# 2 | PEOPLE

The ultimate aim of development is to improve human welfare in a substantial way. But development has often bypassed the poor, and so attacking poverty directly through its many dimensions has become an urgent global priority.

To accelerate progress in human development, economic growth is, of course, necessary. But it is not enough. Because the most significant asset of people poor is their labor, the most effective way to improve their welfare is to increase their employment opportunities and the productivity of their labor through investments in human capital—the product of education and improvements in health and nutrition. Thus freedom from illiteracy (figure 2a) and freedom from illness are two of the most important ways that poor people can escape poverty. But although developing countries have made large investments in human capital, assisted by the private sector and official development agencies, good health and basic education remain elusive to many. To reinforce this paramount task of development, the Millennium Development Goals set specific targets for poverty reduction, education, status of women, and health, among others, in order to measure improvements in people's lives (see section 1 for a fuller discussion of the Millennium Development Goals).

The challenge for governments is formidable. They need to provide not only services that are linked to human development, but also effective mechanisms that reduce vulnerability to economic shocks, ill health, and disability. This section tracks the progress countries have made in developing their human capital and in reducing the vulnerability of their people.

2a

Poverty and illiteracy are related

Population under $1 a day, latest available data (%)

Illiteracy rate (%)
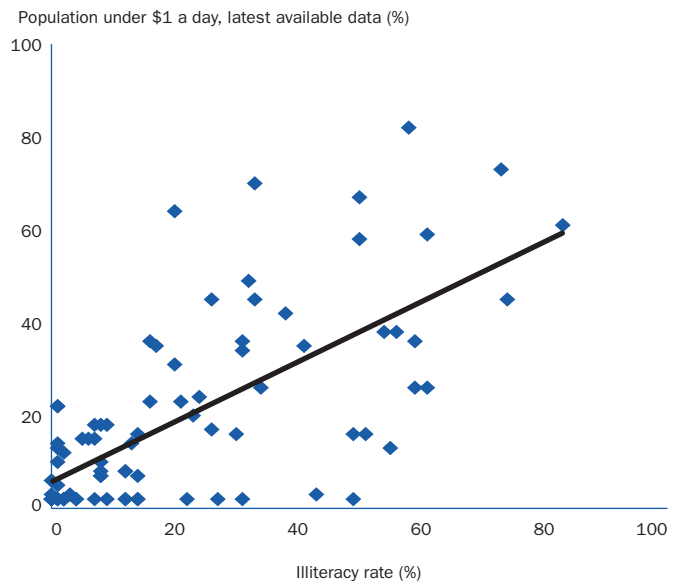
Source: World Bank data files.

Population in sustainable development

In the second half of the 20th century the world population underwent unprecedented growth—from 2.5 billion in 1950 to 6 billion in 1999—even as the population growth rate was declining. The decline was triggered largely by a drop in fertility rates. Between 1950–55 and 2002 fertility rates halved, from 5.1 to 2.6 births per woman. Thus while the world population grew at 1.5 percent a year during 1980–2002, it is expected to grow more slowly, at 1 percent a year, during 2002–15, benefiting from continuing fertility declines (table 2.1). But most developing countries will not benefit from this decline. Between 2002 and 2015 roughly 1 billion people will be added to the world, and most (95 percent) will be born in low- and middle-income countries. Despite the increase in mortality rates brought on by AIDS, the fastest growing region will be Sub-Saharan Africa, and the largest number of people will be added in Asia. And the populations of some high-income and Eastern European countries will continue their decline.

Research shows that changes in population growth, age structure, and spatial distribution interact closely with development. Fertility decline in high-fertility countries, by slowing population growth, can have important economic benefits by reducing the number of children relative to the working age population. This can create a unique opportunity to increase investments in health, education, and infrastructure. Unfortunately, in many of the poorest countries that most need such a break, high levels of unwanted fertility and the pervasive HIV/AIDS pandemic are prematurely curtailing such opportunity. Together, the continuing dependency of youthful populations and the premature deaths of young adults prevent countries from benefiting from their demographic transition.

Enabling poverty reduction

In many developing countries agriculture is still the main economic activity for both men and women (table 2.3). But as economies grow, more people work for wages. The enlarged proportion of working-age populations in countries undergoing fertility decline provides for increased labor force participation (table 2.2). This contributes to economic growth, especially when it occurs in the formal sector. In developing countries gross domestic product (GDP) grew 4.3 percent a year in the 1990s, and the share of people living on less than $1 a day fell from 28.3 percent to 21.6 percent. By 2000, 137 million fewer people were living in extreme poverty (table 2.5). And if projected growth remains on track, global poverty rates will fall to 12.5 percent by 2015, meeting the global Millennium Development Goal target of halving the 1990 poverty rate.

Progress in reducing poverty has been uneven. But because many poor people continue to be excluded from all but the lowest level of economic activity, there are large gaps

in social indicators between the rich and poor, confirming the persistence of deprivation (box 2b; table 2.6). Globally, much of the decline in income poverty took place in East Asia, where sustained growth in China has lifted more than 150 million people out of poverty since 1990. And faster growth in India has led to a modest decline in the number of poor people in South Asia. But in other regions the number of poor people has increased even as their share in the population has declined—and in Europe and Central Asia both the number and the share of poor people have risen. Unemployment is high in many of the formerly centrally planned economies, with long-term unemployment hovering around 40–50 percent of total unemployment in Croatia, the Czech Republic, and Hungary in 2002 (table 2.4).

Enhancing security for poor people

Poor people face many risks. They face labor market risks, often having to take precarious jobs in the informal sector and to put their children to work to increase household income. In Sub-Saharan Africa one in four children ages 10–14 was in the labor force in 2002 (table 2.8). Poor people also face health risks, with illness and injury having both direct and opportunity costs. In South Asia nearly 80 percent of all spending on health comes from private sources, much of it out of pocket, exposing many poor households to the impoverishing effects of needed health care (table 2.8).

Enhancing security for poor people means reducing their vulnerability to ill health and economic shocks. Market-based insurance and pension schemes can reduce risk significantly, but they play only a minor role in many developing countries. In 16 developing countries public spending on pensions amounted to less than 0.5 percent of GDP in the 1990s (table 2.9). To increase the security of poor people, national poverty reduction strategies must support their immediate consumption needs and protect their assets by ensuring access to basic services. Education, health, and

2c

nutrition services are often the most needed and most valued by poor people. Yet many governments fail the poor in the provision of these services (box 2c).

Remaining and emerging challenges in building human capital

Investments in education widen horizons, making it easier for people to take advantage of new opportunities and helping them to participate in social and economic life. But despite increased spending on education, particularly primary education (table 2.10), enrollment rates remain low in many countries (table 2.11), and primary completion rates are even lower (table 2.12), hampering achievement of the Millennium Development Goal target of universal primary education by 2015. Most children who do not attend primary school, or who drop out early, live in poor households and in poor countries (table 2.12). But in many poor countries there is also a gender dimension to school attendance, reflecting traditional biases against girls' education and reliance on girls' contributions to the household. One consequence of this imbalance: higher rates of illiteracy among women. In 2002, 33 developing countries had female literacy rates of 60 percent or lower (table 2.13). And in predominantly illiterate societies there is likely to be less pressure for those who cannot read or write to achieve literacy.

The Millennium Development Goals for health cover health status, nutritional status, illness, mortality rates, and reproductive health. The public sector is the main provider of health care in developing countries—training medical personnel, investing in hospitals, and directly providing medical care (table 2.14). To reduce inequities, many countries have emphasized primary health care, including immunization, sanitation, access to safe drinking water, and safe motherhood initiatives (tables 2.15 and 2.16). But the Millennium Development Goals remain unattainable for many countries. Some 20 countries have rates of child malnutrition greater than 30 percent (table 2.17). An estimated 40 million people are living with HIV/AIDS, an unprecedented public health challenge (table 2.18), and more than half a million women in developing countries die each year during childbirth, often because births are not attended by trained personnel (figure 2d). And the reemergence of old diseases such as tuberculosis in Europe and Central Asia and parts of South and East Asia has put severe strains on health budgets. A high prevalence of disease puts a brake on poverty reduction. Beyond its direct impact on a household's living standards through out-of-pocket spending, ill-health has an indirect impact on labor productivity and the number of hours people can work.

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There are many ways to measure poverty and its effects on people's lives. The indicators reported here suffer from many shortcomings, noted in *About the data* for each table. But taken together, the indicators provide a broad picture of how well different economies are doing in reducing poverty, enhancing human security, and building human capital—and how large a task still lies ahead.

2d

Poor women are much less likely to receive expert care in childbirth

Births attended by medically trained personnel, by income group (%)

Source: World Bank data files.

	Total population (millions)			Average annual population growth rate (%)		Population age composition			Dependency ratio dependents as proportion of working-age population		Crude death rate per 1,000 people	Crude birth rate per 1,000 people
						% Ages 0–14	Ages 15–64	Ages 65+	Young	Old		
	1980	2002	2015	1980–2002	2002–15	2002	2002	2002	2002	2002	2002	2002
Afghanistan	16.0	28.0 [a]	38.8	2.6	2.5	43.8	53.4	2.8	0.8	0.1	21	49
Albania	2.7	3.2	3.5	0.7	0.8	28.0	64.9	7.1	0.4	0.1	6	17
Algeria	18.7	31.3	38.3	2.4	1.5	34.6	61.4	4.0	0.6	0.1	5	22
Angola	7.0	13.1	18.9	2.8	2.8	47.6	49.5	2.9	1.0	0.1	19	50
Argentina	28.1	36.5	42.9	1.2	1.2	27.3	63.0	9.8	0.4	0.2	8	19
Armenia	3.1	3.1	3.0	0.0	−0.1	21.6	68.7	9.7	0.3	0.1	8	9
Australia	14.7	19.7	21.7	1.3	0.8	20.2	67.4	12.4	0.3	0.2	7	13
Austria	7.6	8.0	8.0	0.3	−0.1	16.2	67.9	15.9	0.2	0.2	10	9
Azerbaijan	6.2	8.2	9.0	1.3	0.7	27.7	65.0	7.3	0.4	0.1	7	16
Bangladesh	85.4	135.7	166	2.1	1.5	36.2	60.5	3.3	0.6	0.1	8	28
Belarus	9.6	9.9	9.3	0.1	−0.5	17.4	68.8	13.8	0.3	0.2	14	9
Belgium	9.8	10.3	10.4	0.2	0.1	17.1	66.2	16.7	0.3	0.3	10	11
Benin	3.5	6.6	9.0	2.9	2.4	45.4	51.9	2.7	0.9	0.1	13	38
Bolivia	5.4	8.8	10.9	2.3	1.7	38.7	56.9	4.4	0.7	0.1	8	29
Bosnia and Herzegovina	4.1	4.1	4.2	0.0	0.2	17.8	71.7	10.6	0.2	0.1	8	12
Botswana	0.9	1.7	1.8	2.9	0.4	41.8	56.0	2.2	0.7	0.0	23	30
Brazil	121.6	174.5	201	1.6	1.1	27.9	66.8	5.3	0.4	0.1	7	19
Bulgaria	8.9	8.0	7.3	−0.5	−0.7	14.8	68.9	16.3	0.2	0.2	14	9
Burkina Faso	7.0	11.8	15.6	2.4	2.1	47.0	50.3	2.7	0.9	0.1	19	43
Burundi	4.1	7.1	8.8	2.4	1.7	45.7	51.8	2.6	0.9	0.0	20	39
Cambodia	6.8	12.5	15.1	2.8	1.5	42.0	55.1	2.8	0.8	0.1	12	27
Cameroon	8.8	15.8	19.7	2.7	1.7	41.3	55.0	3.7	0.8	0.1	16	36
Canada	24.6	31.4	33.5	1.1	0.5	18.4	68.8	12.8	0.3	0.2	7	11
Central African Republic	2.3	3.8	4.6	2.3	1.5	42.1	54.4	3.5	0.8	0.1	20	36
Chad	4.5	8.3	12.1	2.8	2.8	48.8	48.3	2.9	1.0	0.1	16	45
Chile	11.1	15.6	17.8	1.5	1.0	27.4	65.3	7.3	0.4	0.1	5	17
China	981.2	1,280.4	1,389.5	1.2	0.6	24.2	68.6	7.2	0.4	0.1	8	15
Hong Kong, China	5.0	6.8	7.0	1.4	0.2	16.2	72.3	11.4	0.2	0.2	5	7
Colombia	28.4	43.7	51.4	2.0	1.2	31.9	63.3	4.8	0.5	0.1	6	21
Congo, Dem. Rep.	27.9	51.6	75.2	2.8	2.9	47.8	49.6	2.6	1.0	0.1	18	45
Congo, Rep.	1.8	3.7	5.2	3.2	2.8	46.7	50.2	3.2	0.9	0.1	14	44
Costa Rica	2.3	3.9	4.7	2.5	1.4	30.5	63.8	5.8	0.5	0.1	4	20
Côte d'Ivoire	8.2	16.5	20.2	3.2	1.6	41.8	55.6	2.6	0.8	0.0	17	37
Croatia	4.6	4.5	4.3	−0.1	−0.3	16.4	68.1	15.5	0.2	0.2	12	10
Cuba	9.7	11.3	11.7	0.7	0.3	20.7	69.0	10.3	0.3	0.1	8	12
Czech Republic	10.2	10.2	9.9	0.0	−0.2	15.8	70.4	13.8	0.2	0.2	11	9
Denmark	5.1	5.4	5.4	0.2	0.1	18.5	66.6	14.9	0.3	0.2	11	12
Dominican Republic	5.7	8.6	10.1	1.9	1.2	32.5	63.0	4.5	0.5	0.1	7	23
Ecuador	8.0	12.8	15.4	2.2	1.4	33.2	62.0	4.8	0.5	0.1	6	23
Egypt, Arab Rep.	40.9	66.4	80.9	2.2	1.5	34.1	61.6	4.2	0.6	0.1	6	24
El Salvador	4.6	6.4	7.9	1.5	1.6	35.0	60.1	5.0	0.6	0.1	6	26
Eritrea	2.4	4.3	5.6	2.7	2.0	44.7	52.7	2.6	0.8	0.1	13	38
Estonia	1.5	1.4	1.3	−0.4	−0.6	16.5	68.4	15.1	0.2	0.2	14	9
Ethiopia	37.7	67.2	87.3	2.6	2.0	45.7	51.5	2.8	0.9	0.1	20	40
Finland	4.8	5.2	5.3	0.4	0.1	17.8	67.0	15.2	0.3	0.2	10	11
France	53.9	59.5	61.8	0.4	0.3	18.7	65.2	16.1	0.3	0.2	10	13
Gabon	0.7	1.3	1.7	2.9	2.2	40.4	54.1	5.6	0.7	0.1	15	35
Gambia, The	0.6	1.4	1.8	3.5	1.9	40.4	56.3	3.3	0.7	0.1	14	37
Georgia	5.1	5.2	4.7	0.1	−0.8	19.2	67.1	13.8	0.3	0.2	10	8
Germany	78.3	82.5	80.3	0.2	−0.2	15.1	68.1	16.9	0.2	0.2	10	9
Ghana	11.0	20.3	25.2	2.8	1.7	42.5	53.0	4.5	0.8	0.1	13	29
Greece	9.6	10.6	11	0.4	0.3	14.8	66.8	18.4	0.2	0.3	11	9
Guatemala	6.8	12	16.3	2.6	2.3	42.9	53.7	3.5	0.8	0.1	7	33
Guinea	4.5	7.7	9.8	2.5	1.8	44.0	53.4	2.6	0.8	0.0	17	38
Guinea-Bissau	0.8	1.4	2.0	2.7	2.6	44.2	52.3	3.5	0.8	0.1	20	49
Haiti	5.4	8.3	10.3	2.0	1.7	39.6	56.9	3.5	0.7	0.1	14	32

	Total population (millions)			Average annual population growth rate (%)		Population age composition (%)			Dependency ratio (dependents as proportion of working-age population)		Crude death rate (per 1,000 people)	Crude birth rate (per 1,000 people)
						Ages 0–14	Ages 15–64	Ages 65+	Young	Old		
	1980	2002	2015	1980–2002	2002–15	2002	2002	2002	2002	2002	2002	2002
Honduras	3.6	6.8	8.9	2.9	2.1	41.1	55.5	3.4	0.7	0.1	6	30
Hungary	10.7	10.2	9.6	−0.2	−0.4	16.5	68.8	14.6	0.2	0.2	13	10
India	687.3	1,048.6	1,231.6	1.9	1.2	32.8	62.2	5.0	0.5	0.1	9	24
Indonesia	148.3	211.7	245.5	1.6	1.1	29.8	65.4	4.8	0.5	0.1	7	20
Iran, Islamic Rep.	39.1	65.5	77.5	2.3	1.3	30.8	64.4	4.7	0.5	0.1	6	18
Iraq	13.0	24.2	31.1	2.8	1.9	40.1	56.9	3.0	0.7	0.1	8	29
Ireland	3.4	3.9	4.3	0.6	0.8	21.4	67.4	11.2	0.3	0.2	8	15
Israel	3.9	6.6	7.9	2.4	1.4	27.5	62.8	9.7	0.4	0.2	6	20
Italy	56.4	57.7	55.1	0.1	−0.3	14.1	67.2	18.7	0.2	0.3	11	9
Jamaica	2.1	2.6	3.0	0.9	1.0	30.1	62.9	6.9	0.5	0.1	6	20
Japan	116.8	127.2	124.6	0.4	−0.2	14.3	67.6	18.1	0.2	0.3	8	9
Jordan	2.2	5.2	6.8	3.9	2.2	37.8	59.1	3.1	0.6	0.1	4	28
Kazakhstan	14.9	14.9	15.5	0.0	0.3	25.3	67.0	7.7	0.4	0.1	12	15
Kenya	16.6	31.3	37.5	2.9	1.4	42.6	54.8	2.7	0.8	0.0	16	35
Korea, Dem. Rep.	17.2	22.5	24.0	1.2	0.5	26.0	67.7	6.4	0.4	0.1	11	17
Korea, Rep.	38.1	47.6	50.0	1.0	0.4	21.0	71.8	7.2	0.3	0.1	7	12
Kuwait	1.4	2.3	3.0	2.4	1.9	25.1	73.1	1.7	0.3	0.0	3	20
Kyrgyz Republic	3.6	5.0	5.8	1.5	1.1	32.5	61.4	6.1	0.5	0.1	7	20
Lao PDR	3.2	5.5	7.3	2.5	2.1	42.1	54.4	3.5	0.8	0.1	12	36
Latvia	2.5	2.3	2.1	−0.4	−0.7	15.8	69.1	15.2	0.2	0.2	14	8
Lebanon	3.0	4.4	5.2	1.8	1.2	30.9	63.2	5.9	0.5	0.1	6	19
Lesotho	1.3	1.8	2.0	1.5	0.9	41.7	53.1	5.2	0.8	0.1	23	33
Liberia	1.9	3.3	4.4	2.6	2.2	44.3	53.0	2.7	0.8	0.1	20	43
Libya	3.0	5.4	6.9	2.6	1.8	33.0	63.4	3.6	0.5	0.1	4	27
Lithuania	3.4	3.5	3.3	0.1	−0.4	18.2	67.8	13.9	0.3	0.2	12	9
Macedonia, FYR	1.9	2.0	2.2	0.3	0.5	21.9	67.7	10.4	0.3	0.2	9	14
Madagascar	8.9	16.4	22.5	2.8	2.4	44.4	52.6	3.0	0.8	0.1	12	39
Malawi	6.2	10.7	13.6	2.5	1.8	44.7	51.9	3.5	0.9	0.1	25	45
Malaysia	13.8	24.3	29.6	2.6	1.5	33.3	62.4	4.3	0.5	0.1	5	22
Mali	6.6	11.4	15.6	2.5	2.4	47.2	50.0	2.9	0.9	0.1	22	48
Mauritania	1.6	2.8	3.6	2.5	2.0	43.1	53.7	3.1	0.8	0.1	15	35
Mauritius	1.0	1.2	1.4	1.0	0.9	25.2	68.5	6.3	0.4	0.1	7	17
Mexico	67.6	100.8	120.6	1.8	1.4	32.9	62.0	5.1	0.5	0.1	4	20
Moldova	4.0	4.3	4.1	0.3	−0.2	21.1	67.9	11.1	0.3	0.2	13	11
Mongolia	1.7	2.4	2.9	1.8	1.3	32.5	63.5	4.0	0.5	0.1	6	23
Morocco	19.4	29.6	35.4	1.9	1.4	33.5	62.2	4.3	0.5	0.1	6	21
Mozambique	12.1	18.4	22.7	1.9	1.6	42.5	53.8	3.7	0.8	0.1	21	40
Myanmar	33.7	48.8	55.7	1.7	1.0	32.3	63.1	4.5	0.5	0.1	12	23
Namibia	1.0	2.0	2.3	3.0	1.1	41.8	54.4	3.8	0.8	0.1	21	35
Nepal	14.6	24.1	31.1	2.3	2.0	40.4	55.8	3.8	0.7	0.1	10	32
Netherlands	14.2	16.1	16.7	0.6	0.3	18.4	67.8	13.8	0.3	0.2	9	12
New Zealand	3.1	3.9	4.4	1.1	0.8	22.1	66.2	11.7	0.3	0.2	7	14
Nicaragua	2.9	5.3	7.0	2.7	2.0	41.5	55.4	3.1	0.7	0.1	5	29
Niger	5.6	11.4	16.3	3.3	2.7	48.9	48.8	2.3	1.0	0.0	20	49
Nigeria	71.1	132.8	169.4	2.8	1.9	43.7	53.7	2.6	0.8	0.0	17	39
Norway	4.1	4.5	4.7	0.5	0.3	19.8	65.2	15	0.3	0.2	10	12
Oman	1.1	2.5	3.4	3.8	2.2	42.3	55.1	2.7	0.8	0.0	3	26
Pakistan	82.7	144.9	192.8	2.5	2.2	40.6	56.0	3.3	0.7	0.1	8	33
Panama	2.0	2.9	3.5	1.9	1.2	30.4	63.9	5.7	0.5	0.1	5	20
Papua New Guinea	3.1	5.4	6.9	2.5	1.9	41.1	56.5	2.4	0.7	0.0	10	33
Paraguay	3.1	5.5	7.2	2.6	2.0	38.8	57.7	3.5	0.7	0.1	5	30
Peru	17.3	26.7	31.5	2.0	1.3	32.4	62.7	4.9	0.5	0.1	6	22
Philippines	48.0	79.9	98.2	2.3	1.6	36.5	59.6	3.9	0.6	0.1	6	26
Poland	35.6	38.6	38.4	0.4	0.0	18.2	69.4	12.4	0.3	0.2	9	9
Portugal	9.8	10.2	10.2	0.2	0.0	17.2	67.6	15.2	0.3	0.2	11	12
Puerto Rico	3.2	3.9	4.2	0.9	0.7	23.6	66.2	10.2	0.4	0.2	8	15

