	50	294	–193	202	–201	0	0
Portugal	218	18	593	–4	482	3	0	0
Spain	1,251	2	2,865	–102	2,865	–102	0	0
Sweden	1,999	178	–17	–107	339	–84	0	0
Switzerland	1,026	97	395	705	1,316	705	–583	0
United Kingdom	3,199	362	18,196	3,952	5,852	390	12,120	3,500
United States	9,377	1,694	42,848	2,652	23,430	2,226	19,472	578
Total	55,485	5,596	130,360	23,406	61,051	10,255	68,963	14,358

Note: Negative figures in the table indicate net outflow of capital to respective OECD countries. Total private capital flows in the table can be greater or smaller than the sum of foreign direct and portfolio investments because they also include smaller flows of capital such as private export credits, grants by nongovernmental institutions, and others.

countries. Most official assistance, however, comes in the form of "tied" aid, which requires recipients to purchase goods and **services** from the donor country or from a specified group of countries. Tying arrangements may prevent a recipient from misappropriating or mismanaging aid receipts, but they may also reduce the value of aid if the arrangements are motivated by a desire to benefit suppliers of certain countries and that may prevent recipients from buying at the lowest price. Official assistance can also be "tied up" by condition-

alities—as happens with aid to transition countries. Because these conditionalities are linked to the speed of market reforms, rapidly reforming economies such as the Czech Republic and Poland receive more official assistance (relative to their population and GDP) than those which are less prepared to do so (see Data Table 3).

Private Capital Flows

While official assistance to developing countries hardly changed in the 1990s, **net private capital flows** to these countries roughly quadrupled between 1990 and 1994, far surpassing official flows (Figure 13.1). The structure of private flows also changed notably, shifting from a predominance of bank loans to **foreign direct investment** and **portfolio investment** (see Table 13.1). The share of foreign direct investment going to developing countries has risen to more than one-third of global foreign direct investment, driven by rapid growth of multinational corporations and encouraged by liberalization of markets and better prospects for **economic growth** in a number of developing countries.

The developing world is becoming more integrated with global capital markets, but the level of integration varies widely from country to country. In 1990–94 about 90 percent of private capital flows to developing countries were concentrated in just 12 countries (Figure 13.2). For the distribution of foreign direct investment in 1996, see Data Table 3. At least half of all developing countries receive little or no foreign direct investment.

Because poor African countries tend to be the least attractive for foreign investors, the growth opportunities fed by foreign capital flows continue to pass them by. The effective exclusion of such countries from the globalization process may widen international disparities even further.

Can increased private capital flows to developing countries make up for reduced official assistance?

Figure 13.1 **Net capital flows to developing countries: period averages 1983–95**

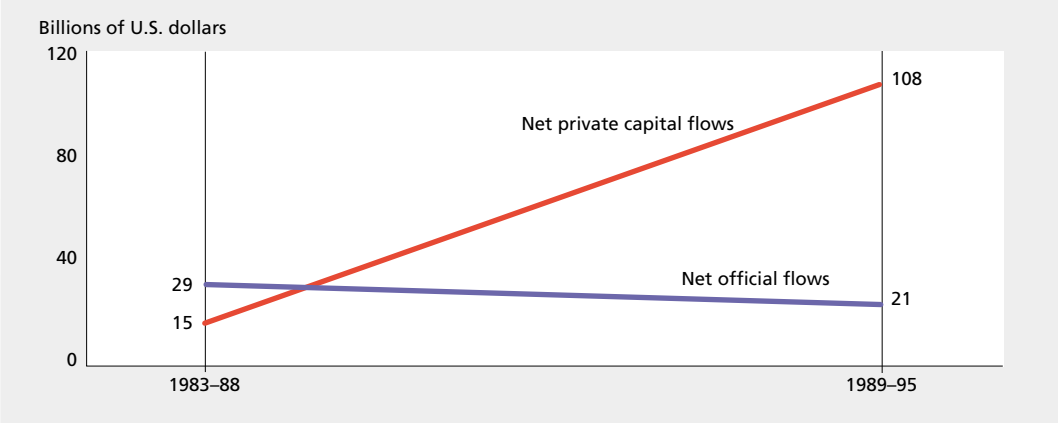
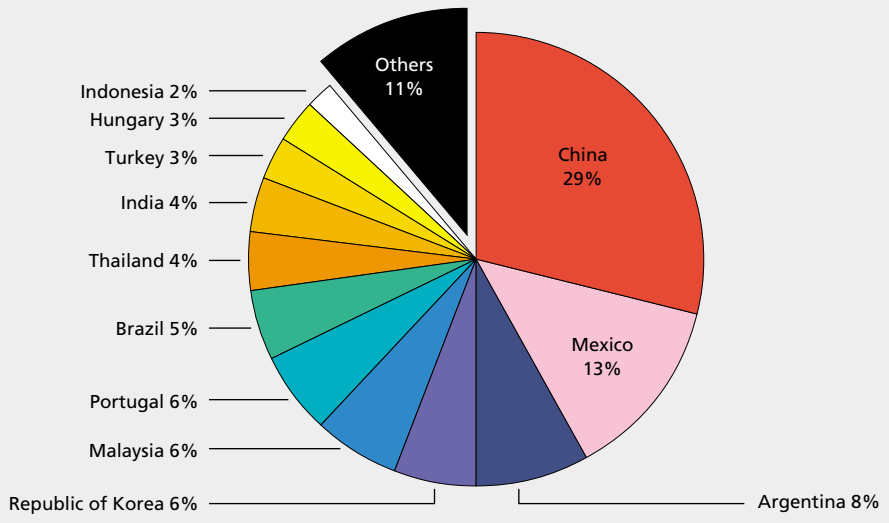


Figure 13.2 **Distribution of private capital flows to developing country recipients, 1991–94**



Should developing and transition countries try to attract more foreign investment?

The developing countries that attract the most private capital flows do so thanks to their favorable investment climate (business environment), which includes such elements as a stable political regime, good prospects for economic growth, easy convertibility of the national currency, and liberal government regulation. Higher foreign investment in these countries helps them break the vicious circle of poverty (see Chapter 6) without adding to their foreign debt. In addition, foreign direct investment usually brings with it advanced technologies, managerial and marketing skills, and easier access to export markets. The added competition between foreign and domestic companies also makes national markets more competitive and national economies more efficient.

The increased international mobility of capital has its risks, however. If private investors (foreign and domestic alike) suddenly lose confidence in a country's stability and growth prospects, they can move their capital out of the country much faster. In that respect portfolio investment is much more dangerous than foreign direct investment, because portfolio investors—who own only a small stock of shares in a company and have little or no influence on its management—are much more likely to try to get rid of these shares at the first sign or suspicion of falling profits. The East Asian financial crisis that started in 1997 is seen by some experts as an example of the negative implications of excessive capital mobility.

Private capital flows to the transition countries of Europe and Central Asia are

often deterred by uncertainties about property rights, inflation, taxes, price controls, export and import regulations, and other aspects of the business environment. As a result private capital flows to these countries remain relatively small, accounting for only about 13 percent of the flows to developing countries in 1990–95. Moreover, the distribution of these flows has been highly uneven. Countries seen as more advanced in market reforms—the Czech and Slovak Republics, Hungary, and Poland—attracted almost three-quarters of foreign investment in this group of countries (see Data Table 3). The distribution of foreign direct investment among selected transition countries is also shown in Table 13.2.

Table 13.2 Foreign direct investment in selected transition countries, 1991–96
(millions of U.S. dollars)

Country	*Cumulative flows*
Armenia	36
Belarus	54
Kyrgyz Republic	146
Uzbekistan	190
Albania	248
Bulgaria	588
Latvia	614
Slovenia	650
Slovak Republic	687
Estonia	859
Ukraine	1,163
Romania	1,379
Kazakhstan	2,997
Poland	4,862
Russia	6,205
Czech Republic	6,368
Hungary	12,767
China	121,704

While some countries have managed to rely on foreign investment to alleviate the difficulties of the transition period, Russia—along with some other former Soviet Union countries—has suffered from significant, mostly illegal capital outflows. If the illegal outflows of the 1990s were reflected in statistics, the numbers for net capital flows to these countries would turn negative. According to some estimates, more than $110 billion in capital flowed out of Russia in 1993–97. The ongoing capital flight from Russia is the biggest obstacle to its economic development. This situation underscores the importance of creating a favorable investment climate, which is critical not only for attracting foreign investors but, even more important, for preventing and reversing domestic capital flight.

14

Economic Development and the Risk of Global Climate Change

Who is primarily responsible for creating the risk of global climate change?

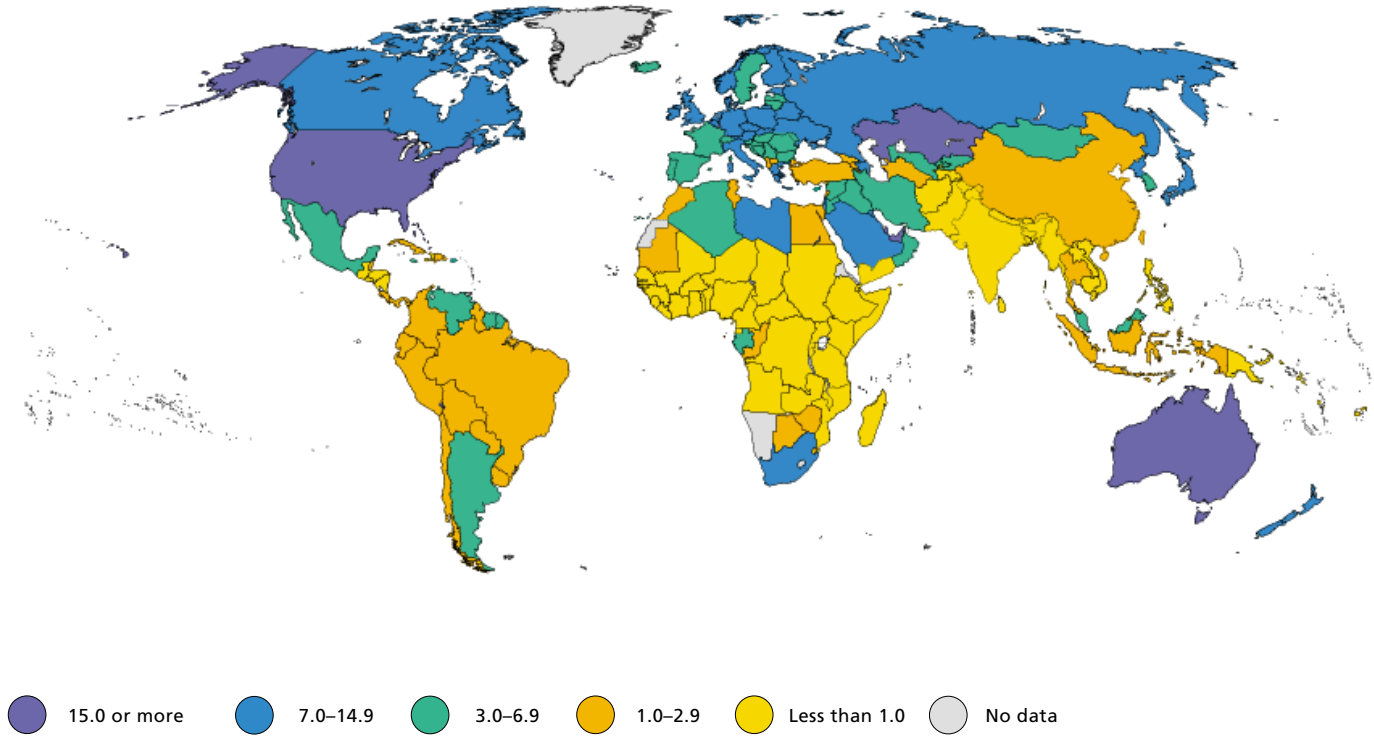
Since the industrial revolution, **economic development** has been accompanied by growth in the consumption of **fossil fuels,** with more and more coal, oil, and natural gas being burned by factories and electric power plants, motor vehicles, and households. The resulting carbon dioxide (CO_2) emissions have turned into the largest source of **greenhouse gases**—gases that trap the infrared radiation from the earth within its atmosphere and create the risk of global warming. Because the earth's environmental systems are so complex, the exact timing and extent to which human economic activities will change the planet's climate are still unclear. But many scientists believe that the changes are already observable.

According to the 1995 report of the Intergovernmental Panel on Climate Change, by 2100 the mean global temperature could increase by 1.0–3.5 degrees Celsius and the global sea level could rise by 15–95 centimeters if current trends in greenhouse gas emissions continue. Though these may seem like minor changes, they could have multiple adverse consequences, along with some uncertain benefits. Forests and other ecosystems, unable to adapt to changing temperatures and precipitation patterns, may be damaged. People are also likely to suffer—and those in poor countries may suffer the most, being less prepared to cope with the changes.

Many developing countries in arid and semiarid regions may see their access to safe water worsen. (As things stand today, more than 1 billion people lack access to safe water.) Tropical diseases may spread farther to the North, and flooding will likely become a bigger problem in temperate and humid regions. While food production could become easier in middle and high latitudes, in the tropics and subtropics yields will likely fall. Large numbers of people could be displaced by a rise in the sea level—including tens of millions in Bangladesh alone, as well as entire nations inhabiting low-lying islands such as those in the Caribbean.

The amount of carbon dioxide a country emits into the atmosphere depends mainly on the size of its economy, the level of its **industrialization,** and the **efficiency** of its energy use. Even though **developing countries** contain most of the world's population, their industrial production and energy consumption per capita are relatively low. Thus until recently there has been little doubt that the primary responsibility for creating

Map 14.1 **Carbon dioxide emissions per capita, 1992 (metric tons)**



the risk of global warming lies with **developed countries** (Map 14.1; Figures 14.1 and 14.2).

The United States is the largest contributor to global warming. Although it contains just 4 percent of the world's population, it produces almost 25 percent of global carbon dioxide emissions. Russia was recently replaced by China as the second largest emitter, but on a per capita basis it is still far ahead of China (see Figures 14.1 and 14.2). Russia's high per capita carbon dioxide emissions are explained not only by its high level of industrialization: it is also because many Russian enterprises use technologies that are older and "dirtier" than those normally used in developed countries. Extremely inefficient energy use is one of Russia's biggest economic problems. Measured in terms of gross domestic product (GDP) per unit of energy use, energy efficiency in Russia is more than 5 times lower than in the United States and more than 12 times lower than in Japan. Only four countries are less energy efficient than Russia—and all are former members of the Soviet Union (see Data Table 4).

Figure 14.1 **Commercial energy use and carbon dioxide emissions per capita, early 1990s**

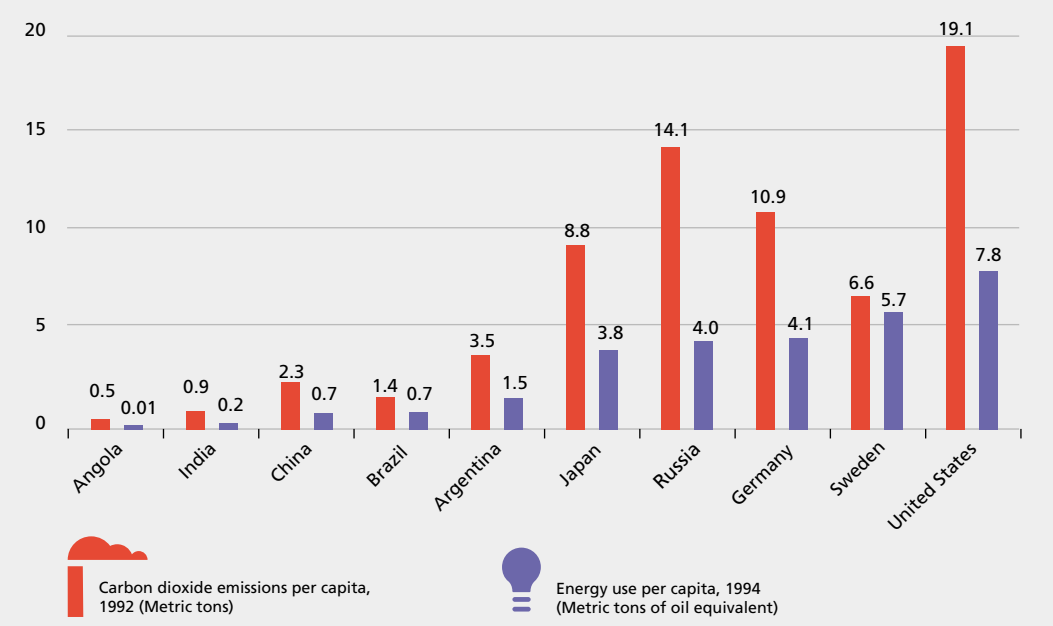
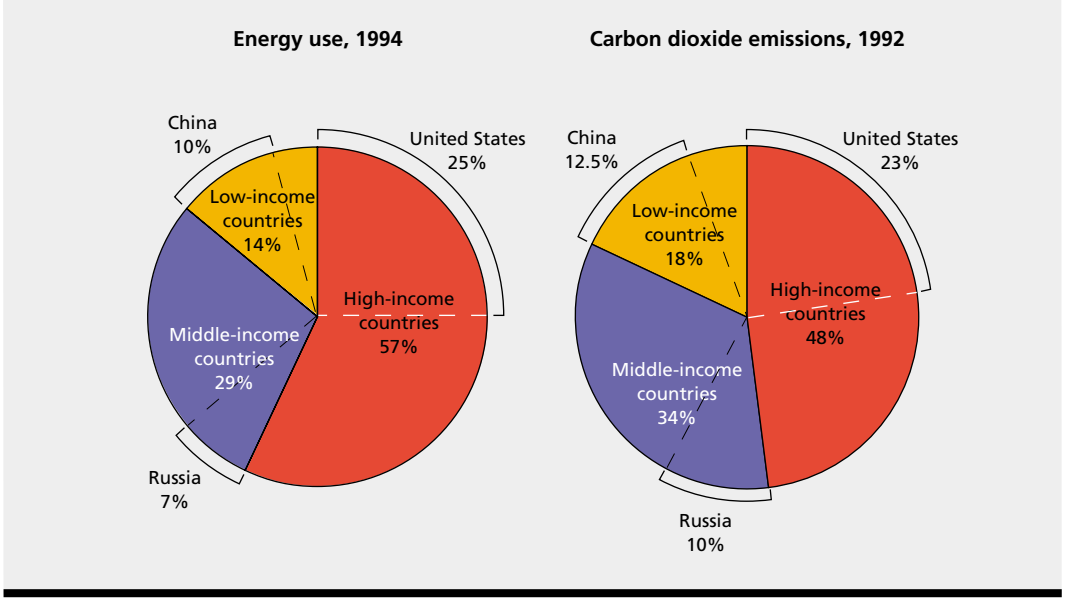


Figure 14.2 **Shares of world energy use and carbon dioxide emissions by country income group, early 1990s**



The link between **economic growth** and increased energy consumption—accompanied by increased carbon dioxide emissions—is direct and positive for **low-** and **middle-income countries.** But at high income levels, there are signs

of lower per capita energy consumption and pollution despite economic growth (see Data Table 4). This occurs because energy use becomes more efficient and environmentally cleaner technologies are introduced. In addition, a higher-income economy usually includes a proportionately larger service sector, which is less energy-intensive than industry (see Chapter 9).

Germany sets the example for other developed countries in this regard: between 1980 and 1992 its per capita energy use has dropped 11 percent and its per capita carbon dioxide emissions almost 20 percent. In the United States during the same period, per capita energy consumption was stable and per capita carbon dioxide emissions fell about 6 percent. But these changes were not sufficient to stop the growth of carbon dioxide emissions by **high-income countries** or to slow the growth of global emissions (see Data Table 4). To prevent global climate change, concerted efforts are needed from the governments of most countries.

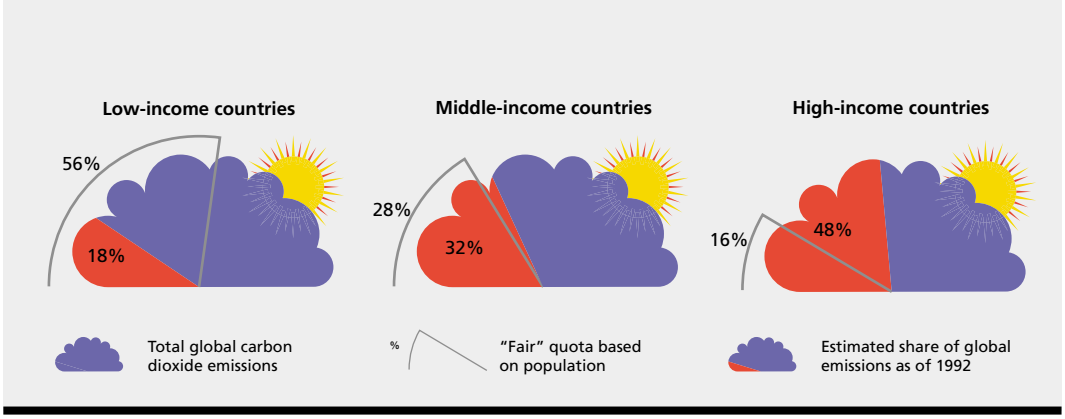
At the 1992 Earth Summit in Rio de Janeiro (Brazil), developed nations agreed to work toward stabilizing their greenhouse gas emissions at 1990 levels by 2000. By the time representatives of 165 countries had gathered in Kyoto (Japan) for the United Nations Conference on Climate Change in 1997, it was clear that many—including the United States—were falling short of that target. The Kyoto Protocol, adopted at the conference, is meant to be legally binding and calls on all wealthy nations to reduce greenhouse gas emissions by 6–8 percent below 1990 levels by 2012.

This agreement is considered the most ambitious global environmental undertaking in history—even though developing countries' participation in it was postponed. Most developing countries refuse to commit to reducing greenhouse gas emissions, arguing that these commitments would undermine their economic development and impede poverty alleviation. At the same time, a number of **countries with transition economies** have joined in the efforts of developed countries. For example, Russia and Ukraine have vowed not to exceed their greenhouse gas emissions of 1990, while Hungary and Poland have promised to go 6 percent below these levels.

Should all developing countries join in international efforts to reduce carbon dioxide emissions?

Developed countries are expected to take the lead in preventing global climate change even though in less than 20 years developing countries will likely surpass them as the main emitters of carbon dioxide. But it will take much longer than 20 years for per capita energy consumption in developing countries to become comparable to that in today's developed countries. So, in terms of fairness, today's poor countries have every right to continue polluting the atmos-

Figure 14.3 **What if the right to emit carbon dioxide were based on population size?**



phere. But is it wise for them to follow a model of development that has already proven unsustainable? And is it true that environmental concerns cannot be addressed without impeding poor countries' economic growth? Many analysts believe that the sooner these countries take advantage of cleaner production technologies and more efficient ways of generating and using energy, the better it will be for their long-term development prospects.

Assume, for the sake of fairness, that every person on earth has an equal right to the atmosphere as a resource. In that case carbon dioxide emission quotas for countries would be determined by population size. Low-income countries would not yet have reached their quotas and would have the right to continue emitting carbon dioxide. But middle- and high-income countries would already have exceeded their quotas (compare Figures 2.2 and 14.3).

15

Composite Indicators of Development

Comparing countries' **GNP (or GDP) per capita** is the most common approach to assessing their level of development. But higher per capita income in a country does not always mean that its people are better off than those in a country with lower income, because there are many aspects of human well-being that these indicators do not capture. (Can you give some examples? See Chapter 2.) Seeking a better measure of development success, experts use different methods of integrating data on average incomes with data on average health and education levels. These methods make it possible to assess a country's achievements in both **economic development** and human development (see Chapter 1).

Development "Diamonds"

Experts at the World Bank use so-called development diamonds to portray relationships among four socioeconomic indicators for a given country relative to the averages for that country's income group (low-income, lower-middle-income, upper-middle-income, or high-income). **Life expectancy at birth, gross primary (or secondary) enrollment, access to safe water,** and GNP per capita are presented, one on each axis, then connected with bold lines to form a polygon (Figure 15.1). The shape of this "diamond" can easily be compared to the reference diamond, which represents the average indicators for the country's income group, each indexed to 100 percent (see green and blue diamonds). Any point outside the reference diamond shows a value better than the group's average, while any point inside signals below-average achievement.

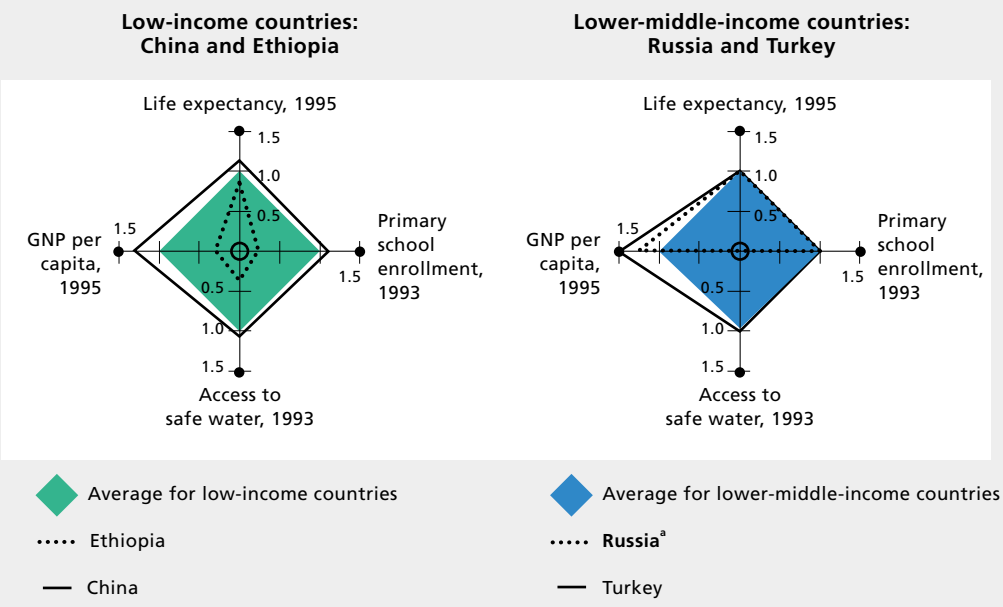
Russia's development diamond has a triangular shape because data on the percentage of its population with access to safe water are unavailable in the World Bank. Think of another indicator, possibly more important for former Soviet Union countries, that you would use to compare levels of development. Use an indicator from the Data Tables at the back of this book to complete the development diamonds for Russia and one or two other countries of your choice.

Note that the development diamonds for China and Ethiopia, and Russia and Turkey were constructed using indexes based on average indicators for two different groups of countries—low-income and lower-middle-income (see Figure 15.1). This approach makes it impossi-

Can you suggest a better way to measure countries' development (than those described in this chapter)?

How can countries use their wealth to more effectively benefit their people?

Figure 15.1 **Development diamonds for selected countries: recent index values**



a. Data on access to safe water in Russia are not available.

ble to visually compare the development achievements of these two pairs of countries. This is one of the main disadvantages of this methodology—that it cannot in practice be used to compare countries in different income groups

Human Development Index

United Nations experts prefer to use the human development index to measure a country's development. This composite index is a simple average of three indexes reflecting a country's achievements in health and longevity (as measured by life expectancy at birth), education (measured by **adult literacy** and combined primary, secondary, and tertiary enrollments), and **living standard** (measured by GDP per capita in **purchasing power parity** terms). Achievement in each area is measured by how far a country has gone in attaining the following goal: life expectancy of 85 years, adult literacy and enrollments of 100 percent, and real GDP per capita of $40,000 in purchasing power parity terms. Although highly desirable, these goals have not yet been fully attained by any country, so the actual indicators are expressed as decimal shares of the ideal.

The advantage of the human development index relative to the development diamond method is that it allows coun-

tries to be ranked in order of their achievements in human development. In the recent ranking, based on 1997 data, the top five countries were Canada, Norway, the United States, Japan, and Belgium. The bottom five countries were, Sierra Leone, Niger, Ethiopia, Burkina Faso, and Burundi. The top five developing economies were Singapore, Hong Kong (China), Brunei, Cyprus, and the Republic of Korea.

The disadvantage of the human development index is that it does not allow us to judge the relative importance of its different components or to understand why a country's index changes over time—whether, for example, it happens because of a change in GNP per capita or because of a change in adult literacy.

The human development index ranking of some countries differs significantly from their ranking by real GNP (or GDP) per capita (Table 15.1). The difference between a country's human development ranking and per capita income ranking shows how successful it is (or isn't), compared with other countries, in translating the benefits of economic growth into **quality of life** for its population (see Data Table 4). A positive difference means that a country is doing relatively better in terms of human development than in terms of per capita income. This outcome is often seen in former socialist countries and in the developed countries of Europe. A negative difference means the opposite. The most striking examples are Kuwait and Pakistan (see Table 15.1).

Table 15.1 Differences between rankings by GNP per capita and by the human development index

Country	*Rank by real (PPP$) GNP per capita, 1995*	*Rank by index of human development, 1995*	*Real GNP per capita (PPP$) rank minus human development index rank*
Kuwait	4	54	–50
Pakistan	96	138	–42
United Arab Emirates	24	48	–24
Russia	62	72	–10
United States	2	4	–2
Tajikistan	128	118	10
Canada	12	1	11
Finland	21	6	15

16

Indicators of Development Sustainability

How does the structure of national wealth change as a country develops?