	Total population (millions)			Average annual population growth rate (%)		Population age composition (%)			Dependency ratio (dependents as proportion of working-age population)		Crude death rate (per 1,000 people)	Crude birth rate (per 1,000 people)
						Ages 0–14	Ages 15–64	Ages 65+	Young	Old		
	1980	2002	2015	1980–2002	2002–15	2002	2002	2002	2002	2002	2002	2002
Romania	22.2	22.3	21.4	0.0	–0.3	17.2	69.1	13.7	0.2	0.2	13	10
Russian Federation	139.0	144.1	134.5	0.2	–0.5	16.9	70.2	12.9	0.2	0.2	15	10
Rwanda	5.2	8.2	10.0	2.1	1.6	46.6	50.3	3.1	0.9	0.1	22	44
Saudi Arabia	9.4	21.9	30.8	3.9	2.6	40.4	56.6	2.9	0.7	0.1	4	31
Senegal	5.5	10.0	12.8	2.7	1.9	44.0	53.3	2.7	0.8	0.1	13	35
Serbia and Montenegro	9.8 b	8.2	10.7	0.4 c	2.1	19.8	66.3	13.9	0.3	0.2	12	12
Sierra Leone	3.2	5.2	6.7	2.2	1.9	44.1	53.3	2.6	0.8	0.0	25	44
Singapore	2.4	4.2	4.8	2.5	1.1	21.1	71.4	7.5	0.3	0.1	5	11
Slovak Republic	5.0	5.4	5.4	0.3	0.0	18.8	69.8	11.4	0.3	0.2	10	11
Slovenia	1.9	2.0	1.9	0.1	–0.2	15.2	70.4	14.4	0.2	0.2	10	9
Somalia	6.5	9.3	14.0	1.6	3.1	47.9	49.7	2.4	1.0	0.0	18	50
South Africa	27.6	45.3	47.0	2.3	0.3	32.1	63.4	4.5	0.5	0.1	20	25
Spain	37.4	40.9	41.5	0.4	0.1	15.0	68.0	17.0	0.2	0.2	9	10
Sri Lanka	14.6	19.0	21.9	1.2	1.1	25.6	67.8	6.5	0.4	0.1	6	18
Sudan	19.4	32.8	42.6	2.4	2.0	39.7	56.8	3.5	0.7	0.1	10	33
Swaziland	0.6	1.1	1.3	3.0	1.2	42.2	55.0	2.9	0.8	0.1	18	35
Sweden	8.3	8.9	9.0	0.3	0.1	17.7	64.8	17.5	0.3	0.3	11	11
Switzerland	6.3	7.3	7.5	0.6	0.2	16.7	67.8	15.5	0.2	0.2	9	10
Syrian Arab Republic	8.7	17.0	22.0	3.0	2.0	39.0	57.8	3.1	0.7	0.1	4	29
Tajikistan	4.0	6.3	7.2	2.1	1.0	37.6	57.9	4.6	0.6	0.1	7	23
Tanzania	18.6	35.2	43.9	2.9	1.7	45.0	52.6	2.4	0.9	0.0	18	38
Thailand	46.7	61.6	66.3	1.3	0.6	23.2	70.3	6.4	0.3	0.1	8	15
Togo	2.5	4.8	6.2	2.9	2.0	43.6	53.3	3.2	0.8	0.1	15	36
Trinidad and Tobago	1.1	1.3	1.4	0.8	0.8	24.3	69.3	6.4	0.4	0.1	7	16
Tunisia	6.4	9.8	11.5	1.9	1.3	28.2	65.8	6.0	0.4	0.1	6	18
Turkey	44.5	69.6	81.3	2.0	1.2	28.4	65.8	5.9	0.4	0.1	7	22
Turkmenistan	2.9	4.8	5.7	2.3	1.3	34.7	60.9	4.4	0.6	0.1	8	22
Uganda	12.8	24.6	33.6	3.0	2.4	49.0	49.1	1.9	1.0	0.0	18	44
Ukraine	50.0	48.7	44.7	–0.1	–0.7	16.5	68.8	14.7	0.2	0.2	15	9
United Arab Emirates	1.0	3.2	3.7	5.1	1.1	25.5	71.6	2.9	0.4	0.0	4	17
United Kingdom	56.3	59.2	59.6	0.2	0.0	18.4	65.6	16.1	0.3	0.2	10	11
United States	227.2	288.4	319.9	1.1	0.8	21.1	66.4	12.5	0.3	0.2	9	14
Uruguay	2.9	3.4	3.6	0.6	0.6	24.5	62.9	12.6	0.4	0.2	10	16
Uzbekistan	16.0	25.3	30.0	2.1	1.3	35.4	60.0	4.6	0.6	0.1	6	20
Venezuela, RB	15.1	25.1	30.3	2.3	1.4	33.0	62.5	4.5	0.5	0.1	5	23
Vietnam	53.7	80.4	92.4	1.8	1.1	31.4	63.3	5.3	0.5	0.1	6	19
West Bank and Gaza	..	3.2	4.9	..	3.2	45.8	50.9	3.2	0.9	0.1	4	35
Yemen, Rep.	8.5	18.6	27.3	3.5	2.9	45.7	51.6	2.7	0.9	0.1	10	41
Zambia	5.7	10.2	11.9	2.6	1.2	44.9	52.9	2.2	0.8	0.0	23	39
Zimbabwe	7.1	13.0	14.1	2.7	0.6	44.0	52.8	3.1	0.8	0.1	21	29
World	**4,430.1 s**	**6,198.5 s**	**7,090.7 s**	**1.5 w**	**1.0 w**	**29.2 w**	**63.7 w**	**7.1 w**	**0.5 w**	**0.1 w**	**9 w**	**21 w**
Low income	1,561.8	2,494.6	3,044.0	2.1	1.5	36.5	59.3	4.2	0.6	0.1	11	29
Middle income	2,038.1	2,737.8	3,039.0	1.3	0.8	26.4	66.5	7.1	0.4	0.1	8	17
Lower middle income	1,801.0	2,408.5	2,658.4	1.3	0.8	26.1	66.9	7.0	0.4	0.1	8	17
Upper middle income	237.0	329.3	380.6	1.5	1.1	28.9	63.7	7.4	0.5	0.1	6	19
Low & middle income	3,599.8	5,232.4	6,083.0	1.7	1.2	31.2	63.1	5.7	0.5	0.1	9	22
East Asia & Pacific	1,359.4	1,838.3	2,036.9	1.4	0.8	26.3	67.2	6.5	0.4	0.1	8	16
Europe & Central Asia	425.8	472.9	478.2	0.5	0.1	20.9	67.9	11.2	0.3	0.2	12	13
Latin America & Carib.	356.4	524.5	619.4	1.8	1.3	30.9	63.6	5.5	0.5	0.1	6	21
Middle East & N. Africa	173.7	305.8	382.7	2.6	1.7	35.3	60.7	4.0	0.6	0.1	6	24
South Asia	901.3	1,401.5	1,683.7	2.0	1.4	34.2	61.2	4.6	0.6	0.1	9	26
Sub-Saharan Africa	383.2	688.9	882.1	2.7	1.9	43.8	53.3	3.0	0.8	0.1	18	39
High income	830.2	966.2	1,007.7	0.7	0.3	18.3	67.3	14.4	0.3	0.2	9	12
Europe EMU	285.5	305.5	305.2	0.3	0.0	16.0	67.2	16.8	0.2	0.2	10	10

a. Estimate does not account for recent refugee flows. b. Includes population for Kosovo until 2001. c. Data are for 1980–2001.

About the data

Population estimates are usually based on national population censuses, but the frequency and quality of these vary by country. Most countries conduct a complete enumeration no more than once a decade. Pre- and post-census estimates are interpolations or extrapolations based on demographic models. Errors and undercounting occur even in high-income countries; in developing countries such errors may be substantial because of limits in the transport, communications, and other resources required to conduct a full census.

The quality and reliability of official demographic data are also affected by the public trust in the government, the government's commitment to full and accurate enumeration, the confidentiality and protection against misuse accorded to census data, and the independence of census agencies from undue political influence. Moreover, the international comparability of population indicators is limited by differences in the concepts, definitions, data collection procedures, and estimation methods used by national statistical agencies and other organizations that collect population data.

Of the 152 economies listed in the table, 125 (about 82 percent) conducted a census between 1995 and 2003. The currentness of a census, along with the availability of complementary data from surveys or registration systems, is one of many objective ways to judge the quality of demographic data. In some European countries registration systems offer complete information on population in the absence of a census. See *Primary data documentation* for the most recent census or survey year and for the completeness of registration.

Current population estimates for developing countries that lack recent census-based data, and pre- and post-census estimates for countries with census data, are provided by national statistical offices, the United Nations Population Division, and other agencies. The standard estimation method requires fertility, mortality, and net migration data, which are often collected from sample surveys, some of which may be small or limited in coverage. The population estimates are the product of demographic modeling and so are susceptible to biases and errors because of shortcomings in the model as well as in the data. Population projections are made using the cohort component method.

The growth rate of the total population conceals the fact that different age groups may grow at very different rates. In many developing countries the population under 15 was earlier growing rapidly but is now starting to shrink. Previously high fertility rates and declining mortality rates are now reflected in the larger share of the working-age population.

Dependency ratios take into account the variations in the proportions of children, elderly people, and working-age people in the population. Separate calculations of young-age and old-age dependency suggest the burden of dependency that the working-age population must bear in relation to children and the elderly. But dependency ratios show the age composition of a population, not economic dependency. Some children and elderly people are part of the labor force, and many working-age people are not.

The vital rates shown in the table are based on data derived from birth and death registration systems, censuses, and sample surveys conducted by national statistical offices, United Nations agencies, and other organizations. The estimates for 2002 for many countries are based on extrapolations of levels and trends measured in earlier years.

Vital registers are the preferred source of these data, but in many developing countries systems for registering births and deaths do not exist or are incomplete because of deficiencies in the coverage of events or of geographic areas. Many developing countries carry out special household surveys that estimate vital rates by asking respondents about births and deaths in the recent past. Estimates derived in this way are subject to sampling errors as well as errors due to inaccurate recall by the respondents.

The United Nations Statistics Division monitors the completeness of vital registration systems. The share of countries with at least 90 percent complete vital registration increased from 45 percent in 1988 to 55 percent in 2002. Still, some of the most populous developing countries—China, India, Indonesia, Brazil, Pakistan, Bangladesh, Nigeria—do not have complete vital registration systems. Fewer than 30 percent of births and 40 percent of deaths worldwide are thought to be registered and reported.

International migration is the only other factor besides birth and death rates that directly determines a country's population growth. From 1990 to 2000 the number of migrants in high-income countries increased by 23 million. About 175 million people currently live outside their home country, accounting for about 3 percent of the world's population. Estimating international migration is difficult. At any time many people are located outside their home country as tourists, workers, or refugees or for other reasons. Standards relating to the duration and purpose of international moves that qualify as migration vary, and accurate estimates require information on flows into and out of countries that is difficult to collect.

Definitions

- **Total population** of an economy includes all residents regardless of legal status or citizenship—except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of their country of origin. The values shown are midyear estimates for 1980 and 2002 and projections for 2015. • **Average annual population growth rate** is the exponential change for the period indicated. See *Statistical methods* for more information. • **Population age composition** refers to the percentage of the total population that is in specific age groups. • **Dependency ratio** is the ratio of dependents—people younger than 15 or older than 64—to the working-age population—those ages 15–64. • **Crude death rate** and **crude birth rate** are the number of deaths and the number of live births occurring during the year, per 1,000 population estimated at midyear. Subtracting the crude death rate from the crude birth rate provides the rate of natural increase, which is equal to the population growth rate in the absence of migration.

	Labor force participation rate				Labor force				
	% ages 15–64				Total millions		Average annual growth rate %	Female % of labor force	
	Male		Female						
	1980	2002	1980	2002	1980	2002	1980–2002	1980	2002
Afghanistan	89.3	87.6 [a]	49.8	50.3 [a]	6.8	11.7 [a]	2.4	34.8	35.8 [a]
Albania	86.1	85.5	60.6	65.8	1.2	1.6	1.3	38.8	41.5
Algeria	80.4	79.8	19.1	33.8	4.8	11.0	3.7	21.4	29.0
Angola	91.7	90.1	77.8	74.8	3.5	6.1	2.5	47.0	46.2
Argentina	86.4	84.3	32.6	44.1	10.7	15.7	1.8	27.6	34.4
Armenia	77.4	78.2	68.1	71.1	1.4	1.6	0.4	47.9	48.6
Australia	86.6	82.8	52.0	67.1	6.7	10.0	1.8	36.8	44.0
Austria	84.9	78.6	54.4	56.6	3.4	3.8	0.5	40.5	40.4
Azerbaijan	77.8	78.0	67.4	61.3	2.7	3.7	1.4	47.5	44.7
Bangladesh	90.9	87.8	70.2	67.9	40.3	72.4	2.7	42.3	42.5
Belarus	83.4	80.9	74.3	73.4	5.1	5.3	0.2	49.9	48.9
Belgium	79.8	72.3	41.3	51.8	3.9	4.3	0.4	33.9	41.1
Benin	86.9	82.5	77.8	75.4	1.7	3.0	2.7	47.0	48.3
Bolivia	85.9	83.5	39.6	49.4	2.0	3.6	2.7	33.3	38.0
Bosnia and Herzegovina	77.8	78.0	37.0	49.1	1.6	1.9	0.8	32.8	38.2
Botswana	84.9	83.9	72.2	66.5	0.4	0.8	3.0	50.1	45.1
Brazil	89.4	87.2	35.7	47.0	47.7	81.7	2.5	28.4	35.5
Bulgaria	82.7	77.3	70.4	70.8	4.6	4.1	−0.6	45.3	48.0
Burkina Faso	94.2	89.9	82.8	77.7	3.8	5.8	1.9	47.6	46.5
Burundi	93.9	93.9	86.9	85.4	2.3	3.9	2.4	50.2	48.6
Cambodia	85.9	86.2	85.2	84.8	3.7	6.6	2.7	55.4	51.5
Cameroon	89.8	86.0	49.6	51.7	3.7	6.5	2.6	36.8	38.2
Canada	86.0	82.8	57.3	72.0	12.2	16.8	1.5	39.5	46.0
Central African Republic	..	..	..	..	1.2	1.8	1.9	..	..
Chad	91.7	89.1	68.3	70.6	2.2	4.0	2.7	43.4	44.8
Chile	81.4	81.9	28.7	43.8	3.8	6.5	2.4	26.3	34.5
China	91.4	89.2	75.5	79.5	538.7	769.3	1.6	43.2	45.2
Hong Kong, China	86.1	85.0	50.5	56.3	2.5	3.6	1.7	34.3	37.2
Colombia	83.1	83.5	26.6	52.2	9.4	19.4	3.3	26.2	39.1
Congo, Dem. Rep.	87.6	84.7	65.8	62.5	12.4	21.4	2.5	44.5	43.3
Congo, Rep.	86.3	83.4	57.2	58.7	0.8	1.5	3.1	42.4	43.5
Costa Rica	88.8	84.3	24.3	40.9	0.8	1.6	3.2	20.8	31.6
Côte d'Ivoire	91.5	87.3	45.5	45.5	3.3	6.7	3.2	32.2	33.6
Croatia	80.5	75.2	53.2	59.7	2.2	2.1	−0.1	40.2	44.4
Cuba	83.4	85.1	39.7	57.4	3.7	5.6	1.9	31.4	39.9
Czech Republic	84.8	82.6	75.1	74.5	5.3	5.7	0.3	47.1	47.2
Denmark	88.3	84.4	71.3	76.7	2.7	2.9	0.3	44.0	46.5
Dominican Republic	86.3	86.7	30.5	44.0	2.1	3.9	2.8	24.7	31.4
Ecuador	86.9	85.6	22.5	35.7	2.5	5.1	3.2	20.1	28.7
Egypt, Arab Rep.	83.5	82.3	29.3	38.3	14.3	25.9	2.7	26.5	31.0
El Salvador	89.6	87.2	32.2	50.7	1.6	2.8	2.7	26.5	37.3
Eritrea	88.4	86.6	78.1	76.6	1.2	2.2	2.6	47.4	47.4
Estonia	85.4	81.7	79.3	74.1	0.8	0.8	−0.3	50.6	48.9
Ethiopia	86.9	85.6	60.2	58.6	16.9	28.9	2.4	42.3	41.0
Finland	79.3	75.6	68.3	71.7	2.4	2.6	0.3	46.5	48.2
France	81.6	75.2	55.2	62.3	23.8	27.0	0.6	40.1	45.3
Gabon	87.7	85.3	67.6	66.5	0.4	0.6	2.2	45.0	44.8
Gambia, The	93.0	90.0	71.2	70.7	0.3	0.7	3.4	44.8	45.2
Georgia	81.1	79.2	71.0	66.6	2.6	2.6	0.0	49.3	46.8
Germany	86.6	81.0	56.2	62.8	37.5	41.1	0.4	40.1	42.4
Ghana	83.0	82.4	82.8	81.0	5.2	9.7	2.8	51.0	50.4
Greece	83.5	78.3	31.8	48.7	3.8	4.6	0.9	27.9	38.2
Guatemala	91.7	88.3	27.6	39.9	2.3	4.5	3.0	22.4	30.1
Guinea	91.7	87.0	83.2	79.6	2.3	3.7	2.1	47.1	47.2
Guinea-Bissau	92.4	90.6	59.7	59.5	0.4	0.7	2.4	39.9	40.5
Haiti	85.5	82.4	64.2	58.1	2.5	3.6	1.6	44.6	42.8

Labor force structure

	Labor force participation rate				Labor force				
	% ages 15–64				Total millions		Average annual growth rate %	Female % of labor force	
	Male		Female						
	1980	**2002**	**1980**	**2002**	**1980**	**2002**	**1980–2002**	**1980**	**2002**
Honduras	90.4	87.1	31.9	43.6	1.2	2.6	3.6	25.2	32.6
Hungary	84.8	78.2	62.0	61.1	5.1	4.9	−0.2	43.3	44.8
India	88.6	86.8	47.8	45.0	299.5	470.2	2.0	33.7	32.5
Indonesia	85.8	84.7	45.6	59.1	58.6	104.2	2.6	35.2	41.2
Iran, Islamic Rep.	83.9	79.8	20.6	32.8	11.7	21.1	2.7	20.4	28.4
Iraq	80.1	76.3	16.3	20.4	3.5	6.8	3.0	17.3	20.4
Ireland	85.0	79.4	34.7	44.7	1.3	1.7	1.3	28.1	35.0
Israel	81.9	79.2	42.0	57.5	1.5	2.9	3.1	33.7	41.7
Italy	81.8	78.7	39.2	50.3	22.6	25.7	0.6	32.9	38.7
Jamaica	85.7	83.8	72.6	74.8	1.0	1.4	1.7	46.3	46.2
Japan	86.1	84.9	52.1	62.4	57.2	68.0	0.8	37.9	41.7
Jordan	78.7	79.3	14.6	29.4	0.5	1.6	5.0	14.7	25.6
Kazakhstan	82.3	79.9	70.5	68.9	7.0	7.4	0.2	47.6	47.1
Kenya	91.7	89.2	77.7	76.8	7.8	16.3	3.3	46.0	46.1
Korea, Dem. Rep.	82.5	84.5	65.7	66.8	7.5	11.8	2.1	44.8	43.3
Korea, Rep.	77.6	79.8	50.2	59.1	15.5	24.6	2.1	38.7	41.8
Kuwait	86.3	79.8	21.0	43.9	0.5	1.0	3.1	13.1	32.1
Kyrgyz Republic	79.9	77.7	68.8	68.1	1.5	2.2	1.6	47.5	47.2
Lao PDR	..	..	..	..	1.7	2.6	2.1	..	..
Latvia	84.8	82.4	77.9	74.6	1.4	1.3	−0.5	50.8	50.5
Lebanon	77.7	81.1	21.4	33.3	0.8	1.6	2.9	22.6	30.1
Lesotho	87.8	85.0	50.0	49.9	0.5	0.7	1.4	37.9	37.0
Liberia	87.3	83.6	55.7	56.1	0.8	1.3	2.3	38.4	39.6
Libya	85.6	77.5	23.3	27.1	0.9	1.6	2.3	18.6	24.0
Lithuania	83.2	81.1	74.7	70.9	1.8	1.8	0.0	49.7	48.0
Macedonia, FYR	80.2	76.2	46.8	57.3	0.8	1.0	0.8	36.1	42.0
Madagascar	91.3	88.9	72.5	70.5	4.3	7.8	2.7	45.2	44.7
Malawi	89.6	86.4	81.4	78.4	3.1	5.2	2.3	50.6	48.4
Malaysia	84.6	81.2	42.8	51.3	5.3	10.3	3.0	33.7	38.3
Mali	92.3	89.7	75.9	73.6	3.4	5.6	2.2	46.7	46.1
Mauritania	91.4	87.5	71.5	65.0	0.8	1.3	2.3	45.0	43.5
Mauritius	85.2	83.7	28.5	42.0	0.3	0.5	1.9	25.7	33.0
Mexico	85.8	85.6	31.1	42.7	22.0	42.3	3.0	26.9	33.8
Moldova	82.8	79.5	74.6	69.9	2.1	2.2	0.1	50.3	48.4
Mongolia	90.4	86.2	75.7	77.3	0.8	1.2	2.2	45.7	47.1
Morocco	84.6	82.6	38.1	44.3	7.0	12.1	2.5	33.5	34.9
Mozambique	92.6	90.3	86.8	83.3	6.7	9.6	1.6	49.0	48.4
Myanmar	90.4	89.4	69.7	68.5	17.1	26.1	1.9	43.7	43.4
Namibia	87.7	82.9	55.2	56.9	0.4	0.8	2.8	40.1	41.0
Nepal	90.6	86.2	58.6	58.4	7.1	11.3	2.1	38.8	40.5
Netherlands	81.0	78.2	38.2	56.3	5.6	7.5	1.3	31.5	40.9
New Zealand	85.8	82.2	46.0	68.1	1.3	2.0	1.8	34.3	45.2
Nicaragua	88.6	86.2	34.8	51.2	1.0	2.2	3.6	27.6	36.6
Niger	95.2	92.6	73.6	71.1	2.8	5.4	3.0	44.6	44.3
Nigeria	89.1	86.2	50.0	49.7	29.5	52.9	2.7	36.2	36.7
Norway	83.5	81.0	59.8	73.9	1.9	2.4	0.9	40.5	46.5
Oman	88.3	77.9	7.4	22.1	0.3	0.7	3.3	6.2	18.9
Pakistan	88.2	86.4	27.7	38.7	29.3	55.3	2.9	22.7	29.5
Panama	82.4	82.8	37.3	47.5	0.7	1.3	2.8	29.9	35.7
Papua New Guinea	90.2	87.7	71.2	69.1	1.5	2.7	2.5	41.7	42.4
Paraguay	91.9	87.6	34.1	39.5	1.1	2.1	2.8	26.7	30.4
Peru	82.0	81.6	25.8	37.7	5.4	10.4	3.0	23.9	31.9
Philippines	84.5	83.1	46.0	51.8	18.7	34.2	2.7	35.0	38.0
Poland	84.2	77.8	67.7	66.2	18.5	19.9	0.3	45.3	46.5
Portugal	88.5	82.4	53.4	63.3	4.6	5.2	0.5	38.7	44.1
Puerto Rico	72.5	74.1	31.3	42.2	1.0	1.5	1.7	31.8	37.8

	Labor force participation rate				Labor force				
	% ages 15–64				Total millions		Average annual growth rate %	Female % of labor force	
	Male		Female						
	1980	2002	1980	2002	1980	2002	1980–2002	1980	2002
Romania	83.6	77.0	69.1	61.3	10.9	10.7	–0.1	45.8	44.5
Russian Federation	84.3	79.7	74.7	72.2	76.0	77.6	0.1	49.4	49.2
Rwanda	95.1	94.4	87.4	85.4	2.6	4.4	2.4	49.1	48.7
Saudi Arabia	86.3	81.1	9.6	24.5	2.8	7.2	4.4	7.6	17.7
Senegal	88.9	86.8	63.2	63.5	2.5	4.4	2.5	42.2	42.6
Serbia and Montenegro	81.4	76.4	50.5	58.6	4.5 b	3.9	0.6 c	38.7 b	43.1
Sierra Leone	86.8	84.6	44.6	46.9	1.2	2.0	2.1	35.5	37.1
Singapore	84.7	82.6	47.4	54.7	1.1	2.0	2.8	34.6	39.2
Slovak Republic	83.5	82.4	69.4	74.3	2.5	3.0	0.8	45.3	47.7
Slovenia	81.9	75.4	67.0	65.1	1.0	1.0	0.2	45.8	46.6
Somalia	89.6	87.2	66.2	64.6	3.0	4.0	1.3	43.4	43.4
South Africa	85.1	82.0	46.5	50.2	10.3	18.1	2.5	35.1	37.9
Spain	84.5	80.0	32.5	48.5	14.0	18.1	1.2	28.3	37.5
Sri Lanka	83.7	81.8	32.3	47.0	5.4	8.4	2.0	26.9	36.9
Sudan	88.6	85.9	30.8	36.5	7.1	13.2	2.8	26.9	30.0
Swaziland	86.4	83.1	41.5	44.5	0.2	0.4	3.2	33.5	37.8
Sweden	85.4	83.9	69.3	81.2	4.2	4.8	0.6	43.8	48.1
Switzerland	89.9	90.2	51.9	65.4	3.1	3.9	1.1	36.7	40.8
Syrian Arab Republic	82.1	80.5	23.6	31.1	2.5	5.6	3.7	23.5	27.6
Tajikistan	79.6	77.3	68.3	63.6	1.5	2.5	2.3	46.9	45.2
Tanzania	89.9	88.3	86.0	82.7	9.5	18.1	2.9	49.8	49.0
Thailand	89.3	89.9	79.7	77.9	24.4	37.5	2.0	47.4	46.2
Togo	89.9	87.2	54.7	55.0	1.1	2.0	2.7	39.3	40.0
Trinidad and Tobago	85.6	81.1	39.7	49.7	0.4	0.6	1.5	31.4	34.9
Tunisia	84.8	83.2	34.5	40.6	2.2	4.0	2.7	28.9	32.1
Turkey	87.5	84.9	47.8	53.6	18.7	33.7	2.7	35.5	38.1
Turkmenistan	81.4	80.4	69.9	67.4	1.2	2.1	2.7	47.0	45.9
Uganda	93.4	91.0	83.3	81.2	6.6	12.1	2.7	47.9	47.6
Ukraine	82.7	78.4	73.7	69.7	26.4	24.9	–0.3	50.2	48.8
United Arab Emirates	94.9	87.9	16.0	34.2	0.6	1.6	4.7	5.1	15.9
United Kingdom	89.2	83.3	57.0	67.1	26.9	29.6	0.4	38.9	44.3
United States	83.8	81.0	58.2	70.1	110.1	148.3	1.4	41.0	46.2
Uruguay	85.3	82.5	37.3	59.4	1.2	1.6	1.3	30.8	42.2
Uzbekistan	78.6	77.9	70.4	68.1	6.5	11.0	2.4	48.0	46.9
Venezuela, RB	83.9	83.0	32.3	47.3	5.2	10.5	3.2	26.7	35.4
Vietnam	89.9	83.8	74.9	77.5	25.6	41.8	2.2	48.1	48.7
West Bank and Gaza	..	..	..	..	..	..	..	..	..
Yemen, Rep.	83.0	84.1	28.5	31.9	2.5	5.9	3.9	32.5	28.3
Zambia	89.5	87.2	69.2	66.8	2.4	4.4	2.8	45.4	44.6
Zimbabwe	87.4	86.3	67.4	67.0	3.2	6.1	2.9	44.4	44.5
World	**87.5 w**	**85.3 w**	**57.3 w**	**60.8 w**	**2,036.6 s**	**3,028.6 s**	**1.8 w**	**39.1 w**	**40.7 w**
Low income	88.4	86.4	53.8	54.4	683.4	1,138.6	2.3	37.4	37.7
Middle income	88.2	85.9	61.9	65.1	978.8	1,419.4	1.7	40.5	42.2
Lower middle income	88.7	86.3	64.2	67.2	885.1	1,276.7	1.7	41.2	42.8
Upper middle income	84.8	82.5	44.3	49.0	93.7	142.7	1.9	34.2	37.0
Low & middle income	88.3	86.1	58.5	60.3	1,662.3	2,558.0	2.0	39.2	40.2
East Asia & Pacific	90.3	88.1	70.8	75.1	704.1	1,049.3	1.8	42.6	44.5
Europe & Central Asia	83.6	79.8	69.0	66.7	214.1	239.3	0.5	46.7	46.3
Latin America & Carib.	86.7	85.4	33.2	46.0	128.8	229.6	2.6	27.8	35.2
Middle East & N. Africa	83.2	80.8	24.8	33.8	53.9	105.0	3.0	23.8	28.6
South Asia	88.7	86.7	47.9	47.1	388.7	629.8	2.2	33.8	33.6
Sub-Saharan Africa	89.2	86.6	63.0	62.2	172.7	305.1	2.6	42.0	42.0
High income	84.4	81.1	52.6	63.5	374.3	470.6	1.0	38.4	43.4
Europe EMU	83.7	78.7	47.2	56.9	123.0	141.6	0.6	36.4	41.4

a. Estimate does not account for recent refugee flows. b. Includes labor force for Kosovo until 2001. c. Data are for 1980–2001.

Labor force structure | 2.2

About the data

The labor force is the supply of labor available for the production of goods and services in an economy. It includes people who are currently employed and people who are unemployed but seeking work as well as first-time job-seekers. Not everyone who works is included, however. Unpaid workers, family workers, and students are among those usually omitted, and in some countries members of the military are not counted. The size of the labor force tends to vary during the year as seasonal workers enter and leave it.

Data on the labor force are compiled by the International Labour Organization (ILO) from labor force surveys, censuses, establishment censuses and surveys, and various types of administrative records such as employment exchange registers and unemployment insurance schemes. For some countries a combination of sources is used. While the resulting statistics may provide rough estimates of the labor force, they are not comparable across countries because of the noncomparability of the original data and the different ways the original sources may be combined.

For international comparisons the most comprehensive source is labor force surveys. Despite the ILO's efforts to encourage the use of international standards, labor force data are not fully comparable because of differences among countries, and sometimes within countries, in their scope and coverage. In some countries data on the labor force refer to people above a specific age, while in others there is no specific age provision. The reference period of the census or survey is another important source of differences: in some countries data refer to people's status on the day of the census or survey or during a specific period before the inquiry date, while in others the data are recorded without reference to any period. In developing countries, where the household is often the basic unit of production and all members contribute to output, but some at low intensity or irregular intervals, the estimated labor force may be significantly smaller than the numbers actually working (ILO, *Yearbook of Labour Statistics* 1997).

The labor force estimates in the table were calculated by World Bank staff by applying labor force participation rates from the ILO database to World Bank population estimates to create a series consistent with these population estimates. This procedure sometimes results in estimates of labor force size that differ slightly from those in the ILO's *Yearbook of Labour Statistics*. The labor force participation rate of the population ages 15–64 provides an indication of the relative size of the supply of labor.

But in many developing countries children under 15 work full or part time. And in some high-income countries many workers postpone retirement past age 65. As a result, labor force participation rates calculated in this way may systematically over- or under-estimate actual rates. High participation rates are found in Sub-Saharan Africa, where men and women cannot afford to forgo work, because of a lack of social protection. The largest gap between men and women in labor force participation is observed in the Middle East and North Africa, where low participation of women in the work force also brings down the overall labor force participation rate.

In general, estimates of women in the labor force are lower than those of men and are not comparable internationally, reflecting the fact that for women, demographic, social, legal, and cultural trends and norms determine whether their activities are regarded as economic. In many countries large numbers of women work on farms or in other family enterprises without pay, while others work in or near their homes, mixing work and family activities during the day. Countries differ in the criteria used to determine the extent to which such workers are to be counted as part of the labor force. In most economies the gap between male and female labor force participation rates has been narrowing since 1980.

	Agriculture [a]				Industry [a]				Services [a]			
	Male % of male employment		Female % of female employment		Male % of male employment		Female % of female employment		Male % of male employment		Female % of female employment	
	1980	2000–02 [b]	1980	2000–02 [b]	1980	2000–02 [b]	1980	2000–02 [b]	1980	2000–02 [b]	1980	2000–02 [b]
Afghanistan	66	..	86	..	9	..	12	..	26	..	2	..
Albania	..	..	..	..	..	..	..	..	..	..	..	..
Algeria	27	..	69	..	33	..	6	..	40	..	25	..
Angola	67	..	87	..	13	..	1	..	20	..	11	..
Argentina	..	1	..	0 c	..	30	..	12	..	69	..	87
Armenia	..	..	..	..	..	..	..	..	..	..	..	..
Australia	8	6	4	3	39	30	16	10	53	64	80	87
Austria	..	5	..	6	..	43	..	14	..	52	..	80
Azerbaijan	..	37	..	43	..	14	..	7	..	49	..	50
Bangladesh	..	53	..	77	..	11	..	9	..	30	..	12
Belarus	..	..	..	..	..	..	..	..	..	..	..	..
Belgium	4	..	2	..	44	..	18	..	51	..	79	..
Benin	66	..	69	..	10	..	4	..	24	..	27	..
Bolivia	..	6	..	3	..	39	..	14	..	55	..	82
Bosnia and Herzegovina	26	..	38	..	45	..	24	..	30	..	39	..
Botswana	..	22	..	17	..	26	..	14	..	51	..	67
Brazil	*34*	24	*20*	16	*30*	27	*13*	10	*36*	49	*67*	74
Bulgaria	..	..	..	..	..	..	..	..	..	..	..	..
Burkina Faso	92	..	93	..	3	..	2	..	5	..	5	..
Burundi	..	..	..	..	..	..	..	..	..	..	..	..
Cambodia	..	71	..	70	..	9	..	12	..	20	..	18
Cameroon	65	..	87	..	11	..	2	..	24	..	11	..
Canada	7	4	3	2	37	33	16	11	56	64	81	87
Central African Republic	79	..	90	..	5	..	1	..	15	..	9	..
Chad	82	..	95	..	6	..	0 c	..	12	..	4	..
Chile	22	18	3	5	27	29	16	13	51	53	81	83
China	..	..	..	..	..	..	..	..	..	..	..	..
Hong Kong, China	2	0 c	1	0 c	47	27	56	10	52	73	43	90
Colombia	2	33	1	7	39	19	26	17	59	48	74	76
Congo, Dem. Rep.	62	..	84	..	18	..	4	..	20	..	12	..
Congo, Rep.	42	..	81	..	20	..	2	..	38	..	17	..
Costa Rica	34	22	6	4	25	27	20	15	40	51	74	80
Côte d'Ivoire	60	..	75	..	10	..	5	..	30	..	20	..
Croatia	..	16	..	15	..	37	..	21	..	47	..	63
Cuba	30	..	10	..	32	..	22	..	39	..	68	..
Czech Republic	13	6	11	3	57	50	39	28	30	44	50	68
Denmark	..	5	..	2	..	36	..	14	..	59	..	85
Dominican Republic	..	21	..	2	..	26	..	17	..	53	..	81
Ecuador	..	10	..	4	..	30	..	16	..	60	..	79
Egypt, Arab Rep.	45	27	10	39	21	25	13	7	33	48	69	54
El Salvador	51	34	10	4	21	25	21	22	28	42	69	74
Eritrea	79	..	88	..	7	..	2	..	14	..	11	..
Estonia	..	10	..	4	..	42	..	23	..	48	..	73
Ethiopia	..	..	..	..	..	..	..	..	..	..	..	..
Finland	15	7	12	4	45	40	23	14	39	53	65	82
France	10	2	7	1	45	34	22	13	46	64	71	86
Gabon	59	..	74	..	18	..	6	..	24	..	21	..
Gambia, The	78	..	93	..	10	..	3	..	13	..	5	..
Georgia	..	53	..	53	..	12	..	6	..	35	..	41
Germany	..	3	..	2	..	44	..	18	..	52	..	80
Ghana	..	..	..	..	..	..	..	..	..	..	..	..
Greece	*26*	15	*42*	18	*34*	30	*18*	12	*40*	56	*40*	70
Guatemala	..	50	..	18	..	18	..	23	..	27	..	56
Guinea	86	..	97	..	2	..	1	..	12	..	3	..
Guinea-Bissau	81	..	98	..	3	..	0	..	17	..	3	..
Haiti	..	..	..	..	..	..	..	..	..	..	..	..