Classical economists consistently identified three sources and components of national wealth: land, labor, and capital. By contrast, economists of the 20th century preferred to focus on **capital,** understood to be **physical capital** only—the stock of structures and equipment used for production. Thus expenses aimed at adding to this stock were the only expenses categorized as **investment.** Most other expenses, such as those for education or for environmental protection, were considered to constitute consumption and treated as deductions from potential capital accumulation.

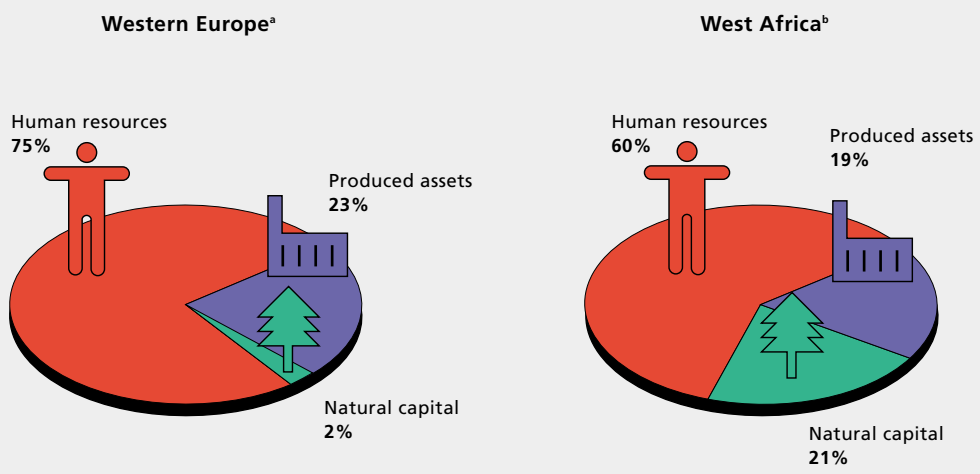
A better understanding of the need for sustainable development first led to attempts to "green" national accounts—that is, to account for changes in **natural capital** in calculations of **gross domestic product** and **gross national product**—then to the development of statistical methods to account for changes in a country's **human capital.** Although valuation methods for natural and human capital are still imperfect, they allow experts to explore some critical development issues. These include the changing composition of a country's national wealth and operational indicators of sustainable—or unsustainable—development.

Composition of National Wealth

According to a number of recent World Bank studies, physical capital (produced assets) is not the main—much less the only—component of a country's wealth. Most important for all countries are human resources, which consist of "raw labor," determined mainly by the number of people in a country's **labor force,** and human capital (Figure 16.1). Natural capital is another important component of every nation's wealth.

A country's level of development determines the roles played by the different components of its national wealth. The dominance of human capital is particularly marked in the most developed countries, where natural capital accounts for just 2–5 percent of aggregate wealth. By contrast, in West Africa—one of the world's poorest regions—natural capital still prevails over physical capital, and the share of human resources is among the lowest in the world despite a large population (see Figure 16.1). Comparing West Africa to Western Europe is particularly indicative because in absolute terms the two regions have roughly the same per capita value for natural capital. Thus the striking difference in the composition of their national

Figure 16.1 **Composition of national wealth, 1994**



a. Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom.
b. Benin, Burkina Faso, Cameroon, Central African Republlc, Chad, Republic of Congo, Côte d'Ivoire, Gambia, Ghana, Guinea-Bissau, Mali, Mauritania, Senegal, Sierra Leone, Togo.

wealth can be entirely attributed to the fact that the average West European has 13–14 times as much human and physical capital at his or her disposal.

Accumulation of National Wealth As an Indicator of Sustainable Development

Over the past 10 years the concept of sustainable development has become more comprehensive and measurable. A recent World Bank study defined sustainable development as "a process of managing a portfolio of assets to preserve and enhance the opportunities people face." The assets that this definition refers to include not just traditionally accounted physical capital, but also natural and human capital. To be sustainable, development must provide for all these assets to grow over time—or at least not to decrease. The same logic applies to prudent management of a national economy as applies to prudent management of personal property.

With that definition in mind, the main indicator of sustainable (or unsustainable) development might be the "genuine saving rate" or "genuine investment rate," a new statistical indicator being developed by World Bank experts. Standard measures of wealth accumulation ignore the depletion of, and damage to, **natural resources** such as forests and oil deposits, on the one hand, and investment in one of a nation's most valuable assets—its people—on the

How can countries make their development more sustainable?

other. The genuine saving (investment) rate is designed to correct for this shortcoming by adjusting the traditional saving rate downward by an estimate of natural resource depletion and pollution damages (the loss of natural capital), and upward by growth in the value of human capital (which comes primarily from investing in education and basic health services) (see Figure 16.2).

Calculating genuine saving rates for different countries is extremely challenging, particularly because of difficulties in valuing human capital. But the effort is considered worthwhile because of the potential importance of sustainable development indicators for informing and guiding practical policymaking.

World Bank analysis has already shown that many of the most resource-dependent countries seem to have low or negative genuine saving. This will eventually lead to declining well-being of their citizens if no consistent efforts are made to reverse the trend. The only two "safe" regions of the developing world appear to be South Asia and East Asia and the Pacific, where genuine saving rates in 1970–93 were positive and sometimes topped 15 percent of GNP (Figure 16.3). In developed countries the rates of genuine saving were near 10 percent for much of that period.

It would be totally incorrect to conclude from this analysis that countries should not choose to develop at the expense of depleting their natural resources. However, negative or low genuine saving rates show that a considerable part of **nonrenewable natural resources** has been used irrationally, to the detriment of people's future well-being. Income from these natural resources has simply been consumed rather than invested in the other components of national

Figure 16.2 Calculating the genuine saving rate

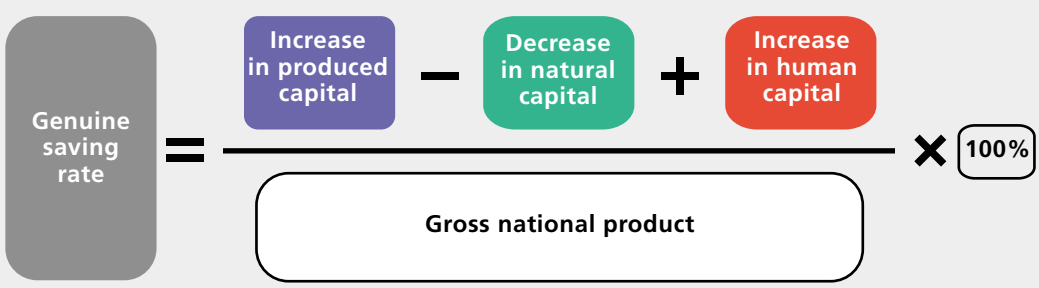
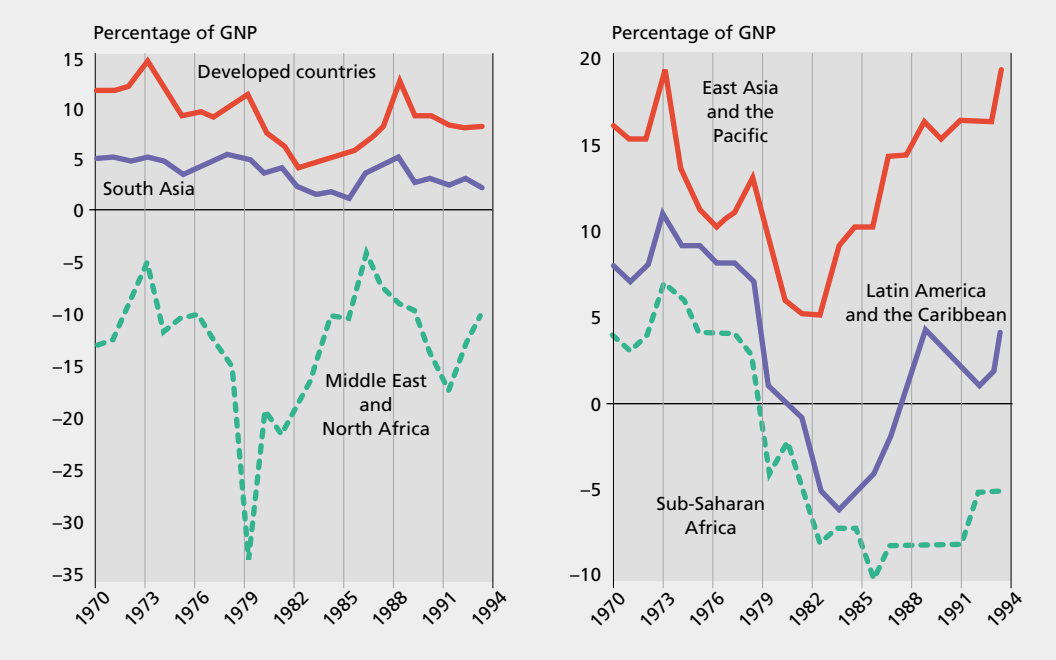


Figure 16.3 **Genuine saving (investment) rate: Estimates for 1970–93**



wealth—physical capital and human capital. Such investments can boost a country's development in a sustainable manner. But according to the data in Figure 16.3, most countries in the Middle East and North Africa failed to make such investments in the 1970s and 1980s, when their windfall oil incomes could have been used to substantially build up their long-term economic potential. That kind of development policy is apparently unsustainable and should normally cause concern among policymakers.

17

Some Additional Issues: In Search of a Comprehensive Development Strategy

What are the main factors of success in development?

Over the past several decades some **developing countries** have achieved high **economic growth** rates, significantly narrowing the gap between themselves and the most **developed countries.** But many more developing countries have actually seen the economic gap widen (see Figure 4.4). Thus, while accelerated growth and development leading to convergence with developed countries are possible, they are in no way guaranteed. Do we understand the main reasons for successful development? And what can governments do to catalyze their countries' development?

To begin to answer these questions, it is important to realize that development is far more complex than simply economic growth or the quantitative accumulation of national **capital,** even in the broader meaning of the term (as described in Chapter 16, for instance). Development is also the qualitative transformation of a whole society, a shift to new ways of thinking, and, correspondingly, new relations and new methods of production. Moreover, as you will probably agree, transformation only qualifies as development if it benefits most people—improves their **quality of life** and gives them more control over their destinies (see Chapter 1). This comprehensive process of change has to involve most of the population and cannot be limited to modernization at the top or in the capital city.

Social Capital and Social Cohesion

Researchers analyzing development have shown that some countries and communities use all their **productive resources (human, physical, and natural capital)** much more **efficiently** than do others and so are developing more successfully. How can this be explained? Refer back to Figure 16.1. What this picture fails to acknowledge is perhaps the most critical factor in any society's development: the way people interact, cooperate, and resolve their conflicts. This is what conventional statistical indicators have trouble measuring. And this is what researchers have recently come to call the *social capital* of society.

Social capital refers to organizations and associations (including public, private, and nonprofit) as well as to norms and relationships (such as laws, traditions, and personal networks). It is the glue

that holds societies together—what social cohesion depends on. Abundant social capital considerably lowers the costs of doing business and increases productivity by promoting trust, coordination, and cooperation at all levels. By contrast, a lack of social capital leads to conflicts and inefficiencies.

Because social capital is so multidimensional, there can hardly be a single "best" way of measuring it. But that does not mean that measurement is impossible. Researchers measure social capital in a number of creative ways, usually by calculating composite indexes based on a range of data collected through surveys. The data used for these calculations generally reflect people's trust in governments and in public institutions, memberships in civic organizations, and access to information.

Mounting evidence suggests that social capital is critical for economies to grow and for people to prosper. However, radical reforms or even rapid but unbalanced development often undermine existing forms of social capital without replacing them with new ones. Such degradation of social capital threatens social cohesion and renders development unsustainable. Some development experts believe that this is what has happened, for example, in many transition countries.

Consider corruption among public servants, including bribery, misappropriation of public funds, and misuse of authority. Corruption not only wastes resources by distorting government policies away from the interests of the majority, it also generates apathy and cynicism among citizens, makes laws dysfunctional, and contributes to a rise in crime. Eventually, corruption discredits political democracy, which is essential for development, and undermines broad public support for economic reforms. No wonder that, according to some studies, countries suffering from high levels of corruption typically exhibit lower rates of economic growth. Such elements of social capital as good governance and the rule of law are no less important for **economic development** than such basic economic conditions as sufficient **saving** and **investment** (see Chapter 6) or strong incentives for efficiency (see Chapter 11).

How can countries build their social capital?

The Role of Government Policies

Governments seeking to accelerate their countries' development must do so with limited resources. Even though development is a comprehensive process of change, governments must, nevertheless, identify and focus on areas where their limited action can make the biggest difference. In addition to making up for well-known **market failures** (see Chapter 11), government can also play an important role in coordinating the involvement of all development agents—private firms, public agencies,

Which roles in national development should the government play? How can the government catalyze national development?

and civic associations—within the framework of a national development strategy. Government can help different segments of society arrive at a common vision of the country's short-term and long-term future, build broad national consensus on ways of making this vision a reality, and enable all the development agents to act in accordance with their social responsibilities. Formulating national development priorities and coordinating their achievement is a crucial task that cannot be entrusted to the market system—let alone underdeveloped markets in poor countries.

The roles of the government and the private sector in implementing the national development strategy cannot be the same in all countries. They depend on the maturity and capabilities of the country's market system, on the one hand, and on the organizational and financial capabilities of the government, on the other. But there are certain areas where government involvement is indispensable: providing for universal health care and education, protecting the economically vulnerable, creating and maintaining an effective legal system with strong law enforcement and well-functioning courts.

Supporting the preservation and development of national culture is another important role for government, particularly where the private sector and civic associations are weak. Cultural values can serve as a strong cohesive force when other forces are being weakened by rapid change. Cultural development is not a luxury, but a way to strengthen social capital and thus one of the keys to successful social and economic development.

In the economic sphere, the government is indispensable in promoting and safeguarding market competition in the private sector. The government can also play an important role in improving public access to the information and knowledge needed for development—for example, by supporting modern means of communication (telephones, faxes, Internet), investing in fundamental research, and creating a favorable environment for independent media and civic associations.

Some government roles are still highly debatable, however. For example, it is not clear to what extent governments should support and protect from foreign competition those industries identified as areas of a country's **comparative advantage** (see Chapter 12). Nor is it clear how best to monitor and supervise private banks and other financial institutions to avoid restraining private initiative while protecting society from the risk of painful financial crisis.

Choices and Challenges

Every country faces many choices in dealing with its development issues. These choices are made daily in more or less

coordinated and more or less democratic ways, with a longer- or shorter-term perspective in mind. They entail big risks or big benefits for entire nations, but there is a lot of uncertainty in every choice. Learning from historical experience, national as well as global, may be the best way to minimize this uncertainty. The authors of this book hope that it will help you start thinking about your country's development in a global context—comparing countries and searching for useful lessons of development experience from around the world—and looking forward to what can realistically be achieved in 10, 20, or 50 years.

The authors also hope that this book will encourage you to play an active role in your country's development efforts, including discussions on the vision for its future and on its unique path of development. Your attitude—active or passive, optimistic or pessimistic—is part of your country's social capital too. You can make a real difference by developing informed opinions and making them known to other people, by influencing the course of public debates and eventually the choice of government policies.

The experience of many countries shows that policies can be sustained over the long term only if they are understood and supported by most of the population. If the changes that these policies bring about do not contradict most people's values and sense of fairness, the ongoing process of change is broadly acknowledged as development. That is why your participation, and that of your peers, in shaping and implementing a national development strategy is so important for your country's future success.

Glossary

Absolute advantage. An advantage that a country has in producing certain goods or *services* relative to all or many other countries due to specific factors of production at its disposal—such as rich farmland and a favorable climate for agricultural production or a highly educated labor force for high-tech manufacturing. A country's absolute advantage means that it can produce certain goods or services at a lower cost than would be possible for other countries. Thus it is clearly beneficial for this country to specialize in producing and exporting these goods and services. But even countries that do not have any absolute advantages can benefit from international trade; see *comparative advantage.*

Access to safe water. The percentage of the population with reasonable means of getting safe water—either treated surface water or clean untreated water from springs, wells, or protected boreholes.

Accumulation of capital. Using *investment* to build *capital* assets.

Adult illiteracy. The percentage of the population 15 and older who cannot, with understanding, read and write a simple statement about their everyday life.

Age dependency ratio. The ratio of the nonworking population—people under 15 or over 65—to the working population—people 15–64. In 1996 the average ratio for *low-income countries* was 0.7, for middle-income countries 0.6, and for *high-income countries* 0.5.

Agriculture. The sector of an economy that includes crop production, animal husbandry, hunting, fishing, and forestry.

Birth rate. The number of live births in a year expressed as a percentage of the population or per 1,000 people.

Capital (capital assets). A stock of wealth used to produce goods and services. Modern economists divide capital into *physical capital* (also called *produced assets*), *natural capital,* and *human capital.*

Carbon dioxide emissions per capita. The amount of carbon dioxide a country releases into the atmosphere during a certain period—usually one year—divided by the total population of that country. Large amounts of carbon dioxide are released when people burn *fossil fuels* and biomass—fuelwood, charcoal, dung—to produce energy.

Chlorofluorocarbons (CFCs). Cheap synthetic gases that serve as coolants in refrigerators and air conditioners and as propellants in aerosol spray cans. Although originally considered harmless, CFCs are now known to accumulate in the earth's atmosphere, where they destroy the protective *ozone* layer and trap the sun's heat—contributing to the greenhouse effect (see *greenhouse gases*). The use of CFCs is now controlled by the Montreal Protocol, an agreement signed by many countries.

Comparative advantage. The concept, formulated by British economist David Ricardo, according to which economic agents—people, firms, countries—are most efficient when they do the things that they are best at doing. Comparative advantage is particularly important in global markets, where countries benefit most by producing and exporting goods and *services* that they can produce more efficiently (at a lower cost, by using less *physical, human,* and *natural capital*) than other goods and services. In particular, Ricardo showed that a country can benefit from international trade even if it has higher costs of production for all traded goods and services relative to the countries it trades with—that is, even if it has no *absolute advantages* whatsoever. This can be done by correctly choosing the country's international specialization in accordance with its comparative advantages. In this case, by using export earnings to import other goods and service at prices that are lower than the costs of their domestic production, the country will maximize the overall volume of national production and consumption.

Countries with transition economies (transition countries, transition economies). Countries moving from centrally planned to market-oriented economies. These countries—which include China, Mongolia, Vietnam, former republics of the Soviet Union, and the countries of Central and Eastern Europe—contain about one-third of the world's population.

Death rate. The number of deaths in a year expressed as a percentage of the population or per 1,000 people.

Demilitarization. Orientation of a country's economy away from military production. The opposite of *militarization.*

Demography. The scientific study of human populations, including their size, composition, distribution, density, and growth as well as the causes and socioeconomic consequences of changes in these factors.

Developed countries (industrial countries, industrially advanced countries). *High-income countries,* in which most people have a high *standard of living.* Sometimes also defined as countries with a large stock of *physical capital,* in which most people undertake highly

specialized activities. According to the *World Bank* classification, these include all high-income economies except Hong Kong (China), Israel, Kuwait, Singapore, and the United Arab Emirates. Depending on who defines them, developed countries may also include middle-income *countries with transition economies,* because these countries are highly industrialized. Developed countries contain about 15 percent of the world's population. They are also sometimes referred to as "the North."

Developing countries. According to the *World Bank* classification, countries with low or middle levels of *GNP per capita* as well as five *high-income developing economies*—Hong Kong (China), Israel, Kuwait, Singapore, and the United Arab Emirates. These five economies are classified as developing despite their high per capita income because of their economic structure or the official opinion of their governments. Several *countries with transition economies* are sometimes grouped with developing countries based on their low or middle levels of per capita income, and sometimes with *developed countries* based on their high industrialization. More than 80 percent of the world's population lives in the more than 100 developing countries.

Economic development. Qualitative change and restructuring in a country's economy in connection with technological and social progress. The main indicator of economic development is increasing *GNP per capita* (or *GDP* per capita), reflecting an increase in the economic productivity and average material well-being of a country's population. Economic development is closely linked with *economic growth.*

Economic growth. Quantitative change or expansion in a country's economy. Economic growth is conventionally measured as the percentage increase in *gross domestic product (GDP)* or *gross national product (GNP)* during one year. Economic growth comes in two forms: an economy can either grow "extensively" by using more resources (such as *physical, human,* or *natural capital*) or "intensively" by using the same amount of resources more efficiently (productively). When economic growth is achieved by using more labor, it does not result in per capita income growth (see Chapter 4). But when economic growth is achieved through more productive use of all resources, including labor, it results in higher per capita income and improvement in people's average *standard of living.* Intensive economic growth requires *economic development.*

Energy use per capita. The amount of energy a country consumes in a certain period—usually one year—divided by the population of that country. This includes fossil fuels burned by machines (such as cars), as well as electricity generated from nuclear power, geothermal

power, hydropower, and fossil fuels. No matter what its source, energy use per capita is measured in equivalent amounts of oil. Though substantial in some *developing countries,* energy from biomass—fuelwood, charcoal, dung—is not considered in this statistic because reliable data are not available.

European Union (EU). A regional international organization with most *developed countries* of Europe among its members. In 1995 it succeeded the European Economic Community (EEC), established in 1957 to promote economic integration among its member countries.

Externalities. Effects of a person's or firm's activities on others which are not compensated. Externalities can either hurt or benefit others—they can be negative or positive. One negative externality arises when a company pollutes the local environment to produce its goods and does not compensate the negatively affected local residents. Positive externalities can be produced through primary education—which benefits not only primary students but also society at large. Governments can reduce negative externalities by regulating and taxing goods with negative externalities. Governments can increase positive externalities by subsidizing goods with positive externalities or by directly providing those goods.

Fertility rate. See *total fertility rate.*

Foreign direct investment. *Foreign investment* that establishes a lasting interest in or effective management control over an enterprise. Foreign direct investment can include buying shares of an enterprise in another country, reinvesting earnings of a foreign-owned enterprise in the country where it is located, and parent firms extending loans to their foreign affiliates. *International Monetary Fund (IMF)* guidelines consider an investment to be a foreign direct investment if it accounts for at least 10 percent of the foreign firm's voting stock of shares. However, many countries set a higher threshold because 10 percent is often not enough to establish effective management control of a company or demonstrate an investor's lasting interest.

Foreign investment. *Investment* in an enterprise that operates outside the investor's country. See also *foreign direct investment* and *portfolio investment.*

Fossil fuels. Coal, natural gas, and petroleum products (such as oil) formed from the decayed bodies of animals and plants that died millions of years ago. A *nonrenewable* source of energy.

GDP. See *gross domestic product.*

General Agreement on Tariffs and Trade (GATT). From 1947 until 1995, an international organization with a mandate to reduce *protection* and promote free trade among nations. Many

barriers to trade—*import tariffs, import quotas,* and others—were reduced during its eight rounds of international negotiations. Issues discussed during the last round of GATT negotiations, in Uruguay (1986–94), included reducing government restrictions on *foreign investment* and on trade in services such as banking, insurance, transport, tourism, and telecommunications. In 1995 GATT was succeeded by the *World Trade Organization (WTO).*

GNP. See *gross national product.*

GNP per capita. A country's *gross national product (GNP)* divided by its population. Shows the income each person would have if GNP were divided equally. Also called *income per capita.* GNP per capita is a useful measure of economic productivity, but by itself it does not measure people's well-being or a country's success in development. It does not show how equally or unequally a country's income is distributed among its citizens. It does not reflect damage made by production processes to natural resources and the environment. It does not take into account any unpaid work done within households or communities or production taking place in the *gray* (shadow) *economy.* It attributes value to anything being produced whether it harms or contributes to general welfare (for example, medicines and chemical weapons). And it ignores the value of such elements of people's well-being as leisure or freedom.

Gray economy (shadow economy). Consists of business activities that are not accounted for by official statistics. It includes illegal activities (or the so-called black market) and activities that are in themselves legal but go unreported or under-reported for purposes of tax evasion.

Greenhouse gases. Gases that trap the sun's heat within the earth's atmosphere, creating a greenhouse effect that may dangerously raise temperatures around the globe. Greenhouse gases include *ozone,* methane, water vapor, nitrous-oxide, carbon dioxide, and *chlorofluorocarbons (CFCs).*

Gross domestic investment rate. All the outlays made to replace and increase a country's *physical capital,* plus changes in inventories of goods, expressed as a percentage of GDP. Gross domestic investment, along with *foreign direct investment,* is critical for *economic growth* and *economic development.*

Gross domestic product (GDP). The value of all final goods and *services* produced in a country in one year (see also *gross national product*). GDP can be measured by adding up all of an economy's incomes—wages, interest, profits, and rents—or expenditures—consumption, *investment*, government purchases, and net exports (exports minus imports). Both results should be the same because one person's expendi-

ture is always another person's income, so the sum of all incomes must equal the sum of all expenditures.

Gross domestic saving rate. *Gross domestic product (GDP)* minus consumption by government and the private sector, expressed as a percentage of GDP. A high gross domestic saving rate usually indicates a country's high potential to invest. See also *savings.*

Gross enrollment ratio. The number of students enrolled at a certain level of education as a percentage of the population of the age group that officially corresponds to that level. Can be above 100 percent if some enrolled students are older or younger than the age group that officially corresponds to that level of education.

Gross national product (GNP). The value of all final goods and *services* produced in a country in one year (*gross domestic product*) plus income that residents have received from abroad, minus income claimed by nonresidents. GNP may be much less than GDP if much of the income from a country's production flows to foreign persons or firms. But if the people or firms of a country hold large amounts of the stocks and bonds of firms or governments of other countries, and receive income from them, GNP may be greater than GDP. For most countries, however, these statistical indicators differ insignificantly (see Chapter 2).

"Gross" indicates that the value lost through the "wear and tear" of capital used in production is not deducted from the value of total output. If it were deducted, we would have a measure called **net domestic product (NDP),** also known as **national income.** The words "product" and "income" are often used interchangeably, so *GNP per capita* is also called *income per capita.*

Gross primary school enrollment ratio. The ratio of primary school enrollment to the number of primary school-aged children (usually children 6–11). The **gross secondary school enrollment ratio** is calculated in the same way, except that the corresponding age group is 12–17. For the **gross tertiary education enrollment ratio,** calculations are based on the number of young people in the five-year age group following the secondary school leaving age. Gross enrollment ratios can be higher than 100 percent because some students are younger or older than the corresponding age group.

High-income countries. Classified by the *World Bank* in 1997 as countries whose *GNP per capita* was $9,386 or more in 1995. The group includes both *developed countries* and *high-income developing economies.*

High-income developing economies. Economies that the United Nations classifies as developing even though their per

capita incomes would place them with *developed countries.* This classification may be based on their economic structure or the official opinion of their governments. In 1995 this group included Hong Kong (China), Israel, Kuwait, Singapore, and the United Arab Emirates.

Human capital. The knowledge, skills, and experience of people that make them economically productive. Human capital can be increased by investing in education, health care, and job training.

Human development index (HDI). A composite of several social indicators that is useful for broad cross-country comparisons even though it yields little specific information about each country. First used in the United Nations Development Programme's *Human Development Report 1990.*

Human resources. The total quantity and quality of human effort available to produce goods and services. The muscle power and brain power of human beings. Human resources can be viewed as consisting of raw labor—determined mostly by the number of people in a country's *labor force*—combined with *human capital.*

Import quotas. Government-imposed limits on the quantities of certain goods and services allowed to be imported. Like *import tariffs,* import quotas are used by governments to protect domestic industries from foreign competition. See *protection.*

Import tariffs. Taxes imposed on certain imported goods or *services.* May be levied as a percentage of the value of imports or as a fixed amount per unit. Used to increase government revenue and protect domestic industries from foreign competition. See *protection.*

Income per capita. Another term for *GNP per capita.*

Industrial countries. See *developed countries.*

Industrialization. The phase of a country's *economic development* in which *industry* grows faster than *agriculture* and gradually comes to play the leading role in the economy.

Industry. The sector of an economy that includes mining, construction, manufacturing, electricity, gas, and water.

Infant mortality rate. Of every 1,000 infants born, the number that die before reaching their first birthday.

International Monetary Fund (IMF). An international institution founded in 1944—together with the *World Bank*—to promote international monetary cooperation and facilitate balanced growth of trade by encouraging the removal of foreign exchange restrictions, promoting

exchange rate stability, and expediting payments among member countries.

International poverty line. An income level established by the *World Bank* to determine which people in the world are poor—set at $1 a day per person in 1985 international *purchasing power parity (PPP)* prices. A person is considered poor if he or she lives in a household whose daily income or consumption is less than $1 per person. Although this *poverty line* is useful for international comparisons, it is impossible to create an indicator of poverty that is strictly comparable across countries. The level of $1 a day per person is close to national poverty lines in *low-income countries* but considerably lower than those in *high-income countries.*

Investment. Outlays made by individuals, firms, or governments to add to their *capital.* From the viewpoint of individual economic agents, buying property rights for existing capital is also an investment. But from the viewpoint of an economy as a whole, only creating new capital is counted as an investment. Investment is a necessary condition for *economic growth.* See *savings, gross domestic saving rate,* and *gross domestic investment rate.*

Labor force. All the economically active people in a country between 15 and 65. Includes all employed persons, the unemployed, and members of the armed services, but excludes students and unpaid caregivers such as homemakers.

Least developed countries. *Low-income countries* where, according to the United Nations, *economic growth* faces long-term impediments—such as structural weaknesses and low *human resources* development. A category used to guide donors and countries in allocating foreign assistance.