Employment by economic activity | 2.3

	Agriculture [a]				Industry [a]				Services [a]			
	Male % of male employment		Female % of female employment		Male % of male employment		Female % of female employment		Male % of male employment		Female % of female employment	
	1980	2000–02 [b]	1980	2000–02 [b]	1980	2000–02 [b]	1980	2000–02 [b]	1980	2000–02 [b]	1980	2000–02 [b]
Honduras	..	..	..	..	..	..	..	..	..	..	..	..
Hungary	..	9	..	4	..	42	..	26	..	49	..	71
India	..	..	..	..	..	..	..	..	..	..	..	..
Indonesia	57	..	54	..	13	..	13	..	29	..	33	..
Iran, Islamic Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Iraq	21	..	62	..	24	..	11	..	55	..	28	..
Ireland	..	11	..	2	..	39	..	14	..	50	..	83
Israel	8	3	4	1	39	34	16	12	52	62	79	86
Italy	13	6	16	5	43	39	28	20	44	55	56	75
Jamaica	..	..	..	..	..	..	..	..	..	..	..	..
Japan	9	5	13	5	40	37	28	21	51	57	58	73
Jordan	..	..	..	..	..	..	..	..	..	..	..	..
Kazakhstan	..	..	..	..	..	..	..	..	..	..	..	..
Kenya	23	20	25	16	24	24	9	10	53	57	65	75
Korea, Dem. Rep.	39	..	52	..	37	..	20	..	24	..	28	..
Korea, Rep.	..	9	..	12	..	34	..	19	..	57	..	70
Kuwait	2	..	0	..	36	..	3	..	62	..	97	..
Kyrgyz Republic	..	..	..	..	..	..	..	..	..	..	..	..
Lao PDR	77	..	82	..	7	..	4	..	16	..	13	..
Latvia	..	18	..	12	..	35	..	16	..	47	..	72
Lebanon	13	..	20	..	29	..	21	..	58	..	59	..
Lesotho	26	..	64	..	52	..	5	..	22	..	31	..
Liberia	69	..	89	..	9	..	1	..	22	..	10	..
Libya	16	..	63	..	29	..	3	..	55	..	34	..
Lithuania	..	20	..	12	..	34	..	21	..	45	..	67
Macedonia, FYR	..	23	..	25	..	36	..	30	..	41	..	46
Madagascar	73	..	93	..	9	..	2	..	19	..	5	..
Malawi	..	..	..	..	..	..	..	..	..	..	..	..
Malaysia	34	21	44	14	26	34	20	29	40	45	36	57
Mali	86	..	92	..	2	..	1	..	12	..	7	..
Mauritania	65	..	79	..	11	..	2	..	25	..	19	..
Mauritius	29	..	30	..	19	..	40	..	47	..	31	..
Mexico	..	24	..	6	..	28	..	22	..	48	..	72
Moldova	..	52	..	50	..	18	..	10	..	31	..	40
Mongolia	..	..	..	..	..	..	..	..	..	..	..	..
Morocco	..	..	..	..	..	..	..	..	..	..	..	..
Mozambique	72	..	97	..	14	..	1	..	14	..	2	..
Myanmar	..	..	..	..	..	..	..	..	..	..	..	..
Namibia	52	33	42	29	22	17	10	7	27	49	47	63
Nepal	..	..	..	..	..	..	..	..	..	..	..	..
Netherlands	..	4	..	2	..	31	..	9	..	64	..	86
New Zealand	*13*	12	*7*	6	*38*	32	*19*	12	*48*	56	*73*	82
Nicaragua	..	..	..	..	..	..	..	..	..	..	..	..
Niger	..	..	..	..	..	..	..	..	..	..	..	..
Nigeria	..	..	..	..	..	..	..	..	..	..	..	..
Norway	10	6	6	2	41	33	13	9	49	58	81	88
Oman	52	..	24	..	21	..	33	..	27	..	43	..
Pakistan	..	44	..	73	..	20	..	9	..	36	..	18
Panama	..	29	..	6	..	20	..	10	..	51	..	85
Papua New Guinea	76	..	92	..	8	..	2	..	16	..	6	..
Paraguay	*2*	39	*0* [c]	20	*35*	21	*13*	10	*63*	40	*86*	69
Peru	..	11	..	6	..	24	..	10	..	65	..	84
Philippines	60	45	37	25	16	18	15	12	25	37	48	63
Poland	..	19	..	19	..	40	..	18	..	40	..	63
Portugal	..	12	..	14	..	44	..	23	..	44	..	63
Puerto Rico	8	3	0 [c]	0 [c]	27	27	24	14	65	69	75	86

2.3 Employment by economic activity

	Agriculture [a]				Industry [a]				Services [a]			
	Male % of male employment		Female % of female employment		Male % of male employment		Female % of female employment		Male % of male employment		Female % of female employment	
	1980	2000–02 [b]	1980	2000–02 [b]	1980	2000–02 [b]	1980	2000–02 [b]	1980	2000–02 [b]	1980	2000–02 [b]
Romania	22	40	39	45	52	30	34	22	26	30	27	33
Russian Federation	..	..	..	..	..	..	..	..	..	..	..	..
Rwanda	88	..	98	..	5	..	1	..	7	..	1	..
Saudi Arabia	45	..	25	..	17	..	5	..	39	..	70	..
Senegal	74	..	90	..	9	..	2	..	17	..	8	..
Serbia and Montenegro	..	..	..	..	..	..	..	..	..	..	..	..
Sierra Leone	63	..	82	..	20	..	4	..	17	..	14	..
Singapore	2	0 c	1	0 c	33	31	40	18	65	69	59	81
Slovak Republic	..	8	..	4	..	48	..	26	..	44	..	71
Slovenia	..	10	..	10	..	46	..	29	..	43	..	61
Somalia	69	..	90	..	12	..	2	..	19	..	8	..
South Africa	..	..	..	..	..	..	..	..	..	..	..	..
Spain	20	8	18	5	42	42	21	15	38	51	61	81
Sri Lanka	*44*	..	*51*	..	*19*	..	*18*	..	*30*	..	*28*	..
Sudan	66	..	88	..	9	..	4	..	24	..	8	..
Swaziland	..	..	..	..	..	..	..	..	..	..	..	..
Sweden	8	3	3	1	45	36	16	11	47	61	81	88
Switzerland	8	5	5	3	47	36	23	13	46	59	72	84
Syrian Arab Republic	..	..	..	..	..	..	..	..	..	..	..	..
Tajikistan	..	..	..	..	..	..	..	..	..	..	..	..
Tanzania	..	..	..	..	..	..	..	..	..	..	..	..
Thailand	68	50	74	48	13	20	8	17	20	30	18	35
Togo	70	..	67	..	12	..	7	..	19	..	26	..
Trinidad and Tobago	..	..	..	..	..	..	..	..	..	..	..	..
Tunisia	33	..	53	..	30	..	32	..	37	..	16	..
Turkey	*4*	24	*9*	56	*36*	28	*31*	15	*60*	48	*60*	29
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	..	..	..	..	..	..	..	..	..	..	..	..
Ukraine	..	22	..	17	..	39	..	22	..	33	..	55
United Arab Emirates	5	9	0 c	0 c	40	36	7	14	55	55	93	86
United Kingdom	4	2	1	1	48	36	23	11	49	62	76	88
United States	5	3	2	1	39	32	19	12	56	65	80	87
Uruguay	..	6	..	2	..	32	..	14	..	62	..	85
Uzbekistan	..	..	..	..	..	..	..	..	..	..	..	..
Venezuela, RB	20	15	2	2	31	28	18	12	49	57	79	86
Vietnam	..	..	..	..	..	..	..	..	..	..	..	..
West Bank and Gaza	22	9	25	26	43	32	25	11	36	58	50	62
Yemen, Rep.	60	..	98	..	19	..	1	..	21	..	1	..
Zambia	69	..	85	..	13	..	3	..	19	..	13	..
Zimbabwe	..	..	..	..	..	..	..	..	..	..	..	..
World	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w
Low income	..	..	..	..	..	..	..	..	..	..	..	..
Middle income	..	..	..	..	..	..	..	..	..	..	..	..
Lower middle income	..	..	..	..	..	..	..	..	..	..	..	..
Upper middle income	..	16	..	8	..	32	..	19	..	51	..	73
Low & middle income	..	..	..	..	..	..	..	..	..	..	..	..
East Asia & Pacific	..	..	..	..	..	..	..	..	..	..	..	..
Europe & Central Asia	..	..	..	..	..	..	..	..	..	..	..	..
Latin America & Carib.	..	21	..	9	..	27	..	14	..	52	..	76
Middle East & N. Africa	..	..	..	..	..	..	..	..	..	..	..	..
South Asia	..	..	..	..	..	..	..	..	..	..	..	..
Sub-Saharan Africa	..	..	..	..	..	..	..	..	..	..	..	..
High income	8	4	6	3	41	35	22	15	51	60	72	82
Europe EMU	..	5	..	4	..	40	..	16	..	55	..	80

a. Data may not add up to 100 because of workers not classified by sector. b. Data are for the most recent year available. c. Less than 0.5.

Employment by economic activity | 2.3

About the data

The International Labour Organization (ILO) classifies economic activity on the basis of the International Standard Industrial Classification (ISIC) of All Economic Activities. Because this classification is based on where work is performed (industry) rather than on what type of work is performed (occupation), all of an enterprise's employees are classified under the same industry, regardless of their trade or occupation. The categories should add up to 100 percent. Where they do not, the differences arise because of workers who cannot be classified by economic activity.

Data on employment are drawn from labor force surveys, household surveys, establishment censuses and surveys, administrative records of social insurance schemes, and official national estimates. The concept of employment generally refers to people above a certain age who worked, or who held a job, during a reference period. Employment data include both full-time and part-time workers. There are, however, many differences in how countries define and measure employment status, particularly for students, part-time workers, members of the armed forces, and household or contributing family workers. Where the armed forces are included, they are allocated to the service sector, causing that sector to be somewhat overstated relative to the service sector in economies where they are excluded. Where data are obtained from establishment surveys, they cover only employees; thus self-employed and contributing family workers are excluded. In such cases the employment share of the agricultural sector is severely underreported.

Countries also take very different approaches to the treatment of unemployed people. In most countries unemployed people with previous job experience are classified according to their last job. But in some countries the unemployed and people seeking their first job are not classifiable by economic activity. Because of these differences, the size and distribution of employment by economic activity may not be fully comparable across countries (ILO, *Yearbook of Labour Statistics 1996,* p. 64).

The ILO's *Yearbook of Labour Statistics* and its database *Key Indicators of the Labour Market* report data by major divisions of the ISIC revision 2 or ISIC revision 3. In this table the reported divisions or categories are aggregated into three broad groups: agriculture, industry, and services. Classification into such broad groups may obscure fundamental shifts within countries' industrial patterns. Most economies report economic activity according to the ISIC revision 2, although a group of economies moved to ISIC revision 3. The use of one classification or another should not have a significant impact on the information for the three broad sectors presented in this table.

The distribution of economic activity by gender reveals some interesting patterns. Industry accounts for a larger share of male employment than female employment worldwide, whereas a higher proportion of women work in the services sector. Employment in agriculture is also male-dominated, although not as much as industry.

Segregating one sex in a narrow range of occupations significantly reduces economic efficiency by reducing labor market flexibility and thus the economy's ability to adapt to change. This segregation is particularly harmful for women, who have a much narrower range of labor market choices and lower levels of pay than men. But it is also detrimental to men when job losses are concentrated in industries dominated by men and job growth is centered in service occupations, where women often dominate, as has been the recent experience in many countries.

There are several explanations for the rising importance of service jobs for women. Many service jobs—such as nursing and social and clerical work—are considered "feminine" because of a perceived similarity to women's traditional roles. Women often do not receive the training needed to take advantage of changing employment opportunities. And the greater availability of part-time work in service industries may lure more women, although it is not clear whether this is a cause or an effect.

Definitions

• **Agriculture** corresponds to division 1 (ISIC revision 2) or tabulation categories A and B (ISIC revision 3) and includes hunting, forestry, and fishing. • **Industry** corresponds to divisions 2–5 (ISIC revision 2) or tabulation categories C–F (ISIC revision 3) and includes mining and quarrying (including oil production), manufacturing, construction, and public utilities (electricity, gas, and water). • **Services** correspond to divisions 6–9 (ISIC revision 2) or tabulation categories G–P (ISIC revision 3) and include wholesale and retail trade and restaurants and hotels; transport, storage, and communications; financing, insurance, real estate, and business services; and community, social, and personal services.

2.3a

Women tend to suffer disproportionately from underemployment

Underemployment as share of total employment (%)
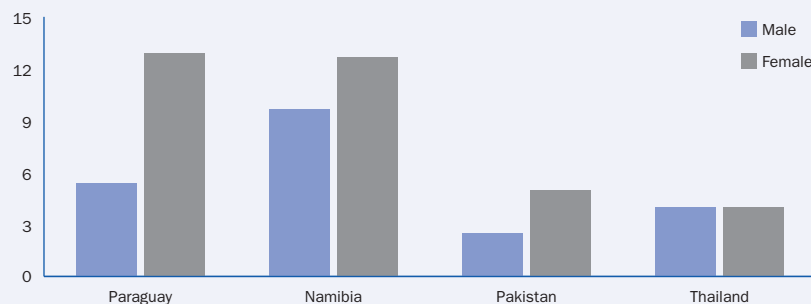
Time-related underemployment includes people who work less than the normal duration of work, as defined by national authorities, but who desire and seek to work additional hours. More women tend to be underemployed than men, as discrimination and women's household responsibilities may make it more difficult for them to have stable and high-paid work.

Source: International Labour Organization, *Key Indicators of the Labour Market,* third edition.

Data sources

The employment data are from the ILO database *Key Indicators of the Labour Market,* third edition.

	Unemployment						Long-term unemployment			Unemployment by level of educational attainment		
	Male % of male labor force		Female % of female labor force		Total % of total labor force		% of total unemployment			% of total unemployment		
							Male	Female	Total	Primary 1999–	Secondary 1999–	Tertiary 1999–
	1980	2000–02 [a]	1980	2000–02 [a]	1980	2000–02 [a]	2000–02 [a]	2000–02 [a]	2000–02 [a]	2001 [a]	2001 [a]	2001 [a]
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..
Albania	..	18.8	..	28.4	5.6	22.7	..	..	..	..	..	..
Algeria	..	33.9	..	29.7	..	29.8	..	..	..	..	..	..
Angola	..	..	..	..	..	..	..	..	..	..	..	..
Argentina	..	14.1	..	16.4	2.3	17.8	..	..	..	..	..	..
Armenia	..	..	..	..	..	..	72.2	70.8	71.6	..	..	..
Australia	5.0	6.2	7.4	5.8	5.9	6.0	25.9	17.1	22.1	54.3	31.5	14.0
Austria	1.6	3.5	2.3	3.8	1.9	3.6	25.8	24.2	25.1	36.0	57.6	6.4
Azerbaijan	..	1.1	..	1.5	..	1.3	..	..	..	4.5	35.4	60.1
Bangladesh	..	3.2	..	3.3	..	3.3	..	..	..	54.3	22.7	8.4
Belarus	..	1.9	..	2.6	..	2.3	..	..	..	7.9	15.3	76.9
Belgium	5.5	6.2	15.0	7.8	9.1	6.9	45.8	53.3	49.4	50.0	34.9	15.1
Benin	..	..	..	..	..	..	..	..	..	..	..	..
Bolivia	..	4.5	..	6.2	..	5.2	..	..	..	60.2	32.5	4.4
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..	..	..
Botswana	..	14.7	..	17.2	..	15.8	..	..	..	..	..	..
Brazil	2.8	7.5	2.8	11.9	2.8	9.4	..	..	..	26.1	20.2	2.5
Bulgaria	..	20.2	..	18.4	..	19.4	..	..	..	36.7	53.0	10.3
Burkina Faso	..	..	..	..	..	..	..	..	..	46.8	19.3	5.6
Burundi	..	..	..	..	..	..	..	..	..	..	..	..
Cambodia	..	1.5	..	2.2	..	1.8	..	..	..	..	..	..
Cameroon	..	..	..	..	..	..	..	..	..	..	..	..
Canada	7.0	8.1	8.2	7.1	7.5	7.7	9.9	8.4	9.3	30.7	30.3	39.0
Central African Republic	..	..	..	..	..	..	..	..	..	..	..	..
Chad	..	..	..	..	..	..	..	..	..	..	..	..
Chile	10.6	7.5	10.0	8.5	10.4	7.8	..	..	..	22.7	54.9	21.6
China	..	..	..	..	4.9	3.1	..	..	..	..	..	..
Hong Kong, China	3.9	8.4	3.4	6.0	3.8	7.3	..	..	..	..	..	..
Colombia	7.5	11.6	11.5	19.1	9.1	17.9	..	..	..	22.8	57.2	17.2
Congo, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Congo, Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Costa Rica	5.3	5.6	7.8	7.9	5.9	6.4	8.9	13.3	10.9	71.6	15.2	10.0
Côte d'Ivoire	..	..	..	..	..	..	..	..	..	..	..	..
Croatia	*3.4*	13.4	*8.2*	18.5	*5.3*	15.2	..	..	56.4	19.1	71.3	9.1
Cuba	..	..	..	..	..	3.3	..	..	..	..	..	..
Czech Republic	..	5.9	..	9.0	..	7.3	50.2	51.0	50.6	27.3	69.1	3.6
Denmark	6.5	4.2	7.6	4.3	7.0	4.3	17.1	22.1	19.5	35.1	44.9	20.0
Dominican Republic	..	9.4	..	26.0	..	15.6	2.2	1.3	1.6	..	..	..
Ecuador	..	7.1	..	16.2	..	11.0	..	..	..	26.8	50.8	20.2
Egypt, Arab Rep.	3.9	5.1	19.2	22.7	5.2	9.0	..	..	..	..	..	..
El Salvador	..	8.0	..	3.5	12.9	6.2	..	..	..	..	..	..
Eritrea	..	..	..	..	..	..	..	..	..	..	..	..
Estonia	..	12.9	..	12.2	..	12.6	..	..	..	19.3	62.7	18.1
Ethiopia	..	..	..	..	..	..	..	..	..	26.9	61.3	8.1
Finland	4.6	9.0	4.7	9.1	4.7	9.0	30.0	22.6	26.2	38.2	45.8	16.0
France	4.1	7.9	9.1	10.1	6.1	8.9	30.2	33.1	31.7	..	..	..
Gabon	..	..	..	..	..	..	..	..	..	..	..	..
Gambia, The	..	..	..	..	..	..	..	..	..	..	..	..
Georgia	..	11.6	..	10.7	..	11.0	..	..	..	5.5	33.1	61.4
Germany	..	8.7	..	8.3	..	8.6	44.9	48.7	46.6	26.8	60.4	12.8
Ghana	..	..	..	..	..	..	..	..	..	..	..	..
Greece	*3.3*	6.2	*5.7*	14.6	2.4	9.6	47.1	55.7	52.4	35.1	49.4	14.5
Guatemala	..	2.5	..	4.3	*1.7*	3.1	..	..	..	..	..	..
Guinea	..	..	..	..	..	..	..	..	..	..	..	..
Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	..	..
Haiti	..	..	..	..	..	..	..	..	..	..	..	..

	Unemployment						Long-term unemployment			Unemployment by level of educational attainment		
	Male % of male labor force		Female % of female labor force		Total % of total labor force		% of total unemployment			% of total unemployment Primary	Secondary	Tertiary
	1980	2000–02 [a]	1980	2000–02 [a]	1980	2000–02 [a]	Male 2000–02 [a]	Female 2000–02 [a]	Total 2000–02 [a]	1999– 2001 [a]	1999– 2001 [a]	1999– 2001 [a]
Honduras	*8.6*	3.4	*6.0*	4.7	*7.3*	3.8	..	..	..	..	..	..
Hungary	..	6.1	..	5.4	..	5.8	47.1	41.7	44.8	35.4	60.5	4.1
India	..	..	..	..	..	..	..	..	..	29.0	40.3	30.7
Indonesia	..	..	..	..	..	6.1	..	..	..	46.0	36.6	6.7
Iran, Islamic Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Iraq	..	..	..	..	..	..	..	..	..	..	..	..
Ireland	*11.4*	4.6	*8.2*	3.7	*10.5*	4.2	35.9	18.2	29.4	60.8	20.8	16.1
Israel	4.1	10.1	6.0	10.6	4.8	10.3	..	..	..	20.7	44.2	34.1
Italy	4.8	6.9	13.2	12.2	7.6	9.0	58.0	61.6	59.9	49.1	41.9	7.2
Jamaica	16.3	..	39.6	..	27.3	..	24.4	36.2	31.7	..	..	..
Japan	2.0	5.6	2.0	5.1	2.0	5.4	34.8	21.6	29.7	21.5	53.4	24.8
Jordan	..	11.8	..	20.7	..	13.2	..	..	..	..	..	..
Kazakhstan	..	..	..	..	..	..	..	..	..	7.2	52.5	40.3
Kenya	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	6.2	3.5	3.5	2.5	5.2	3.1	3.1	1.2	2.5	26.1	51.0	22.9
Kuwait	..	0.8	..	0.6	..	0.8	..	..	..	..	11.9	2.7
Kyrgyz Republic	..	..	..	..	..	8.6	..	..	..	33.4	55.7	10.9
Lao PDR	..	..	..	..	..	..	..	..	..	..	..	..
Latvia	..	14.1	..	11.5	..	12.8	..	..	..	24.6	67.0	8.2
Lebanon	..	..	..	..	..	..	..	..	..	..	..	..
Lesotho	..	..	..	..	..	..	..	..	..	..	..	..
Liberia	..	..	..	..	..	..	..	..	..	..	..	..
Libya	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	..	19.7	..	14.2	..	13.8	..	..	57.8	15.4	55.8	28.8
Macedonia, FYR	*15.6*	31.7	*32.8*	32.3	*22.0*	31.9	..	..	..	34.0	52.1	7.8
Madagascar	..	..	..	..	..	..	..	..	..	..	..	..
Malawi	..	..	..	..	..	..	..	..	..	..	..	..
Malaysia	..	..	..	..	..	3.9	..	..	..	..	..	..
Mali	..	..	..	..	..	..	..	..	..	..	..	..
Mauritania	..	..	..	..	..	..	..	..	..	..	..	..
Mauritius	..	5.6	..	12.6	..	8.0	..	..	..	35.5	63.9	..
Mexico	..	2.4	..	2.4	..	2.4	1.0	0.3	0.7	51.5	23.9	22.2
Moldova	..	8.7	..	5.9	..	7.3	..	..	..	..	..	..
Mongolia	..	..	..	..	..	..	..	..	..	..	..	..
Morocco	..	..	..	..	..	..	..	..	..	..	..	..
Mozambique	..	..	..	..	..	..	..	..	..	..	..	..
Myanmar	..	..	..	..	..	..	..	..	..	..	..	..
Namibia	..	28.3	..	39.0	..	33.8	..	..	..	..	..	..
Nepal	..	..	..	..	..	..	..	..	..	..	..	..
Netherlands	4.3	2.8	5.2	3.6	4.6	3.1	21.5	20.7	21.1	49.5	35.9	13.2
New Zealand	..	5.0	..	5.3	..	5.2	14.9	10.0	12.6	0.5	44.5	19.2
Nicaragua	..	12.8	..	9.4	..	11.2	..	..	..	56.3	23.4	14.7
Niger	..	..	..	..	..	..	..	..	..	..	..	..
Nigeria	..	..	..	..	..	..	..	..	..	..	..	..
Norway	1.2	4.1	2.1	3.7	1.6	3.9	8.1	3.7	6.2	25.0	50.0	22.6
Oman	..	..	..	..	..	..	..	..	..	..	..	..
Pakistan	3.0	6.1	7.5	17.3	3.6	7.8	..	..	..	..	..	..
Panama	*6.3*	10.5	*13.3*	18.2	*8.4*	13.2	24.0	35.7	29.3	47.0	35.5	11.3
Papua New Guinea	..	..	..	..	..	..	..	..	..	..	..	..
Paraguay	3.8	..	4.8	..	4.1	..	..	..	..	..	..	..
Peru	..	7.5	..	10.0	..	8.7	..	..	..	15.8	54.9	28.3
Philippines	3.2	9.4	7.5	10.3	4.8	9.8	..	..	..	..	..	..
Poland	..	19.1	..	20.9	..	19.9	45.1	52.0	48.4	19.1	76.8	4.2
Portugal	3.3	4.2	12.1	6.1	6.7	5.1	31.9	31.4	31.6	73.3	13.6	8.1
Puerto Rico	19.5	13.0	12.3	9.1	17.1	11.4	..	..	..	..	..	..

	Unemployment						Long-term unemployment			Unemployment by level of educational attainment		
	Male % of male labor force		Female % of female labor force		Total % of total labor force		% of total unemployment			% of total unemployment		
							Male	Female	Total	Primary	Secondary	Tertiary
	1980	2000–02 [a]	1980	2000–02 [a]	1980	2000–02 [a]	2000–02 [a]	2000–02 [a]	2000–02 [a]	1999–2001 [a]	1999–2001 [a]	1999–2001 [a]
Romania	..	7.1	..	5.9	..	6.6	..	..	..	20.6	72.7	5.5
Russian Federation	..	9.3	..	8.5	..	8.9	..	..	..	16.8	41.6	41.6
Rwanda	..	..	..	..	..	..	..	..	..	60.7	24.1	5.9
Saudi Arabia	..	..	..	..	..	..	..	..	..	..	..	..
Senegal	..	..	..	..	..	..	..	..	..	..	..	..
Serbia and Montenegro	..	22.6	..	22.1	..	22.3	..	..	..	..	..	..
Sierra Leone	..	..	..	..	..	..	..	..	..	..	..	..
Singapore	2.9	3.5	3.4	3.4	3.0	3.4	..	..	..	25.5	26.9	32.0
Slovak Republic	..	18.6	..	18.7	..	18.6	..	..	..	19.8	77.1	3.0
Slovenia	..	5.6	..	6.3	..	5.9	58.6	61.4	59.9	33.3	63.2	5.3
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	..	26.1	..	33.3	..	29.5	..	..	..	..	..	..
Spain	10.4	8.0	13.1	16.4	11.1	11.4	31.6	41.8	37.5	57.1	19.7	22.2
Sri Lanka	..	6.8	..	11.2	..	8.2	..	..	..	41.0	..	56.1
Sudan	..	..	..	..	..	..	..	..	..	..	..	..
Swaziland	..	..	..	..	..	..	..	..	..	..	..	..
Sweden	1.9	5.6	2.6	4.7	2.2	5.2	23.0	18.1	20.9	28.6	56.6	13.1
Switzerland	0.2	2.8	0.3	3.1	0.2	2.9	19.0	23.9	21.3	43.0	43.0	14.0
Syrian Arab Republic	3.8	8.0	3.8	23.9	3.9	11.2	..	..	..	..	..	..
Tajikistan	..	..	..	..	..	..	..	..	..	..	..	..
Tanzania	..	..	..	..	..	..	..	..	..	..	..	..
Thailand	1.0	1.8	0.7	1.7	0.8	1.8	..	..	..	70.6	7.2	19.2
Togo	..	..	..	..	..	..	..	..	..	..	..	..
Trinidad and Tobago	8.0	..	14.0	..	10.0	..	20.3	34.7	27.6	38.2	60.7	0.8
Tunisia	..	..	..	..	..	..	..	..	..	..	..	..
Turkey	*9.0*	10.9	*23.0*	9.9	*10.9*	10.6	26.4	34.5	28.5	60.1	29.0	8.4
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	..	..	..	..	..	..	..	..	..	..	..	..
Ukraine	..	11.2	..	11.0	..	11.1	..	..	..	8.6	27.3	64.1
United Arab Emirates	..	2.2	..	2.6	..	2.3	..	..	..	..	..	..
United Kingdom	8.3	5.6	4.8	4.4	6.8	5.1	26.4	17.0	22.8	33.7	44.4	12.7
United States	6.9	5.9	7.4	5.6	7.1	5.8	8.9	8.1	8.5	20.3	35.3	44.4
Uruguay	..	11.5	..	19.7	..	17.2	..	..	..	50.7	21.2	27.8
Uzbekistan	..	..	..	..	..	..	..	..	..	..	..	..
Venezuela, RB	..	11.6	..	14.6	5.9	12.8	..	..	..	57.9	24.0	14.4
Vietnam	..	..	..	..	..	..	..	..	..	..	..	..
West Bank and Gaza	..	27.3	..	14.1	..	25.5	..	..	..	..	..	..
Yemen, Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Zambia	32.7	..	59.0	..	42.2	..	..	..	..	..	..	..
Zimbabwe	..	..	..	..	..	..	..	..	..	16.4	81.8	0.8
World	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w	**30.0 w**	**40.2 w**	**25.2 w**
Low income	..	..	..	..	..	..	..	..	..	30.0	41.4	27.9
Middle income	..	..	..	..	4.8	4.9	..	..	..	..	..	..
Lower middle income	..	..	..	..	4.9	4.3	..	..	..	..	..	..
Upper middle income	..	..	..	..	..	9.0	..	..	..	34.8	52.5	11.3
Low & middle income	..	..	..	..	..	..	..	..	..	28.8	40.0	25.8
East Asia & Pacific	..	..	..	..	4.7	3.7	..	..	..	..	..	..
Europe & Central Asia	..	11.3	..	11.1	..	11.1	..	..	..	21.3	45.8	32.6
Latin America & Carib.	..	..	..	..	..	9.2	..	..	..	31.3	28.3	9.6
Middle East & N. Africa	..	..	..	..	..	..	..	..	..	..	..	..
South Asia	..	..	..	..	..	..	..	..	..	29.3	40.3	31.0
Sub-Saharan Africa	..	..	..	..	..	..	..	..	..	..	..	..
High income	5.5	5.4	7.0	6.7	6.0	6.2	24.7	22.8	24.1	31.1	41.8	25.9
Europe EMU	5.5	7.9	10.8	11.6	7.1	9.8	40.7	44.6	42.8	42.1	43.7	13.3

a. Data are for the most recent year available.

About the data

Unemployment and total employment in an economy are the broadest indicators of economic activity as reflected by the labor market. The International Labour Organization (ILO) defines the unemployed as members of the economically active population who are without work but available for and seeking work, including people who have lost their jobs and those who have voluntarily left work. Some unemployment is unavoidable in all economies. At any time some workers are temporarily unemployed—between jobs as employers look for the right workers and workers search for better jobs. Such unemployment, often called frictional unemployment, results from the normal operation of labor markets.

Changes in unemployment over time may reflect changes in the demand for and supply of labor, but they may also reflect changes in reporting practices. Ironically, low unemployment rates can often disguise substantial poverty in a country, while high unemployment rates can occur in countries with a high level of economic development and low incidence of poverty. In countries without unemployment or welfare benefits, people eke out a living in the informal sector. In countries with well-developed safety nets, workers can afford to wait for suitable or desirable jobs. But high and sustained unemployment indicates serious inefficiencies in the allocation of resources.

The ILO definition of unemployment notwithstanding, reference periods, the criteria for those considered to be seeking work, and the treatment of people temporarily laid off and those seeking work for the first time vary across countries. In many developing countries it is especially difficult to measure employment and unemployment in agriculture. The timing of a survey, for example, can maximize the effects of seasonal unemployment in agriculture. And informal sector employment is difficult to quantify where informal activities are not registered and tracked.

Data on unemployment are drawn from labor force sample surveys and general household sample surveys, censuses, and other administrative records such as social insurance statistics, employment office statistics, and official estimates, which are usually based on information drawn from one or more of the above sources. Labor force surveys generally yield the most comprehensive data because they include groups not covered in other unemployment statistics, particularly people seeking work for the first time. These surveys generally use a definition of unemployment that follows the international recommendations more closely than that used by other sources and therefore generate statistics that are more comparable internationally.

In contrast, the quality and completeness of data from employment offices and social insurance programs vary widely. Where employment offices work closely with social insurance schemes and registration with such offices is a prerequisite for receipt of unemployment benefits, the two sets of unemployment estimates tend to be comparable. Where registration is voluntary and where employment offices function only in more populous areas, employment office statistics do not give a reliable indication of unemployment. Most commonly excluded from both these sources are discouraged workers who have given up their job search because they believe that no employment opportunities exist or do not register as unemployed after their benefits have been exhausted. Thus measured unemployment may be higher in countries that offer more or longer unemployment benefits.

Women tend to be excluded from the unemployment count for various reasons. Women suffer more from discrimination and from structural, social, and cultural barriers that impede them from actively seeking work. Also, women are often responsible for the care of children and the elderly or for other household affairs. They may not be available for work during the short reference period, as they need to make arrangement before starting work. Furthermore, women are considered to be employed when they are working part-time or in temporary jobs in the informal sector, despite the instability of these jobs and that they may be actively looking for more secure employment.

Long-term unemployment is measured in terms of duration, that is, the length of time that an unemployed person has been without work and looking for a job. The underlying assumption is that shorter periods of joblessness are of less concern, especially when the unemployed are covered by unemployment benefits or similar forms of welfare support. The length of time a person has been unemployed is difficult to measure, because the ability to recall the length of that time diminishes as the period of joblessness extends. Women's long-term unemployment is likely to be lower in countries where women constitute a large share of the unpaid family workforce. Women in such countries have more access than men to nonmarket work and are more likely to drop out of the labor force and not be counted as unemployed.

Unemployment by level of educational attainment provide insights into the relationship between the educational attainment of workers and unemployment. Besides the limitations to comparability raised for measuring unemployment, the different ways of classifying the level of education across countries may also cause inconsistency. The level of education is supposed to be classified according to International Standard Classification of Education 1997 (ISCED97). For more information on ISCED97, see *About the data* for table 2.10.

Definitions

• **Unemployment** refers to the share of the labor force without work but available for and seeking employment. Definitions of labor force and unemployment differ by country (see *About the data*). •**Long-term unemployment** refers to the number of people with continuous periods of unemployment extending for a year or longer, expressed as a percentage of the total unemployed. • **Unemployment by level of educational attainment** shows the unemployed by level of educational attainment, as a percentage of the total unemployed. The levels of educational attainment accord with the International Standard Classification of Education 1997 of the United Nations Educational, Cultural, and Scientific Organization (UNESCO).

	National poverty line								International poverty line				
		Population below the poverty line				Population below the poverty line				Population below	Poverty gap at	Population below	Poverty gap at
	Survey year	Rural %	Urban %	National %	Survey year	Rural %	Urban %	National %	Survey year	$1 a day %	$1 a day %	$2 a day %	$2 a day %
Afghanistan		..	..	..		..	..	..		..	..	..	..
Albania	2002	29.6		25.4		..	..	..	2002 [a]	<2	<0.5	11.8	2.0
Algeria	1995	30.3	14.7	22.6	1998	16.6	7.3	12.2	1995 [a]	<2	<0.5	15.1	3.8
Angola		..	..	..		..	..	..		..	..	..	..
Argentina	1995	..	28.4		1998		29.9		2001 [b]	3.3	0.5	14.3	4.7
Armenia	1996	48.0	58.8	54.7	1998–99	44.8	60.4	53.7	1998 [a]	12.8	3.3	49.0	17.3
Australia		..	..	..		..	..	..		..	..	..	..
Austria		..	..	..		..	..	..		..	..	..	..
Azerbaijan	1995	..	..	68.1	2001	..	..	49.6	2001 [a]	3.7	<1	9.1	3.5
Bangladesh	1995–96	55.2	29.4	51.0	2000	53.0	36.6	49.8	2000 [a]	36.0	8.1	82.8	36.3
Belarus	1998	..	..	33.0	2000	..	..	41.9	2000 [a]	<2	<0.5	<2	0.1
Belgium		..	..	..		..	..	..		..	..	..	..
Benin	1995	..	..	33.0		..	..	..		..	..	..	..
Bolivia	1997	77.3		63.2	1999	81.7	..	62.7	1999 [a]	14.4	5.4	34.3	14.9
Bosnia and Herzegovina	2001–02	19.9	13.8	19.5		..	..	..		..	..	..	..
Botswana		..	..	..		..	..	..	1993 [a]	23.5	7.7	50.1	22.8
Brazil	1990	32.6	13.1	17.4		..	..	..	2001 [b]	8.2	2.1	22.4	8.8
Bulgaria	1997	..	..	36.0	2001	..	..	12.8	2001 [a]	4.7	1.4	16.2	5.7
Burkina Faso	1994	51.0	10.4	44.5	1998	51.0	16.5	45.3	1998 [a]	44.9	14.4	81.0	40.6
Burundi	1990	36.0	43.0			..	..	..	1998 [a]	58.4	24.9	89.2	51.3
Cambodia	1993–94	43.1	24.8	39.0	1997	40.1	21.1	36.1	1997 [a]	34.1	9.7	77.7	34.5
Cameroon	1996	59.6	41.4	53.3	2001	49.9	22.1	40.2	2001 [a]	17.1	4.1	50.6	19.3
Canada		..	..	..		..	..	..		..	..	..	..
Central African Republic		..	..	..		..	..	..	1993 [a]	66.6	38.1	84.0	58.4
Chad	1995–96	67.0	63.0	64.0		..	..	..		..	..	..	..
Chile	1996	..	..	19.9	1998	..	..	17.0	2000 [b]	<2	<0.5	9.6	2.5
China	1996	7.9	<2	6.0	1998	4.6	<2	4.6	2001 [a]	16.6	3.9	46.7	18.4
Hong Kong, China		..	..	..		..	..	..		..	..	..	..
Colombia	1995	79.0	48.0	60.0	1999	79.0	55.0	64.0	1999 [b]	8.2	2.2	22.6	8.8
Congo, Dem. Rep.		..	..	..		..	..	..		..	..	..	..
Congo, Rep.		..	..	..		..	..	..		..	..	..	..
Costa Rica	1992	25.5	19.2	22.0		..	..	..	2000 [b]	2.0	0.7	9.5	3.0
Côte d'Ivoire		..	..	..		..	..	..	1998 [a]	15.5	3.8	50.4	18.9
Croatia		..	..	..		..	..	..	2000 [a]	<2	<0.5	<2	<0.5
Cuba		..	..	..		..	..	..		..	..	..	..
Czech Republic		..	..	..		..	..	..	1996 [b]	<2	<0.5	<2	<0.5
Denmark		..	..	..		..	..	..		..	..	..	..
Djibouti	1996	86.5	..	45.1		..	..	..		..	..	..	..
Dominican Republic	1992	49.0	19.3	33.9	1998	42.1	20.5	28.6	1998 [b]	<2	<0.5	<2	<0.5
Ecuador	1994	47.0	25.0	35.0		..	..	..	1998 [b]	17.7	7.1	40.8	17.7
Egypt, Arab Rep.	1995–96	23.3	22.5	22.9	1999–2000	..	..	16.7	2000 [a]	3.1	<0.5	43.9	11.3
El Salvador	1992	55.7	43.1	48.3		..	..	..	2000 [b]	31.1	14.1	58.0	29.7
Eritrea	1993–94	..	..	53.0		..	..	..		..	..	..	..
Estonia	1995	14.7	6.8	8.9		..	..	..	1998 [a]	<2	<0.5	5.2	0.8
Ethiopia	1995–96	47.0	33.3	45.5	1999–2000	45.0	37.0	44.2	1999–2000 [a]	26.3	5.7	80.7	31.8
Finland		..	..	..		..	..	..		..	..	..	..
France		..	..	..		..	..	..		..	..	..	..
Gabon		..	..	..		..	..	..		..	..	..	..
Gambia, The	1992	..	..	64.0	1998	61.0	48.0	..	1998 [a]	59.3	28.8	82.9	51.1
Georgia	1997	9.9	12.1	11.1		..	..	..	2001 [a]	2.7	0.9	15.7	4.6
Germany		..	..	..		..	..	..		..	..	..	..
Ghana	1992			50.0	1998	49.9	18.6	39.5	1999 [a]	44.8	17.3	78.5	40.8
Greece		..	..	..		..	..	..		..	..	..	..
Guatemala	1989	71.9	33.7	57.9	2000	74.5	27.1	56.2	2000 [b]	16.0	4.6	37.4	16.0
Guinea	1994	..	..	40.0		..	..	..		..	..	..	..
Guinea-Bissau	1991	..	..	48.7		..	..	..		..	..	..	..