Life expectancy at birth. The number of years a newborn baby would live if, at each age it passes through, the chances of his/her survival were the same as they were for that age group in the year of his/her birth. The change in this indicator reflects changes in the overall health of a country's population, in people's living conditions, and in the quality of health care.

Living standard. See *standard of living.*

Low-income countries. Classified by the *World Bank* in 1997 as countries whose *GNP per capita* was $765 or less in 1995.

Manufactured goods. Goods produced using *primary goods.* Include petroleum, steel, textiles, and baked goods.

Market failures. Cases when a market economy fails to provide people with a desirable supply of certain kinds of goods and *services.* Market failures can occur in a market economy when it does

not produce enough *public goods* and goods with positive *externalities,* when it produces too many goods with negative externalities, when goods are overpriced by *natural monopolies,* and when market agents do not have access to sufficient information, such as information about the quality of some consumer goods. These market failures usually justify economic intervention by the government. But there is always the risk of government failure—in which faulty political processes or institutional structures prevent government measures from improving social welfare (see Chapter 11).

Market liberalization. Removing and abstaining from using state controls that impede the normal functioning of a market economy—for example, lifting price and wage controls and *import quotas* or lowering taxes and *import tariffs.* Market liberalization usually does not mean that a government completely abstains from interfering with market processes.

Middle-income countries. Classified by the *World Bank* in 1997 as countries whose *GNP per capita* was between $766 and $9,385 in 1995. These countries are further divided into lower-middle-income countries ($766–$3,035) and upper-middle-income countries ($3,036–$9,385).

Militarization. Orientation of a country's economy toward military production. The opposite of *demilitarization.*

Natural capital. A stock of *natural resources*—such as land, water, and minerals—used for production. Can be either *renewable* or *nonrenewable.*

Natural monopoly. A situation that occurs when one firm in an industry can serve the entire market at a lower cost than would be possible if the industry were composed of many smaller firms. Gas and water utilities are two classic examples of natural monopolies. These monopolies must not be left to operate freely; if they are, they can increase prices and profits by restricting their output. Governments prevent such a scenario by regulating utility monopolies or providing utility services themselves.

Natural population increase. The difference between the *birth rate* and the *death rate* over a period of time. See also *population growth rate.*

Natural resources. All "gifts of nature"—air, land, water, forests, wildlife, topsoil, minerals—used by people for production or for direct consumption. Can be either *renewable* or *nonrenewable.* Natural resources include *natural capital* plus those gifts of nature that cannot be stocked (such as sunlight) or cannot be used in production (such as picturesque landscapes).

Net official assistance. The sum of grants and concessional loans from donor country governments to recipi-

ent countries, minus any repayment of loan principal during the period of the loans.

Net private flows. Privately financed capital flows that enter a country on market terms, minus such flows that leave the country. An example of a net private flow is net portfolio investment—the value of stocks and bonds bought by foreign investors minus the value of stocks and bonds sold by them. See also *portfolio investment.*

Nominal indicator. An indicator measured using the prices prevailing at the time of measurement. A change in a nominal indicator sometimes reflects changing market prices more than any other changes (changes in the *real indicator*). For example, during periods of inflation, nominal wages can increase while their real value decreases.

In making cross-country comparisons, this term also applies to the conversion of indicators calculated in local currency units into some common currency, most often US dollars. Nominal indicators are those converted into US dollars using current exchange rates, while real indicators are calculated based on *purchasing power parity (PPP) conversion factors.*

Nonrenewable natural resources. *Natural resources* that cannot be replaced or replenished. See *renewable natural resources.*

Organisation for Economic Co-operation and Development (OECD). An organization that coordinates policy among *developed countries.* OECD member countries exchange economic data and create unified policies to maximize their countries' *economic growth* and help nonmember countries develop more rapidly. The OECD arose from the Organisation for European Economic Co-operation (OEEC), which was created in 1948 to administer the Marshall Plan in Europe. In 1960, when the Marshall Plan was completed, Canada, Spain, and the United States joined OEEC members to form the OECD.

Ozone. A gas that pollutes the air at low altitudes, but that high in the atmosphere forms a thin shield protecting life on earth from harmful solar radiation. *Chlorofluorocarbons (CFCs)* destroy this high-level ozone layer.

Physical capital (produced assets). Buildings, machines, and technical equipment used in production plus inventories of raw materials, half-finished goods, and finished goods.

Population growth rate. The increase in a country's population during a certain period—usually one year—expressed as a percentage of the population when the period began. The population growth rate is the sum of the difference between the *birth rate* and the *death rate*—the *natural population*

increase—and the difference between the population entering and leaving the country—the net migration rate.

Portfolio investment. Stock and bond purchases that, unlike direct investment, do not create a lasting interest in or effective management control over an enterprise. See *foreign direct investment.*

Postindustrialization. The phase in a country's *economic development* that follows *industrialization* and is characterized by the leading role of *service sector* in the national economy.

Poverty line. The income level people require to buy life's basic necessities—food, clothing, housing—and satisfy their most important sociocultural needs. The poverty line changes over time and varies by region. Also called *subsistence minimum.*

Primary goods. Goods that are sold (for consumption or production) just as they were found in nature. Include oil, coal, iron, and agricultural products like wheat or cotton. Also called commodities.

Produced assets. See *physical capital.*

Production resources. The main inputs for any production. Traditionally, economists identified three factors of production: labor, land, and capital. More recently, economists came to use the concept of three types of capital: *physical* (or *produced*) *capital, human capital,* and *natural capital.*

Productivity (economic productivity, efficiency). Output of goods and *services* per unit of input—for example, per unit of labor (labor productivity), per unit of energy (such as *GNP* per unit of energy use), or per unit of all *production resources* combined (see Chapter 2).

Protection. The imposition of *import tariffs, import quotas,* or other barriers that restrict the flow of imports. The opposite of "free trade." Used to:

- Protect "strategically important" industries—such as *agriculture*—without which a country would be vulnerable in times of war.
- Protect new industries until they are strong enough to compete in international markets.
- Retaliate against protectionist policies of trade partners.

Since World War II protectionist policies have been significantly reduced in most countries through negotiations under the *General Agreement on Tariffs and Trade (GATT).*

Public goods. Goods that are nonrival—consumption by one person does not reduce the supply available for others—and nonexcludable—people cannot be prevented from consuming them. These characteristics make it impossible to charge consumers for public goods, so the private sector is not interested in

supplying them. Instead, they are often supplied by government. Public goods are usually national or local. Defense is a national public good—benefiting the entire population of a country. Rural roads are local public goods, benefiting a smaller group of people. There can also be global public goods, benefiting most of the world's population, for example global peace and security, or information needed to prevent global climate change. Providing such goods (and *services*) is a function of international organizations.

Purchasing power parity (PPP) conversion factor. The PPP conversion factor shows how much of a country's currency is needed in that country to buy what $1 would buy in the United States. By using the PPP conversion factor instead of the currency exchange rate, we can convert a country's *GNP per capita* calculated in national currency units into GNP per capita in U.S. dollars while taking into account the difference in domestic prices for the same goods. Thus PPP helps us compare GNPs of different countries more accurately. Because prices are usually lower in *developing countries,* their GNP per capita expressed in PPP dollars is higher than their GNP per capita expressed in U.S. dollars. In *developed countries* the opposite is true (see Chapter 2).

Quality of life. People's overall well-being. Quality of life is difficult to measure (whether for an individual, group, or nation) because in addition to material well-being (see *standard of living*) it includes such intangible components as the quality of the environment, national security, personal safety, and political and economic freedoms.

Real indicator. An economic indicator that uses the prices from some base year. This approach controls for fluctuating market prices so that other economic changes can be seen more clearly. In cross-country comparisons, this term also applies to the conversion of indicators calculated in local currency units into some common currency, most often US dollars. Real indicators are calculated with the help of *purchasing power parity (PPP) conversion factors,* while *nominal indicators* are those converted into US dollars using current exchange rates.

Renewable natural resources. *Natural resources* that can be replaced or replenished by natural processes or human action. Fish and forests are renewable natural resources. Minerals and *fossil fuels* are *nonrenewable natural resources* because they are regenerated on a geological, rather than human, time scale. Some aspects of the environment—soil quality, assimilative capacity, ecological support systems—are called semirenewable because they are regenerated very slowly on a human time scale.

Savings. Income not used for current consumption. See also *gross domestic sav-*

ing rate and *gross domestic investment rate.*

Services. Intangible goods that are often produced and consumed at the same time. An example is education: students consume a lesson—an educational service—at the same time a teacher produces it. The service sector of the economy includes hotels, restaurants, and wholesale and retail trade; transport, storage, and communications; financing, insurance, real estate, and business services; community and social services (such as education and health care); and personal services.

Shadow economy. See *gray economy.*

Standard of living. The level of well-being (of an individual, group or the population of a country) as measured by the level of income (for example, *GNP per capita*) or by the quantity of various goods and *services* consumed (for example, the number of cars per 1,000 people or the number of television sets per capita). See also *quality of life.*

Subsistence minimum. Another term for *poverty line.*

Sustainable development. According to the United Nations World Commission on Environment and Development (1987), sustainable development is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." According to the more operational (practice-oriented) definition used by the *World Bank,* sustainable development is "a process of managing a portfolio of assets to preserve and enhance the opportunities people face." Sustainable development includes economic, environmental, and social sustainability, which can be achieved by rationally managing *physical, natural,* and *human capital (see Chapters 1 and 16).*

Terms of trade. The ratio of export prices to import prices. A high ratio benefits an economy, because then the country can pay for many imports by selling a small amount of exports. If terms of trade worsen, the country needs to sell more exports to buy the same amount of imports.

Total fertility rate. The average number of children a woman will have during her lifetime, by country or region. Between 1980 and 1995 the average fertility rate in *low-income countries* and *middle-income countries* fell from 4.1 to 3.1, while in *high-income countries* it fell from 1.9 to 1.7.

Transfer payments. Payments from the government to individuals used to redistribute a country's wealth. Examples are pensions, welfare, and unemployment benefits.

Transition countries. See c*ountries with transition economies.*

World Bank. An international lending institution that aims to reduce poverty and improve people's lives by strengthening economies and promoting *sustainable development.* Owned by the governments of its 181 member countries, the Bank lends about $20 billion a year to development projects, provides technical assistance and policy advice, and acts as a catalyst for *investment* and lending from other sources. The World Bank's poorest members receive loans for up to 50 years without interest. Other needy members receive loans for 15–20 years at lower interest rates than are charged by commercial banks.

World Trade Organization (WTO). An international organization established on January 1, 1995, to succeed the *General Agreement on Tariffs and Trade (GATT).* Serves as a forum for multilateral trade negotiations and helps resolve its members' trade disputes.

Classification of Economies by Income and Region

Income group	Subgroup	Sub-Saharan Africa: East and Southern Africa	Sub-Saharan Africa: West Africa	Asia: East Asia and Pacific	Asia: South Asia	Europe and Central Asia: Eastern Europe and Central Asia	Europe and Central Asia: Rest of Europe	Middle East and North Africa: Middle East	Middle East and North Africa: North Africa	Americas
Low-income		Angola Burundi Comoros Eritrea Ethiopia Kenya Madagascar Malawi Mozambique Rwanda Somalia Sudan Tanzania Uganda Zaire Zambia Zimbabwe	Benin Burkina Faso Cameroon Central African Republic Chad Congo, Rep. Côte d'Ivoire Eq. Guinea Gambia, The Ghana Guinea Guinea-Bissau Liberia Mali Mauritania Niger Nigeria São Tomé and Principe Senegal Sierra Leone Togo	Cambodia China Lao PDR Mongolia Myanmar Vietnam	Afghanistan Bangladesh Bhutan India Nepal Pakistan Sri Lanka	Albania Armenia Azerbaijan Bosnia and Herzegovina Georgia Kyrgyz Republic Tajikistan		Yemen, Rep.		Guyana Haiti Honduras Nicaragua
Middle-income	Lower	Botswana Djibouti Lesotho Namibia Swaziland	Cape Verde	Fiji Indonesia Kiribati Korea, Dem. Marshall Islands Micronesia, Fed. Sts. Papua New Guinea Philippines Solomon Islands Thailand Tonga Vanuatu Western Samoa	Maldives	Belarus Bulgaria Estonia Kazakhstan Latvia Lithuania Macedonia, FYR [a] Moldova Poland Romania Russian Federation Slovak Rep. Turkmenistan Ukraine Uzbekistan Yugoslavia, Fed. Rep. [b]	Turkey	Iran, Islamic Rep. Iraq Jordan Lebanon Syrian Arab Rep. West Bank and Gaza	Algeria Egypt, Arab Rep. Morocco Tunisia	Belize Bolivia Colombia Costa Rica Cuba Dominica Dominican Republic Ecuador El Salvador Grenada Guatemala Jamaica Panama Paraguay Peru St. Vincent and the Grenadines Suriname Venezuela

Classification of Economies by Income and Region, (continued)

Income group	Subgroup	Sub-Saharan Africa: East and Southern Africa	Sub-Saharan Africa: West Africa	Asia: East Asia and Pacific	Asia: South Asia	Europe and Central Asia: Eastern Europe and Central Asia	Europe and Central Asia: Rest of Europe	Middle East and North Africa: Middle East	Middle East and North Africa: North Africa	Americas
	Upper	Mauritius Mayotte Seychelles South Africa	Gabon	American Samoa Malaysia		Croatia Czech Republic Hungary Slovenia	Greece Isle of Man Malta	Bahrain Oman Saudi Arabia	Libya	Antigua and Barbuda Argentina Barbados Brazil Chile Guadeloupe Mexico Puerto Rico St. Kitts and Nevis St. Lucia Trinidad and Tobago Uruguay
High-income	OECD countries			Australia Japan Korea, Rep. New Zealand			Austria Belgium Denmark Finland France Germany Iceland Ireland Italy Luxembourg Netherlands Norway Portugal Spain Sweden Switzerland United Kingdom			Canada United States
	Non-OECD countries	Reunion		Brunei French Polynesia Guam Hong Kong Macao New Caledonia N. Mariana Is. Singapore OAE [c]			Andorra Channel Islands Cyprus Faeroe Islands Greenland Liechtenstein Monaco	Israel Kuwait Qatar United Arab Emirates		Aruba Bahamas, The Bermuda Cayman Islands French Guiana Martinique Netherlands Antilles Virgin Islands (U.S.)
Total	210	27	23	34	8	27	28	14	5	44

Note: Economies are divided according to 1995 GNP per capita. a. Former Yugoslav Republic of Macedonia. b. Federal Republic of Yugoslavia (Serbia/Montenegro). c. Other Asian economies—Taiwan, China.

Table1. Indicators to chapters 1–6

COUNTRY or REGION	Gross domestic product $ millions 1980	1995	Average annual GDP growth % 1980-90	1990-95	Population millions 1980	1995	Fertility rate births per woman 1980	1995	Birth rate per 1,000 people 1980	1995
Afghanistan	3639	..			15.95	23.48	7.0	6.9	50	48
Albania	..	2192	3.0	1.4	2.67	3.26	3.6	2.6	29	21
Algeria	42345	41435	2.8	0.1	18.67	27.96	6.7	3.5	42	26
American Samoa	..	..			0.03	0.06	..	..	..	..
Andorra	..	..			..	0.06	..	..	..	..
Angola	..	3722	3.7	-4.1	7.02	10.77	6.9	6.9	50	49
Antigua and Barbuda	112	..			0.06	0.07	2.1	1.7	17	17
Argentina	76962	281060	-0.3	5.7	28.11	34.67	3.3	2.7	24	20
Armenia	..	2843	3.3	-21.2	3.10	3.76	2.3	1.8	23	14
Aruba	..	..			..	0.08	..	..	..	..
Australia	160109	348782	3.4	3.5	14.69	18.05	1.9	1.9	15	15
Austria	76882	233427	2.1	1.9	7.55	8.05	1.6	1.5	12	11
Azerbaijan	..	3473	..	-20.2	6.17	7.51	3.2	2.3	25	21
Bahamas, The	1335	3459			0.21	0.28	3.3	2.0	24	19
Bahrain	3073	5060			0.33	0.58	5.2	3.1	34	22
Bangladesh	12950	29110	4.3	4.1	86.70	119.77	6.1	3.5	44	28
Barbados	860	1742			0.25	0.27	2.0	1.8	17	13
Belarus	..	20561	..	-9.3	9.64	10.34	2.0	1.4	16	11
Belgium	118022	269081	1.9	1.1	9.85	10.15	1.7	1.6	13	12
Belize	195	578			0.15	0.22	..	3.9	..	32
Benin	1405	..	2.6	4.1	3.46	5.48	6.5	6.0	49	43
Bermuda	613	..			0.05	0.06	..	..	..	..
Bhutan	142	304			0.49	0.70	..	..	..	..
Bolivia	3074	6131	0.0	3.8	5.36	7.41	5.5	4.5	39	35
Bosnia and Herzegovina	..	..	..	..	4.09	4.38	2.1	..	19	..
Botswana	971	4318	10.3	4.2	0.90	1.45	6.7	4.4	48	34
Brazil	235025	688085	2.7	2.7	121.29	159.22	3.9	2.4	31	21
Brunei	4906	4986			0.19	0.29	4.0	2.9	31	22
Bulgaria	20040	12366	4.0	-4.3	8.86	8.41	2.0	1.2	15	10
Burkina Faso	1709	2325	3.7	2.6	6.96	10.38	7.5	6.7	47	46
Burundi	920	1062	4.4	-2.3	4.13	6.26	6.8	6.5	46	44
Cambodia	..	2771	..	6.4	6.50	10.02	4.7	4.7	39	40
Cameroon	6741	7931	3.1	-1.8	8.70	13.29	6.5	5.7	47	41
Canada	263193	568928	3.4	1.8	24.59	29.61	1.7	1.7	15	13
Cape Verde	107	..			0.29	0.38	6.5	4.0	37	34
Cayman Islands	..	..			..	0.03	..	..	..	..
Central African Republic	797	1128	1.7	1.0	2.31	3.28	5.8	5.1	43	38
Chad	727	1138	6.3	1.9	4.48	6.45	5.9	5.9	44	43
Channel Islands	..	..			0.13	0.14	1.4	1.6	12	12
Chile	27572	67297	4.1	7.3	11.14	14.23	2.8	2.3	24	20
China	201688	697647	10.2	12.8	981.24	1200.24	2.5	1.9	18	17
Colombia	33399	76112	3.7	4.6	27.89	36.81	3.8	2.8	30	23
Comoros	124	227			0.34	0.50	..	5.9	..	43

Death rate per 1,000 people		Average annual population growth %	GNP per capita $	GNP per capita PPP $	GNP per capita growth annual %	Gini index	Poverty % of people living on less than $1 a day (PPP)	Gross domestic savings % of GDP		Gross domestic investment % of GDP	
1980	1995	1985-95	1995	1995	1985-95		1981-95	1980	1995	1980	1995
23	21	2.6	..	..	..		..	..	..	..	..
6	6	1.0	670	..	..	..	..	..	-8	35	16
12	5	2.5	1600	5 300	-2.6	38.7	1.6	43	29	39	32
..	..	3.9	..	..	..		..	..	..	..	..
..	..	..	..	..	..		..	..	..	..	..
23	19	3.0	410	1 310	-6.1	..	..	..	43	..	27
6	6	0.5	..	..	2.7		..	..	..	..	..
9	8	1.3	8030	8 310	1.9	..	..	24	18	25	18
6	7	1.2	730	2 260	-15.1	..	..	..	-29	29	9
..	..	..	..	..	..		..	..	..	..	..
7	7	1.4	18720	18 940	1.4	33.7	..	24	22	25	23
12	10	0.6	26890	21 250	1.9	23.1	..	26	26	28	27
7	7	1.2	480	1 460	-16.3	..	..	..	4	..	16
7	5	1.7	11940	14 710	-1.0		..	26	..	18	..
6	4	3.1	7840	13 400	0.6		..	55	..	46	..
18	10	2.0	240	1 380	2.1	28.3	..	2	8	15	17
8	9	0.5	6560	10 620	-0.2		..	23	..	25	..
10	12	0.4	2070	4 220	-5.2	21.6	..	..	20	..	25
12	11	0.3	24710	21 660	2.2	25.0	..	19	24	22	18
..	4	2.6	2630	5 400	4.4		..	11	..	24	..
19	15	3.0	370	1 760	-0.4	..	..	-5	..	15	..
..	..	1.2	..	..	-1.2		..	..	..	..	..
..	..	2.6	420	1 260	4.0		..	8	..	31	..
15	10	2.3	800	2 540	1.7	42	7.1	19	..	15	..
7	..	..	..	..	..	..	..	..	..	..	..
14	12	3.0	3020	5 580	6.0	..	34.7	28	23	38	25
9	7	1.6	3640	5 400	-0.7	63.4	28.7	21	21	23	22
5	4	2.5	25160	..	..		..	..	..	3	..
11	13	-0.6	1330	4 480	-2.2	30.8	2.6	39	25	34	21
20	18	2.8	230	780	-0.1	..	..	-6	..	17	..
18	17	2.8	160	630	-1.3	..	..	-1	-7	14	11
27	13	3.0	270	..	2.0	..	..	..	..	..	..
15	11	2.9	650	2 110	-7.0	..	..	20	21	21	15
7	7	1.3	19380	21 130	0.4	31.5	..	25	21	24	19
11	8	2.0	960	1 870	2.1	..	..	-24	..	52	..
..	..	..	..	..	..	..	..	..	..	..	..
19	17	2.3	340	1 070	-2.0	..	..	-10	6	7	15
22	18	2.5	180	700	0.5	..	..	..	..	..	..
12	10	0.6	..	..	..	..	..	..	..	..	..
7	6	1.6	4160	9 520	6.1	56.5	15.0	20	29	25	27
6	7	1.3	620	2 920	8.0	41.5	29.4	35	42	35	40
7	7	1.8	1910	6 130	2.8	51.3	7.4	20	16	19	20
..	12	2.8	470	1 320	-1.4	..	..	-10	-8	33	17

Table1. Indicators to chapters 1–6 (continued)

COUNTRY or REGION	Gross domestic product $ millions 1980	1995	Average annual GDP growth % 1980-90	1990-95	Population millions 1980	1995	Fertility rate births per woman 1980	1995	Birth rate per 1,000 people 1980	1995
Congo	1706	2164	3.6	-0.6	1.67	2.63	6.2	6.0	46	47
Costa Rica	4831	9233	3.0	5.1	2.28	3.40	3.7	2.8	30	25
Côte d'Ivoire	10175	10069	0.1	0.7	8.19	13.98	7.4	5.3	51	37
Croatia	..	18081	..	..	4.59	4.78	..	1.5	..	11
Cuba	..	..	..	..	9.72	11.01	2.0	1.7	14	14
Cyprus	2154	..			0.61	0.73	2.5	2.2	20	16
Czech Republic	29123	44772	1.7	-2.6	10.23	10.33	2.0	1.3	15	10
Denmark	66322	172220	2.4	2.0	5.12	5.22	1.5	1.8	11	13
Djibouti	..	495			0.28	0.63	6.6	5.8	48	46
Dominica	58	227			0.07	0.07	..	2.3	25	23
Dominican Republic	6631	11277	2.7	3.9	5.70	7.82	4.2	2.9	33	24
Ecuador	11733	17939	2.0	3.4	7.96	11.48	5.0	3.2	36	27
Egypt, Arab Rep.	22913	47349	5.0	1.3	40.88	57.80	5.1	3.4	39	26
El Salvador	3574	9472	0.2	6.3	4.55	5.62	5.3	3.7	39	30
Equatorial Guinea	..	169			0.22	0.40	5.7	5.9	43	43
Eritrea	..	..	..	..	..	3.57	..	5.8	..	43
Estonia	..	4007	2.1	-9.2	1.48	1.49	2.0	1.3	15	10
Ethiopia	..	5287	2.3	..	37.72	56.40	6.6	7.0	47	47
Faeroe Islands	..	..			..	0.05	..	..	..	..
Fiji	1204	2068			0.63	0.78	3.5	2.7	30	23
Finland	51306	125432	3.3	-0.5	4.78	5.11	1.6	1.8	13	13
France	664597	1536089	2.4	1.0	53.88	58.06	1.9	1.7	15	12
French Guiana	213	..			0.07	0.15	..	..	28	..
French Polynesia	..	..			0.16	0.23	..	3.0	31	27
Gabon	4285	4691	0.5	-2.5	0.69	1.08	4.5	5.2	33	39
Gambia, The	233	384	3.4	1.6	0.64	1.11	6.5	5.3	48	41
Georgia	..	2325	0.5	-26.9	5.07	5.40	2.3	..	18	11
Germany	..	2415764	2.2	..	78.30	81.87	1.6	1.2	11	9
Ghana	4445	6315	3.0	4.3	10.74	17.08	6.5	5.1	45	37
Greece	40147	90550	1.4	1.1	9.64	10.47	2.2	1.4	15	10
Greenland	..	..			..	0.06	..	..	..	..
Grenada	75	276			0.09	0.09	..	..	..	..
Guadeloupe	1426	..			0.33	0.42	2.8	2.1	20	19
Guam	..	..			0.11	0.15	..	2.7	28	22
Guatemala	7879	14489	0.8	4.0	6.92	10.62	6.2	4.7	43	35
Guinea	..	3686	4.5	3.5	4.46	6.59	6.1	6.5	46	48
Guinea-Bissau	105	257	..	3.8	0.81	1.07	6.0	6.0	43	45
Guyana	591	595			0.76	0.84	3.5	2.4	30	23
Haiti	1462	2043	-0.2	-6.5	5.35	7.17	5.9	4.4	37	35
Honduras	2566	3937	2.7	3.5	3.66	5.92	6.5	4.6	43	35
Hong Kong	28495	143670	6.9	5.6	5.04	6.19	2.0	1.2	17	11
Hungary	22163	43712	1.6	-1.0	10.71	10.23	1.9	1.6	14	11
Iceland	3373	7052			0.23	0.27	2.5	2.1	20	16

Death rate per 1,000 people		Average annual population growth %	GNP per capita $	GNP per capita PPP $	GNP per capita growth annual %	Gini index	Poverty % of people living on less than $1 a day (PPP)	Gross domestic savings % of GDP		Gross domestic investment % of GDP	
1980	1995	1985-95	1995	1995	1985-95		1981-95	1980	1995	1980	1995
16	16	3.1	680	2 050	-3.2	..	..	36	23	36	27
4	4	2.5	2610	5 850	2.9	46.1	18.9	16	24	27	25
16	12	3.4	660	1 580	-4.3	36.9	17.7	20	20	27	13
..	11	0.2	3250	..	..	..	..	..	1	..	14
6	7	0.9	..	..	..	..	..	..	..	..	..
8	7	1.2	..	..	4.6	..	..	20	..	38	..
13	11	0.0	3870	9 770	-1.8	26.6	3.1	..	20	..	25
11	12	0.2	29890	21 230	1.5	24.7	..	17	21	19	16
20	16	4.8	..	..	..	..	..	..	-5	..	12
5	6	-0.1	2990	..	4.0	..	..	..	..	..	..
7	5	2.0	1460	3 870	2.1	50.5	19.9	15	16	25	20
9	6	2.3	1390	4 220	0.8	46.6	30.4	26	21	26	19
13	8	2.2	790	3 820	1.1	32	7.6	15	6	28	17
11	6	1.8	1610	2 610	2.9	..	..	14	6	13	19
22	17	2.5	380	..	2.3	..	..	..	..	..	..
..	16	..	..	..	..	..	..	..	-27	..	20
12	14	-0.3	2860	4 220	-4.3	39.5	6.0	..	18	..	27
20	17	2.6	100	450	-0.5	..	33.8	3	7	9	17
..	..	..	..	..	..	..	..	..	..	..	..
6	5	1.1	2440	5 780	2.3	..	..	27	12	32	14
9	10	0.4	20580	17 760	-0.2	25.6	..	28	24	29	16
10	9	0.5	24990	21 030	1.5	32.7	..	23	20	24	18
7	..	5.4	..	..	..	..	..	..	..	..	..
6	5	2.7	..	..	..	..	..	..	..	..	..
18	15	2.9	3490	..	-1.6	..	..	61	48	28	26
24	18	4.0	320	930	0.3	..	..	1	..	26	..
9	9	0.2	440	1 470	-17.0	..	..	..	-9	29	3
12	11	0.5	27510	20 070	..	28.1	..	..	23	..	21
15	10	3.0	390	1 990	1.5	33.9	..	5	10	6	19
9	9	0.5	8210	11 710	1.2	..	..	23	7	29	19
..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	2980	..	..	..	..	-10	25	26	32
7	6	1.8	..	..	..	..	..	..	..	..	..
4	4	2.1	..	..	..	..	..	..	..	..	..
11	7	2.9	1340	3 340	0.3	59.6	53.3	13	..	16	..
24	20	2.8	550	..	1.4	46.8	26.3	..	11	..	15
25	25	1.9	250	790	1.8	56.2	87.0	-6	-5	30	16
7	8	0.6	590	2 420	0.8	..	..	20	..	33	..
15	12	2.0	250	910	-5.2	..	..	8	..	17	..
10	6	3.0	600	1 900	0.2	52.7	46.5	17	14	25	23
5	5	1.3	22990	22 950	4.8		..	34	33	35	35
14	14	-0.3	4120	6 410	-1.0	27	0.7	29	21	31	23
7	7	1.1	24950	20 460	0.3		..	26	19	26	15