	National poverty line								International poverty line				
		Population below the poverty line				Population below the poverty line				Population below $1 a day %	Poverty gap at $1 a day %	Population below $2 a day %	Poverty gap at $2 a day %
	Survey year	Rural %	Urban %	National %	Survey year	Rural %	Urban %	National %	Survey year	%	%	%	%
Guyana	1993	..	..	43.2	1998	..	..	35.0	1998 [b]	<2	<0.5	6.1	1.7
Haiti	1987	..	..	65.0	1995	66.0	..	..	..	..	..	..	..
Honduras	1992	46.0	56.0	50.0	1993	51.0	57.0	53.0	1998 [b]	23.8	11.6	44.4	23.1
Hungary	1993	..	..	14.5	1997	..	..	17.3	1998 [b]	<2	<0.5	7.3	1.7
India	1993–94	37.3	32.4	36.0	1999–2000	30.2	24.7	28.6	1999–2000 [a]	34.7	8.2	79.9	35.3
Indonesia	1996			15.7	1999			27.1	2002 [a]	7.5	0.9	52.4	15.7
Iran, Islamic Rep.		..	..	..		..	..	..	1998 [a]	<2	<0.5	7.3	1.5
Iraq		..	..	..		..	..	..		..	..	..	..
Ireland		..	..	..		..	..	..		..	..	..	..
Israel		..	..	..		..	..	..		..	..	..	..
Italy		..	..	..		..	..	..		..	..	..	..
Jamaica	1995	37.0	..	27.5	2000	25.1	..	18.7	2000 [a]	<2	<0.5	13.3	2.7
Japan		..	..	..		..	..	..		..	..	..	..
Jordan	1991	..	..	15.0	1997	..	..	11.7	1997 [a]	<2	<0.5	7.4	1.4
Kazakhstan	1996	39.0	30.0	34.6		..	..	..	2001 [a]	<2	<0.5	8.5	1.4
Kenya	1994	47.0	29.0	40.0	1997	53.0	49.0	52.0	1997 [a]	23.0	6.0	58.6	24.1
Korea, Dem. Rep.		..	..	..		..	..	..		..	..	..	..
Korea, Rep.		..	..	..		..	..	..	1998 [b]	<2	<0.5	<2	<0.5
Kuwait		..	..	..		..	..	..		..	..	..	..
Kyrgyz Republic	1997	64.5	28.5	51.0	1999	69.7	49.0	64.1	2001 [a]	<2	<0.5	27.2	5.9
Lao PDR	1993	48.7	33.1	45.0	1997–98	41.0	26.9	38.6	1997–98 [a]	26.3	6.3	73.2	29.6
Latvia		..	..	..		..	..	..	1998 [a]	<2	<0.5	8.3	2.0
Lebanon		..	..	..		..	..	..		..	..	..	..
Lesotho		..	..	..		..	..	..	1995 [a]	36.4	19.0	56.1	33.1
Liberia		..	..	..		..	..	..		..	..	..	..
Libya		..	..	..		..	..	..		..	..	..	..
Lithuania		..	..	..		..	..	..	2000 [a]	<2	<0.5	13.7	4.2
Macedonia, FYR		..	..	..		..	..	..	1998 [a]	<2	<0.5	4.0	0.6
Madagascar	1997	76.0	63.2	73.3	1999	76.7	52.1	71.3	1999 [a]	49.1	18.3	83.3	44.0
Malawi	1990–91	..	..	54.0	1997–98	66.5	54.9	65.3	1997–98 [a]	41.7	14.8	76.1	38.3
Malaysia	1989	..	..	15.5		..	..	..	1997 [b]	<2	<0.5	9.3	2.0
Mali	1998	75.9	30.1	63.8		..	..	..	1994 [a]	72.8	37.4	90.6	60.5
Mauritania	1996	65.5	30.1	50.0	2000	61.2	25.4	46.3	2000 [a]	25.9	7.6	63.1	26.8
Mauritius		..	..	..		..	..	..		..	..	..	..
Mexico	1988	..	..	10.1		..	..	..	2000 [b]	9.9	3.7	26.3	10.9
Moldova	1997	26.7	..	23.3		..	..	..	2001 [a]	22.0	5.8	63.7	25.1
Mongolia	1995	33.1	38.5	36.3		..	..	..	1995 [a]	13.9	3.1	50.0	17.5
Morocco	1990–91	18.0	7.6	13.1	1998–99	27.2	12.0	19.0	1999 [a]	<2	<0.5	14.3	3.1
Mozambique	1996–97	71.3	62.0	69.4		..	..	..	1996 [a]	37.9	12.0	78.4	36.8
Myanmar		..	..	..		..	..	..		..	..	..	..
Namibia		..	..	..		..	..	..	1993 [b]	34.9	14.0	55.8	30.4
Nepal	1995–96	44.0	23.0	42.0		..	..	..	1995 [a]	37.7	9.7	82.5	37.5
Netherlands		..	..	..		..	..	..		..	..	..	..
New Zealand		..	..	..		..	..	..		..	..	..	..
Nicaragua	1993	76.1	31.9	50.3	1998	68.5	30.5	47.9	2001 [a]	45.1	16.7	79.9	41.2
Niger	1989–93	66.0	52.0	63.0		..	..	..	1995 [a]	61.4	33.9	85.3	54.8
Nigeria	1985	49.5	31.7	43.0	1992–93	36.4	30.4	34.1	1997 [a]	70.2	34.9	90.8	59.0
Norway		..	..	..		..	..	..		..	..	..	..
Oman		..	..	..		..	..	..		..	..	..	..
Pakistan	1993	33.4	17.2	28.6	1998–99	35.9	24.2	32.6	1998 [a]	13.4	2.4	65.6	22.0
Panama	1997	64.9	15.3	37.3		..	..	..	2000 [b]	7.2	2.3	17.6	7.4
Papua New Guinea	1996	41.3	16.1	37.5		..	..	..		..	..	..	..
Paraguay	1991	28.5	19.7	21.8		..	..	..	1999 [b]	14.9	6.8	30.3	14.7
Peru	1994	67.0	46.1	53.5	1997	64.7	40.4	49.0	2000 [b]	18.1	9.1	37.7	18.5
Philippines	1994	53.1	28.0	40.6	1997	50.7	21.5	36.8	2000 [a]	14.6	2.7	46.4	17.2
Poland	1993	..	..	23.8		..	..	..	1999 [b]	<2	<0.5	<2	<0.5

	National poverty line								International poverty line				
		Population below the poverty line				Population below the poverty line				Population below $1 a day	Poverty gap at $1 a day	Population below $2 a day	Poverty gap at $2 a day
	Survey year	Rural %	Urban %	National %	Survey year	Rural %	Urban %	National %	Survey year	%	%	%	%
Portugal		..	..	..		..	..	..	1994 [b]	<2	<0.5	<0.5	<0.5
Puerto Rico		..	..	..		..	..	..		..	..	..	..
Romania	1994	27.9	20.4	21.5		..	..	..	2000 [a]	2.1	0.6	20.5	5.2
Russian Federation	1994	..	..	30.9		..	..	..	2000 [a]	6.1	1.2	23.8	8.0
Rwanda	1993	..	..	51.2		..	..	..	1983–85 [a]	35.7	7.7	84.6	36.7
Saudi Arabia		..	..	..		..	..	..		..	..	..	..
Senegal	1992	40.4	..	33.4		..	..	..	1995 [a]	26.3	7.0	67.8	28.2
Serbia and Montenegro		..	..	..		..	..	..		..	..	..	..
Sierra Leone	1989	76.0	53.0	68.0		..	..	..	1989 [a]	57.0	39.5	74.5	51.8
Singapore		..	..	..		..	..	..		..	..	..	..
Slovak Republic		..	..	..		..	..	..	1996 [b]	<2	<0.5	2.4	0.7
Slovenia		..	..	..		..	..	..	1998 [a]	<2	<0.5	<2	<0.5
Somalia		..	..	..		..	..	..		..	..	..	..
South Africa		..	..	..		..	..	..	1995 [a]	7.1	1.1	23.8	8.6
Spain		..	..	..		..	..	..		..	..	..	..
Sri Lanka	1990–91	22.0	15.0	20.0	1995–96	27.0	15.0	25.0	1995–96 [a]	6.6	1.0	45.4	13.5
Sudan		..	..	..		..	..	..		..	..	..	..
Swaziland	1995	..	..	40.0		..	..	..		..	..	..	..
Sweden		..	..	..		..	..	..		..	..	..	..
Switzerland		..	..	..		..	..	..		..	..	..	..
Syrian Arab Republic		..	..	..		..	..	..		..	..	..	..
Tajikistan		..	..	..		..	..	..	1998 [a]	10.3	2.6	50.8	16.3
Tanzania	1991	40.8		38.6	2000–01	38.7		35.7	1993 [a]	19.9	4.8	59.7	23.0
Thailand	1990	..	..	18.0	1992	15.5	10.2	13.1	2000 [a]	<2	<0.5	32.5	9.0
Togo	1987–89	..	..	32.3		..	..	..		..	..	..	..
Trinidad and Tobago	1992	20.0	24.0	21.0		..	..	..	1992 [b]	12.4	3.5	39.0	14.6
Tunisia	1990	13.1	3.5	7.4	1995	13.9	3.6	7.6	2000 [a]	<2	<0.5	6.6	1.3
Turkey		..	..	..		..	..	..	2000 [a]	<2	<0.5	10.3	2.5
Turkmenistan		..	..	..		..	..	..	1998 [a]	12.1	2.6	44.0	15.4
Uganda	1993	..	..	55.0	1997	..	..	44.0		..	..	..	..
Ukraine	1995	..	..	31.7		..	..	..	1999 [b]	2.9	0.6	45.7	16.3
United Arab Emirates		..	..	..		..	..	..		..	..	..	..
United Kingdom		..	..	..		..	..	..		..	..	..	..
United States		..	..	..		..	..	..		..	..	..	..
Uruguay		..	..	..		..	..	..	2000 [b]	<2	<0.5	3.9	0.8
Uzbekistan	2000	30.5	22.5	27.5		..	..	..	2000 [a]	21.8	5.4	77.5	28.9
Venezuela, RB	1989	..	..	31.3		..	..	..	1998 [b]	15.0	6.9	32.0	15.2
Vietnam	1993	57.2	25.9	50.9		..	..	..	1998 [a]	17.7	3.3	63.7	22.9
West Bank and Gaza		..	..	..		..	..	..		..	..	..	..
Yemen, Rep.	1998	45.0	30.8	41.8		..	..	..	1998 [a]	15.7	4.5	45.2	15.0
Zambia	1996	82.8	46.0	69.2	1998	83.1	56.0	72.9	1998 [a]	63.7	32.7	87.4	55.4
Zimbabwe	1990–91	35.8	3.4	25.8	1995–96	48.0	7.9	34.9	1990–91 [a]	36.0	9.6	64.2	29.4

a. Based on expenditure. b. Based on income.

International comparisons of poverty data entail both conceptual and practical problems. Different countries have different definitions of poverty, and consistent comparisons between countries can be difficult. Local poverty lines tend to have higher purchasing power in rich countries, where more generous standards are used than in poor countries. Is it reasonable to treat two people with the same standard of living—in terms of their command over commodities—differently because one happens to live in a better-off country? Can we hold the real value of the poverty line constant across countries, just as we do when making comparisons over time?

Poverty measures based on an international poverty line attempt to do this. The commonly used $1 a day standard, measured in 1985 international prices and adjusted to local currency using purchasing power parities (PPPs), was chosen for the World Bank's *World Development Report 1990: Poverty* because it is typical of the poverty lines in low-income countries. PPP exchange rates, such as those from the Penn World Tables or the World Bank, are used because they take into account the local prices of goods and services not traded internationally. But PPP rates were designed not for making international poverty comparisons but for comparing aggregates from national accounts. Thus there is no certainty that an international poverty line measures the same degree of need or deprivation across countries.

This year's edition of the *World Development Indicators* (like those of the past four years) uses 1993 consumption PPP estimates produced by the World Bank. The international poverty line, set at $1 a day in 1985 PPP terms, has been recalculated in 1993 PPP terms at about $1.08 a day. Any revisions in the PPP of a country to incorporate better price indexes can produce dramatically different poverty lines in local currency.

Problems also exist in comparing poverty measures within countries. For example, the cost of living is typically higher in urban than in rural areas. So the urban monetary poverty line should be higher than the rural poverty line. But it is not always clear that the difference between urban and rural poverty lines found in practice properly reflects the difference in the cost of living. In some countries the urban poverty line in common use has a higher real value than does the rural poverty line. Sometimes the difference has been so large as to imply that the incidence of poverty is greater in urban than in rural areas, even though the reverse is found when adjustments are made only for differences in the cost of

living. As with international comparisons, when the real value of the poverty line varies, it is not clear how meaningful such urban-rural comparisons are.

The problems of making poverty comparisons do not end there. More issues arise in measuring household living standards. The choice between income and consumption as a welfare indicator is one issue. Income is generally more difficult to measure accurately, and consumption accords better with the idea of the standard of living than does income, which can vary over time even if the standard of living does not. But consumption data are not always available, and when they are not there is little choice but to use income. There are still other problems. Household survey questionnaires can differ widely, for example, in the number of distinct categories of consumer goods they identify. Survey quality varies, and even similar surveys may not be strictly comparable.

Comparisons across countries at different levels of development also pose a potential problem, because of differences in the relative importance of consumption of nonmarket goods. The local market value of all consumption in kind (including consumption from own production, particularly important in underdeveloped rural economies) should be included in the measure of total consumption expenditure. Similarly, the imputed profit from production of nonmarket goods should be included in income. This is not always done, though such omissions were a far bigger problem in surveys before the 1980s. Most survey data now include valuations for consumption or income from own production. Nonetheless, valuation methods vary. For example, some surveys use the price in the nearest market, while others use the average farm gate selling price.

Wherever possible, consumption has been used as the welfare indicator for deciding who is poor. Where consumption data are unavailable, income data are used. Beginning with last year's *World Development Indicators,* there has been a change in how income surveys are used. Before that, average income was adjusted to accord with consumption and income data from national accounts. This approach was tested using data for more than 20 countries for which the surveys provided both income and consumption expenditure data. Income gave a higher mean than consumption but also greater income inequality. These two effects roughly canceled each other out when poverty measures based on consumption were compared with those based on income from the same survey; statistically, there was no significant

difference. So income data are used to estimate poverty directly, with no adjustment of the income mean.

In all cases the measures of poverty have been calculated from primary data sources (tabulations or household data) rather than existing estimates. Estimation from tabulations requires an interpolation method; the method chosen was Lorenz curves with flexible functional forms, which have proved reliable in past work. Empirical Lorenz curves were weighted by household size, so they are based on percentiles of population, not households.

• **Survey year** is the year in which the underlying data were collected. • **Rural poverty rate** is the percentage of the rural population living below the national rural poverty line. • **Urban poverty rate** is the percentage of the urban population living below the national urban poverty line. • **National poverty rate** is the percentage of the population living below the national poverty line. National estimates are based on population-weighted subgroup estimates from household surveys. • **Population below $1 a day** and **population below $2 a day** are the percentages of the population living on less than $1.08 a day and $2.15 a day at 1993 international prices. As a result of revisions in PPP exchange rates, poverty rates cannot be compared with poverty rates reported in previous editions for individual countries. • **Poverty gap** is the mean shortfall from the poverty line (counting the nonpoor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.

	Survey year	Prevalence of child malnutrition		Under-five mortality rate		Child immunization rate		Contraceptive prevalence		Births attended by skilled health staff[a]	
		Weight for age % of children under age 5		per 1,000		Measles % of children ages 12–23 months[b]		% of women ages 15–49		% of total	
		Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Poorest quintile	Richest quintile
Armenia	2000	3	2	61	30	68	74[c]	16	29	93	100
Bangladesh	2000	60	29	140	72	59	86	37	50	4	42
Benin	1996	37	19	208	110	49	80	1	9	34	98
Bolivia	1998	14	3	147	32	58	85	7	46	20	98
Brazil	1996	12	3	99	33	78	90	56	77	72	99
Burkina Faso	1998–99	38	26	239	155	33	69	2	16	18	75
Cambodia	2000	52	34	155	64	44	82	13	25	15	81
Cameroon	1998	33	9	199	87	37	78	1	17	28	89
Central African Republic	1994–95	37	20	193	98	31	80	1	9	14	82
Chad	1996–97	50	29	171	172	12	39	0[d]	5	3	47
Colombia	2000	9	3	39	20	74	85	54	66	64	99
Comoros	1996	36	18	129	87[c]	51	86	7	19	26	85
Côte d'Ivoire	1994	31	13	190	97	31	79	1	13	17	84
Egypt, Arab Rep.	2000	7	2	98	34	95	99	43	61	31	94
Eritrea	1995	51	25	152	104	37	92	0[d]	19	5	74
Ethiopia	2000	49	37	159	147	18	52	3	23	1	25
Gabon	2000	19	8	93	55	34	71	6	18	67	97
Ghana	1998	33	12	139	52	61	87	8	18	18	86
Guatemala	1998	34	10	78	39	80	91	5	60	9	92
Guinea	1999	29	17	230	133	33	73	1	9	12	82
Haiti	2000	24	8	164	109	43	63	17	24	4	70
India	1999	61	26	141	46	28	81	29	55	16	84
Indonesia	1997	..	..	109	29	59	85	46	57	21	89
Jordan	1997	9	3	42	25	90	93	28	47	91	99
Kazakhstan	1999	5	6	82	45	74	76[c]	49	55	99	99
Kenya	1998	32	10	136	61	64	89	13	50	23	80
Kyrgyz Republic	1997	13	8	96	49	82	81	44	54	96	100
Madagascar	1997	45	32	195	101	32	79	2	24	30	89
Malawi	2000	33	13	231	149	80	90	20	40	43	83
Mali	2001	39	17	248	148	40	77	4	18	21	86
Mauritania	2000–01	37	18	98	78	42	86	0[d]	17	15	93
Morocco	1992	17	2	112	39	62	95	18	48	5	78
Mozambique	1997	37	14	278	145	33	94	1	17	18	82
Namibia	1992	36	13	110	76	69	79	5	57	51	91
Nepal	2001	57	31	130	68	61	83	24	55	4	45
Nicaragua	2001	16	3	64	19	76	94	50	71	78	99
Niger	1998	52	37	282	184	23	66	1	18	4	63
Nigeria	1990	40	22	240	120	35	70	1	12	12	70
Pakistan	1990	54	26	125	74	28	75	1	23	5	55
Paraguay	1990	6	1	57	20	48	69	21	46	41	98
Peru	2000	15	1	93	18	81	92	37	58	21	99
Philippines	1998	..	..	80	29	68	92	20	29	21	92
Rwanda	2000	27	14	246	154	84	89	2	15	17	60
Senegal	1997	..	..	181	70	..	..	1	24	20	86
South Africa	1998	..	..	87	22	74	85	34	70	68	98
Tanzania	1999	32	22	160	135	63	89	6	32	29	83
Togo	1998	32	12	168	97	35	63	3	13	25	91
Turkey	1998	17	3	85	33	64	89	24	48	53	98
Uganda	2000–01	27	12	192	106	49	65	11	41	20	77
Uzbekistan	1996	25	13	70	50	96	93	46	52	92	100
Vietnam	1997	..	..	63	23	64	88	47	56	49	99
Yemen, Rep.	1997	56	30	163	73	16	73	1	24	7	50
Zambia	2001	33	20	192	92	81	88	11	53	20	91
Zimbabwe	1999	18	6	100	62	80	86	41	67	57	94

a. Based on births in the five years before the survey. b. Refers to children who were immunized before 12 months or, in some cases, at any time before the survey (between 12–23 months). c. The data contain large sampling errors because of the small number of cases. d. Less than 0.5.

About the data

The data in the table describe the health status and use of health services by individuals in different socio-economic groups within countries. The data are from Demographic and Health Surveys conducted by Macro International with the support of the U.S. Agency for International Development. These large-scale house-hold sample surveys, conducted periodically in devel-oping countries, collect information on a large number of health, nutrition, and population measures as well as on respondents' social, demographic, and econom-ic characteristics using a standard set of question-naires. The data presented here draw on responses to individual and household questionnaires.

The table defines socioeconomic status in terms of a household's assets, including ownership of con-sumer items, features of the household's dwelling, and other characteristics related to wealth. Each household asset on which information was collected was assigned a weight generated through principal component analysis. The resulting scores were stan-dardized in relation to a standard normal distribution with a mean of zero and a standard deviation of one. The standardized scores were then used to create break points defining wealth quintiles, expressed as quintiles of individuals in the population rather than quintiles of individuals at risk with respect to any one health indicator.

The choice of the asset index for defining socio-economic status was based on pragmatic rather than conceptual considerations: Demographic and Health Surveys do not provide income or consumption data

but do have detailed information on households' ownership of consumer goods and access to a variety of goods and services. Like income or consumption, the asset index defines disparities in primarily eco-nomic terms. It therefore excludes other possibilities of disparities among groups, such as those based on gender, education, ethnic background, or other facets of social exclusion. To that extent the index provides only a partial view of the multidimensional concepts of poverty, inequality, and inequity.

Creating one index that includes all asset indica-tors limits the types of analysis that can be per-formed. In particular, the use of a unified index does not permit a disaggregated analysis to examine which asset indicators have a more or less important association with health status or use of health serv-ices. In addition, some asset indicators may reflect household wealth better in some countries than in others—or reflect different degrees of wealth in dif-ferent countries. Taking such information into account and creating country-specific asset indexes with country-specific choices of asset indicators might produce a more effective and accurate index for each country. The asset index used in the table does not have this flexibility.

The analysis has been carried out for 54 countries, with the results issued in country reports. The table shows the estimates for the poorest and richest quintiles only; the full set of estimates for more than 70 indicators is available in the country reports (see *Data sources*).

Definitions

• **Survey year** is the year in which the underlying data were collected. • **Prevalence of child malnutri-tion** is the percentage of children whose weight for age is more than two standard deviations below the median reference standard for their age as estab-lished by the World Health Organization, the U.S. Centers for Disease Control and Prevention, and the U.S. National Center for Health Statistics. The fig-ures in the table are based on children under age three, four, or five years of age, depending on the country. • **Under-five mortality rate** is the probabili-ty that a newborn baby will die before reaching age five, if subject to current age-specific mortality rates. The probability is expressed as a rate per 1,000. Data in the table are based on births in the 10 years preceding the survey and may therefore differ from the estimates in table 2.19. • **Child immunization rate** is the percentage of children ages 12–23 months at the time of the survey who received a dose of measles vaccine by 12 months, or at any time before the interview date. These data may dif-fer from those in table 2.15. • **Contraceptive preva-lence** is the percentage of women who are practic-ing, or whose sexual partners are practicing, any modern method of contraception. It is usually meas-ured for married women ages 15–49. • **Births attended by skilled health staff** are the percentage of deliveries attended by personnel trained to give the necessary supervision, care, and advice to women during pregnancy, labor, and the postpartum period; to conduct deliveries on their own; and to care for newborns. Skilled health staff include doctors, nurses, or trained midwives, but exclude trained or untrained traditional birth attendants. Data in the tables are based on births in the five years preceding the survey and may therefore differ from the estimates in table 2.16.