Table1. Indicators to chapters 1–6 (continued)

COUNTRY or REGION	Gross domestic product $ millions 1980	1995	Average annual GDP growth % 1980-90	1990-95	Population millions 1980	1995	Fertility rate births per woman 1980	1995	Birth rate per 1,000 people 1980	1995
India	172321	324082	5.8	4.6	687.33	929.36	5.0	3.2	35	26
Indonesia	78013	198079	6.1	7.6	148.30	193.28	4.3	2.7	34	23
Iran, Islamic Rep.	92664	..	1.5	4.2	39.12	64.12	6.1	4.5	44	32
Iraq	47562	..	-6.8	..	13.01	20.10	6.4	5.4	41	38
Ireland	20080	60780	3.1	4.7	3.40	3.59	3.2	1.9	22	14
Isle of Man	..	..			..	..	..	..	..	..
Israel	22579	91965	3.5	6.4	3.88	5.52	3.2	2.4	24	20
Italy	452648	1086932	2.4	1.0	56.43	57.20	1.6	1.2	11	9
Jamaica	2679	4406	2.0	2.9	2.13	2.52	3.7	2.4	28	22
Japan	1059253	5108540	4.0	1.0	116.78	125.21	1.8	1.5	14	10
Jordan	..	..	-1.5	8.2	2.18	4.21	6.8	4.8	..	31
Kazakhstan	..	21413	..	-11.9	14.91	16.61	2.9	2.3	24	18
Kenya	7265	9096	4.2	1.4	16.56	26.69	7.8	4.7	51	35
Kiribati	28	43			0.06	0.08	4.6	3.8	..	27
Korea, Dem. Rep.	..	..	..	..	18.26	23.87	3.0	2.2	22	22
Korea, Rep.	63661	455476	9.4	7.2	38.12	44.85	2.6	1.8	22	16
Kuwait	28639	26650	0.9	12.2	1.38	1.66	5.3	3.0	37	22
Kyrgyz Republic	..	3054	..	-14.7	3.63	4.52	4.1	3.3	30	25
Lao PDR	..	1760	..	6.5	3.21	4.88	6.7	6.5	45	44
Latvia	..	5690	3.4	-13.7	2.54	2.52	2.0	1.3	15	9
Lebanon	..	11143	..	..	2.83	4.01	4.0	2.8	30	26
Lesotho	368	1029	4.3	7.5	1.37	1.98	5.6	4.6	41	33
Liberia	1117	..			1.88	2.73	6.8	6.5	47	47
Libya	35545	..	-5.7	..	3.04	5.41	7.3	6.1	46	41
Liechtenstein	..	..			..	0.03	..	..	..	..
Lithuania	..	7089	..	-9.7	3.41	3.72	2.0	1.5	16	11
Luxembourg	5022	16535			0.36	0.41	1.5	1.7	11	13
Macao	..	7232			0.29	0.45	..	1.8	18	18
Macedonia, FYR	..	1975.4	..	..	1.89	2.12	2.5	2.2	21	16
Madagascar	4042	3198	1.3	0.1	8.71	13.65	6.5	5.8	46	41
Malawi	1238	1465	2.3	0.7	6.14	9.76	7.6	6.6	57	47
Malaysia	24488	85311	5.2	8.7	13.76	20.14	4.2	3.4	31	26
Maldives	42	271			0.16	0.25	6.9	6.6	42	41
Mali	1629	2431	1.8	2.5	6.59	9.79	7.1	6.8	49	49
Malta	1135	..			0.36	0.37	2.0	1.9	15	13
Marshall Islands	..	103			..	0.06	..	..	..	..
Martinique	1444	..			0.33	0.38	2.3	2.0	17	17
Mauritania	709	1068	1.7	4.0	1.55	2.27	6.3	5.2	43	38
Mauritius	1132	3919	6.2	4.9	0.97	1.13	2.7	2.2	24	19
Mayotte	..	..			..	0.11	..	..	..	..
Mexico	194914	250038	1.0	1.1	66.56	91.83	4.5	3.0	33	26
Micronesia, Fed. Sts.	..	..			0.07	0.11	..	4.6	..	33
Moldova	..	3518	..	..	4.00	4.34	2.4	2.0	20	14

Death rate per 1,000 people		Average annual population growth %	GNP per capita $	GNP per capita PPP $	GNP per capita growth annual %	Gini index	Poverty % of people living on less than $1 a day (PPP)	Gross domestic savings % of GDP		Gross domestic investment % of GDP	
1980	1995	1985-95	1995	1995	1985-95		1981-95	1980	1995	1980	1995
13	9	1.9	340	1 400	3.1	33.8	52.5	17	22	21	25
12	8	1.7	980	3 800	6.0	31.7	14.5	37	36	24	38
11	6	3.2	..	5 470	0.5	..	..	26	34	30	29
9	8	2.7	..	..	..	..	..	..	..	..	..
10	9	0.1	14710	15 680	5.2	35.9	..	14	27	27	13
..	..	..	..	..	..	..	..	..	..	..	..
7	6	2.7	15920	16 490	2.5	35.5	..	11	13	22	24
10	10	0.1	19020	19 870	1.7	31.2	..	24	22	27	18
7	6	0.9	1510	3 540	3.7	41.1	4.7	16	10	16	17
6	7	0.4	39640	22 110	2.9	..	..	31	31	32	29
..	5	4.7	1510	4 060	-2.8	43.4	2.5	..	..	..	..
8	9	0.5	1330	3 010	-8.6	32.7	..	..	19	..	22
13	9	2.9	280	1 380	0.1	57.5	50.2	18	13	29	19
..	9	2.0	920	..	-0.3	..	..	-54	..	33	..
6	6	1.8	..	..	..	..	..	..	..	..	..
6	6	0.9	9700	11 450	7.6	..	..	25	36	32	37
4	3	-0.3	17390	23 790	0.9	..	..	58	18	14	12
9	8	1.2	700	1 800	-6.9	..	18.9	..	10	..	16
20	14	3.1	350	..	2.7	30.4	..	..	..	..	..
13	16	-0.4	2270	3 370	-6.6	27	..	..	16	26	21
9	8	2.3	2660	..	2.7	..	..	..	..	..	..
15	11	2.4	770	1 780	1.5	56	50.4	-60	-9	42	87
17	19	2.2	..	..	..		..	27	..	27	..
12	7	3.6	..	..	..	..	..	57	..	22	..
..	..	..	..	..	..		..	..	..	..	..
10	12	0.5	1900	4 120	-11.7	33.6	2.1	..	16	..	19
11	9	1.1	41210	37 930	1.0		..	23	..	23	..
7	5	3.9	..	..	..		..	..	..	..	..
7	7	0.7	860	..	..	..	..	..	4	..	15
16	11	3.1	230	640	-2.0	43.4	72.3	-1	3	15	11
23	20	3.1	170	750	-0.7	..	..	11	4	25	15
6	5	2.5	3890	9 020	5.7	48.4	5.6	33	37	30	41
13	8	3.2	990	3 080	6.7		..	..	..	..	..
22	17	2.8	250	550	0.6	..	..	-2	10	17	26
9	7	0.8	..	..	5.1		..	19	..	25	..
..	..	..	..	..	..		..	..	..	..	..
7	7	1.1	..	..	..		..	..	..	..	..
19	14	2.5	460	1 540	0.5	42.4	31.4	7	11	36	15
6	7	1.0	3380	13 210	5.7	..	..	10	22	21	25
..	..	..	..	..	..		..	..	..	..	..
7	5	2.1	3320	6 400	0.1	50.3	14.9	25	19	27	15
..	7	2.2	2010	..	..	..	..	..	..	..	..
10	11	0.4	920	..	-8.2	34.4	6.8	..	-1	..	7

Table1. Indicators to chapters 1–6 (continued)

COUNTRY or REGION	Gross domestic product $ millions 1980	1995	Average annual GDP growth % 1980-90	1990-95	Population millions 1980	1995	Fertility rate births per woman 1980	1995	Birth rate per 1,000 people 1980	1995
Monaco	..	..			..	0.03	..	..	..	..
Mongolia	2329	861	5.5	-3.3	1.66	2.46	5.3	3.4	38	27
Morocco	18821	32412	4.2	1.2	19.38	26.56	5.4	3.4	38	27
Mozambique	2028	1469	-0.2	7.1	12.10	16.17	6.5	6.2	46	44
Myanmar	..	..	0.6	5.7	33.82	45.11	5.1	3.4	36	28
Namibia	2190	3033	1.1	3.8	1.03	1.55	5.9	5.0	41	37
Nepal	1946	4232	4.6	5.1	14.64	21.46	6.4	5.3	44	36
Netherlands	171861	395900	2.3	1.8	14.15	15.46	1.6	1.6	13	12
Netherlands Antilles	986	..			0.17	0.20	2.3	2.1	..	19
New Caledonia	..	..			0.14	0.19	3.8	2.5	26	21
New Zealand	22469	57070	1.8	3.6	3.11	3.60	2.1	2.1	16	16
Nicaragua	2144	1911	-2.0	1.1	2.80	4.38	6.2	4.1	45	33
Niger	2538	1860	-1.1	0.5	5.52	9.03	7.4	7.4	51	52
Nigeria	93082	40477	1.6	1.6	71.15	111.27	6.9	5.5	50	42
Northern Mariana Islands	..	..			..	0.07	..	..	..	..
Norway	63283	145954	2.9	3.5	4.09	4.35	1.7	1.9	12	14
Oman	5982	12102	8.3	6.0	1.10	2.20	9.9	7.0	45	44
Pakistan	23690	60649	6.3	4.6	82.58	129.91	7.0	5.2	47	38
Panama	3592	7413	0.3	6.3	1.96	2.63	3.7	2.7	29	23
Papua New Guinea	2548	4901	1.9	9.3	3.09	4.30	5.7	4.8	37	33
Paraguay	4579	7744	2.5	3.1	3.14	4.83	4.8	4.0	36	31
Peru	20661	57424	-0.2	5.3	17.30	23.82	4.5	3.1	35	26
Philippines	32500	74180	1.0	2.3	48.32	68.60	4.8	3.7	35	29
Poland	57068	117663	1.9	2.4	35.58	38.61	2.3	1.6	19	13
Portugal	28526	102337	2.9	0.8	9.77	9.93	2.2	1.4	16	11
Puerto Rico	14436	..	4.1	3.0	3.21	3.72	2.6	2.1	23	17
Qatar	7829	7612			0.23	0.64	5.6	3.9	29	21
Reunion	..	..			0.51	0.65	3.1	2.2	25	19
Romania	..	35533	0.5	-1.4	22.20	22.69	2.4	1.4	18	11
Russian Federation	..	346383	1.9	-9.8	139.01	148.20	1.9	1.4	16	9
Rwanda	1163	1128	2.3	-12.8	5.16	6.40	8.3	6.2	51	41
São Tomé and Principe	43	45			0.09	0.13	..	4.8	39	35
Saudi Arabia	156487	125501	-1.2	1.7	9.37	18.98	7.3	6.2	43	36
Senegal	3016	4867	3.1	1.9	5.54	8.47	6.7	5.7	46	40
Seychelles	147	..			0.06	0.07	..	2.4	29	22
Sierra Leone	1166	824	1.6	-4.2	3.24	4.20	6.5	6.5	49	48
Singapore	11718	83695	6.4	8.7	2.28	2.99	1.7	1.7	17	16
Slovak Republic	..	17414	2.0	-2.8	4.98	5.37	2.3	1.5	19	12
Slovenia	..	18550	..	..	1.90	1.99	2.1	1.3	15	10
Solomon Islands	116	357			0.23	0.38	6.7	5.1	44	37
Somalia	604	..			6.71	9.49	7.0	7.0	50	49
South Africa	78744	136035	1.3	0.6	29.17	41.46	4.9	3.9	36	30

Death rate per 1,000 people		Average annual population growth %	GNP per capita $	GNP per capita PPP $	GNP per capita growth annual %	Gini index	Poverty % of people living on less than $1 a day (PPP)	Gross domestic savings % of GDP		Gross domestic investment % of GDP	
1980	1995	1985-95	1995	1995	1985-95		1981-95	1980	1995	1980	1995
..	..	..	..	..	..	..	..	..	..	..	..
11	7	2.5	310	1 950	-3.8	..	..	27	..	46	..
12	7	2.0	1110	3 340	0.8	39.2	1.1	14	13	24	21
20	18	1.8	80	810	3.6	..	..	1	5	22	60
14	10	1.8	..	..	0.4	..	..	18	..	21	..
14	12	2.7	2000	4 150	2.8	..	..	39	..	29	..
18	12	2.5	200	1 170	2.4	36.7	53.1	11	12	18	23
8	9	0.6	24000	19 950	1.8	31.5	..	22	29	22	22
..	6	1.0	..	..	..	..	..	..	..	..	..
7	5	2.0	..	..	..	..	..	..	..	..	..
9	8	1.0	14340	16 360	0.6	..	..	20	26	21	24
11	6	3.1	380	2 000	-5.8	50.3	43.8	-2	..	17	..
23	19	3.2	220	750	-2.1	36.1	61.5	23	..	37	..
18	13	2.9	260	1 220	1.2	37.5	28.9	32	..	22	..
..	..	..	..	..	..	..	..	..	..	..	..
10	10	0.5	31250	21 940	1.6	25.2	..	31	29	25	23
10	4	4.5	4820	8 140	0.3	..	..	47	..	22	..
15	8	3.0	460	2 230	1.2	31.2	11.6	7	16	18	19
6	5	1.9	2750	5 980	-0.4	56.6	25.6	..	22	..	24
14	10	2.2	1160	2 420	2.1	..	..	15	39	25	24
7	5	2.7	1690	3 650	1.1	..	..	18	..	32	..
11	6	2.1	2310	3 770	-1.6	44.9	49.4	32	11	29	17
9	7	2.3	1050	2 850	1.5	40.7	27.5	24	15	29	23
10	10	0.4	2790	5 400	-0.4	27.2	6.8	23	19	26	17
10	10	-0.1	9740	12 670	3.7	..	..	21	18	34	28
6	8	1.0	..	..	2.1	..	..	10	..	17	..
7	4	5.8	11600	17 690	-2.6	..	..	..	..	..	..
6	5	1.6	..	..	..		..	..	..	..	..
10	12	0.0	1480	4 360	-4.0	25.5	17.7	35	21	40	26
11	15	0.3	2240	4 480	-5.1	49.6	1.1	..	26	22	25
19	22	0.6	180	540	-5.0	28.9	45.7	5	-7	16	13
10	7	2.3	350	..	-2.1	..	..	-15	..	34	..
9	5	4.3	7040	8 820	-1.9	..	..	62	..	22	..
20	14	2.8	600	1 780	-1.2	54.1	54.0	0	10	15	16
7	7	1.2	6620	..	4.2	..	..	27	..	38	..
29	29	1.6	180	580	-3.4	..	..	2	-9	18	6
5	5	1.8	26730	22 770	6.2	..	..	38	..	46	33
10	10	0.3	2950	3 610	-2.6	19.5	12.8	..	30	..	28
10	10	0.1	8200	..	..	28.2	..	..	21	..	22
10	7	3.1	910	2 190	2.2	..	..	7	..	36	..
22	18	1.9	..	..	..	..	..	-13	..	42	..
12	8	2.3	3160	5 030	-1.0	58.4	23.7	36	18	28	18

Table1. Indicators to chapters 1–6 (continued)

COUNTRY or REGION	Gross domestic product $ millions 1980	1995	Average annual GDP growth % 1980-90	1990-95	Population millions 1980	1995	Fertility rate births per woman 1980	1995	Birth rate per 1,000 people 1980	1995
Spain	211543	558617	3.2	1.1	37.39	39.20	2.2	1.2	15	10
Sri Lanka	4024	12915	4.2	4.8	14.74	18.11	3.5	2.3	28	19
St. Kitts and Nevis	48	225			0.04	0.04	..	2.4	27	20
St. Lucia	133	556			0.12	0.16	4.4	2.9	31	28
St. Vincent and the Grenadines	59	256			0.10	0.11	..	2.3	28	22
Sudan	6760	..	0.6	6.8	18.68	26.71	6.5	4.8	45	35
Suriname	891	335			0.36	0.41	4.3	2.6	28	24
Swaziland	582	1073			0.57	0.90	6.2	4.6	44	34
Sweden	125557	228679	2.3	-0.1	8.31	8.83	1.7	1.7	12	13
Switzerland	101646	300508	2.2	0.1	6.32	7.04	1.5	1.5	12	12
Syrian Arab Republic	13062	16783	1.5	7.4	8.70	14.11	7.4	4.8	46	39
Tajikistan	..	1999	..	-18.1	3.97	5.84	5.6	4.2	37	28
Tanzania	..	3602	3.8	3.2	18.58	29.65	6.7	5.8	47	42
Thailand	32354	167060	7.6	8.4	46.72	58.24	3.5	1.8	28	17
Togo	1136	1263	1.8	-3.4	2.62	4.09	6.6	6.4	45	44
Tonga	52	170			0.09	0.10	4.8	3.3	29	28
Trinidad and Tobago	6236	5327	-2.5	1.0	1.08	1.29	3.3	2.1	29	19
Tunisia	8743	18035	3.3	3.9	6.38	8.99	5.2	2.9	35	24
Turkey	68790	164789	5.3	3.2	44.44	61.06	4.3	2.7	32	23
Turkmenistan	..	3917	..	-10.6	2.86	4.51	4.9	3.8	34	31
Uganda	1267	5655	3.1	6.6	12.81	19.17	7.2	6.7	49	49
Ukraine	..	80127	..	-14.3	50.04	51.55	2.0	1.5	15	10
United Arab Emirates	29625	39107	-2.0	..	1.04	2.46	5.4	3.6	30	20
United Kingdom	537382	1105822	3.2	1.4	56.33	58.53	1.9	1.7	13	13
United States	2708150	6952020	3.0	2.6	227.76	263.12	1.8	2.1	16	15
Uruguay	10132	17847	0.4	4.0	2.91	3.18	2.7	2.2	19	16
Uzbekistan	..	21556	..	-4.4	15.95	22.77	4.8	3.7	34	29
Vanuatu	113	..			0.12	0.17	..	5.0	..	35
Venezuela	69377	75016	1.1	2.4	14.87	21.67	4.1	3.1	33	25
Vietnam	..	20351	..	8.3	53.70	73.48	5.0	3.1	36	26
Virgin Islands (U.S.)	728	..			0.10	0.10	..	2.4	26	19
West Bank and Gaza	..	..	..	..	1.20	2.15	..	..	..	..
Western Samoa	112	..			0.16	0.17	..	4.2	..	33
Yemen, Rep.	..	4790	..	..	8.54	15.27	7.9	7.4	53	48
Yugoslavia, FR (Serbia/Montenegro)	..	..	..	..	9.52	10.52	2.3	1.9	18	14
Zaire	14391	..	1.7	..	27.01	43.85	6.6	..	48	..
Zambia	3884	4073	0.8	-0.2	5.74	8.98	7.0	5.7	50	45
Zimbabwe	5355	6522	3.5	1.0	7.01	11.01	6.8	3.8	49	31

Death rate per 1,000 people		Average annual population growth %	GNP per capita $	GNP per capita PPP $	GNP per capita growth annual %	Gini index	Poverty % of people living on less than $1 a day (PPP)	Gross domestic savings % of GDP		Gross domestic investment % of GDP	
1980	1995	1985-95	1995	1995	1985-95		1981-95	1980	1995	1980	1995
8	9	0.2	13580	14 520	2.6	32.5	..	21	22	23	21
6	6	1.3	700	3 250	2.7	30.1	4.0	11	14	34	25
11	12	-0.4	5170	9 410	4.6	..	..	8	..	38	..
7	6	1.4	3370	..	3.9	..	..	7	..	34	..
7	7	0.8	2280	..	3.9	..	..	-2	..	39	..
17	12	2.2	..	..	0.6	..	..	3	..	15	..
8	6	0.3	880	2 250	0.7		..	21	..	26	..
15	9	3.1	1170	2 880	0.6	..	..	6	9	30	17
11	10	0.6	23750	18 540	-0.1	25.0	..	19	19	21	14
9	9	0.8	40630	25 860	0.2	36.1	..	20	27	24	23
9	5	3.1	1120	5 320	1.0	..	..	10	..	28	..
8	7	2.4	340	920	-13.0	..	..	..	18	..	17
15	14	3.1	120	640	0.9	38.1	16.4	..	-7	..	31
8	6	1.3	2740	7 540	8.4	46.2	0.1	23	36	29	43
16	15	3.0	310	1 130	-2.8	..	..	25	9	30	14
9	6	0.9	1630	..	0.2	..	..	-7	..	30	..
7	6	0.9	3770	8 610	-1.6	..	..	42	25	31	14
9	6	2.1	1820	5 000	1.8	40.2	3.9	24	20	29	24
10	7	1.9	2780	5 580	2.2	..	..	11	20	18	25
8	7	3.3	920	..	-9.6	35.8	5.0	..	..	..	..
18	19	3.0	240	1 470	2.8	40.8	50.0	0	7	6	16
11	14	0.1	1630	2 400	-9.2	25.7	..	..	..	..	..
5	3	5.8	17400	16 470	-3.5	..	..	72	..	28	..
12	11	0.3	18700	19 260	1.4	32.6	..	19	15	17	16
9	8	0.9	26980	26 980	1.3	40.1	..	19	..	20	..
10	10	0.6	5170	6 630	3.3	..	..	12	13	17	14
8	6	2.3	970	2 370	-3.9	..	..	..	..	..	..
..	7	2.7	1200	2 290	-1.1		..	..	..	..	..
6	5	2.4	3020	7 900	0.5	53.8	11.8	33	21	26	16
8	7	2.2	240	..	4.2	35.7	..	..	16	..	27
..	5	-0.8	..	..	..		..	..	..	..	..
..	..	4.6	..	..	..	..	..	..	..	..	..
..	7	1	1120	2 030	-0.4	..	..	-4	..	33	..
19	13	4.2	260	..	..	..	..	..	..	..	..
10	10	0.5	..	..	..	..	..	..	..	..	..
17	..	3.2	120	490	-8.5	..	..	10	..	10	..
15	18	2.6	400	930	-1.0	46.2	84.6	19	3	23	12
13	10	2.8	540	2 030	-0.6	56.8	41.0	16	..	19	..

Table1. Indicators to chapters 1–6 (continued)

COUNTRY or REGION	Gross domestic product $ millions		Average annual GDP growth %		Population millions		Fertility rate births per woman		Birth rate per 1,000 people	
	1980	1995	1980-90	1990-95	1980	1995	1980	1995	1980	1995
World	**10768090**	**27846241**	**3.1**	**2.0**	**4429.39**	**5672.99**	**3.7**	**2.9**	**27**	**23**
Low Income	739236	1352256	6.0	6.8	2377.58	3179.93	4.3	3.2	31	26
Excl. China & India	390472	316889	2.7	1.8	709.02	1050.33	6.3	5.0	44	37
Middle income	2461307	4033376	1.9	0.1	1235.94	1590.91	3.8	3.0	29	22
Lower middle income	..	2025853	2.3	-1.5	904.85	1152.56	3.7	3.0	28	22
Upper middle income	989317	1981511	1.3	2.6	331.08	438.35	3.9	2.9	30	23
Low & middle income	3192729	5393142	2.8	2.1	3613.52	4770.84	4.1	3.1	30	25
East Asia & Pacific	464719	1341265	7.6	10.3	1359.97	1706.44	3.1	2.2	22	19
Europe & Central Asia	..	1103330	2.3	-6.5	437.46	487.64	2.5	2.0	19	14
Latin America & Caribbean	758569	1688195	1.7	3.2	358.22	477.94	4.1	2.8	31	24
Middle East & N. Africa	463031	..	0.2	2.3	174.74	272.44	6.1	4.2	42	32
South Asia	219283	439203	5.7	4.6	902.59	1243.03	5.3	3.5	37	28
Sub-Saharan Africa	292557	296748	1.7	1.4	380.55	583.35	6.7	5.7	47	41
High Income	7758074	22485548	3.2	2.0	815.87	902.15	1.9	1.7	15	13

Death rate per 1,000 people		Average annual population growth %	GNP per capita $	GNP per capita PPP $	GNP per capita growth annual %	Gini index	Poverty % of people living on less than $1 a day (PPP)	Gross domestic savings % of GDP		Gross domestic investment % of GDP	
1980	1995	1985-95	1995	1995	1985-95		1981-95	1980	1995	1980	1995
12	**9**	**1.6[a]**	**4880**		**0.8**			**25**	**21**	**24**	**23**
13	10	1.9	430		3.8			22	30	24	32
17	13	2.6	300		-1.4			..	10	..	20
10	8	1.7	2390		0.7			..	25	..	25
10	8	1.6	1670		-1.3			..	..	..	..
9	7	1.9	4260		0.2			32	23	25	21
12	9	1.9	1090		0.4			30	22	26	27
8	7	1.5	800		7.2			28	38	28	39
10	11	0.7	2220		-3.5			..	..	..	..
8	7	1.9	3320		0.3			23	19	25	20
12	7	3.0	1780		-0.3			45	..	26	..
14	9	2.1	350		2.9			15	20	20	23
18	15	2.8	490		-1.1			27	16	23	19
9	8	0.7	24930		1.9			23	21	23	21

a. 1980–95.

Table2. Indicators to chapters 7–10

COUNTRY or REGION	Adult illiteracy % of people 15 and above, 1995			Child labor % of child. 10-14 in the labor force		Public expenditure on education % of GNP		School enrollment as a % of age group						Life expectency at birth, 1995		
								Primary		Secondary		Tertiary				
	male	female	total	1980	1995	1980	1995	1980	1995	1980	1995	1980	1995	male	female	total
Afghanistan	53	85	69	28	25	..	..	..	..	..	..	..	..	44	45	44
Albania	..	..	..	4	1	..	3.4	113	87	67	35	8	10	70	76	73
Algeria	26	51	38	7	2	7.8	..	94	107	33	62	6	11	68	71	70
American Samoa	..	..	..	..	..			..	..	..	..	..	..	..	..	..
Andorra	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Angola	..	..	..	30	27	..	..	174	88	21	14	0	1	45	48	47
Antigua and Barbuda	..	..	..	..	..	..	..	..	..	..	..	..	..	72	78	75
Argentina	4	4	4	8	5	2.7	4.5	106	108	56	72	22	38	69	76	73
Armenia	..	..	..	0	0	..	..	..	82	..	79	30	49	68	74	71
Aruba	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Australia	..	..	..	0	0	5.5	5.6	112	108	71	147	26	72	74	80	77
Austria	..	..	..	0	0	5.6	5.5	99	101	99	104	26	45	74	80	77
Azerbaijan	..	..	..	0	0	..	3.0	115	104	93	74	24	20	66	75	70
Bahamas, The	2	2	2	0	0	..	..	..	..	..	..	..	..	70	77	73
Bahrain	11	21	15	0	0	..	..	..	..	..	..	..	..	71	75	72
Bangladesh	51	74	62	35	30	1.5	2.3	61	92	18	..	3	..	57	58	58
Barbados	2	3	3	0	0	..	..	..	..	..	..	..	..	73	78	..
Belarus	..	..	..	0	0	5.2	5.6	104	97	98	..	39	..	64	75	70
Belgium	..	..	..	0	0	6.1	5.7	104	103	91	144	26	49	73	80	77
Belize	..	..	..	4	2	..	..	..	..	..	..	..	..	73	76	70
Benin	51	74	63	30	28	..	3.1	67	72	16	16	1	3	49	52	50
Bermuda	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bhutan	44	72	58	63	55	..	..	..	..	..	..	..	..	..	..	..
Bolivia	10	24	17	19	14	4.4	6.6	87	..	37	..	16	..	59	62	60
Bosnia and Herzegovina	..	..	..	1	0	..	..	..	..	..	..	..	..	..	..	..
Botswana	20	40	30	26	17	..	9.6	91	115	19	56	1	4	50	53	68
Brazil	17	17	17	19	16	3.6	..	98	112	33	54	11	11	63	71	67
Brunei	7	17	12	0	0	..	..	..	..	..	..	..	..	73	78	75
Bulgaria	..	..	..	0	0	4.5	4.2	98	94	84	78	16	39	68	75	71
Burkina Faso	71	91	81	71	51	2.6	3.6	17	38	3	8	0	1	45	47	49
Burundi	51	78	65	50	49	..	2.8	26	70	3	7	1	1	45	48	49
Cambodia	..	..	..	27	25	..	..	..	122	32	27	1	2	52	54	53
Cameroon	25	48	37	34	25	3.2	..	98	88	18	27	2	..	55	58	57
Canada	..	..	..	0	0	6.9	7.3	99	102	88	106	57	103	76	82	78
Cape Verde	19	..	28	16	14	..	..	..	..	..	..	..	..	65	67	65
Cayman Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Central African Republic	32	48	40	39	31	..	..	71	56	14	10	1	1	46	51	48
Chad	38	65	52	42	38	..	2.2	..	55	..	9	..	1	47	50	48
Channel Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	74	82	78
Chile	5	5	5	0	0	4.6	2.9	109	99	53	69	12	28	72	78	72
China	10	27	19	30	12	2.5	2.3	113	118	46	67	2	5	68	71	69

Under-five mortality rate per 1,000 live births		Age dependency ratio		Smoking prevalence (% of adult)		Agri-culture % of GDP	Industry % of GDP	Services % of GDP	Urban population % of total population		Motor vehicles per 1,000 people		Passenger cars per 1,000 people		Forest area thousand sq.km
				male	female										
1980	1995	1980	1995	1985-95	1985-95	1995	1995	1995	1980	1995	1980	1996	1980	1996	1995
..	237	0.8	0.9	..	..	..	..	..	16	20	..	..	..	..	..
..	37	0.7	0.6	50	8	56	21	23	34	37	..	31	..	20	10
139	42	1	0.7	53	10	13	47	41	43	56	..	53	30	25	19
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	209	0.9	1	..	..	12	59	28	21	32	..	21	..	19	222
..	23	..	0.5	..	..	..	..	..	31	35	..	..	..	..	..
38	27	0.6	0.6	40	23	6	31	63	83	88	155	154	..	127	339
..	24	0.6	0.6	..	..	44	35	20	66	69	..	2	..	0	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	8	0.5	0.5	29	21	3	28	70	86	85	502	604	401	485	409
..	7	0.6	0.5	42	27	2	34	63	55	56	330	495	297	458	39
..	31	0.7	0.6	..	..	27	32	41	53	56	..	48	..	36	10
..	18	0.7	0.5	..	..	..	..	..	75	87	..	..	..	..	..
..	23	0.6	0.6	..	..	1	43	56	81	90	..	..	..	..	..
207	115	1	0.9	60	15	31	18	52	11	18	..	1	..	0	10
..	12	0.7	0.5	..	..	..	..	..	40	48	..	..	..	..	..
..	20	0.5	0.5	..	..	13	35	52	56	71	..	101	..	101	74
..	10	0.5	0.5	31	19	2	..	..	95	97	349	469	..	424	7
..	46	1.1	0.8	..	..	13	25	22	49	47	..	..	..	..	..
205	156	0.9	1	..	..	34	12	53	32	42	..	8	..	7	46
..	..	..	..	..	..	..	..	..	100	..	..	..	..	..	..
..	175	0.8	0.8	..	..	..	..	..	..	..	..	..	..	..	..
171	96	0.9	0.8	50	21	..	..	..	46	58	19	48	..	29	483
..	..	0.5	0.5	..	..	..	..	..	36	49	..	24	..	22	27
80	74	1	0.8	21	..	5	46	48	15	31	27	45	9	15	139
86	57	0.7	0.6	40	25	14	37	49	66	78	85	79	75	84	5511
..	11	0.7	0.6	..	..	..	..	..	60	59	..	..	..	..	..
..	19	0.5	0.5	49	17	13	34	53	61	71	..	234	92	204	32
241	164	0.9	1	..	..	34	27	39	9	27	..	5	..	4	43
195	162	0.9	1	..	..	56	18	26	4	8	..	6	..	..	3
..	158	0.9	0.9	..	..	51	14	34	12	21	..	6		5	98
172	86	0.9	0.9	..	..	39	23	38	31	45	8	12		7	196
..	8	0.5	0.5	31	29	..	..	..	76	77	548	559	417	440	2446
..	68	1.1	0.9	..	..	..	..	..	24	54	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
193	160	..	0.9	..	..	44	13	43	35	39	8	0	..	0	299
206	197	0.8	0.9	..	..	44	22	35	19	21	..	4	..	2	110
..	9	..	0.5	..	..	14	32	54	32	29	..	..	..	..	..
37	15	0.6	0.6	38	25	..	..	..	81	86	61	110	45	71	79
60	43	0.7	0.5	61	7	21	48	31	19	30	2	8	..	3	1333

Table2. Indicators to chapters 7–10 (continued)

COUNTRY or REGION	Adult illiteracy % of people 15 and above, 1995			Child labor % of child. 10-14 in the labor force		Public expenditure on education % of GNP		School enrollment as a % of age group						Life expectency at birth, 1995		
								Primary		Secondary		Tertiary				
	male	female	total	1980	1995	1980	1995	1980	1995	1980	1995	1980	1995	male	female	total
Colombia	9	9	9	12	7	1.9	3.5	124	114	41	67	9	17	67	73	70
Comoros	36	50	43	45	39	..	..	..	..	..	..	..	..	54	58	56
Congo	17	33	25	27	26	7.0	5.9	141	114	74	53	5	..	49	54	51
Costa Rica	5	5	5	10	5	7.8	4.5	105	107	48	50	21	32	74	79	77
Côte d'Ivoire	50	70	60	28	20	7.2	..	75	69	19	23	3	4	53	56	55
Croatia	..	..	..	0	0	..	5.3	..	86	..	82	19	28	70	78	74
Cuba	4	5	4	0	0	7.2	..	106	105	81	80	17	14	74	78	76
Cyprus	..	..	..	4	0	..	..	..	..	..	..	..	..	75	80	78
Czech Republic	..	..	..	0	0	..	6.1	..	96	..	96	18	21	70	77	73
Denmark	..	..	..	0	0	6.9	8.3	96	99	105	118	28	46	72	78	75
Djibouti	40	67	54	..	..	..	..	..	..	..	..	..	..	48	51	50
Dominica	..	..	..	..	..	..	..	..	..	..	..	..	..	71	75	73
Dominican Republic	18	18	18	25	16	2.2	1.9	118	103	42	41	..	..	68	73	71
Ecuador	8	12	10	9	5	5.5	3.4	117	109	53	50	35	..	67	72	69
Egypt, Arab Rep.	36	61	49	18	11	5.7	5.6	73	100	50	74	16	18	64	66	63
El Salvador	27	30	29	17	15	3.9	2.2	74	88	25	32	13	16	66	72	67
Equatorial Guinea	10	32	21	40	34	..	..	..	..	..	..	..	..	48	51	49
Eritrea	..	..	..	44	40	..	..	..	57	..	19	..	1	49	52	48
Estonia	..	..	..	0	0	..	6.6	98	91	..	86	25	36	65	76	70
Ethiopia	55	75	65	46	42	..	4.7	36	31	8	11	0	1	47	51	49
Faeroe Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fiji	6	11	8	5	0	..	..	..	..	..	..	..	..	70	74	72
Finland	..	..	..	0	0	5.3	7.6	96	100	100	116	32	67	73	80	76
France	..	..	..	0	0	5.0	5.9	111	106	85	111	25	50	74	82	78
French Guiana	52	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
French Polynesia	..	..	..	..	..	..	..	..	..	..	..	..	..	67	73	70
Gabon	26	47	37	29	18	2.7	..	..	142	..	..	..	..	53	56	55
Gambia, The	47	75	61	44	37	3.3	5.5	53	73	11	22	..	2	45	48	46
Georgia	..	..	..	0	0	..	5.2	..	82	..	73	30	38	69	78	73
Germany	..	..	..	0	0	..	4.7	..	102	98	103	34	43	73	79	76
Ghana	24	47	..	16	13	3.1	..	79	76	41	37	2	..	57	61	59
Greece	..	..	..	5	0	..	3.7	103	..	81	95	17	38	75	81	78
Greenland	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	68
Grenada	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Guadeloupe	..	..	..	0	0	..	..	..	..	..	..	..	..	72	79	75
Guam	..	..	..	..	..	..	..	..	..	..	..	..	..	70	76	73
Guatemala	38	51	44	19	16	..	1.7	71	84	18	25	8	8	63	68	66
Guinea	50	78	..	41	34	..	..	36	48	17	12	5	..	44	45	44
Guinea-Bissau	32	58	45	43	39	..	..	68	64	6	..	..	..	42	45	38
Guyana	2	..	2	2	0	..	..	..	..	..	..	..	..	61	67	66
Haiti	52	58	55	33	25	1.5	..	76	..	14	..	1	..	54	57	57
Honduras	27	27	27	14	9	3.2	3.9	98	111	30	32	8	10	64	69	67
Hong Kong	4	12	8	6	0	..	2.8	107	96	64	75	10	..	76	81	79
Hungary	..	..	..	0	0	4.7	6.0	96	97	70	81	14	19	66	74	70

Under-five mortality rate per 1,000 live births		Age dependency ratio		Smoking prevalence (% of adult)		Agri-culture % of GDP	Industry % of GDP	Services % of GDP	Urban population % of total population		Motor vehicles per 1,000 people		Passenger cars per 1,000 people		Forest area thousand sq.km
				male	female										
1980	1995	1980	1995	1985-95	1985-95	1995	1995	1995	1980	1995	1980	1996	1980	1996	1995
58	31	0.8	0.6	35	19	..	..	..	64	73	..	38	12	20	530
..	143	1	1	..	..	39	13	48	21	28	..	..	..	..	..
..	144	0.9	1	..	..	10	38	51	41	59	..	20	..	14	195
29	16	0.7	0.7	35	20	17	24	58	43	50	..	123	20	81	12
157	138	1	1	..	..	31	20	50	35	44	24	32	..	20	55
..	18	0.5	0.5	37	38	12	25	62	50	64		196	..	175	18
22	10	0.7	0.5	39	25	..	..	..	68	76	..	5	..	2	18
..	11	0.5	0.6	..	..	..	..	..	46	54	..	..	..	..	..
..	10	0.6	0.5	43	31	6	39	55	64	65	..	349	..	325	28
..	7	0.5	0.5	37	37	4	33	67	84	85	322	390	271	331	4
..	181	0.9	0.8	..	..	3	20	77	74	83	..	..	..	..	..
..	21	..	0.7	..	..	..	..	..	..	..	..	..	..	..	..
92	44	0.8	0.6	66	14	15	22	64	51	65	36	47	20	28	16
98	45	0.9	0.7	..	..	12	36	52	47	58	..	46	28	41	111
175	76	0.8	0.7	40	1	20	21	59	44	45	..	30	8	23	0
125	42	1	0.8	38	12	14	22	65	42	45	..	77	16	29	1
..	185	0.8	0.9	..	..	..	..	..	27	42	..	..	..	..	..
..	196	..	0.9	..	..	11	20	69	..	17	..	2	..	2	3
..	16	0.5	0.5	52	24	8	28	64	70	73	..	329	..	277	20
213	188	1	1	..	..	57	10	33	11	13	2	1	1	1	136
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	25	0.7	0.6	..	..	..	..	..	38	41	..	..	..	..	..
..	5	0.5	0.5	27	19	6	37	57	60	63	288	431	256	379	200
..	9	0.6	0.5	40	27	2	27	71	73	73	402	524	355	437	150
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	24	0.8	0.6	..	..	..	..	..	60	..	..	..	..	..	..
..	145	0.6	0.8	..	..	..	..	..	36	50	..	36	..	22	179
..	213	0.8	0.8	..	..	28	15	58	18	26	..	15	11	8	1
..	21	0.5	0.5	..	..	67	22	11	52	58	..	87	..	79	30
..	7	0.5	0.5	37	22	..	..	..	83	87	399	528	297	500	107
157	116	0.9	0.9	..	..	46	16	38	31	36	..	8	..	5	90
..	10	0.6	0.5	46	28	21	36	43	58	65	134	312	91	223	65
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	32	..	0.8	..	..	11	19	70	..	..	..	..	..	..	..
..	14	0.7	0.5	..	..	..	..	..	44	52	..	..	..	..	..
..	12	0.6	0.5	..	..	..	..	..	40	38	..	..	..	..	..
140	58	1	0.9	38	25	25	19	56	37	42	..	18	..	9	38
..	220	0.9	1	40	2	24	31	45	19	30	..	5	..	2	64
..	233	0.8	0.9	..	..	46	24	30	17	22	..	12	..	7	23
..	82	0.8	0.6	..	..	..	..	..	31	37	..	..	..	..	..
200	101	0.8	0.8	..	..	44	12	44	24	32	..	7	..	4	0
101	59	1	0.9	36	11	21	33	46	36	48	..	33	..	4	41
12	6	..	..	..	..	0	17	83	92	95	54	78	41	55	..
..	14	0.5	0.5	40	27	8	33	59	57	65	108	273	95	239	17

Table2. Indicators to chapters 7–10 (continued)

COUNTRY or REGION	Adult illiteracy % of people 15 and above, 1995			Child labor % of child. 10-14 in the labor force		Public expenditure on education % of GNP		School enrollment as a % of age group						Life expectency at birth, 1995		
								Primary		Secondary		Tertiary				
	male	female	total	1980	1995	1980	1995	1980	1995	1980	1995	1980	1995	male	female	total
Iceland	..	..	..	0	0	..	..	..	..	..	..	..	..	77	81	79
India	35	62	48	21	14	2.8	3.5	83	100	30	49	5	6	62	63	62
Indonesia	10	22	16	13	10	1.7	..	107	114	29	48	4	11	62	66	64
Iran, Islamic Rep.	22	34	28	14	5	7.5	4.0	87	99	42	69		15	68	69	68
Iraq	29	55	42	11	3	3.0	..	113	90	57	44	9		60	62	66
Ireland	..	..	..	1	0	..	6.3	100	104	90	114	18	37	74	79	77
Isle of Man	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Israel	..	..	..	0	0	7.9	6.6	95	99	73	89	29	41	75	79	77
Italy	..	..	..	2	0	..	4.9	100	98	72	74	27	41	75	81	78
Jamaica	19	11	15	0	0	7.0	8.2	103	109	67	66	7	6	72	77	74
Japan	..	..	..	0	0	5.8	3.8	101	102	93	99	31	40	77	83	80
Jordan	7	21	13	4	1	..	6.3	104	94	75		27		69	72	70
Kazakhstan	..	..	..	0	0	..	4.5	84	96	93	83	34	33	64	74	69
Kenya	14	30	22	45	41	6.8	7.4	115	85	20	24	1	..	57	60	58
Kiribati	..	..	..	..	..	..	..	..	..	..	..	..	..	56	61	58
Korea, Dem. Rep.	1	3	..	3	0	..	..	..	..	..	..	..	..	67	74	70
Korea, Rep.	1	3	2	0	0	3.7	3.7	110	101	78	101	15	52	68	76	72
Kuwait	18	25	21	0	0	2.4	5.6	102	73	80	64	11	25	74	79	76
Kyrgyz Republic	..	..	..	0	0	7.2	6.8	116	107	110	61	16	14	63	72	68
Lao PDR	31	56	43	31	27	..	2.4	113	107	21	25	0	2	51	54	52
Latvia	..	..	..	0	0	3.3	6.3	78	69	100	85	24	26	63	75	69
Lebanon	5	10	8	5	0	..	2.0	111	109	59	91	30	27	68	71	68
Lesotho	19	38	29	28	22	5.1	5.9	102	99	16	28	1	2	57	60	61
Liberia	46	78	..	26	19	..	..	..	..	..	..	..	..	46	46	54
Libya	12	37	..	9	0	3.4	..	125	110	76	97	8	16	63	67	65
Liechtenstein	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	..	..	..	0	0	5.5	6.1	79	96	114	84	35	28	63	75	69
Luxembourg	..	..	..	0	0	..	..	..	..	..	..	..	..	73	80	76
Macao	..	..	..	7	0	..	..	..	..	..	..	..	..	75	80	77
Macedonia, FYR	..	..	..	1	0	..	5.5	100	89	61	57	28	18	71	75	73
Madagascar	..	..	..	40	36	4.4	..	133	72	..	14	3	3	56	59	52
Malawi	28	58	44	45	35	3.4	5.7	60	135	3	98	1	2	43	44	43
Malaysia	11	22	17	8	3	6.0	5.3	93	91	48	61	4	11	69	74	71
Maldives	7	7	7	23	6	..	..	..	..	..	..	..	..	64	63	63
Mali	61	77	69	61	55	3.8	2.2	26	34	8	9	1	..	48	51	50
Malta	..	..	..	1	0	..	..	..	..	..	..	..	..	75	79	77
Marshall Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Martinique	..	..	..	0	0	..	..	..	..	..	..	..	..	73	80	77
Mauritania	50	74	..	30	24	..	5.0	37	78	11	15	..	4	51	54	51
Mauritius	13	21	17	5	3	5.3	4.3	93	107	50	62	1	6	68	75	71
Mayotte	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mexico	8	13	10	9	7	4.7	5.3	120	115	49	58	14	14	69	75	72
Micronesia, Fed. Sts.	..	..	..	9	6	..	..	..	..	..	..	..	..	63	66	..
Moldova	..	..	..	3	0	..	6.1	83	94	78	80	30	25	65	73	69

Under-five mortality rate per 1,000 live births		Age dependency ratio		Smoking prevalence (% of adult)		Agri-culture % of GDP	Industry % of GDP	Services % of GDP	Urban population % of total population		Motor vehicles per 1,000 people		Passenger cars per 1,000 people		Forest area thousand sq.km
				male	female										
1980	1995	1980	1995	1985-95	1985-95	1995	1995	1995	1980	1995	1980	1996	1980	1996	1995
..	6	0.6	0.5	..	..	..	..	..	88	92	..	..	..	..	..
173	95	0.7	0.7	40	3	29	29	41	23	27	2	7	..	4	650
124	75	0.8	0.6	53	4	17	42	41	22	34	8	22	..	11	1098
130	59	0.9	0.9	..	..	25	34	40	50	59	..	38	..	29	15
93	145	0.9	0.9	40	5	..	..	..	66	78	..	14	..	1	1
..	7	0.7	0.5	29	28	..	..	..	55	58	236	307	216	272	6
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	9	0.7	0.6	45	30	..	..	..	89	..	123	263	107	208	1
..	8	0.5	0.5	38	26	3	31	66	67	66	334	674	303	571	65
34	15	0.9	0.6	43	13	9	38	53	47	55	..	50	..	41	2
..	6	0.5	0.4	59	15	2	38	60	76	78	323	552	203	374	251
64	33	1.1	0.8	43	5	8	27	65	60	72	56	68	41	50	0
..	35	0.6	0.6	..	..	12	30	57	54	60	..	80	..	61	105
115	90	1.2	1	52	7	29	17	54	16	28	8	13	7	10	13
..	75	..	0.7	..	..	..	..	..	..	..	..	..	..	..	..
..	32	0.8	0.5	..	..	..	..	..	57	61	..	..	..	..	62
18	14	0.6	0.4	68	7	7	43	50	57	81	14	195	7	151	76
33	14	0.7	0.6	52	12	0	53	46	90	97	390	404	..	338	0
..	42	0.8	0.8	..	..	44	24	32	38	39	..	32	..	32	7
..	147	0.8	0.9	..	..	52	18	30	13	22	..	4	..	3	..
..	20	0.5	0.5	67	12	9	31	60	68	73	..	189	..	153	29
..	40	0.8	0.7	..	..	7	24	69	73	87	..	320	..	298	1
..	121	0.8	0.8	38	1	10	56	34	13	23	10	19	3	6	0
235	239	0.9	0.9	..	..	..	..	..	35	46	..	..	..	..	..
..	75	1	0.9	..	..	..	..	..	70	86	..	138	..	87	4
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	19	0.5	0.5	52	10	11	36	53	61	72	..	238	..	212	20
..	9	0.5	0.5	..	..	..	..	..	79	89	..	..	..	..	..
..	9	..	0.5	..	..	..	..	..	..	..	..	..	..	..	..
..	31	0.6	0.5	..	..	..	..	..	53	60	..	142	..	139	10
175	127	0.9	0.9	29	28	34	13	53	18	27	..	6	..	5	151
271	225	1	1	..	..	42	27	31	9	13	5	6	2	3	33
..	14	0.8	0.7	41	4	13	43	44	42	54	..	152	52	131	155
..	70	0.9	1	..	..	..	..	..	22	34	..	..	..	..	..
291	192	1	1	..	..	46	17	37	19	27	..	4	..	3	116
..	11	0.5	0.5	..	..	..	..	..	83	89	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..					
..	12	0.6	0.5	..	..	..	..	..	66	79					
..	158	0.9	0.9	..	..	27	30	43	29	54	..	13	..	8	6
38	20	0.6	0.5	47	4	9	33	58	42	41	44	88	27	63	0
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
76	41	0.9	0.7	38	14	8	26	67	66	75	..	140	61	92	554
..	40	0.9	0.8	..	..	..	..	..	25	28	..	..	..	..	..
..	26	0.5	0.6	..	..	50	28	22	40	52	..	54	..	39	

Table2. Indicators to chapters 7–10 (continued)

COUNTRY or REGION	Adult illiteracy % of people 15 and above, 1995			Child labor % of child. 10-14 in the labor force		Public expenditure on education % of GNP		School enrollment as a % of age group						Life expectency at birth, 1995		
								Primary		Secondary		Tertiary				
	male	female	total	1980	1995	1980	1995	1980	1995	1980	1995	1980	1995	male	female	total
Monaco	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mongolia	..	..	..	4	2	..	5.6	107	88	91	59	..	15	64	66	65
Morocco	43	69	56	21	6	6.1	5.6	83	83	26	39	6	11	64	68	65
Mozambique	42	77	60	39	34	4.4	..	99	60	5	7	0	1	45	48	47
Myanmar	11	22	17	28	25	1.7	1.3	91	100	22	32	5	5	58	61	59
Namibia	..	..	..	34	22	1.5	9.4	..	133	..	62	..	8	55	57	59
Nepal	59	86	73	56	45	1.8	2.9	86	110	22	38	3	5	57	56	55
Netherlands	..	..	..	0	0	7.6	5.3	100	107	93	139	29	49	75	81	78
Netherlands Antilles	..	..	..	0	0	..	..	..	..	..	..	..	..	75	80	77
New Caledonia	..	..	..	..	..	..	..	..	..	..	..	..	..	71	75	..
New Zealand	..	..	..	0	0	5.8	6.7	111	104	83	117	27	58	73	79	76
Nicaragua	35	33	34	19	14	3.4	..	96	110	43	47	13	9	65	70	68
Niger	79	93	86	48	45	3.1	..	25	29	5	7	0	..	44	49	47
Nigeria	33	53	43	29	26	6.4	..	105	89	16	30	2	4	51	54	53
Northern Mariana Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Norway	..	..	..	0	0	7.2	8.3	100	99	94	92	26	55	75	81	78
Oman	..	..	..	6	1	2.1	4.6	51	80	12	66	..	5	68	73	70
Pakistan	50	76	62	23	18	2.0	..	39	74	14	26	..	3	62	64	60
Panama	9	10	9	6	4	4.8	5.2	106	106	61	68	21	30	71	76	73
Papua New Guinea	19	37	28	28	19	..	..	59	80	12	14	2	3	56	58	57
Paraguay	7	9	8	15	8	1.5	2.9	106	109	27	38	9	10	67	72	68
Peru	6	17	11	4	2	3.1	..	114	123	59	70	17	31	65	68	66
Philippines	5	6	5	14	8	1.7	2.2	112	116	64	79	24	27	64	68	66
Poland	..	..	..	0	0	..	4.6	100	98	77	96	18	27	67	76	70
Portugal	..	..	..	8	2	3.8	5.4	123	128	37	102	11	34	72	79	75
Puerto Rico	..	..	..	0	0	..	..	..	..	..	..	48	..	72	80	75
Qatar	21	20	21	0	0	..	..	..	..	..	..	..	..	70	75	72
Reunion	..	..	..	0	0	..	..	..	..	..	..	..	..	70	79	74
Romania	..	..	..	0	0	3.3	3.2	102	100	71	66	12	18	66	74	70
Russian Federation	..	..	..	0	0	3.5	4.1	102	106	96	87	46	43	58	72	65
Rwanda	30	48	40	43	42	2.7	..	63	82	3	11	0	..	38	40	39
São Tomé and Principe	..	..	..	..	..	..	..	..	..	..	..	..	..	66	72	69
Saudi Arabia	29	50	37	5	0	4.1	5.5	61	78	29	58	7	15	69	71	70
Senegal	57	77	67	43	31	..	3.6	46	65	11	16	3	3	49	51	50
Seychelles	..	..	21	..	..	..	..	..	..	..	..	..	..	69	76	72
Sierra Leone	55	82	..	19	15	3.8	..	52	..	14	..	1	..	35	38	40
Singapore	4	14	9	2	0	2.8	3.0	108	104	58	62	8	34	74	79	76
Slovak Republic	..	..	..	0	0	..	4.4	..	97	..	91	..	20	68	76	72
Slovenia	..	..	..	0	0	..	5.8	..	98	..	91	..	32	70	78	74
Solomon Islands	..	..	..	40	29	..	..	..	..	..	..	..	..	62	63	63
Somalia	..	..	..	38	33	..	..	..	..	..	..	..	..	47	50	49
South Africa	18	18	18	1	0	..	6.8	86	117	..	84	..	17	61	67	64
Spain	..	..	..	0	0	..	5.0	109	105	87	118	23	46	74	81	77

Under-five mortality rate per 1,000 live births		Age dependency ratio		Smoking prevalence (% of adult)		Agri-culture % of GDP	Industry % of GDP	Services % of GDP	Urban population % of total population		Motor vehicles per 1,000 people		Passenger cars per 1,000 people		Forest area thousand sq.km
				male	female										
1980	1995	1980	1995	1985-95	1985-95	1995	1995	1995	1980	1995	1980	1996	1980	1996	1995
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	74	0.9	0.7	40	7	..	..	..	52	60	..	26	..	12	94
147	75	0.9	0.7	40	9	14	33	53	41	49	..	50	..	40	38
285	190	0.9	0.9	..	..	33	12	55	13	38	..	1	..	0	169
134	119	0.8	0.7	..	..	..	..	..	24	27	..	2	..	1	272
108	78	0.9	0.9	..	..	..	..	..	23	38	..	83	..	40	124
179	131	0.9	0.8	..	..	42	22	36	7	14	..	..	..	..	48
..	8	0.5	0.5	36	29	..	..	..	88	89	343	400	322	363	3
..	14	0.6	0.5	..	..	..	..	..	68	70	..	..	..	..	..
..	19	0.7	0.6	..	..	..	..	..	57	62	..	..	..	..	..
..	9	0.6	0.5	24	22	..	..	..	83	84	492	562	420	461	78
120	61	1	1	..	..	33	20	46	53	62	..	30	9	16	56
300	200	1	1	..	..	39	18	44	13	23	6	6	5	4	26
196	176	0.9	0.9	24	7	28	53	18	27	39	4	12	3	7	138
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	8	0.6	0.5	36	36	..	..	..	71	73	342	470	302	379	81
..	22	0.9	1	..	..	..	..	..	8	13	..	134	..	97	0
161	127	0.9	0.9	27	4	26	24	49	28	35	2	7	2	5	17
47	28	0.8	0.6	56	20	10	15	73	50	55	..	99	..	76	28
..	95	0.8	0.7	46	28	26	..	..	13	16	..	26	..	7	369
59	52	0.8	0.8	24	6	24	22	54	42	54	..	24	..	14	115
126	62	0.8	0.6	41	13	7	38	55	65	72	..	121	..	58	676
69	53	0.8	0.7	43	8	22	32	46	38	53	..	13	6	9	68
..	16	0.9	0.5	51	29	6	39	54	58	65	86	248	67	209	87
..	11	0.6	0.5	38	15	..	..	..	29	36	145	370	..	277	29
22	15	0.7	0.6	..	..	..	..	..	67	71	..	285	..	232	3
..	22	0.5	0.5	..	..	..	..	..	86	92	..	..	..	..	..
..	10	0.7	0.5	..	..	..	..	..	55	67	..	..	..	..	..
..	29	0.6	0.5	..	..	21	40	39	49	55	..	124	..	107	62
..	21	0.5	0.5	67	30	7	38	55	70	73	..	158	..	92	7635
218	200	1	1.1	..	..	37	17	46	5	8	2	4	1	2	3
..	78	..	0.8	..	..	..	..	..	32	47	..	..	..	..	..
..	31	0.9	0.9	53	..	..	..	..	67	79	163	149	67	90	2
218	97	0.9	1	48	35	20	18	62	36	42	19	14	..	10	74
..	19	..	0.6	..	..	..	..	..	43	67	..	..	..	..	..
335	236	0.9	0.9	..	..	42	27	31	25	39	..	6	..	4	13
13	6	0.5	0.4	32	3	0	36	64	100	100	..	167	71	120	0
..	15	0.6		43	26	6	33	61	52	59	..	217	..	198	20
..	8	0.5		35	23	5	39	57	48	64	..	387	..	365	11
..	52	1	0.9	..	..	..	..	..	11	17	..	..	..	..	..
..	218	1	1	..	..	..	..	..	19	24	..	..	..	..	..
..	67	0.8	0.7	52	17	5	31	64	48	51	133	134	66	106	85
..	9	0.6	0.5	48	25	3	..	..	73	77	239	456	202	376	84

Table2. Indicators to chapters 7–10 (continued)