2.6a

Education lowers birth rates dramatically for rich women, but not for poor ones

Lowest wealth quintile

Total fertility rate, 1995–2000

Women completing grade 5 (%)

Highest wealth quintile

Total fertility rate, 1995–2000

Women completing grade 5 (%)
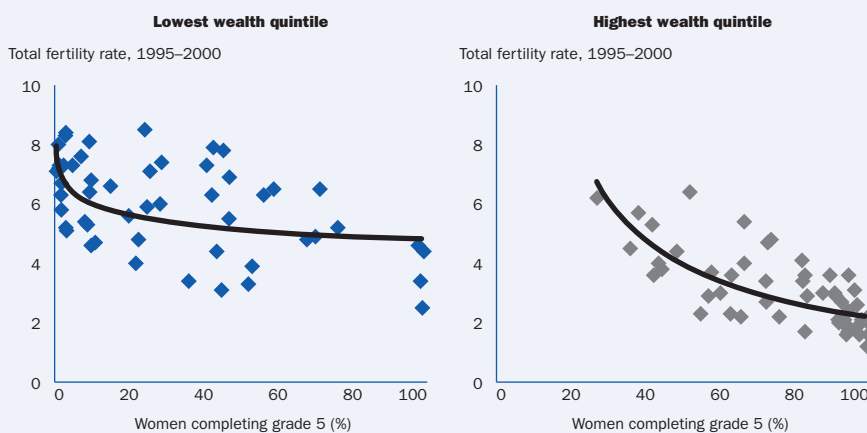
It is well known that women's education strongly affects the number of children they bear. But the effect varies with the wealth of the household. Education greatly reduces fertility rates among wealthy women, but the effect is very weak among poor women.

Source: Demographic and Health Survey data.

Distribution of income or consumption

	Survey year	Gini Index	Lowest 10%	Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%	Highest 10%
					Percentage share of income or consumption				
Afghanistan		..	..	..	..	..	..	..	..
Albania	2002 a,b	28.2	3.8	9.1	13.5	17.3	22.8	37.4	22.4
Algeria	1995 a,b	35.3	2.8	7.0	11.6	16.1	22.7	42.6	26.8
Angola		..	..	..	..	..	..	..	..
Argentina c	2001 d,e	52.2	1.0	3.1	7.2	12.3	21.0	56.4	38.9
Armenia	1998 a,b	37.9	2.6	6.7	11.3	15.4	21.6	45.1	29.7
Australia	1994 d,e	35.2	2.0	5.9	12.0	17.2	23.6	41.3	25.4
Austria	1997 d,e	30.0	3.1	8.1	13.2	17.3	22.9	38.5	23.5
Azerbaijan	2001 a,b	36.5	3.1	7.4	11.5	15.3	21.2	44.5	29.5
Bangladesh	2000 a,b	31.8	3.9	9.0	12.5	15.9	21.2	41.3	26.7
Belarus	2000 a,b	30.4	3.5	8.4	13.0	17.0	22.5	39.1	24.1
Belgium	1996 d,e	25.0	2.9	8.3	14.1	17.7	22.7	37.3	22.6
Benin		..	..	..	..	..	..	..	..
Bolivia	1999 a,b	44.7	1.3	4.0	9.2	14.8	22.9	49.1	32.0
Bosnia and Herzegovina	2001 a,b	26.2	3.9	9.5	14.2	17.9	22.6	35.8	21.4
Botswana	1993 a,b	63.0	0.7	2.2	4.9	8.2	14.4	70.3	56.6
Brazil	1998 d,e	59.1	0.5	2.0	5.7	10.0	18.0	64.4	46.7
Bulgaria	2001 d,e	31.9	2.4	6.7	13.1	17.9	23.4	38.9	23.7
Burkina Faso	1998 a,b	48.2	1.8	4.5	7.4	10.6	16.7	60.7	46.3
Burundi	1998 a,b	33.3	1.7	5.1	10.3	15.1	21.5	48.0	32.8
Cambodia	1997 a,b	40.4	2.9	6.9	10.7	14.7	20.1	47.6	33.8
Cameroon	2001 a,b	44.6	2.3	5.6	9.3	13.7	20.4	50.9	35.4
Canada	1998 d,e	33.1	2.5	7.0	12.7	17.0	22.9	40.4	25.0
Central African Republic	1993 a,b	61.3	0.7	2.0	4.9	9.6	18.5	65.0	47.7
Chad		..	..	..	..	..	..	..	..
Chile	2000 d,e	57.1	1.2	3.3	6.6	10.5	17.4	62.2	47.0
China	2001 a,b	44.7	1.8	4.7	9.0	14.2	22.1	50.0	33.1
Hong Kong, China	1996 d,e	43.4	2.0	5.3	9.4	13.9	20.7	50.7	34.9
Colombia	1999 d,e	57.6	0.8	2.7	6.6	10.8	18.0	61.9	46.5
Congo, Dem. Rep.		..	..	..	..	..	..	..	..
Congo, Rep.		..	..	..	..	..	..	..	..
Costa Rica	2000 d,e	46.5	1.4	4.2	8.9	13.7	21.7	51.5	34.8
Côte d'Ivoire	1998 a,b	45.2	2.2	5.5	9.6	13.6	20.1	51.1	35.9
Croatia	2001 a,b	29.0	3.4	8.3	12.8	16.8	22.6	39.6	24.5
Cuba		..	..	..	..	..	..	..	..
Czech Republic	1996 d,e	25.4	4.3	10.3	14.5	17.7	21.7	35.9	22.4
Denmark	1997 d,e	24.7	2.6	8.3	14.7	18.2	22.9	35.8	21.3
Dominican Republic	1998 d,e	47.4	2.1	5.1	8.6	13.0	20.0	53.3	37.9
Ecuador	1998 a,b	43.7	0.9	3.3	7.5	11.7	19.4	58.0	41.6
Egypt, Arab Rep.	1999 a,b	34.4	3.7	8.6	12.1	15.4	20.4	43.6	29.5
El Salvador	2000 d,e	53.2	0.9	2.9	7.4	12.4	20.2	57.1	40.6
Eritrea		..	..	..	..	..	..	..	..
Estonia	2000 d,e	37.2	1.9	6.1	12.1	15.9	22.0	44.0	28.5
Ethiopia	2000 a,b	30.0	3.9	9.1	13.2	16.8	21.5	39.4	25.5
Finland	2000 d,e	26.9	4.0	9.6	14.1	17.5	22.1	36.7	22.6
France	1995 d,e	32.7	2.8	7.2	12.6	17.2	22.8	40.2	25.1
Gabon		..	..	..	..	..	..	..	..
Gambia, The	1998 a,b	38.0	1.5	4.0	7.6	12.3	20.8	55.2	38.0
Georgia	2001 a,b	36.9	2.3	6.4	11.4	16.1	22.6	43.6	27.9
Germany	2000 d,e	28.3	3.2	8.5	13.7	17.8	23.1	36.9	22.1
Ghana	1999 a,b	30.0	2.1	5.6	10.1	14.9	22.8	46.6	30.0
Greece	1998 d,e	35.4	2.9	7.1	11.4	15.8	22.0	43.6	28.5
Guatemala	2000 d,e	48.3	0.9	2.6	5.9	9.8	17.6	64.1	48.3
Guinea	1994 a,b	40.3	2.6	6.4	10.4	14.8	21.2	47.2	32.0
Guinea-Bissau	1993 a,b	47.0	2.1	5.2	8.8	13.1	19.4	53.4	39.3
Guyana	1999 a,b	43.2	1.3	4.5	9.9	14.5	21.4	49.7	33.8
Haiti		..	..	..	..	..	..	..	..

	Survey year	Gini Index	Percentage share of income or consumption						
			Lowest 10%	Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%	Highest 10%
Honduras	1999 d,e	55.0	0.9	2.7	6.7	11.8	19.9	58.9	42.2
Hungary	1999 a,b	24.4	2.6	7.7	13.4	18.0	23.4	37.5	22.8
India	1999–2000 a,b	32.5	3.9	8.9	12.3	16.0	21.2	41.6	27.4
Indonesia	2002 a,b	34.3	3.6	8.4	11.9	15.4	21.0	43.3	28.5
Iran, Islamic Rep.	1998 a,b	43.0	2.0	5.1	9.4	14.1	21.5	49.9	33.7
Iraq		..	..	..	..	..	..	..	..
Ireland	1996 d,e	35.9	2.8	7.1	11.8	15.8	22.0	43.3	27.6
Israel	1997 d,e	35.5	2.4	6.9	11.4	16.3	22.9	44.3	28.2
Italy	2000 d,e	36.0	2.3	6.5	12.0	16.8	22.8	42.0	26.8
Jamaica	2000 a,b	37.9	2.7	6.7	10.7	15.0	21.7	46.0	30.3
Japan	1993 d,e	24.9	4.8	10.6	14.2	17.6	22.0	35.7	21.7
Jordan	1997 a,b	36.4	3.3	7.6	11.4	15.5	21.1	44.4	29.8
Kazakhstan	2001 a,b	31.3	3.4	8.2	12.5	16.8	22.9	39.6	24.2
Kenya	1997 a,b	44.5	2.3	5.6	9.3	13.6	20.2	51.2	36.1
Korea, Dem. Rep.		..	..	..	..	..	..	..	..
Korea, Rep.	1998 d,e	31.6	2.9	7.9	13.6	18.0	23.1	37.5	22.5
Kuwait		..	..	..	..	..	..	..	..
Kyrgyz Republic	2001 a,b	29.0	3.9	9.1	13.2	16.9	22.5	38.3	23.3
Lao PDR	1997 a,b	37.0	3.2	7.6	11.4	15.3	20.8	45.0	30.6
Latvia	1998 d,e	32.4	2.9	7.6	12.9	17.1	22.1	40.3	25.9
Lebanon		..	..	..	..	..	..	..	..
Lesotho	1995 a,b	63.2	0.5	1.5	4.3	8.9	18.8	66.5	48.3
Liberia		..	..	..	..	..	..	..	..
Libya		..	..	..	..	..	..	..	..
Lithuania	2000 a,b	31.9	3.2	7.9	12.7	16.9	22.6	40.0	24.9
Luxembourg	2000 d,e	30.8	3.5	8.4	12.9	17.1	22.7	38.9	23.8
Macedonia, FYR	1998 a,b	28.2	3.3	8.4	14.0	17.7	23.1	36.7	22.1
Madagascar	2001 a,b	47.5	1.9	4.9	8.5	12.7	20.4	53.5	36.6
Malawi	1997 a,b	50.3	1.9	4.9	8.5	12.3	18.3	56.1	42.2
Malaysia	1997 d,e	49.2	1.7	4.4	8.1	12.9	20.3	54.3	38.4
Mali	1994 a,b	50.5	1.8	4.6	8.0	11.9	19.3	56.2	40.4
Mauritania	2000 a,b	39.0	2.5	6.2	10.6	15.2	22.3	45.7	29.5
Mauritius		..	..	..	..	..	..	..	..
Mexico	2000 d,e	54.6	1.0	3.1	7.2	11.7	19.0	59.1	43.1
Moldova	2001 a,b	36.2	2.8	7.1	11.5	15.8	22.0	43.7	28.4
Mongolia	1998 a,b	44.0	2.1	5.6	10.0	13.8	19.4	51.2	37.0
Morocco	1998–99 a,b	39.5	2.6	6.5	10.6	14.8	21.3	46.6	30.9
Mozambique	1996–97 a,b	39.6	2.5	6.5	10.8	15.1	21.1	46.5	31.7
Myanmar		..	..	..	..	..	..	..	..
Namibia	1993 d,e	70.7	0.5	1.4	3.0	5.4	11.5	78.7	64.5
Nepal	1995–96 a,b	36.7	3.2	7.6	11.5	15.1	21.0	44.8	29.8
Netherlands	1994 d,e	32.6	2.8	7.3	12.7	17.2	22.8	40.1	25.1
New Zealand	1997 d,e	36.2	2.2	6.4	11.4	15.8	22.6	43.8	27.8
Nicaragua	2001 d,e	55.1	1.2	3.6	7.2	11.3	18.3	59.7	45.0
Niger	1995 a,b	50.5	0.8	2.6	7.1	13.9	23.1	53.3	35.4
Nigeria	1996–97 a,b	50.6	1.6	4.4	8.2	12.5	19.3	55.7	40.8
Norway	2000 d,e	25.8	3.9	9.6	14.0	17.2	22.0	37.2	23.4
Oman		..	..	..	..	..	..	..	..
Pakistan	1998–99 a,b	33.0	3.7	8.8	12.5	15.9	20.6	42.3	28.3
Panama	2000 d,e	56.4	0.7	2.4	6.5	11.2	19.6	60.3	43.3
Papua New Guinea	1996 a,b	50.9	1.7	4.5	7.9	11.9	19.2	56.5	40.5
Paraguay	1999 d,e	56.8	0.6	2.2	6.5	11.5	19.5	60.2	43.6
Peru	2000 d,e	49.8	0.7	2.9	8.3	14.1	21.5	53.2	37.2
Philippines	2000 a,b	46.1	2.2	5.4	8.8	13.1	20.5	52.3	36.3
Poland	1999 a,b	31.6	2.9	7.3	11.8	16.2	22.2	42.5	27.4
Portugal	1997 d,e	38.5	2.0	5.8	11.0	15.5	21.9	45.9	29.8
Puerto Rico		..	..	..	..	..	..	..	..

	Survey year	Gini Index	Percentage share of income or consumption						
			Lowest 10%	Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%	Highest 10%
Romania	2000 a,b	30.3	3.3	8.2	13.1	17.4	22.9	38.4	23.6
Russian Federation	2000 a,b	45.6	1.8	4.9	9.5	14.1	20.3	51.3	36.0
Rwanda	1983–85 a,b	28.9	4.2	9.7	13.2	16.5	21.6	39.1	24.2
Saudi Arabia		..	..	..	..	..	..	..	..
Senegal	1995 a,b	41.3	2.6	6.4	10.3	14.5	20.6	48.2	33.5
Serbia and Montenegro		..	..	..	..	..	..	..	..
Sierra Leone	1989 a,b	62.9	0.5	1.1	2.0	9.8	23.7	63.4	43.6
Singapore	1998 d,e	42.5	1.9	5.0	9.4	14.6	22.0	49.0	32.8
Slovak Republic	1996 d,e	25.8	3.1	8.8	14.9	18.7	22.8	34.8	20.9
Slovenia	1998–99 d,e	28.4	3.6	9.1	14.2	18.1	22.9	35.7	21.4
Somalia		..	..	..	..	..	..	..	..
South Africa	1995 a,b	59.3	0.7	2.0	4.3	8.3	18.9	66.5	46.9
Spain	1990 d,e	32.5	2.8	7.5	12.6	17.0	22.6	40.3	25.2
Sri Lanka	1995 a,b	34.4	3.5	8.0	11.8	15.8	21.5	42.8	28.0
St. Lucia	1995 d,e	42.6	2.0	5.2	9.9	14.8	21.8	48.3	32.5
Sudan		..	..	..	..	..	..	..	..
Swaziland	1994 d,e	60.9	1.0	2.7	5.8	10.0	17.1	64.4	50.2
Sweden	2000 d,e	25.0	3.6	9.1	14.0	17.6	22.7	36.6	22.2
Switzerland	1992 d,e	33.1	2.6	6.9	12.7	17.3	22.9	40.3	25.2
Syrian Arab Republic		..	..	..	..	..	..	..	..
Tajikistan	1998 a,b	34.7	3.2	8.0	12.9	17.0	22.1	40.0	25.2
Tanzania	1993 a,b	38.2	2.8	6.8	11.0	15.1	21.6	45.5	30.1
Thailand	2000 a,b	43.2	2.5	6.1	9.5	13.5	20.9	50.0	33.8
Togo		..	..	..	..	..	..	..	..
Trinidad and Tobago	1992 d,e	40.3	2.1	5.5	10.3	15.5	22.7	45.9	29.9
Tunisia	2000 a,b	39.8	2.3	6.0	10.3	14.8	21.7	47.3	31.5
Turkey	2000 a,b	40.0	2.3	6.1	10.6	14.9	21.8	46.7	30.7
Turkmenistan	1998 a,b	40.8	2.6	6.1	10.2	14.7	21.5	47.5	31.7
Uganda	1999 a,b	43.0	2.3	5.9	10.0	14.0	20.3	49.7	34.9
Ukraine	1999 a,b	29.0	3.7	8.8	13.3	17.4	22.7	37.8	23.2
United Arab Emirates		..	..	..	..	..	..	..	..
United Kingdom	1999 d,e	36.0	2.1	6.1	11.4	16.0	22.5	44.0	28.5
United States	2000 d,e	40.8	1.9	5.4	10.7	15.7	22.4	45.8	29.9
Uruguay c	2000 d,e	44.6	1.8	4.8	9.3	14.2	21.6	50.1	33.5
Uzbekistan	2000 a,b	26.8	3.6	9.2	14.1	17.9	22.6	36.3	22.0
Venezuela, RB	1998 d,e	49.1	0.6	3.0	8.4	13.7	21.6	53.4	36.3
Vietnam	1998 a,b	36.1	3.6	8.0	11.4	15.2	20.9	44.5	29.9
West Bank and Gaza		..	..	..	..	..	..	..	..
Yemen, Rep.	1998 a,b	33.4	3.0	7.4	12.2	16.7	22.5	41.2	25.9
Zambia	1998 a,b	52.6	1.1	3.3	7.6	12.5	20.0	56.6	41.0
Zimbabwe	1995 a,b	56.8	1.8	4.6	8.1	12.2	19.3	55.7	40.3

a. Data refer to consumption shares by percentiles of population. b. Ranked by per capita consumption. c. Urban data. d. Data refer to income shares by percentiles of population.
e. Ranked by per capita income.

Inequality in the distribution of income is reflected in the percentage shares of income or consumption accruing to segments of the population ranked by income or consumption levels. The segments ranked lowest by personal income receive the smallest shares of total income. The Gini index provides a convenient summary measure of the degree of inequality.

Data on personal or household income or consumption come from nationally representative household surveys. The data in the table refer to different years between 1989 and 2002. Footnotes to the survey year indicate whether the rankings are based on per capita income or consumption. Each distribution is based on percentiles of population—rather than of households—with households ranked by income or expenditure per person.

Where the original data from the household survey were available, they have been used to directly calculate the income (or consumption) shares by quintile. Otherwise shares have been estimated from the best available grouped data.

The distribution data have been adjusted for household size, providing a more consistent measure of per capita income or consumption. No adjustment has been made for spatial differences in cost of living within countries, because the data needed for such calculations are generally unavailable. For further details on the estimation method for low- and middle-income economies, see Ravallion and Chen (1996).

Because the underlying household surveys differ in method and type of data collected, the distribution data are not strictly comparable across countries. These problems are diminishing as survey methods improve and become more standardized, but achieving strict comparability is still impossible (see *About the data* for table 2.5).

Two sources of noncomparability should be noted in particular. First, the surveys can differ in many respects, including whether they use income or consumption expenditure as the living standard indicator. The distribution of income is typically more unequal than the distribution of consumption. In addition, the definitions of income used usually differ among surveys. Consumption is usually a much better welfare indicator, particularly in developing countries. Second, households differ in size (number of members) and in the extent of income sharing among members. And individuals differ in age and consumption needs. Differences among countries in these respects may bias comparisons of distribution.

World Bank staff have made an effort to ensure that the data are as comparable as possible.

Wherever possible, consumption has been used rather than income. Income distribution and Gini indexes for high-income countries are calculated directly from the Luxembourg Income Study database, using an estimation method consistent with that applied for developing countries.

• **Survey year** is the year in which the underlying data were collected. • **Gini index** measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Thus a Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality. • **Percentage share of income or consumption** is the share that accrues to subgroups of population indicated by deciles or quintiles. Percentage shares by quintile may not sum to 100 because of rounding.

The data on distribution are compiled by the World Bank's Development Research Group using primary household survey data obtained from government statistical agencies and World Bank country departments. The data for high-income economies are from the Luxembourg Income Study database.