COUNTRY or REGION	Adult illiteracy % of people 15 and above, 1995			Child labor % of child. 10-14 in the labor force		Public expenditure on education % of GNP		School enrollment as a % of age group						Life expectency at birth, 1995		
								Primary		Secondary		Tertiary				
	male	female	total	1980	1995	1980	1995	1980	1995	1980	1995	1980	1995	male	female	total
Sri Lanka	7	13	10	4	2	2.7	3.1	103	113	55	75	3	5	70	75	72
St. Kitts and Nevis	..	..	..	..	..	..	..	..	..	..	..	..	..	67	72	69
St. Lucia	..	..	..	..	..	..	..	..	..	..	..	..	..	68	73	71
St. Vincent and the Grenadines	..	..	..	..	..	..	..	..	..	..	..	..	..	69	76	72
Sudan	42	65	54	33	29	4.8	..	50	54	16	13	2	..	52	55	54
Suriname	5	9	7	1	0	..	..	..	..	..	..	..	..	66	73	70
Swaziland	22	24	23	17	14	..	..	..	..	..	..	..	..	57	61	58
Sweden	..	..	..	0	0	9.0	8.0	97	105	68	132	31	43	76	81	79
Switzerland	..	..	..	0	0	5.0	5.5	..	107	..	91	18	32	75	82	78
Syrian Arab Republic	14	44	..	14	6	4.0	..	100	101	46	44	17	18	66	71	68
Tajikistan	..	..	..	0	0	8.2	8.6	..	89	..	82	24	20	66	66	67
Tanzania	21	43	32	43	39	4.4	..	93	67	3	5	..	1	50	52	51
Thailand	4	8	6	25	16	3.4	4.2	99	87	29	55	15	20	67	72	69
Togo	33	63	48	36	29	5.6	5.6	118	118	33	27	2	3	49	52	56
Tonga	..	..	..	..	..	..	..	..	..	..	..	..	..	67	72	69
Trinidad and Tobago	1	3	2	1	0	4.0	4.5	99	96	70	72	4	8	70	75	72
Tunisia	21	45	33	6	0	6.4	6.8	102	116	27	61	6	13	68	70	69
Turkey	8	28	18	21	24	2.8	3.4	96	105	36	56	5	18	66	71	67
Turkmenistan	..	..	..	0	0	..	..	..	..	..	..	23	..	..	..	67
Uganda	26	50	38	49	45	1.2	..	50	73	5	12	1	2	44	44	42
Ukraine	..	..	..	0	0	5.6	7.7	102	87	84	91	42	41	64	74	69
United Arab Emirates	21	20	21	0	0	1.3	1.8	89	95	52	78	3	9	74	76	75
United Kingdom	..	..	..	0	0	5.6	5.5	103	115	83	134	19	48	74	79	77
United States	..	..	..	0	0	6.7	5.7	99	102	91	97	56	81	74	80	77
Uruguay	3	2	3	4	2	2.3	2.8	107	111	62	82	17	27	70	77	73
Uzbekistan	..	..	..	0	0	6.4	9.5	81	77	105	93	29	32	..	..	70
Vanuatu	..	..	..	..	..	..	..	..	..	..	..	..	..	63	65	64
Venezuela	8	10	9	4	1	4.4	5.2	93	94	21	36	21	29	70	75	71
Vietnam	4	9	6	22	9	..	2.7	109	114	42	47	2	4	65	70	68
Virgin Islands (U.S.)	..	..	..	..	..	..	..	..	..	..	..	..	..	72	79	76
West Bank and Gaza	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Western Samoa	..	..	..	..	..	..	..	..	..	..	..	..	..	67	71	68
Yemen, Rep.	..	..	..	26	20	..	7.5	..	79	..	23	..	4	53	54	53
Yugoslavia, FR (Serbia/Montenegro)	..	..	..	0	0	..	..	29	72	..	65	..	21	70	75	73
Zaire	..	46	33	33	30	2.6	..	80	72	24	26	1	2	..	..	..
Zambia	14	29	22	19	16	4.5	1.8	90	89	16	28	2	3	45	46	46
Zimbabwe	10	20	15	37	29	6.6	8.5	85	116	8	47	1	7	56	58	57

Under-five mortality rate per 1,000 live births		Age dependency ratio		Smoking prevalence (% of adult)		Agri-culture % of GDP	Industry % of GDP	Services % of GDP	Urban population % of total population		Motor vehicles per 1,000 people		Passenger cars per 1,000 people		Forest area thousand sq.km
				male	female										
1980	1995	1980	1995	1985-95	1985-95	1995	1995	1995	1980	1995	1980	1996	1980	1996	1995
48	19	0.7	0.6	55	1	23	25	52	22	22	..	14	8	6	18
..	38	..	0.8	..	..	..	..	..	36	46	..	..	..	..	..
..	21	..	0.7	..	..	..	..	..	42	49	..	..	..	..	..
..	22	..	0.6	..	..	11	22	67	27	47	..	..	..	..	..
132	109	0.9	0.9	..	..	..	..	..	20	26	..	12	..	10	416
..	41	0.8	0.6	..	..	..	..	..	45	50	..	..	..	..	..
..	96	1	1	..	..	9	86	5	18	33	..	..	..	..	..
..	5	0.6	0.6	22	24	2	32	66	83	83	370	450	347	414	244
..	7	0.5	0.5	36	26	..	..	..	57	61	383	501	356	462	11
74	40	1.1	1	..	..	..	..	..	47	53	..	28	..	10	2
..	61	0.9	0.9	..	..	..	..	..	34	32	..	1	..	0	4
176	133	1	0.9	..	..	58	17	24	15	24	3	5	2	1	326
58	42	0.8	0.5	49	4	11	40	49	17	20	13	106	9	28	116
175	128	0.9	1	..	..	38	21	41	23	31	..	27	..	19	12
..	23	..	0.7	..	..	..	..	..	24	41	..	..	..	..	..
39	18	0.7	0.6	42	8	3	42	54	63	68	..	113	..	94	2
100	50	0.8	0.6	58	6	12	29	59	51	57	38	64	20	29	6
133	63	0.8	0.6	63	24	16	31	53	44	70	23	70	..	55	89
..	65	0.8	0.7	27	1	..	..	..	47	45	..	..	..	..	38
180	160	1	1.1	10	0	50	14	36	9	12	1	4	1	2	61
..	21	0.5	0.5	..	..	18	42	41	62	70	..	92	..	93	92
..	19	0.4	0.5	..	..	2	57	40	72	84	..	99	..	79	1
..	7	0.6	0.5	28	26	2	32	66	89	90	303	399	268	359	24
..	10	0.5	0.5	28	23	2	26	72	74	76	..	767	536	521	2125
43	21	0.6	0.6	41	27	9	26	65	85	90	..	166	..	161	8
..	48	0.9	0.8	40	1	33	34	18	41	42	..	..	..	..	91
..	51	0.9	0.8	..	..	..	..	..	..	..	..	..	..	..	..
42	25	0.8	0.7	..	..	5	38	56	83	93	112	88	92	68	440
60	49	0.9	0.7	73	4	28	30	42	19	21	..	..	..	..	91
..	23	..	0.6			..	..	..	46	49					
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	27	1	0.8	..	..	..	..	..	21	21	..	..	..	..	..
198	145	1.1	1	..	..	..	..	..	20	34	..	34	8	15	0
..	22	0.5	0.5	52	31	..	..	..	46	57	118	163	..	150	18
..	144	1	1	..	..	..	..	..	29	29	..	31	..	17	..
149	180	1.1	1	39	7	22	40	37	40	45	..	26	..	17	314
107	83	1	0.8	36	15	..	..	..	22	32	..	32	..	29	87

Table2. Indicators to chapters 7–10 (continued)

COUNTRY or REGION	Adult illiteracy % of people 15 and above, 1995			Child labor % of child. 10-14 in the labor force		Public expenditure on education % of GNP		School enrollment as a % of age group						Life expectency at birth, 1995		
								Primary		Secondary		Tertiary				
	male	female	total	1980	1995	1980	1995	1980	1995	1980	1995	1980	1995	male	female	total
World	**21**	**38**	**30**	**21**	**14**	**4.4**	**5.2**	**97**	**103**	**49**	**62**	**14**	**..**	**65**	**69**	**67**
Low Income	24	45	34	28	19	3.4	3.6	93	107	34	56	3	6	62	64	63
Excl. China & India	36	55	46	33	28	3.4	3.9	75	82	21	..	3	..	55	58	56
Middle income	14	22	18	13	8	4.4	5.2	100	105	54	60	19	19	65	71	68
Lower middle income	14	25	20	13	8	4.5	5.2	99	104	57	60	21	22	64	70	67
Upper middle income	13	16	15	11	8	4.0	5.0	101	107	47	62	14	14	66	73	69
Low & middle Income	21	39	30	24	16	3.9	4.6	95	103	41	53	8	..	63	67	64
East Asia & Pacific	9	24	17	25	11	2.1	2.6	111	115	43	65	3	6	67	70	68
Europe & Central Asia	..	..	..	3	11	5.0	5.6	97	100	84	81	31	32	64	73	68
Latin America & Caribbean	12	15	13	13	10	3.9	3.9	106	111	42	53	14	15	66	72	69
Middle East & N. Africa	28	50	39	14	5	5.0	5.6	87	97	42	64	11	15	65	68	66
South Asia	38	64	51	23	17	2.0	3.0	76	99	27	49	5	6	61	62	61
Sub-Saharan Africa	34	53	44	35	30	4.1	5.3	78	75	14	27	1	..	50	53	52
High Income	..	..	..	0	0	5.6	5.5	102	103	87	104	35	57	74	81	77

Under-five mortality rate per 1,000 live births		Age dependency ratio		Smoking prevalence (% of adult)		Agri-culture % of GDP	Industry % of GDP	Services % of GDP	Urban population % of total population		Motor vehicles per 1,000 people		Passenger cars per 1,000 people		Forest area thousand sq.km
				male	female										
1980	1995	1980	1995	1985-95	1985-95	1995	1995	1995	1980	1995	1980	1996	1980	1996	1995
132	**81**	**0.7**	**0.6**	**48**	**12**	**5**	**33**	**63**	**40**	**45**	**72**	**121**	**..**	**91**	**32712**
145	104	0.8	0.7	51	6	25	38	35	21	29	2	8	..	4	6227
175	143	0.9	0.9	..	..	33	25	41	21	28	..	10	..	6	4243
..	53	0.7	0.6	48	16	11	35	52	52	60	..	91	..	65	19985
..	56	0.7	0.6	52	13	13	36	49	48	56	..	70	..	46	12884
..	45	0.7	0.6	42	22	9	37	53	64	73	101	139	70	111	7100
133	88	0.8	0.6	50	9	14	36	48	32	39	14	36	..	23	26211
75	53	0.7	0.5	59	6	18	44	38	21	31	3	15	..	7	3756
..	35	0.6	0.5	58	26	..	..	..	58	65	..	142	..	109	8590
82	47	0.8	0.6	40	20	10	33	55	65	74	..	92	62	72	9064
141	72	0.9	0.8	..	..	..	..	..	48	56	..	53	..	35	69
174	106	0.8	0.7	41	4	30	27	41	22	26	2	6	..	4	744
193	157	0.9	0.9	..	..	20	30	48	23	31	..	20	..	14	3969
..	9	0.5	0.5	39	22	2	32	66	75	78	321	559	338	427	6501

Table3. Indicators to chapters 11–13

COUNTRY or REGION	Central government expenditure % of GDP		State-owned enterprises share in GDP, %	State-owned enterprises share in gross domestic investment, %	Proceeds from privatization millions of 1995 $	Defence expenditure % of GDP		Trade % of PPP GDP		Net private capital flows $ millions	
	1980	1995	1986-1991	1986-1991	1989-95	1980	1994	1986	1996	1990	1996
Afghanistan	..	..	..	..	..	..	..	..	..	..	..
Albania	..	31.0	..	..	22	..	..	..	..	31	92
Algeria	..	..	57.6	30.7	..	..	..	17.3	15.0	-442	-72
American Samoa	..	..	..	..	..	..	..	..	..	..	..
Andorra	..	..	..	..		..	..	..	..	..	..
Angola	..	..	..	..	..	..	..	23.3	29.3	237	753
Antigua and Barbuda	..	..	..	..	..	..	..	..	..	..	..
Argentina	18.2	14.5	4.7	8.5	20644	2.6	0.8	5.9	14.0	-203	14407
Armenia	..	..	..	..	..	..	..	..	14.0	..	18
Aruba	..	..	..	..	..	..	..	..	..	..	..
Australia	22.7	27.4	..	14.7	..	2.13	2.06	24.2	34.0	..	..
Austria	36.6	42.2	13.9	..	..	1.14	0.88	48.7	71.6	..	..
Azerbaijan	..	..	..	..	..	..	..	..	16.3	..	601
Bahamas, The			..	..	..	0.3	..	..	..	..	..
Bahrain	..	..	..	..	..	5.11	5.27	..	..	..	..
Bangladesh	10.0	..	3.0	29.8	55	0.94	..	5.7	8.3	70	92
Barbados	..	..	..		..	1.1	..	..	..	..	..
Belarus	..	..	..	..	..	..	1.6	..	26.3	..	7
Belgium	50.6	49.4	2.8	7.0	..	2.88	..	..	..	..	..
Belize	..	..	..		..	0.94	1.52	..	..	..	..
Benin	..	..	..	15.8	63	..	..	12.4	15.9	1	2
Bermuda	..	..	..	..	..	..	..	..	..	..	..
Bhutan	..	..	..	..	..	..	0	..	..	..	..
Bolivia	..	23.1	13.7	26.9	813	..	2.07	11.7	12.0	3	571
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..	..
Botswana	31.8	38.0	5.9	20.6	..	3.3	5.6	..	..	77	66
Brazil	20.2	37.4	8.6	15.2	10724	0.8	1	5.8	10.2	562	28384
Brunei	..	..	..	..	..	..	..	..	..	..	..
Bulgaria	..	41.6	..	..	321	..	2.6	18.3	23.8	-42	300
Burkina Faso	12.2	..	..	..	0	2.1	2.1	8.5	9.8	0	0
Burundi	21.5	24.9	7.3	40.3	5	..	..	12.5	4.2	-5	0
Cambodia	..	..	..	..	..	..	..	..	..	0	290
Cameroon	15.7	12.7	18.0	..	..	1.4	1.5	9.6	13.0	-125	-28
Canada	21.3	24.6	..	..	..	1.6	1.7	45.6	58.5	..	..
Cape Verde	..	..	..	..	..	..	..	..	..	..	..
Cayman Islands	..	..	..	..	..	..	..	..	..	..	..
Central African Republic	22.0	..	3.9	17.0	..	..	..	8.7	8.6	0	5
Chad	..	..	..	..	..	..	..	4.7	5.7	-1	18
Channel Islands	..	..	..	..	..	..	..	..	..	..	..
Chile	28.0	19.2	12.9	19.1	1550	3.5	1.8	11.6	18.9	2098	6803

Foreign direct investment						Portfolio investment				Aid dependency							
$ millions		% of gross domestic investment		% of GDP		Bonds $ millions		Equity $ millions		$ millions		Aid per capita, $		Aid % of GNP		Aid as % of gross domestic investment	
1990	1996	1980	1996	1980	1996	1990	1996	1990	1996	1991	1996	1991	1996	1991	1996	1991	1996
..	..	..	..	..	..					..	..	..	..	..	..	..	..
0	90	..	16.3	..	3.4	0	0	0	0	324.2	222	99	68	29.2	8.1	470.1	40.2
0	4	2.1	0	0.8	0	-15	0	0	0	340	309	13	11	0.8	0.7	2.4	2.5
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
-335	300	..	39.7	..	4.5	0	0	0	0	279.7	544.2	29	49	9.6	15.8	51.5	72
..	..	..	..	..	..					..	..	..	..	..	..	..	..
1836	4285	3.5	7.9	0.9	1.5	-857	8945	13	864	299.5	277.4	9	8	0.2	0.1	1.1	5
..	18	..	9.4	..	1	..	0	..	0	2.7	294.9	1	78	0.1	18.2	0.2	146.8
..	..	..	..	..	..					..	..	..	..	..	..	..	..
6517	6321	4.6	18.9	1.2	1.6	..	..	..	..								
653	3826	1.1	1.1	0.3	1.7	..	..	..	..								
..	601	..	67.3	..	16.5	..	0	..	0	0	106.3	0	14	0	3	2.3	11.9
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
3	15	0	0.3	0	0	0	0	0	30	1889.1	1254.5	17	10	6.1	3.9	70.2	23.2
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	18	..	0.4	..	0.1	..	0	..	0	187	73	18	7	0.5	0.4	1.8	1.5
..	..	..	..	..	..	..	..	..	..								
..	..	..	..	..	..					..	..	..	..	..	..	..	..
1	2	2	0.5	0.3	0.1	0	0	0	0	268.4	292.8	55	52	14.5	13.5	98.6	77.5
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
27	527	10.3	17.9	1.5	6.4	0	0	0	0	512.6	849.9	76	112	10.8	13.3	74	71.6
..	..	..	..	..	..	..	..	..	..	0.0	811.6	0	184	..	..	..	..
95	75	30.5	6.3	10.8	1.5	0	0	0	0	136.0	80.8	103	55	3.4	1.7	10.9	6.8
989	9889	3.5	6.8	0.8	1.3	129	4634	0	3981	182.6	406.2	1	3	0.0	0.1	0.2	0.3
..	..	..	..	..	..					..	..	..	..	..	..	..	..
4	115	0.0	8.6	0.0	1.2	65	-205	0	500	316.0	170.0	37	20	3.2	1.9	12.8	12.7
0	0	0.0	0.0	0.0	0.0	0	0	0	0	423.7	418.2	46	38	15.2	16.5	73.7	64.8
1	1	0.0	1.0	0.0	0.1	0	0	0	0	259.1	203.8	46	32	22.4	18.1	154.0	203.2
0	294	..	45.4	..	9.4	0	0	0	0	91.0	452.9	10	44	5.6	14.5	59.3	70.0
-113	35	9.2	2.4	1.9	0.4	0	0	0	0	518.5	413.3	44	30	4.5	4.9	25.0	28.4
7581	8398	9.4	10.5	2.2	1.1	..	..	..	..								
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
1	5	9.5	8.4	0.7	0.5	0	0	0	0	174.7	166.9	58	50	12.8	16.1	99.8	280.7
0	18	0.0	8.0	0.0	1.5	0	0	0	0	265.8	305.2	46	46	20.2	26.9	274.0	134.9
..	..	..	..	..	..					..	..	..	..	..	..	..	..
590	4091	3.7	19.9	0.8	5.5	-7	1859	320	103	125.5	203.4	9	14	0.4	0.3	1.5	1.0

Table3. Indicators to chapters 11–13 (continued)

COUNTRY or REGION	Central government expenditure % of GDP		State-owned enterprises share in GDP, %	State-owned enterprises share in gross domestic investment, %	Proceeds from privatization millions of 1995 $	Defence expenditure % of GDP		Trade % of PPP GDP		Net private capital flows $ millions	
	1980	1995	1986-1991	1986-1991	1989-95	1980	1994	1986	1996	1990	1996
China	..	8.3	..	..	7720	..	1.2	6.6	7.1	8107	50100
Colombia	13.4	14.4	6.7	12.0	826	1.1	1.3	7.1	9.5	345	7739
Comoros	..	..	..		..	..	..	..	..	..	..
Congo	49.4	..	16.1	..	..	..	..	51.4	70.6	-100	-7
Costa Rica	25.0	29.1	8.2	8.4	64	0.7	0	20.2	34.4	23	387
Côte d'Ivoire	31.7	..	..	21.0	168	..	..	36.0	32.0	57	160
Croatia	..	46.5	..	..	97	..	8.3	..	59.9	..	915
Cuba	..	..	..	..	..	..	..	..	..	..	..
Cyprus	..	..	..	..	..	1.4	1.2	..	..	..	..
Czech Republic	..	39.9	..	..	1645	..	2.7	..	46.3	876	4894
Denmark	39.4	43.4	5.1	13.5	..	2.6	1.8	58.8	73.7	..	..
Djibouti	..	..	..	..	..	..	..	..	..	..	..
Dominica	..	..			..	..	..	..	..	..	..
Dominican Republic	16.9	15.6	..	10.6	..	1.3	0.8	12.3	28.3	130	366
Ecuador	14.2	15.7	10.5	13.4	178	1.8	..	11.8	16.3	183	816
Egypt, Arab Rep.	45.6	37.4	30.0	63.3	735	6.2	3.7	13.6	14.8	698	1434
El Salvador	17.1	13.7	1.6	7.7	..	1.51	1.17	20.7	22.5	8	48
Equatorial Guinea	..	..	..	..	..	..	..	..	..	..	..
Eritrea	..	..	..	..	..	..	..	..	..	..	0
Estonia	..	35.2	..	..	267	..	1	..	77.4	..	191
Ethiopia	19.5	18.1	..	..	..	6.8	3.7	10.5	6.8	-45	-205
Faeroe Islands	..	..	..	..	..	..	..	..	..	..	..
Fiji	..	..	..		..	0.9	1.9	..	..	..	..
Finland	28.1	42.7	..	..	..	1.6	1.8	51.5	70.1	..	..
France	39.5	46.4	..	11.6	..	2.9	2.5	33.7	45.4	..	..
French Guiana	..	..	..	..	..	..	..	..	..	..	..
French Polynesia	..	..	..	..	..	..	..	..	..	..	..
Gabon	36.5	..	..	..	..	..	..	40.4	45.5	103	-114
Gambia, The	32.1	21.6			..	..	..	22.4	11.9	-7	11
Georgia	..	..	..	..	..	..	..	..	9.6	..	40
Germany	..	33.9	..	..	..	..	..	..	55.1	..	..
Ghana	10.9	22.1	8.4	25.0	667	0.4	1	11.0	15.3	-5	477
Greece	29.3	33.6	11.5	19.6	1231	4.5	3.8	21.2	27.9	..	..
Greenland	..	..	..	..	..	..	..	..	..	..	..
Grenada	..	..			..	..	0	..	..	..	..
Guadeloupe	..	..	..	..	..	..	..	..	..	..	..
Guam	..	..	..	..	..	..	..	..	..	..	..
Guatemala	12.1	8.9	2.0	7.8	17	1.3	1.4	9.7	12.2	44	5
Guinea	..	..	8.7	..	..	..	..	13.2	13.1	-1	41
Guinea-Bissau	..	..	..	..	..	..	..	11.4	14.2	2	1
Guyana	..	..			..	3.7	..	..	..	..	..
Haiti	17.4	..		9.8	..	..	..	6.9	12.6	8	4

Foreign direct investment						Portfolio investment				Aid dependency							
$ millions		% of gross domestic investment		% of GDP		Bonds $ millions		Equity $ millions		$ millions		Aid per capita, $		Aid % of GNP		Aid as % of gross domestic investment	
1990	1996	1980	1996	1980	1996	1990	1996	1990	1996	1991	1996	1991	1996	1991	1996	1991	1996
3487	40180	0.0	11.6	0.0	4.9	-48	1190	0	3466	1998.7	2617.3	2	2	0.5	0.3	1.5	0.8
500	3322	2.5	18.7	0.5	3.9	-4	1844	0	290	122.5	250.8	4	7	0.3	0.3	1.9	1.4
..	..	..	..	..	..					..	..	..	..	..	..	..	..
0	8	6.6	0.6	2.3	0.3	0	0	0	0	133.7	429.7	57	159	5.9	22.9	24.9	29.6
163	410	4.1	19.7	1.1	4.5	-42	-7	0	1	174.1	-6.8	56	-2	3.2	-0.1	12.3	-0.3
48	21	3.5	1.4	0.9	0.2	-1	0	0	30	632.7	967.6	51	67	6.9	9.9	82.0	66.1
..	349	..	12.4	..	1.8	..	22	..	111	0.0	133.4	0	28	0.0	0.7	0.0	4.7
..	..	..	..	..	..	..	..	..	..	37.6	67.8	4	6	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
207	1435	0.0	7.6	0.0	2.6	0	171	0	164	231.0	122.0	22	12	0.9	0.2	3.2	0.6
1132	773	1.1	14.1	0.2	0.4	..	..	..	..								
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
133	394	5.6	12.3	1.4	3.0	0	0	0	0	66.5	105.8	9	13	0.9	0.8	3.8	3.3
126	447	2.3	13.4	0.6	2.3	0	-10	0	1	238.0	260.9	23	22	2.2	1.5	9.1	7.8
734	636	8.7	5.7	2.4	0.9	-1	0	0	1233	5024.7	2211.8	94	37	14.3	3.3	64.2	19.7
2	25	1.2	1.5	0.2	0.2	0	0	0	0	294.2	317.2	57	55	5.6	3.1	36.0	19.3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	0	..	..	..	..	..	0	..	0	0.0	157.2	0	43	..	..	..	..
..	150	..	12.9	..	3.5	..	40	..	5	15.0	62.0	10	42	0.3	1.4	1.0	5.4
12	5	0.0	0.4	0.0	0.1	0	0	0	0	1097.3	849.4	21	15	20.6	14.3	287.8	67.6
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
812	1118	0.2	5.1	0.1	0.9	..	..	..	..								
13183	21972	2.0	8.5	0.5	1.4	..	..	..	..								
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
74	-65	2.7	-5.7	0.7	-1.1	0	0	0	0	143.4	126.5	145	112	3.0	2.6	10	11
0	11	0.0	10.2	0.0	2.2	0	0	0	0	102.7	38.5	107	34	31.6	13.4	157.2	62.6
..	40	..	4.6	..	0.2	..	0	..	0	0.2	318.4	0	59	0.0	7.1	0.0	121.1
2532	-3183	..	2.2	..	-0.1	..	..	..	..								
15	120	6.2	10.1	0.4	1.9	0	250	0	124	882.1	653.6	58	37	13.6	10.5	84.2	55.2
..	..	5.9	7.0	1.4	0.7	..	..	..	..								
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
48	77	8.9	3.8	1.4	0.5	-11	-33	0	0	198.6	216.1	21	20	2.1	1.4	14.8	10.7
18	24	..	4.7	..	0.6	0	0	0	0	382.0	295.5	64	44	13.6	7.8	77.6	57.6
2	1	0.0	1.7	0.0	0.4	0	0	0	0	115.5	179.9	118	164	49.4	67.5	144.9	304.3
..	..	..	..	..	..					..	..	..	..	..	..	..	..
8	4	5.3	0.0	0.9	0.2	0	0	0	0	181.9	375.2	28	51	5.6	14.4	49.6	2117.2

Table3. Indicators to chapters 11–13 (continued)

COUNTRY or REGION	Central government expenditure % of GDP		State-owned enterprises share in GDP, %	State-owned enterprises share in gross domestic investment, %	Proceeds from privatization millions of 1995 $	Defence expenditure % of GDP		Trade % of PPP GDP		Net private capital flows $ millions	
	1980	1995	1986-1991	1986-1991	1989-95	1980	1994	1986	1996	1990	1996
Honduras	..	..	5.5	12.6	114	..	..	21.7	42.5	77	65
Hong Kong	..	..	..	..	..	..	..	111.8	247.6	..	..
Hungary	56.2	..	..	..	8648	2.4	..	34.5	41.4	-308	1618
Iceland	..	..	..	..	..	0	0	..	..	..	..
India	13.3	16.4	13.8	39.0	5744	2.6	2.5	3.9	4.5	1873	6404
Indonesia	22.1	14.7	14.1	10.3	4199	3.0	1.1	10.7	13.6	3219	18030
Iran, Islamic Rep.	35.7	23.2	..	..	7	5.7	1.6	9.7	9.6	-392	-352
Iraq	..	..	..	..	..	..	..	..	..	..	..
Ireland	45.1	40.3	..	..	..	1.7	1.3	86.7	121.6	..	..
Isle of Man	..	..	..	..	..	..	..				
Israel	70.2	44.7	..	..	..	27.9	8.4	39.5	47.5	..	..
Italy	41.3	48.6		12.9	..	1.4	..	28.0	39.6	..	..
Jamaica	41.5	..	..	21.3	546	..	..	28.8	53.7	92	191
Japan	18.4	23.7	..	5.5	..	..	1	21.5	26.1	..	..
Jordan	41.3	31.6	..	..	15	..	6.4	36.8	36.6	254	-119
Kazakhstan	..	..	..	..	341	..	..	..	19.6	..	615
Kenya	25.3	29.8	11.5	20.8	77	4.2	1.6	16.8	17.9	124	-104
Kiribati	..	..	..	..	..	..	..	..	..	..	..
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	17.0	17.7	10.3	15.3	4717	5.8	3.3	33.6	46.7	..	..
Kuwait	27.7	51.4	..	..	951	3.4	12.5	54.3	45.8	..	..
Kyrgyz Republic	..	..	..	..	..	..	..	..	13.6	..	46
Lao PDR	..	..	..	..	35	..	..	2.9	16.5	6	104
Latvia	..	32.2	..	..	173	..	0.9	..	41.1	..	331
Lebanon	..	32.5	..	..	..	..	..	..	36.0	12	740
Lesotho	..	50.7	..	..	..	..	2.8	..	..	17	38
Liberia	..	..	..	..	..	1.5	..	..	..	..	..
Libya	..	..	..	..	..	..	..	..	..	..	..
Liechtenstein	..	..	..	..	..	..	..	..	..	..	..
Lithuania	..	25.5	..	..	114	..	0.5	..	46.6	..	469
Luxembourg	..	..	..	..	..	1.0	0.6	..	..	..	..
Macao	..	..	..	..	..	..	..	..	..	..	..
Macedonia, FYR	..	..	..	..	685	..	..	..	..	..	8
Madagascar	..	17.2	..	..	..	..	0.9	7.8	10.0	7	5
Malawi	34.6	..	4.1	10.3	..	4.4	..	13.0	16.8	2	-3
Malaysia	28.5	22.9	17.0	15.8	9981	4.2	3	33.6	70.2	769	12096
Maldives	..	..	..	..	..	0	0	..	..	..	..
Mali	20.6	..	..	..	..	2.4	..	16.4	19.9	-8	23
Malta	..	..	..	..	..	0.6	..	..	..	..	..
Marshall Islands	..	..	..	..	..	..	..	..	..	..	..
Martinique	..	..	..	..	..	..	..	..	..	..	..
Mauritania	..	..	..	19.3	1	..	..	29.6	26.7	6	25

Foreign direct investment						Portfolio investment				Aid dependency							
$ millions		% of gross domestic investment		% of GDP		Bonds $ millions		Equity $ millions		$ millions		Aid per capita, $		Aid % of GNP		Aid as % of gross domestic investment	
1990	1996	1980	1996	1980	1996	1990	1996	1990	1996	1991	1996	1991	1996	1991	1996	1991	1996
44	75	0.9	5.8	0.2	1.9	0	-13	0	0	302.5	367.3	58	60	10.5	9.2	40.0	28.6
..	..	..	..	..	..	..	..	..	..	36.1	13.2	6	2	0.0	0.0	0.2	0.0
0	1982	0.0	16.5	0.0	4.4	921	-940	150	1004	626.0	185.0	61	18	2.0	0.4	9.2	1.5
..	..	..	..	..	..					..	..	..	..	..	..	..	..
162	2587	0.2	2.7	0.0	0.7	147	-457	105	4398	2745.0	1936.2	3	2	1.1	0.6	4.8	2.1
1093	7960	1.0	11.1	0.2	3.5	26	3744	312	3099	1874.4	1120.6	10	6	1.5	0.5	5.0	1.6
-362	10	0.0	..	0.0	..	0	0	0	0	194.4	171.0	4	3	0.2	0.1	0.5	..
..	..	..	..	0.0	..	..	..	..	..	552.4	387.4	30	18	..	..	..	..
627	2456	..	23.6	1.7	3.5	..	..	..	..								
101	2110	1.0	7.3	0.2	1.7	..	..	..	..	1749.5	2216.7	353	389	2.8	0.4	11.6	1.6
6411	3523	0.5	2.5	0.1	0.3	..	..	..	..								
138	175	6.5	14.9	1.0	4.0	0	53	0	0	162.2	59.9	67	24	4.9	1.4	16.7	5.1
1777	200	1.0	0.0	0.0	0.0	..	..	..	..								
38	16	2.3	0.6	0.9	0.2	0	-5	0	25	920.7	513.7	260	119	23.8	7.2	84.9	20.2
..	310	..	6.4	..	1.5	..	200	..	0	111.5	124.0	7	8	0.4	0.6	0.1	2.6
57	13	3.7	0.7	1.1	0.1	0	0	0	43	921.2	606.1	38	22	12.1	6.8	53.9	32.4
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	9.0	42.8	0	2	..	..	..	..
788	2325	0.0	1.3	0.0	0.5	..	..	..	..	54.8	-146.9	1	-3	0.0	0.0	0.0	-0.1
..	..	0.0	..	0.0	..	..	..	..	..	4.5	3.1	3	2	0.0	0.0	0.0	0.2
..	46	..	13.8	..	2.6	..	0	..	0	0.0	231.9	0	51	0.0	13.9	0.0	69.2
6	104	..	18.4	..	5.6	0	0	0	0	143.3	338.6	35	72	13.9	18.2	..	59.8
..	328	..	34.9	..	6.5	..	0	..	0	3.0	79.0	1	32	0.0	1.6	0.1	8.4
6	80	..	2.0	..	0.6	0	460	0	122	132.2	232.8	36	57	2.7	1.8	15.4	6.0
17	28	2.9	3.0	1.2	3.2	0	0	0	0	126.2	107.2	69	53	12.1	8.7	27.6	11.6
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	-13.9	..	-3.1	..	..	..	..	..	26.9	9.9	6	2	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	152	..	9.3	..	2.0	..	160	..	21	4.0	89.0	1	24	0.0	1.2	0.1	5.5
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	8	..	4.6	..	0.7	..	0	..	0	0.0	105.5	0	53	0.0	5.3	0.0	26.0
22	10	-0.2	2.4	0.0	0.2	0	0	0	0	455.9	364.5	38	27	17.9	9.1	161.3	87.8
0	1	3.1	0.3	0.8	0.0	0	0	0	0	524.6	500.8	60	50	24.6	23.2	119.6	132.4
2333	4500	12.5	11.0	3.8	4.5	-1239	2062	293	4353	289.5	-451.6	16	-22	0.6	-0.5	1.7	-1.1
..	..	..	..	..	..					..	..	..	..	..	..	..	..
-7	23	0.9	3.3	0.1	0.9	0	0	0	0	457.7	505.1	53	51	19.2	19.4	83.0	71.7
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
7	5	10.6	2.1	3.8	0.5	0	0	0	0	219.9	273.6	107	117	20.6	26.4	108.4	113.8

Table3. Indicators to chapters 11–13 (continued)

COUNTRY or REGION	Central government expenditure % of GDP		State-owned enterprises share in GDP, %	State-owned enterprises share in gross domestic investment, %	Proceeds from privatization millions of 1995 $	Defence expenditure % of GDP		Trade % of PPP GDP		Net private capital flows $ millions	
	1980	1995	1986-1991	1986-1991	1989-95	1980	1994	1986	1996	1990	1996
Mauritius	27.2	22.6	4.8	..	..	0.2	0.3	30.9	35.7	85	112
Mayotte	..	..	..	..	..	..	..	..	..	..	..
Mexico	15.7	15.9	11.0	14.3	31717	0.4	0.8	6.8	26.1	8240	23647
Micronesia, Fed. Sts.	..	..	..	..	..	..	..				
Moldova	..	..	..	..	..	..	..	..	41.4	..	115
Monaco	..	..	..	..	..	..	..	..	..	..	..
Mongolia	..	21.5	..	..	..	..	2.5	3.8	19.5	16	-15
Morocco	33.1	..	17.2	18.7	922	5.9	4.2	12.6	14.0	337	388
Mozambique	..	..	..	..	66	..	..	17.8	14.4	35	23
Myanmar	15.8	10.6	..	30.8	..	3.5	4.1	..	..	153	129
Namibia	..	38.5	..	10.8	..	..	..	..	..	..	..
Nepal	14.3	17.5	..	53.3	14	1.0	0.9	4.2	4.3	-9	9
Netherlands	52.9	50.8	..	6.0	..	3.0	2.1	86.7	106.4	..	..
Netherlands Antilles	..	..	..	..	..	0	..	..	..	..	..
New Caledonia	..	..	..	..	..	..	..	..	..	..	..
New Zealand	38.3	32.9	..	..	..	1.96	1.19	29.7	45.0	..	..
Nicaragua	30.4	33.2	..	..	146	3.3	1.9	15.5	19.4	21	41
Niger	18.4	..	5.2	14.5	..	0.7	..	9.6	7.4	9	-24
Nigeria	..	..	14.8	15.1	862	..	..	17.2	21.5	467	706
Northern Mariana Islands	..	..	..	..	..	..	..	..	..	..	..
Norway	34.4	39.0	..	26.8	..	2.7	2.8	67.8	80.3	..	..
Oman	38.5	42.4	..	..	67	19.7	16.1	52.9	45.4	-259	69
Pakistan	17.5	23.2	11.4	28.6	1726	..	..	9.3	10.0	182	1936
Panama	30.5	24.7	8.4	8.9	111	..	1.5	14.3	111.0	127	301
Papua New Guinea	34.4	29.4	..	7.1	..	1.5	1.0	31.2	33.0	204	414
Paraguay	9.9	13.0	4.1	10.7	20	1.2	1.4	8.2	29.3	67	202
Peru	19.5	17.2	5.3	7.7	4735	4.1	..	6.6	13.0	59	5854
Philippines	13.4	17.9	2.4	6.7	3760	2.1	1.36	8.0	21.3	639	4600
Poland	..	43.0	..	..	3234	..	..	15.9	26.5	71	5333
Portugal	33.1	44.1	14.2	15.3	..	2.5	..	23.2	43.1	..	..
Puerto Rico	..	..	..	..	..	..	..	..	..	..	..
Qatar	..	..	..	..	..	..	..	..	..	..	..
Reunion	..	..	..	..	..	..	..	..	..	..	..
Romania	44.8	32.0	..	..	125	1.7	2.4	20.3	16.8	4	1814
Russian Federation	..	24.0	..	..	1226	..	4.4	..	19.8	5604	7454
Rwanda	14.3	25.8	10.0	..	..	..	..	11.7	12.9	6	1
São Tomé and Principe	..	..	..	..	..	..	..				
Saudi Arabia	..	..	..	..	..	..	..	36.2	41.2	..	..
Senegal	23.1	..	6.2	22.0	..	3.9	..	22.6	16.1	42	34
Seychelles	..	..	..	..	..	..	2.43	..	..	..	..
Sierra Leone	26.5	16.4	..	..	..	..	..	14.1	22.8	36	5

Foreign direct investment						Portfolio investment				Aid dependency							
$ millions		% of gross domestic investment		% of GDP		Bonds $ millions		Equity $ millions		$ millions		Aid per capita, $		Aid % of GNP		Aid as % of gross domestic investment	
1990	1996	1980	1996	1980	1996	1990	1996	1990	1996	1991	1996	1991	1996	1991	1996	1991	1996
41	37	0.5	3.3	0.1	0.9	0	0	0	34	67.5	19.6	63	17	2.4	0.5	8.3	1.8
..	..	..	..	..	..					..	..	..	..	..	..	..	..
2634	7619	4.1	10.9	1.1	2.3	661	11344	563	3922	278.3	289.1	3	3	0.1	0.1	0.4	0.4
..	41	..	8.0	..	2.2	..	0	..	0	0.0	37.0	0	9	0.0	2.1	0.0	7.3
..	..	..	..	..	..					..	..	..	..				
0	5	..	2.3	..	0.5	0	0	0	0	69.5	202.6	31	81	24.2	21.3	80.8	93.0
165	311	2.0	4.1	0.5	0.8	0	293	0	222	1232.4	650.8	50	24	4.6	1.8	19.5	8.6
9	29	0.0	3.6	0.0	1.7	0	0	0	0	1070.3	922.9	74	51	83.8	59.8	163.4	111.5
161	100	..	..	..	..	0	0	0	10	179.4	56.2	4	1	..	..	..	..
..	..	0.0	21.4	0.0	4.2	..	..	..	..	184.4	188.6	133	119	6.9	5.7	38.8	29.4
6	19	0.0	1.9	0.0	0.4	0	0	0	0	453.4	401.4	24	18	12.0	8.9	58.8	38.8
12343	7824	6.0	18.7	1.3	2.0	..	..	..	..								
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
1735	280	3.7	31.5	0.8	0.4	..	..	..	..								
0	45	0.0	8.2	0.0	2.3	0	-8	0	0	841.1	954.0	217	212	64.1	57.1	239.8	174.5
-1	0	5.3	0.0	1.9	0.0	0	0	0	0	377.0	258.7	48	28	16.5	13.2	176.4	134.8
588	1391	-5.4	23.2	-1.2	4.3	0	0	0	5	262.6	191.8	3	2	1.1	0.6	4.1	3.2
..	..	..	..	..	..					..	..	..	..	..	..	..	..
1003	3960	0.4	..	0.1	2.5	..	..	..	..								
141	67	7.4	4.0	1.6	0.4	0	0	0	25	15.2	61.6	9	28	0.2	0.6	0.9	5.0
244	690	1.4	5.7	0.3	1.1	0	150	0	700	1370.9	876.8	12	7	2.9	1.4	15.9	7.3
132	238	-4.4	9.9	-1.2	2.9	-2	75	0	5	101.9	89.5	42	33	1.9	1.1	9.1	3.7
155	225	11.8	16.2	3	4.4	0	0	0	187	396.8	385	101	87	10.8	8	38.2	27.7
76	220	2.2	10.1	0.7	2.3	0	0	0	0	146.0	97.1	34	20	2.4	1.0	10.1	4.6
41	3581	0.4	25.0	0.1	5.9	0	0	0	2740	614.0	409.8	28	17	2.2	0.7	12.6	2.9
530	1408	-1.1	6.9	-0.3	1.7	395	2319	0	1333	1053.0	883.2	16	12	2.3	1.0	11.5	4.4
89	4498	0.1	16.4	0.0	3.3	0	216	0	722	2508.0	830.0	0	22	0.0	0.6	0.0	3.0
2610	618	..	8.3	0.5	0.6	..	..	..	..								
..	..	..	..	..	..	..	..	..	..								
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
0	263	..	2.9	..	0.7	0	1029	0	11	321.0	218.0	14	10	1.1	0.6	4.0	2.4
0	2479	..	2.5	..	0.6	310	21	0	5008	564.0	1225.0	4	8.3	0.1	0.3	0.3	1.3
8	1	8.7	0.6	1.4	0.1	0	0	0	0	363.6	674.3	51	100	19.9	51.2	166.8	371.9
..	..	-9.4	-7.7	-2.0	-1.5	..	..	..	..	44.7	28.5	3	1	0.0	0.0	0.2	0.1
57	45	3.1	5.3	0.5	0.9	0	0	0	0	639.0	581.5	85	68	12.0	11.6	94.8	68.3
..	..	..	..	..	..					..	..	..	..	..	..	..	..
32	5	-9.0	5.7	-1.6	0.5	0	0	0	0	104.9	195.5	26	42	14.8	21.2	123.3	223.2

Table3. Indicators to chapters 11–13 (continued)

COUNTRY or REGION	Central government expenditure % of GDP		State-owned enterprises share in GDP, %	State-owned enterprises share in gross domestic investment, %	Proceeds from privatization millions of 1995 $	Defence expenditure % of GDP		Trade % of PPP GDP		Net private capital flows $ millions	
	1980	1995	1986-1991	1986-1991	1989-95	1980	1994	1986	1996	1990	1996
Singapore	20.0	15.9	..	..	..	5.1	4.4	191.0	316.0	..	..
Slovak Republic	..	..	..	..	1525	..	..	..	52.2	278	1265
Slovenia	..	..	..	..	565	..	..	..	74.0	..	1219
Solomon Islands	..	..	..	..	..	0	..	..	..	..	..
Somalia	..	..	..	..	..	..	..	..	..	..	..
South Africa	22.1	33.7	14.7	15.5	796	..	..	17.4	20.7	..	1417
Spain	26.7	38.2	..	8.6	..	1.2	1.3	18.4	36.8	..	..
Sri Lanka	41.4	29.3	10.4	25.5	316	0.7	3.4	14	21.5	54	123
St. Kitts and Nevis	..	..	..		..	..	..	..	..	..	..
St. Lucia	..	..	..		..	..	..	..	..	..	..
St. Vincent and the Grenadines	..	..	..		..	0	0	..	..	..	..
Sudan	19.6	..	48.2	..	..	2.6	..	..	..	0	0
Suriname	..	..	..	..	..	..	..	..	..	..	..
Swaziland	..	..	..	..	..	2.19	..	..	..	..	..
Sweden	39.3	49.6	..	10.1	..	3.0	2.7	61.5	87.2	..	..
Switzerland	20.1	26.5	..	..	..	2.1	1.7	67.4	89.6	..	..
Syrian Arab Republic	48.2	24.5	..	..	..	17.2	7.5	20.0	19.6	18	77
Tajikistan	..	..	..	..	..	..	..	..	26.9	..	16
Tanzania	..	..	13.7	30.0	113	3.4	..	..	..	5	143
Thailand	18.8	15.8	5.4	13.5	1171	4.1	2.4	14.7	31.3	4498	13517
Togo	30.8	..	11.8	11.4	32	2.3	..	11.0	19.5	0	0
Tonga	..	..	..	..	..	0	..	..	..	..	..
Trinidad and Tobago	30.9	29.2	9.1	16.4	492	..	..	42.7	53.7	-69	343
Tunisia	31.6	32.8	30.2	30.4	148	3.84	1.7	20.6	30.2	-122	697
Turkey	21.3	22.2	9.1	31.9	3434	3.3	2.2	10.3	17.5	1782	5635
Turkmenistan	..	..	..	..	..	..	..	..	32.8	..	355
Uganda	6.2	..	..	..	107	1.5	..	10.1	6.3	16	114
Ukraine	..	..	..	..	264	..	..	..	35.0	..	395
United Arab Emirates	12.1	11.8	..	..	190	5.8	4.4	83.6	135.7	..	..
United Kingdom	38.3	42.0	3.0	5.6	..	5.3	3.6	33.3	46.3	..	..
United States	22.0	22.7	1.0	3.7	..	4.7	4.2	14.0	19.4	..	..
Uruguay	21.8	31.5	5.4	14.7	20	2.9	2.5	14.7	22.8	-192	499
Uzbekistan	..	..	..	..	30	..	..	..	12.4	..	431
Vanuatu	..	..	..	..	..	..	..	..	..	..	..
Venezuela	18.7	18.8	23.0	53.6	2918	1.1	..	15.3	19.0	-126	4244
Vietnam	..	..	..	..	..	..	..	..	17.7	16	2061
Virgin Islands (U.S.)	..	..	..	..	..	..	..	..	..	..	..
West Bank and Gaza	..	..	..	..	..	..	..	..	..	..	..
Western Samoa			..	..	..	..	..	..	..	..	..
Yemen, Rep.	..	24.7	..	..	..	..	11.7	..	56.3	30	100

Foreign direct investment						Portfolio investment				Aid dependency							
$ millions		% of gross domestic investment		% of GDP		Bonds $ millions		Equity $ millions		$ millions		Aid per capita, $		Aid % of GNP		Aid as % of gross domestic investment	
1990	1996	1980	1996	1980	1996	1990	1996	1990	1996	1991	1996	1991	1996	1991	1996	1991	1996
5575	9440	22.8	28.6	10.5	10.0	..	..	..	..	7.8	0.0	3	0	0.0	0.0	0.1	0.0
0	281	..	3.9	..	1.5	0	380	0	0	114.0	141.0	22	26	1.1	0.7	3.4	2.0
..	186	..	4.3	..	1.0	..	163	..	360	0.0	82.2	0	41	0.0	0.4	0.0	1.9
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	136	-0.1	0.6	0.0	0.1	..	367	..	1759	0.0	361.1	0	10	0.0	0.3	0.0	1.6
13984	6.396	3.0	5.2	0.7	1.1	..	..	..	..								
43	120	3.2	3.4	1.1	0.9	0	0	0	70	890.5	494.5	52	27	10.1	3.6	43.3	13.9
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
0	0	0.0	..	0.0	..	0	0	0	0	880.9	230.3	36	8	12.3	..	49.4	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
1982	5492	0.9	41.2	0.2	2.2	..	..	..	..								
4961	3512	..	..	..	1.2	..	..	..	..								
71	89	0.0	..	0.0	0.6	0	0	0	0	381.4	225.3	30	16	3.0	1.4	18.6	..
..	16	..	4.7	..	0.8	..	0	..	0	0.0	113.0	0	19	0.0	5.6	0.0	20.3
0	150	..	14.2	..	2.6	0	0	0	0	1080.7	893.7	41	29	24.9	15.6	86.7	84.8
2444	2336	2.0	3.1	0.6	1.3	-87	3774	449	1551	721.5	832.0	13	14	0.7	0.5	1.7	1.1
0	0	13.1	0.0	3.7	0.0	0	0	0	0	202.2	166.0	56	39	12.9	12.0	73.7	85.4
..	..	..	..	..	..					..	..	..	..	..	..	..	..
109	320	9.7	38.1	3.0	5.9	-62	125	0	0	-1.5	16.9	-1	13	0.0	0.3	-0.2	2.0
76	320	9.1	6.8	2.7	1.6	-60	0	0	0	357.2	126.4	43	14	2.8	0.7	10.5	2.7
684	722	0.1	1.7	0.0	0.4	597	1578	35	799	1622.5	232.5	28	4	1.1	0.1	4.7	0.5
..	108	..	..	..	2.5	..	0	..	0	0.0	23.8	0	5	0.0	0.5	0.0	..
0	121	0.0	12.1	0.0	2.0	0	0	0	0	666.8	683.6	39	35	20.4	11.3	132.3	68.3
..	350	..	3.5	..	0.8	..	-80	..	0	368.0	379.0	7	7	0.5	0.9	1.7	3.8
..	..	..	..	..	..	..	..	..	..	-5.9	0.0	-3	0	0.0	0.0	-0.1	-0.1
32427	32347	11.2	..	1.9	2.8	..	..	..	..								
47918	76955	3.1	5.4	0.6	1.0	..	..	..	..								
0	169	16.5	7.7	2.9	0.9	-16	59	0	5	51.5	51.5	17	16	0.5	0.3	4.3	2.3
..	55	..	1.4	..	0.2	..	0	..	0	0.0	87.2	0	4	0.0	0.4	0.0	2.1
..	..	..	..	..	..					..	..	..	..	..	..	..	..
451	1833	0.3	16.3	0.1	2.7	346	51	0	1740	30.7	44.2	2	2	0.1	0.1	0.3	0.4
16	1500	..	23.0	..	6.4	0	0	0	390	237.5	927.2	4	12	2.5	4.0	16.5	14.2
..	..	..	..	..	..					..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	0.0	593.0	..	..	..	..	..	..
..	..	..	..	..	..					..	..	..	..	..	..	..	..
-131	100	..	6.6	..	1.7	0	0	0	0	300.1	260.4	22	17	6.2	4.9	37.4	17.1

Table3. Indicators to chapters 11–13 (continued)

COUNTRY or REGION	Central government expenditure % of GDP		State-owned enterprises share in GDP, %	State-owned enterprises share in gross domestic investment, %	Proceeds from privatization millions of 1995 $	Defence expenditure % of GDP		Trade % of PPP GDP		Net private capital flows $ millions	
	1980	1995	1986-1991	1986-1991	1989-95	1980	1994	1986	1996	1990	1996
Yugoslavia, FR (Serbia/Montenegro)	..	..	..	..	..	..	..	..	..	1836	0
Zaire	12.4	7.6	..	19.0	..	..	..	4.2	6.9	-24	2
Zambia	37.1	25.0	29.8	..	72	0	..	22.4	26.1	194	33
Zimbabwe	34.8	34.1	..	..	290	8.72	..	13.8	19.8	85	42
World	**25.7**	**29.1**				**..**	**..**	**20.7**	**29.1**	**..**	**..**
Low Income	..	12.9				..	..	7.1	7.9	11625	65176
Excl. China & India	..	..				..	..	12.0	15.7	..	..
Middle income	..	..				..	..	12.5	21.8	29271	181769
Lower middle income	..	22.6				..	..	12.5	20.0	..	..
Upper middle income	20.3	29.0				..	..	12.5	24.1	..	..
Low & middle Income	..	21.9				..	..	10.4	15.2	41881	246944
East Asia & Pacific	..	11.5				..	..	9.1	13.0	18443	101272
Europe & Central Asia	..	30.9				..	..	..	25.5	7787	35005
Latin America & Caribbean	18.8	24.5				..	..	7.9	17.3	12601	95569
Middle East & N. Africa	..	..				..	..	19.4	18.9	646	1979
South Asia	14.2	17.6				..	..	4.9	5.8	2173	8743
Sub-Saharan Africa	22.2	..				..	..	15.8	18.9	195	4376
High Income	26.3	31.3				..	..	26.5	38.9	..	..

Foreign direct investment						Portfolio investment				Aid dependency							
$ millions		% of gross domestic investment		% of GDP		Bonds $ millions		Equity $ millions		$ millions		Aid per capita, $		Aid % of GNP		Aid as % of gross domestic investment	
1990	1996	1980	1996	1980	1996	1990	1996	1990	1996	1991	1996	1991	1996	1991	1996	1991	1996
0	0	0.0	..	0.0	..	-2	0	0	0	159.0	681.0	15	64	..	..	..	..
-12	2	0.0	0.5	0.0	0.0	0	0	0	0	476.2	167.4	12	4	5.7	2.8	94.0	38.5
203	58	6.8	11.4	1.6	1.7	0	0	0	0	883.3	613.9	110	67	27.7	18.6	237.4	120.2
-12	63	0.1	4.7	0.0	0.8	-30	-30	0	17	393.3	374.2	39	33	6.3	5.2	23.9	27.6
238969	**552616**	**2.3**	**8.1**	**0.6**	**1.1**	**..**	**..**	**..**	**..**	**68110.3**	**63773.6**	**15**	**13**	**1.4**	**1.0**	**..**	**..**
4683	49531	0.0	9.8	0.0	3.3	67	1082	105	9283	28568.2	28186.8	10	8	3.1	1.8	11.6	5.1
..	..	-0.1	10.6	0.0	2.1	..	..	..	..	23824.5	23633.2	25	21	8.5	7.1	48.5	33.6
19004	69429	1.1	7.8	0.3	1.8	32	44602	2134	36457	26049.7	19403.2	17	12	0.8	0.5	3.2	2.3
..	..	1.6	6.5	0.4	1.6	..	..	..	..	20832.9	16145.9	20	14	1.2	0.8	4.0	3.2
..	..	0.8	9.2	0.2	2.0	..	..	..	..	5216.8	3527.3	12	7	0.4	0.3	1.8	1.4
23687	118960	0.8	8.5	0.2	2.2	100	45684	3225	45830	61160.0	54035.8	14	11	1.5	0.9	5.7	3.4
10347	58681	1.1	10.4	0.4	4.0	-952	13089	1750	14389	7541.2	8359.5	5	5	1.0	0.6	..	..
1097	14941	0.1	5.7	0.0	1.3	1893	2755	235	8705	8890.3	8938.2	19	17	0.8	0.6	2.6	2.3
8188	38015	3.4	10.4	0.8	2.1	101	28812	1099	13893	5850.2	8025.1	13	17	0.5	0.5	2.6	1.7
2757	614	3.1	3.3	0.7	0.7	-148	748	0	1632	10311.9	5342.5	43	19	2.4	1.3	9.2	..
464	3439	0.4	2.9	0.1	0.7	147	-307	105	5198	8114.1	5499.9	7	4	2.3	1.1	10.6	4.8
834	3271	0.0	6.0	0.0	1.1	-941	586	0	2012	18206.9	17299.5	33	26	6.3	5.3	35.3	27.8
167908	195736	2.9	5.4	0.7	0.9	..	..	..	..	2653.6	3091.5	..	..	..	..	..	..

Table 4. Indicators to chapters 14–17

COUNTRY or REGION	Commercial energy use: Total, thousand metric tons of oil equivalent 1980	1994	Commercial energy use: per capita, kg of oil equivalent 1980	1994	GDP per unit of energy use 1987 $ per kg oil equivalent 1980	1994
Afghanistan	893	2590	56	114	..	..
Albania	3058	1093	1145	341	0.61	2.44
Algeria	12078	24834	647	906	4.15	2.58
American Samoa	141	51	4352	927	..	..
Andorra	0	0	..	..	..	..
Angola	937	931	133	89	..	6.98
Antigua and Barbuda	106	131	1738	2017	1.72	2.91
Argentina	39669	51405	1411	1504	2.83	2.68
Armenia	1071	1441	346	384	4.29	1.43
Aruba	0	0	..	..	..	..
Australia	70399	95280	4792	5341	2.38	2.65
Austria	23449	26500	3105	3301	4.56	5.41
Azerbaijan	15001	16274	2433	2182	..	0.19
Bahamas, The	1764	1867	8400	6864	1.22	1.50
Bahrain	3169	5719	9488	10268	1.06	0.79
Bangladesh	2809	7566	32	64	4.46	3.06
Barbados	396	363	1590	1375	3.43	4.19
Belarus	2385	24772	247	2392	..	0.79
Belgium	46122	51790	4684	5120	2.81	3.16
Belize	74	88	507	417	3.15	5.09
Benin	149	107	43	20	8.34	18.01
Bermuda	190	176	3519	2816	6.33	..
Bhutan	0	22	0	33	..	16.93
Bolivia	1713	2698	320	373	2.74	2.09
Bosnia and Herzegovina	..	1525	..	348	..	..
Botswana	384	549	426	387	2.12	4.69
Brazil	72141	112795	595	718	3.45	2.81
Brunei	330	3045	1710	10839	9.97	1.00
Bulgaria	28476	20568	3213	2438	0.73	1.05
Burkina Faso	144	160	21	16	11.21	16.03
Burundi	58	143	14	23	13.89	8.28
Cambodia	393	512	60	52	..	2.41
Cameroon	774	1335	89	103	10.01	6.94
Canada	193170	229730	7854	7854	1.72	2.04
Cape Verde	105	114	363	307	1.14	2.13
Cayman Islands	0	0	..	..	..	..
Central African Republic	59	93	26	29	16.17	12.09
Chad	93	100	21	16	6.17	10.91
Channel Islands	0	0	0	0	..	..
Chile	7743	14155	695	1012	2.27	2.34
China	413130	791040	421	664	0.33	0.66
Colombia	13972	22470	501	622	2.08	2.14
Comoros	15	18	45	37	10.23	11.78
Congo	262	847	157	331	5.74	2.79
Costa Rica	1292	1843	566	558	3.12	3.41

CO_2 emission: total, million, metric tons 1980	CO_2 emission: total, million, metric tons 1992	CO_2 emission: per capita, metric tons 1980	CO_2 emission: per capita, metric tons 1992	CO_2 emission: kg per 1987 $ of GDP 1980	CO_2 emission: kg per 1987 $ of GDP 1992	Access to safe water % of population, 1993: Urban	Access to safe water % of population, 1993: Rural	Human Development Index 1995	HDI rank 1995	PPP GDP per capita rank 1995
1.8	1.4	0.1	0.1	..	..			..	..	
7.4	4.0	2.8	1.2	4.0	1.8	..	..	0.656	105	
66.2	79.2	3.5	3.0	1.3	1.2	..	..	0.746	82	59
..	..	..	..	..	..					
..	..	..	..	..	..					
5.3	4.5	0.8	0.5	..	0.6	..	..	0.344	156	120
0.1	..	2.3	..	0.8	..			0.895	29	
107.5	117.0	3.8	3.5	1.0	1.0	73	17	0.888	36	41
..	4.2	..	1.1	..	1.8	..	..	0.674	99	94
..	..	..	..	..	..					
202.8	267.9	13.8	15.3	1.2	1.2	..	..	0.932	15	19
52.2	56.6	6.9	7.2	0.5	0.4	..	..	0.933	13	10
..	63.9	..	8.7	..	13.6	..	..	0.623	110	115
8.0	..	38.0	..	3.7	..			0.893	32	27
6.6	..	19.7	..	2.0	..			0.872	43	29
7.6	17.2	0.1	0.2	0.6	0.8	47	85	0.371	147	118
0.7	..	2.7	..	0.5	..			0.909	24	34
..	102.0	..	9.9	..	4.0	..	..	0.783	68	67
127.7	101.8	13.0	10.1	1.0	0.6	..	..	0.933	12	9
0.2	0.3	1.3	1.3	0.8	0.6			0.807	63	57
0.5	0.6	0.1	0.1	0.4	0.3	82	63	0.378	145	110
..	..	..	..	..	..					
0.0	0.1	0.0	0.2	0.1	0.4			0.347	155	121
4.5	6.6	0.8	1.0	1.0	1.3	82	21	0.593	116	88
..	15.1	..	3.4	..	..	..	..			
1.0	2.2	1.1	1.6	1.2	0.9	100	53	0.678	97	53
183.6	217.1	1.5	1.4	0.7	0.8	99	68	0.809	62	56
6.9	..	35.5	..	2.1	..			0.889	35	
74.9	54.4	8.4	6.4	3.6	2.4	..	..	0.789	67	63
0.4	0.6	0.1	0.1	0.3	0.2	..	..	0.219	172	132
0.1	0.2	0.0	0.0	0.1	0.1	97	55	0.241	170	138
0.3	0.5	0.0	0.1	..	0.4	20	12	0.422	140	
3.9	2.2	0.4	0.2	0.5	0.2	71	24	0.481	132	98
430.2	409.9	17.5	14.4	1.3	0.9	..	..	0.96	1	12
0.1	..	0.4	..	1.0	..			0.591	117	106
..	..	..	..	..	..					
0.1	0.2	0.0	0.1	0.1	0.2	..	..	0.347	154	125
0.2	0.3	0.0	0.0	0.4	0.2	..	..	0.318	163	135
..	..	..	..	..	..					
27.0	34.7	2.4	2.6	1.5	1.2	100	31	0.893	31	36
1489.2	2668.0	1.5	2.3	11.0	6.6	..	..	0.65	106	83
39.3	61.5	1.4	1.8	1.4	1.4	90	90	0.85	53	48
0.0	..	0.1	..	0.3	..			0.411	141	119
0.4	4.0	0.2	1.6	0.3	1.6	94	8	0.519	128	99
2.5	3.8	1.1	1.2	0.6	0.7	..	..	0.889	34	50

Table 4. Indicators to chapters 14–17 (continued)

COUNTRY or REGION	Commercial energy use: Total, thousand metric tons of oil equivalent 1980	1994	Commercial energy use: per capita, kg of oil equivalent 1980	1994	GDP per unit of energy use 1987 $ per kg oil equivalent 1980	1994
Côte d'Ivoire	1435	1406	175	103	6.77	6.83
Croatia	..	6667	..	1395	..	..
Cuba	9645	10133	992	923	..	..
Cyprus	938	1961	1535	2701	2.71	2.79
Czech Republic	29394	39982	2873	3868	..	0.78
Denmark	19488	20700	3804	3977	4.43	5.48
Djibouti	517	548	1840	909	..	..
Dominica	12	21	164	290	6.96	7.41
Dominican Republic	2083	2591	366	337	2.04	2.47
Ecuador	4209	6345	529	565	2.32	2.19
Egypt, Arab Rep.	15176	34071	371	600	1.59	1.20
El Salvador	1000	2032	220	370	4.48	2.65
Equatorial Guinea	19	31	88	80	..	5.23
Eritrea	..	..	..	..	..	..
Estonia	..	5560	..	3709	..	0.66
Ethiopia	624	1193	17	22	..	6.95
Faeroe Islands	156	188	..	..	..	..
Fiji	334	404	527	527	3.54	3.94
Finland	24998	30520	5230	5997	2.90	2.96
France	190660	234160	3539	4042	4.12	4.38
French Guiana	125	194	1812	..	..	..
French Polynesia	179	306	1140	1399	..	..
Gabon	759	692	1098	652	4.98	5.51
Gambia, The	53	60	83	56	3.49	4.93
Georgia	..	3325	..	614	..	0.74
Germany	359170	336490	4587	4128	..	..
Ghana	1303	1542	121	93	3.57	4.45
Greece	15973	23560	1656	2260	2.76	2.19
Greenland	186	209	..	..	..	..
Grenada	17	27	191	293	6.48	6.89
Guadeloupe	159	262	486	622	..	..
Guam	1210	1372	11308	9429	..	..
Guatemala	1443	2165	209	210	5.01	4.28
Guinea	356	418	80	65	..	6.10
Guinea-Bissau	31	39	38	37	3.76	5.78
Guyana	599	288	788	350	0.74	1.49
Haiti	240	200	45	29	9.55	7.91
Honduras	843	1173	230	204	4.23	4.39
Hong Kong	5628	13243	1117	2185	5.32	5.32
Hungary	28322	24450	2645	2383	0.78	0.96
Iceland	1432	2110	6281	7932	2.92	2.66
India	93907	226638	137	248	1.92	1.64
Indonesia	25028	69740	169	366	2.07	1.85
Iran, Islamic Rep.	38347	94159	980	1505	3.04	1.92
Iraq	12003	23864	923	1213	7.15	..

CO_2 emission total, million, metric tons 1980	CO_2 emission total, million, metric tons 1992	CO_2 emission per capita, metric tons 1980	CO_2 emission per capita, metric tons 1992	CO_2 emission kg per 1987 $ of GDP 1980	CO_2 emission kg per 1987 $ of GDP 1992	Access to safe water % of population, 1993 Urban	Access to safe water % of population, 1993 Rural	Human Development Index 1995	HDI rank 1995	PPP GDP per capita rank 1995
4.7	6.3	0.6	0.5	0.5	0.6	97	73	0.368	148	111
..	16.2	..	3.4	..	..	98	74	0.759	76	
30.7	28.6	3.2	2.6	..	..	100	91	0.729	85	
3.2	..	5.2	..	1.3	..	..	..	0.913	23	
..	135.6	..	13.1	..	4.4	..	..	0.884	39	35
63.2	53.9	12.3	10.4	0.7	0.5	..	100	0.928	18	11
0.3	..	1.1	..	..	..			0.324	162	
0.0	..	0.5	..	0.4	..			0.879	41	
6.4	10.2	1.1	1.4	1.5	1.7	75	40	0.72	88	71
13.4	18.9	1.7	1.8	1.4	1.4	79	45	0.767	73	66
45.2	84.0	1.1	1.5	1.9	2.1	95	74	0.612	112	72
2.1	3.6	0.5	0.7	0.5	0.7	95	16	0.604	114	87
0.1	0.1	0.3	0.3	..	0.8			0.465	135	
..	..	..	..	..	..	..	..	0.275	168	
0.4	20.9	0.3	13.5	0.1	4.9	..	..	0.758	77	65
1.8	2.9	0.0	0.1	..	0.4	90	20	0.252	169	143
..	..	..	..	..	..	..	..	..	..	..
0.8	0.7	1.2	0.9	0.7	0.5			0.869	44	51
55.1	41.2	11.5	8.2	0.8	0.5	100	100	0.942	6	21
484.1	362.1	9.0	6.3	0.6	0.4	100	100	0.946	2	13
0.4	..	5.3	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
4.8	5.6	6.9	5.5	1.3	1.3	80	30	0.568	120	
0.2	0.2	0.2	0.2	0.9	0.6	87	86	0.291	165	127
..	13.8	..	2.5	..	3.0	..	..	0.633	108	114
1068.3	878.1	13.6	10.9	..	..	..	..	0.925	19	15
2.4	3.8	0.2	0.2	0.5	0.6	76	46	0.473	133	103
51.4	73.9	5.3	7.2	1.2	1.4	..	..	0.924	20	32
0.6	..	..	..	..	..			..	..	..
0.0	..	0.5	..	0.4	..			0.851	51	
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
4.5	5.7	0.6	0.6	0.6	0.7	84	51	0.615	111	80
0.9	1.0	0.2	0.2	..	0.4	78	51	0.277	167	..
0.1	0.2	0.2	0.2	1.2	1.0	18	47	0.295	164	131
1.8	0.8	2.3	1.0	4.0	2.3			0.67	100	90
0.8	0.8	0.1	0.1	0.3	0.4	55	34	0.34	159	129
2.1	3.1	0.6	0.6	0.6	0.6	90	54	0.573	119	105
16.4	29.1	3.3	5.0	0.5	0.5	..	..	0.909	25	5
82.0	59.9	7.7	5.8	3.7	2.6	..	..	0.857	47	46
1.9	1.8	8.2	6.8	0.4	0.3			0.942	5	14
350.1	769.4	0.5	0.9	1.9	2.3	87	85	0.451	139	116
94.6	184.6	0.6	1.0	1.8	1.7	86	56	0.679	96	73
116.1	235.5	3.0	4.0	1.0	1.3	100	75	0.758	78	54
44.0	64.5	3.4	3.4	0.5	..	100	85	0.538	127	..

Table 4. Indicators to chapters 14–17 (continued)

COUNTRY or REGION	Commercial energy use: Total, thousand metric tons of oil equivalent 1980	1994	Commercial energy use: per capita, kg of oil equivalent 1980	1994	GDP per unit of energy use 1987 $ per kg oil equivalent 1980	1994
Ireland	8485	11200	2495	3137	3.12	3.90
Isle of Man	..	..	..	..	..	..
Israel	8616	14624	2222	2717	3.44	3.72
Italy	139190	154600	2466	2707	4.79	5.53
Jamaica	2169	2703	1017	1083	1.27	1.47
Japan	347120	481850	2972	3856	5.51	6.21
Jordan	1710	4306	784	1067	..	1.53
Kazakhstan	76799	56664	5153	3371	..	0.31
Kenya	1991	2872	120	110	3.09	3.34
Kiribati	9	8	155	103	2.82	3.79
Korea, Dem. Rep.	30932	26464	1694	1129	..	..
Korea, Rep.	41426	132538	1087	2982	1.80	1.76
Kuwait	9500	13968	6909	8622	2.67	1.97
Kyrgyz Republic	..	2755	..	616	..	0.88
Lao PDR	107	182	33	38	..	9.09
Latvia	..	3997	..	1569	..	1.22
Lebanon	2376	3790	840	964	..	..
Lesotho	..	..	..	..	..	..
Liberia	793	108	422	41	1.60	..
Libya	7122	13039	2340	2499	5.65	..
Liechtenstein	0	0	..	..	..	..
Lithuania	..	7555	..	2030	..	0.81
Luxembourg	3643	3780	9984	9361	1.56	2.32
Macao	174	377	605	857	..	9.24
Macedonia, FYR	..	2686	..	1279	..	..
Madagascar	391	479	45	36	6.72	5.57
Malawi	334	370	54	39	3.15	3.39
Malaysia	9522	33410	692	1699	2.44	1.71
Maldives	14	34	89	139	..	4.81
Mali	164	205	25	22	11.22	11.51
Malta	402	924	1104	2511	3.36	..
Marshall Islands	..	..	..	..	..	..
Martinique	79	244	242	649	..	..
Mauritania	214	229	138	103	3.79	4.77
Mauritius	339	431	351	387	3.69	6.32
Mayotte	..	..	..	..	..	..
Mexico	97434	140840	1464	1561	1.33	1.21
Micronesia, Fed. Sts.	..	..	..	..	..	..
Moldova	..	4763	..	1095	..	..
Monaco	0	0	..	..	..	..
Mongolia	1943	2550	1168	1058	1.16	1.17
Morocco	4927	8509	254	327	3.08	2.92
Mozambique	1123	619	93	40	1.39	3.33
Myanmar	1858	2181	55	49	..	..
Namibia	..	..	..	..	..	..

CO_2 emission total, million, metric tons 1980	CO_2 emission total, million, metric tons 1992	CO_2 emission per capita, metric tons 1980	CO_2 emission per capita, metric tons 1992	CO_2 emission kg per 1987 $ of GDP 1980	CO_2 emission kg per 1987 $ of GDP 1992	Access to safe water % of population, 1993 Urban	Access to safe water % of population, 1993 Rural	Human Development Index 1995	HDI rank 1995	PPP GDP per capita rank 1995
25.1	30.9	7.4	8.7	0.9	0.8	..	..	0.93	17	26
..	..	..	..	..	..			..	..	..
21.1	41.6	5.4	8.1	0.7	0.9	..	..	0.913	22	23
372.1	407.7	6.6	7.2	0.6	0.5	..	..	0.922	21	17
8.4	8.0	4.0	3.3	3.1	2.1	92	48	0.735	84	77
933.9	1093.5	8.0	8.8	0.5	0.4	..	..	0.94	8	7
4.7	11.3	2.2	3.0	..	1.9	98	94	0.729	87	70
..	298.0	..	17.6	..	12.6	..	..	0.695	93	83
6.2	5.3	0.4	0.2	1.0	0.6	74	43	0.463	137	117
0.0	..	0.5	..	1.2	..			..	..	..
125.6	253.8	6.9	11.2	..	..	100	100	0.766	75	..
125.7	289.8	3.3	6.6	1.7	1.4	..	..	0.894	30	33
24.7	16.0	18.0	11.2	1.0	0.8	..	..	0.848	54	4
..	15.4	..	3.4	..	4.3	..	..	0.633	109	107
0.2	0.3	0.1	0.1	..	0.2	34	36	0.465	136	
..	14.8	..	5.6	..	2.6	..	..	0.704	92	78
6.2	11.1	2.2	2.9	..	..	..	..	0.796	66	
..	..	..	..	..	..	90	40	0.469	134	109
2.0	0.3	1.1	0.1	1.6	..			..	..	..
26.9	39.5	8.8	8.1	0.7	..	..	..	0.806	64	
..	..	..	..	..	..			..	..	..
..	22.0	..	5.9	..	3.1	..	..	0.75	79	69
10.6	..	29.1	..	1.9	..			0.9	26	1
0.5	..	1.7	..	..	..			..	..	..
..	4.1	..	2.0	..	..	..	..	0.749	80	
1.6	0.9	0.2	0.1	0.6	0.4	55	10	0.348	153	137
0.7	0.7	0.1	0.1	0.7	0.5	91	41	0.334	161	134
28.0	70.5	2.0	3.8	1.2	1.5	100	80	0.834	60	38
0.0	..	0.3	..	..	..			0.683	95	82
0.4	0.4	0.1	0.0	0.2	0.2	42	25	0.236	171	140
1.0	..	2.7	..	0.7	..			0.899	27	
..	..	..	..	..	..			..	..	..
0.8	..	2.4	..	..	..			..	..	..
0.6	2.9	0.4	1.4	0.8	2.9	49	86	0.361	149	112
0.6	1.4	0.6	1.3	0.5	0.5	..	..	0.833	61	30
..	..	..	..	..	..			..	..	..
260.1	332.9	3.9	3.8	2.0	2.0	90	66	0.855	49	47
..	..	..	..	..	..			..	..	..
0.0	14.2	0.0	3.3	..	..	..	..	0.61	113	
..	..	..	..	..	..			..	..	..
6.7	9.3	4.0	4.0	3.0	3.1	..	..	0.669	101	104
16.0	27.3	0.8	1.1	1.1	1.2	100	18	0.557	125	79
3.2	1.0	0.3	0.1	2.0	0.6	44	17	0.281	166	130
4.8	4.4	0.1	0.1	..	..	38	36	0.481	131	
..	..	..	..	..	..	97	37	0.644	107	68

Table 4. Indicators to chapters 14–17 (continued)

COUNTRY or REGION	Commercial energy use: Total, thousand metric tons of oil equivalent 1980	1994	Commercial energy use: per capita, kg of oil equivalent 1980	1994	GDP per unit of energy use 1987 $ per kg oil equivalent 1980	1994
Nepal	174	582	12	28	12.47	7.34
Netherlands	65106	70440	4601	4580	3.01	3.71
Netherlands Antilles	3974	2371	22839	11981	..	..
New Caledonia	711	603	5152	3308	..	..
New Zealand	9202	15070	2956	4245	3.37	2.80
Nicaragua	756	1273	270	300	5.10	2.69
Niger	210	327	38	37	12.11	7.35
Nigeria	9879	17503	139	162	3.07	2.15
Northern Mariana Islands	..	..	..	..	..	..
Norway	18865	23060	4611	5318	3.87	4.62
Oman	1346	5018	1223	2392	2.93	2.38
Pakistan	11698	32133	142	254	1.83	1.47
Panama	1376	1597	703	618	3.20	3.87
Papua New Guinea	705	990	228	236	3.86	4.75
Paraguay	550	1402	175	299	5.97	3.46
Peru	8139	8555	471	367	2.49	2.68
Philippines	13406	21199	277	316	2.45	1.94
Poland	124500	92537	3499	2401	0.48	0.67
Portugal	10291	18090	1054	1827	3.54	2.77
Puerto Rico	8042	7371	2508	2000	3.54	2.77
Qatar	4738	7684	20690	12597	2.42	..
Reunion	322	429	636	669		
Romania	63846	39387	2876	1733	0.53	0.73
Russian Federation	750240	595440	5397	4014	0.59	0.52
Rwanda	190	209	37	34	9.31	4.93
São Tomé and Principe	13	23	139	184	5.15	2.64
Saudi Arabia	35496	83772	3787	4566	2.70	1.14
Senegal	875	803	158	97	4.20	6.33
Seychelles	70	122	1110	1691	3.18	2.94
Sierra Leone	310	323	96	77	2.32	2.44
Singapore	6049	23743	2651	8103	2.23	1.55
Slovak Republic	..	17343	..	3243	..	0.88
Slovenia	..	5195	..	2612	..	..
Solomon Islands	389	58	1670	159	0.25	3.92
Somalia	389	61	58	7	2.10	..
South Africa	60511	86995	2074	2146	1.25	1.00
Spain	68692	96200	1837	2458	3.62	3.62
Sri Lanka	1411	1728	96	97	3.42	5.09
St. Kitts and Nevis	0	20	0	486	..	7.33
St. Lucia	39	53	315	338	..	7.93
St. Vincent and the Grenadines	17	22	174	199	5.41	8.76
Sudan	1150	1731	62	66	12.74	12.09
Suriname	1002	784	2813	1926	0.43	1.06
Swaziland	191	232	338	264	2.15	3.00
Sweden	40992	50250	4933	5723	3.43	3.33

CO_2 emission total, million, metric tons 1980	CO_2 emission total, million, metric tons 1992	CO_2 emission per capita, metric tons 1980	CO_2 emission per capita, metric tons 1992	CO_2 emission kg per 1987 $ of GDP 1980	CO_2 emission kg per 1987 $ of GDP 1992	Access to safe water % of population, 1993 Urban	Access to safe water % of population, 1993 Rural	Human Development Index 1995	HDI rank 1995	PPP GDP per capita rank 1995
0.5	1.3	0.0	0.1	0.2	0.3	60	41	0.351	152	123
152.8	139.0	10.8	9.2	0.8	0.5	100	100	0.941	7	16
..	..	..	..	..	..			..	..	..
..	..	..	..	..	..			..	..	..
17.6	26.2	5.7	7.6	0.6	0.7	..	..	0.939	9	25
2.0	2.5	0.7	0.6	0.5	0.7	74	30	0.547	126	102
0.6	1.1	0.1	0.1	0.2	0.5	58	54	0.207	173	133
68.1	96.5	1.0	0.9	2.2	2.6	69	11	0.391	142	122
..	..	..	..	..	..			..	..	..
40.0	60.2	9.8	14.1	0.5	0.6	..	..	0.943	3	8
5.9	10.0	5.3	5.3	1.5	0.9	98	56	0.771	71	42
31.7	71.9	0.4	0.6	1.5	1.6	85	47	0.453	138	96
3.6	4.2	1.9	1.7	0.8	0.8	..	..	0.868	45	49
1.8	2.3	0.6	0.6	0.7	0.6	97	18	0.507	129	89
1.5	2.6	0.5	0.6	0.4	0.6	..	17	0.707	91	75
23.5	22.3	1.4	1.0	1.2	1.2	76	24	0.729	86	74
36.5	49.7	0.8	0.8	1.1	1.3	..	..	0.677	98	86
459.6	341.9	12.9	8.9	7.7	6.0	..	..	0.851	52	55
27.1	47.2	2.8	4.8	0.7	0.9	..	..	0.892	33	31
14.0	..	4.4	..	0.7	..	..	..			
12.9	..	56.3	..	..	..	..	..	0.84	57	22
0.7	..	1.4	..	..	..					
191.4	122.1	8.6	5.4	5.7	4.5	..	..	0.767	74	64
..	2103.1	..	14.1	..	5.5	..	..	0.769	72	62
0.3	0.5	0.0	0.1	0.1	0.2	..	..	..	..	141
0.0	..	0.4	..	0.6	..			0.563	121	
130.8	220.6	14.0	13.1	1.4	2.3	98	54	0.778	70	39
2.8	2.8	0.5	0.4	0.8	0.6	..	..	0.342	158	108
0.1	..	1.5	..	0.4	..			0.845	56	
0.6	0.4	0.2	0.1	0.8	0.6	85	..	0.185	174	139
30.1	49.8	13.2	17.7	2.2	1.6	100	..	0.896	28	6
..	37.0	..	7.0	..	2.5	..	..	0.875	42	76
..	5.5	..	2.8	..	..	..	..	0.887	37	
0.1	0.2	0.4	0.5	1.0	0.8			0.56	123	97
0.6	0.0	0.1	0.0	0.7	..			..	..	..
213.4	290.3	7.3	7.5	2.8	3.5	..	..	0.717	89	60
200.0	223.2	5.4	5.7	0.8	0.6	..	..	0.935	11	28
3.4	5.0	0.2	0.3	0.7	0.6	87	49	0.716	90	81
..	..	..	..	..	..			0.854	50	37
0.1	..	0.9	..	..	..			0.839	58	
0.0	..	0.4	..	0.4	..			0.845	55	..
3.3	3.5	0.2	0.1	0.2	0.2	89	73	0.343	157	
2.4	2.0	6.7	5.0	5.5	2.1			0.796	65	95
0.5	0.3	0.8	0.3	1.2	0.4			0.597	115	85
71.4	56.8	8.6	6.6	0.5	0.3	..	..	0.936	10	20

Table 4. Indicators to chapters 14–17 (continued)

COUNTRY or REGION	Commercial energy use: Total, thousand metric tons of oil equivalent 1980	1994	Commercial energy use: per capita, kg of oil equivalent 1980	1994	GDP per unit of energy use 1987 $ per kg oil equivalent 1980	1994
Switzerland	20840	25380	3298	3629	7.29	7.36
Syrian Arab Republic	5343	13675	614	997	1.90	1.23
Tajikistan	..	3542	..	616	..	0.48
Tanzania	1023	975	55	34	..	4.53
Thailand	12093	44395	259	769	2.77	2.23
Togo	195	183	75	46	6.33	6.94
Tonga	13	18	138	178	..	4.80
Trinidad and Tobago	3863	6935	3570	5436	1.46	0.69
Tunisia	3083	5264	483	595	2.44	2.39
Turkey	31314	57580	705	957	1.88	1.85
Turkmenistan	..	10401	..	2361	..	..
Uganda	320	425	25	23	..	22.59
Ukraine	108290	165132	2164	3180	..	0.35
United Arab Emirates	8558	25137	8205	10531	3.64	..
United Kingdom	201200	220270	3572	3772	2.84	3.49
United States	1801000	2037980	7908	7819	2.07	2.62
Uruguay	2208	1971	758	622	3.42	4.61
Uzbekistan	..	41825	..	1869	..	0.33
Vanuatu	39	46	339	279	2.42	2.95
Venezuela	35011	46300	2354	2186	1.30	1.21
Vietnam	4024	7267	75	101	..	7.53
Virgin Islands (U.S.)	3224	3362	33237	33843	0.31	..
West Bank and Gaza	..	..	..	..	..	..
Western Samoa	0.00	71.00	0.00	432.93	..	..
Yemen, Rep.	1364	3044	160	206	..	..
Yugoslavia, FR (Serbia/Montenegro)	..	11681	..	1110	..	..
Zaire	1487	1902	55	45	4.38	..
Zambia	1685	1296	294	149	1.28	1.84
Zimbabwe	2797	4722	399	438	1.52	1.44
World	**6249745**	**8011531**	**1419**	**1433**	**2.27**	**2.38**
Low Income	587124	1154712	248	369	0.89	1.07
Excl. China & India	80087	137034	114	134	..	2.65
Middle income	1873142	2313337	1537	1475	1.69	1.16
Lower middle income	1448776	1647009	1632	1449	1.40	0.96
Upper middle income	424366	666328	1282	1544	2.27	1.65
Low & middle Income	2460266	3468049	686	739	1.39	1.13
East Asia & Pacific	514066	1000586	378	593	0.69	0.94
Europe & Central Asia	1279071	1288624	3105	2647	..	0.64
Latin America & Caribbean	317962	451011	888	960	2.28	2.02
Middle East & N. Africa	143540	323064	825	1220	3.20	1.65
South Asia	110906	271293	123	222	2.01	1.70
Sub-Saharan Africa	94721	133471	249	237	2.16	1.99
High Income	3789479	4543482	4644	5066	2.90	3.38

CO_2 emission total, million, metric tons 1980	CO_2 emission total, million, metric tons 1992	CO_2 emission per capita, metric tons 1980	CO_2 emission per capita, metric tons 1992	CO_2 emission kg per 1987 $ of GDP 1980	CO_2 emission kg per 1987 $ of GDP 1992	Access to safe water % of population, 1993 Urban	Access to safe water % of population, 1993 Rural	Human Development Index 1995	HDI rank 1995	PPP GDP per capita rank 1995
40.9	43.7	6.5	6.4	0.3	0.2	100	..	0.93	16	3
19.3	42.4	2.2	3.3	1.9	2.8	95	77	0.749	81	58
..	4.0	..	0.7	..	1.6	..	..	0.575	118	128
1.9	2.1	0.1	0.1	..	0.5	65	45	0.358	150	136
40.0	112.5	0.9	2.0	1.2	1.3	89	72	0.838	59	44
0.6	0.7	0.2	0.2	0.5	0.6	64	54	0.38	144	124
0.0	..	0.4	..	..	..			..	..	..
16.7	20.6	15.4	16.5	3.0	4.4	83	80	0.88	40	40
9.5	13.6	1.5	1.6	1.3	1.1	100	67	0.744	83	61
76.0	145.5	1.7	2.5	1.3	1.4	100	85	0.782	69	52
..	42.3	..	10.5	..	..	..	..	0.66	103	..
0.6	1.0	0.1	0.1	..	0.1	..	..	0.34	160	113
..	611.3	..	11.7	..	6.9	..	..	0.665	102	91
36.3	70.6	34.8	33.9	1.2	..	98	98	0.855	48	24
588.3	566.2	10.4	9.8	1.0	0.8	100	100	0.932	14	18
4623.2	4881.3	20.3	19.1	1.2	1.0	..	..	0.943	4	2
5.8	5.0	2.0	1.6	0.8	0.6	93	..	0.885	38	45
..	123.3	..	5.7	..	8.5	..	..	0.659	104	92
0.1	..	0.5	..	0.7	..			0.559	124	93
89.6	116.4	6.0	5.7	2.0	2.0	68	67	0.86	46	43
17.0	21.5	0.3	0.3	..	0.5	100	66	0.56	122	
..	..	..	..	..	..			..	..	..
..	..	..	..	..	..	..	..	..	..	..
0.10	..	0.64	..	0.97	..			0.694	94	101
3.3	10.1	0.4	0.7	..	..	88	17	0.356	151	
..	38.2	..	3.6	..	..	..	..	..	..	..
3.5	4.2	0.1	0.1	0.5	0.7	..	..	0.383	143	142
3.5	2.5	0.6	0.3	1.6	1.0	76	43	0.378	146	126
9.7	18.7	1.4	1.8	2.3	3.0	99	65	0.507	130	100
14770.0	**21347.5**	**3.6**	**4.0**	**1.1**	**1.2**	**..**	**..**	**0.7715**		
2062.6	3880.3	0.9	1.3	4.2	3.6	..	..			
223.3	442.9	0.3	0.5	1.1	1.3	71	45			
2830.7	7221.0	2.9	4.8	1.7	..	..	..			
1663.7	5564.7	2.6	5.1	..	3.3	..	..			
1166.9	1656.3	3.7	4.0	1.4	..	93	65			
4893.3	11101.4	1.5	2.4	2.2	3.0	..	..			
1845.8	3378.0	1.4	2.1	6.0	4.8	..	..			
944.1	4506.4	..	9.3	..	4.8	..	..			
855.0	1029.3	2.4	2.3	1.2	1.2	89	57			
500.5	849.1	2.9	3.4	1.1	..	98	70			
395.2	866.4	0.4	0.7	1.8	2.1	84	80			
352.7	472.2	0.9	0.9	1.7	1.8	..	..			
9876.7	10246.1	12.4	11.9	0.9	0.7	..	..			