	Urban informal sector employment		Youth unemployment		Children in the labor force		Female-headed households		Pension contributors			Private health expenditure
	% of urban employment		Male % of male labor force ages 15–24	Female % of female labor force ages 15–24	% ages 10–14			% of		% of labor force	% of working-age population	% of total
	Male 1995–2001 [a]	Female 1995–2001 [a]	1995–2002 [a]	1995–2002 [a]	1980	2002	Year	total	Year			2001
Afghanistan	..	..	..	..	28	24		..		..	..	47.4
Albania	..	..	..	..	4	0		..	1995	32.0	31.0	35.4
Algeria	..	..	..	..	7	0		..	1997	31.0	23.0	25.0
Angola	..	..	..	..	30	26		..		..	..	36.9
Argentina	..	..	31	33	8	2		..	1995	53.0	39.0	46.6
Armenia	..	..	..	..	0	0	2000	28	2002	64.4	48.3	58.8
Australia	..	..	13	12	0	0		..		..	..	32.1
Austria	..	..	5	6	0	0		..	1993	95.8	76.6	30.7
Azerbaijan	..	..	..	..	0	0		..	1996	52.0	46.0	*24.9*
Bangladesh	..	..	11	10	35	27	1999–2000	8	1993	3.5	2.6	55.8
Belarus	..	..	..	..	0	0		..	1992	97.0	94.0	13.3
Belgium	..	..	16	15	0	0		..	1995	86.2	65.9	28.3
Benin	50	41	..	..	30	26	2001	20	1996	4.8	..	53.1
Bolivia	..	..	7	10	19	10	1998	19	1999	14.8	13.3	33.7
Bosnia and Herzegovina	..	..	..	..	1	0		..		..	..	63.2
Botswana	..	..	38	47	26	14		..		..	..	33.8
Brazil	27	27	15	22	19	14	1996	20	1996	36.0	31.0	58.4
Bulgaria	..	..	42	35	0	0		..	1994	64.0	63.0	17.9
Burkina Faso	..	..	..	..	71	40	1998–99	6	1993	3.1	3.0	..
Burundi	..	..	..	..	50	48		..	1993	3.3	3.0	41.0
Cambodia	..	..	..	..	27	23	2000	25		..	..	85.1
Cameroon	..	..	..	..	34	22	1998	22	1993	13.7	11.5	62.9
Canada	..	..	15	12	0	0		..	1992	91.9	80.2	29.2
Central African Republic	..	..	..	..	..	..	1994–95	21		..	..	48.8
Chad	..	..	..	..	42	36	1996–97	21	1990	1.1	1.0	24.0
Chile	..	..	17	22	0	0		..	2001	54.8	34.9	56.0
China	..	..	..	..	30	6		..	1994	17.6	17.4	62.8
Hong Kong, China	..	..	14	9	6	0		..		..	..	..
Colombia	..	..	32	41	12	6	2000	27	1999	35.0	29.3	34.3
Congo, Dem. Rep.	..	..	..	..	33	28		..		..	..	55.6
Congo, Rep.	..	..	..	..	27	25		..	1992	5.8	5.6	36.2
Costa Rica	..	..	12	16	10	4		..	1998	50.6	38.5	31.5
Côte d'Ivoire	..	..	..	..	28	18	1998–99	14	1997	9.3	9.1	84.0
Croatia	..	..	35	40	0	0		..	2001	67.0	57.0	18.2
Cuba	..	..	..	..	0	0		..		..	..	13.8
Czech Republic	..	..	15	17	0	0		..	1995	85.0	67.2	8.6
Denmark	..	..	9	5	0	0		..	1993	89.6	88.0	17.6
Dominican Republic	..	..	16	34	25	12	1999	32	2001	26.8	17.7	63.9
Ecuador	..	..	11	20	9	4		..	2002	23.2	14.9	49.7
Egypt, Arab Rep.	..	..	14	37	18	8	2000	11	1994	50.0	34.2	51.1
El Salvador	..	..	14	10	17	13		..	1996	26.2	25.0	53.3
Eritrea	..	..	..	..	44	38	1995	30		..	..	34.9
Estonia	..	..	19	26	0	0		..	1995	76.0	67.0	22.2
Ethiopia	39	65	..	..	46	41	2000	23		..	..	59.5
Finland	..	..	21	20	0	0		..	1993	90.3	83.6	24.4
France	..	..	18	23	0	0		..	1993	88.4	74.6	24.0
Gabon	..	..	..	..	29	12	2000	25	1995	15.0	14.0	52.1
Gambia, The	..	..	..	..	44	33		..		..	..	50.6
Georgia	21	7	20	20	0	0		..	2000	41.7	40.2	62.2
Germany	..	..	11	8	0	0		..	1995	94.2	82.3	25.1
Ghana	..	..	..	..	16	11		..	1993	7.2	9.0	40.4
Greece	..	..	19	34	5	0		..	1996	88.0	73.0	44.0
Guatemala	..	..	..	..	19	13	1998–99	19	1999	22.8	19.3	51.7
Guinea	..	..	..	..	41	30	1999	12	1993	1.5	1.8	45.9
Guinea-Bissau	..	..	..	..	43	36		..		..	..	46.2
Haiti	..	..	..	..	33	22	2000	42		..	..	46.6

	Urban informal sector employment		Youth unemployment		Children in the labor force		Female-headed households		Pension contributors			Private health expenditure
	% of urban employment		Male % of male labor force ages 15–24	Female % of female labor force ages 15–24	% ages 10–14			% of		% of labor force	% of working-age population	% of total
	Male 1995–2001 [a]	Female 1995–2001 [a]	1995–2002 [a]	1995–2002 [a]	1980	2002	Year	total	Year			2001
Honduras	..	..	7	8	14	7		..	1999	20.6	17.7	46.9
Hungary	..	..	13	12	0	0		..	1996	77.0	65.0	25.0
India	54	41	..	..	21	11	1998–99	10	1992	10.6	7.9	82.1
Indonesia	..	..	12	15	13	7	1997	12	1995	8.0	7.0	74.9
Iran, Islamic Rep.	..	..	..	..	14	2	2000	..	2000	30.0	15.9	58.1
Iraq	..	..	..	..	11	2		..		..	..	68.2
Ireland	..	..	9	7	1	0		..	1992	79.3	64.7	24.0
Israel	..	..	19	18	0	0		..	1992	82.0	63.0	30.8
Italy	..	..	23	31	2	0		..	1997	87.0	68.0	24.7
Jamaica	..	..	24	46	0	0		..	1999	44.4	45.8	57.9
Japan	..	..	11	9	0	0		..	1994	97.5	92.3	22.1
Jordan	..	..	..	..	4	0	1997	9	1995	40.0	25.0	53.0
Kazakhstan	..	..	..	..	0	0	1999	33	2001	38.0	28.3	39.6
Kenya	..	..	..	..	45	38	1998	31	1995	18.0	24.0	78.6
Korea, Dem. Rep.	..	..	..	..	3	0		..		..	..	26.6
Korea, Rep.	..	..	10	7	0	0		..	1996	58.0	43.0	55.6
Kuwait	..	..	..	..	0	0		..		..	..	19.0
Kyrgyz Republic	33	25	..	..	0	0	1997	26	1997	44.0	42.0	51.3
Lao PDR	..	..	..	..	31	25		..		..	..	44.5
Latvia	..	..	20	21	0	0		..	1995	60.5	52.3	47.5
Lebanon	..	..	..	..	5	0		..		..	..	..
Lesotho	..	..	38	59	28	20		..		..	..	21.1
Liberia	..	..	..	..	26	14		..		..	..	24.1
Libya	..	..	..	..	9	0		..		..	..	44.0
Lithuania	50	27	31	26	0	0		..	2002	77.0	60.0	29.5
Macedonia, FYR	..	..	..	..	1	0		..	1995	49.0	47.0	15.1
Madagascar	..	..	..	..	40	33	1997	21	1993	5.4	4.8	34.1
Malawi	..	..	..	..	45	30	2000	26		..	..	65.0
Malaysia	..	..	..	..	8	2		..	1993	48.7	37.8	46.3
Mali	..	..	..	..	61	50	2001	11	1990	2.5	2.0	61.4
Mauritania	..	..	..	..	30	21	2000–01	29	1995	5.0	4.0	27.6
Mauritius	..	..	..	..	5	1		..	1995	60.0	57.0	40.5
Mexico	18	22	5	6	9	4		..	1997	30.0	31.0	55.7
Moldova	..	..	..	..	3	0		..		..	..	44.2
Mongolia	..	..	..	..	4	1		..	2002	61.4	49.1	27.7
Morocco	..	..	16	15	21	0	1992	16	2000	17.3	11.3	60.7
Mozambique	..	..	..	..	39	32	1997	26	1995	2.0	2.1	32.6
Myanmar	..	..	..	..	28	22		..		..	..	82.2
Namibia	..	..	33	41	34	16	1992	30		..	..	32.2
Nepal	60	76	..	..	56	41	2001	16		..	..	70.3
Netherlands	..	..	6	6	0	0		..	1993	91.7	75.4	36.7
New Zealand	..	..	12	11	0	0		..		..	..	23.2
Nicaragua	..	..	20	20	19	11	1997–98	30	1999	14.3	13.3	51.5
Niger	..	..	..	..	48	43	1998	13	1992	1.3	1.5	60.9
Nigeria	..	..	..	..	29	23	1999	16	1993	1.3	1.3	76.8
Norway	..	..	12	11	0	0		..	1993	94.0	85.8	14.5
Oman	..	..	..	..	6	0		..		..	..	19.3
Pakistan	64	61	11	29	23	14	1991	7	1993	3.5	2.1	75.6
Panama	..	..	25	37	6	2		..	1998	51.6	40.7	31.0
Papua New Guinea	..	..	..	..	28	16		..		..	..	11.0
Paraguay	..	..	12	17	15	5	1990	16	2001	18.0	12.0	61.7
Peru	..	..	13	14	4	2	2000	19	2001	31.0	19.0	45.0
Philippines	16	19	17	23	14	4	1998	14	1996	28.3	13.6	54.8
Poland	..	..	44	44	0	0		..	1996	68.0	64.0	28.1
Portugal	..	..	10	14	8	1		..	1996	84.3	80.0	31.0
Puerto Rico	..	..	23	16	0	0		..		..	..	..

	Urban informal sector employment % of urban employment		Youth unemployment		Children in the labor force		Female-headed households		Pension contributors			Private health expenditure % of total
	Male 1995–2001[a]	Female 1995–2001[a]	Male % of male labor force ages 15–24 1995–2002[a]	Female % of female labor force ages 15–24 1995–2002[a]	% ages 10–14 1980	2002	Year	% of total	Year	% of labor force	% of working-age population	2001
Romania	..	..	18	17	0	0		..	1994	55.0	48.0	20.8
Russian Federation	10	9	24	26	0	0		..		..	..	31.8
Rwanda	..	..	..	..	43	41	2000	36	1993	9.3	13.3	44.5
Saudi Arabia	..	..	..	..	5	0		..		..	..	25.4
Senegal	..	..	..	..	43	26	1997	18	1998	4.3	4.7	41.2
Serbia and Montenegro	..	..	..	..	0	0		..		..	..	20.8
Sierra Leone	..	..	..	..	19	13		..		..	..	39.0
Singapore	..	..	4	6	2	0		..	1995	73.0	56.0	66.5
Slovak Republic	..	..	39	36	0	0		..	1996	73.0	72.0	10.7
Slovenia	..	..	15	18	0	0		..	1995	86.0	68.7	25.1
Somalia	..	..	..	..	38	31		..		..	..	55.4
South Africa	16	28	58	53	1	0	1998	41		..	..	58.6
Spain	..	..	18	27	0	0		..	1994	85.3	61.4	28.6
Sri Lanka	..	..	20	31	4	1		..	1992	28.8	20.8	51.1
Sudan	..	..	..	..	33	27		..	1995	12.1	12.0	81.3
Swaziland	..	..	42	48	17	12		..		..	..	31.5
Sweden	..	..	14	12	0	0		..	1994	91.1	88.9	14.8
Switzerland	..	..	7	4	0	0		..	1994	98.1	96.8	42.9
Syrian Arab Republic	..	..	..	..	14	2		..		..	..	56.1
Tajikistan	..	..	..	..	0	0		..		..	..	71.1
Tanzania	60	85	..	..	43	36	1999	23	1996	2.0	2.0	53.3
Thailand	..	..	7	6	25	11		..	1999	18.0	17.0	42.9
Togo	..	..	..	..	36	26	1998	24	1997	15.9	15.0	51.4
Trinidad and Tobago	..	..	22	31	1	0		..		..	..	56.7
Tunisia	..	..	..	..	6	0		..	2000	40.0	23.0	24.3
Turkey	10	6	21	18	21	7	1998	10	1997	37.1	27.4	*36.8*
Turkmenistan	..	..	..	..	0	0	2000	26		..	..	26.7
Uganda	..	..	..	..	49	43	2000–01	27	1994	8.2	..	42.5
Ukraine	5	5	23	25	0	0		..	1995	69.8	66.1	32.2
United Arab Emirates	..	..	6	6	0	0		..		..	..	24.2
United Kingdom	..	..	13	9	0	0		..	1994	89.7	84.5	17.8
United States	..	..	13	11	0	0		..	1993	94.0	91.9	55.6
Uruguay	..	..	29	42	4	1		..	1995	82.0	78.0	53.7
Uzbekistan	..	..	..	..	0	0	1996	22		..	..	25.5
Venezuela, RB	..	..	20	28	4	0		..	1999	23.6	18.2	37.9
Vietnam	..	..	..	..	22	4	1997	24	1998	8.4	10.0	71.5
West Bank and Gaza	..	..	..	..	..	..		..		..	..	..
Yemen, Rep.	..	..	..	..	26	18	1997	9		..	..	65.9
Zambia	..	..	..	..	19	15	2001–02	22	1994	10.2	7.9	46.9
Zimbabwe	..	..	17	11	37	26	1999	33	1995	12.0	10.0	54.7
World			.. w	.. w	20 w	11 w						**40.8 w**
Low income			..	..	25	18						73.7
Middle income			..	..	21	5						48.9
Lower middle income			..	..	23	5						52.8
Upper middle income			21	27	6	2						42.3
Low & middle income			..	..	23	12						53.0
East Asia & Pacific			..	..	27	6						61.2
Europe & Central Asia			..	..	3	1						27.6
Latin America & Carib.			17	24	13	8						52.0
Middle East & N. Africa			..	..	14	4						40.7
South Asia			..	..	23	14						78.4
Sub-Saharan Africa			..	..	35	28						58.7
High income			12	13	0	0						37.9
Europe EMU			14	17	1	0						26.5

a. Data are for the most recent year available.

About the data

As traditionally defined and measured, poverty is a static concept, and vulnerability a dynamic one. Vulnerability reflects a household's resilience in the face of shocks and the likelihood that a shock will lead to a decline in well-being. Thus it depends primarily on the household's asset endowment and insurance mechanisms. Because poor people have fewer assets and less diversified sources of income than the better-off, fluctuations in income affect them more.

Poor households face many risks, and vulnerability is thus multidimensional. The indicators in the table focus on individual risks—informal sector employment, youth unemployment, child labor, female-headed household, income insecurity in old age, private health expenditure—and the extent to which publicly provided services may be capable of mitigating some of these risks. Poor people face labor market risks, often having to take up precarious, low-quality jobs in the informal sector and to increase their household's labor market participation through their children. Income security is a prime concern for the elderly. And affordable access to health care is a primary concern for all poor people, for whom illness and injury have both direct and opportunity costs.

For informal sector employment, the data are from labor force and special informal sector surveys, various household surveys, surveys of household industries or economic activities, surveys of small and micro enterprises, and official estimates. The international comparability of the data is affected by differences among countries in definitions and coverage and in the treatment of domestic workers and those who have a secondary job in the informal sector. The data in the table are based on national definitions of urban areas established by countries. For details on these definitions, see the notes in *Data sources*.

Youth unemployment is an important policy issue for many economies. Experiencing unemployment may permanently impair a young person's productive potential and future employment opportunities. In this table unemployment among youth ages 15–24 is presented, but the lower age limit for young people could be determined by the minimum age for leaving school, so age groups could differ across countries. Also since this age group is likely to include school leavers, the level of youth unemployment varies significantly over the year as a result of different school opening and closing dates. The youth unemployment rate shares similar limitations on comparability to the general unemployment rate. For further information, see *About the data* for table 2.4.

Reliable estimates of child labor are difficult to obtain. In many countries child labor is officially presumed not to exist and so is not included in surveys or in official data. Underreporting also occurs because data exclude children engaged in agricultural or household activities with their families. Available statistics suggest that more boys than girls work. But the number of girls working is often underestimated because surveys exclude girls working as unregistered domestic help or doing full-time household work to enable their parents to work outside the home.

The data on female-headed household are from recent Demographic and Health Surveys. The definition and concept of the female-headed household differ greatly across economies, making cross-country comparison difficult. In some cases it is assumed that a woman cannot be the head of any household in which an adult male is present, because of sex-biased stereotype. Users need to be cautious when interpreting the data.

The data on pension contributors come from national sources, the International Labour Organization, and International Monetary Fund country reports. Coverage by pension schemes may be broad or even universal where eligibility is determined by citizenship, residency, or income status. In contribution-related schemes, however, eligibility is usually restricted to individuals who have made contributions for a minimum number of years. Definitional issues—relating to the labor force, for example—may arise in comparing coverage by contribution-related schemes over time and across countries (for country-specific information, see Palacios and Pallares-Miralles 2000). Coverage of the share of the labor force covered by a pension scheme may be overstated in countries that do not attempt to count informal sector workers as part of the labor force.

The expenditure on health in a country can be divided into two main categories by source of funding: public and private. Public health expenditure consists of spending by central and local governments, including social health insurance funds. Private health expenditure includes private insurance, direct out-of-pocket payments by households, spending by nonprofit institutions serving households, and direct payments by private corporations. In countries where the share of out-of-pocket spending is large, poor households may be particularly vulnerable to the impoverishing effects of health care needs.

Definitions

• **Urban informal sector employment** is broadly characterized as employment in urban areas in units that produce goods or services on a small scale with the primary objective of generating employment and income for those concerned. These units typically operate at a low level of organization, with little or no division between labor and capital as factors of production. Labor relations are based on casual employment, kinship, or social relationships rather than contractual arrangements. • **Youth unemployment** refers to the share of the labor force ages 15–24 without work but available for and seeking employment. Definitions of labor force and unemployment may differ by country (see *About the data*). • **Children in the labor force** refer to the share of children ages 10–14 active in the labor force. • **Female-headed households** refer to the percentage of households with a female head. • **Pension contributors** refer to the share of the labor force or working-age population (here defined as ages 15–64) covered by a pension scheme. • **Private health expenditure** includes direct (out-of-pocket) spending by households, private insurance, spending by nonprofit institutions serving households (other than social insurance), and direct service payments by private corporations.

		Public expenditure on pensions			Public expenditure on health	Public expenditure on education	
	Year	% of GDP	Year	Average pension % of per capita income	% of GDP **2001**	% of GDP **2001/02** [a]	Per student % of GDP per capita **2001/02** [a]
Afghanistan		..	..	..	2.7	..	..
Albania	1995	5.1	1995	36.4	2.4	..	..
Algeria	1997	2.1	1991	75.0	3.1	..	..
Angola		..	..	..	2.8	2.8	..
Argentina	1994	6.2	..	..	5.1	4.6	14.5
Armenia	2002	2.5	1996	18.7	3.2	3.2	14.3
Australia	1997	5.9	1989	37.3	6.2	4.6	16.5
Austria	1995	14.9	1993	69.3	5.5	5.8	..
Azerbaijan	1996	2.5	1996	51.4	0.6	3.5	12.4
Bangladesh	1992	0.0	..	..	1.5	2.3	11.2
Belarus	1997	7.7	1995	31.2	4.8	6.0	..
Belgium	1997	12.9	..	..	6.4	5.9	..
Benin	1993	0.4	1993	189.7	2.1	3.3	14.2
Bolivia	2000	4.5	..	..	3.5	5.5	15.0
Bosnia and Herzegovina		..	..	..	2.8	..	..
Botswana		..	..	..	4.4	8.6	7.1
Brazil	1997	9.8	..	..	3.2	4.0	12.7
Bulgaria	1996	7.3	1995	39.3	3.9	3.2	15.6
Burkina Faso	1992	0.3	1992	207.3	2.0	..	..
Burundi	1991	0.2	1991	57.4	2.1	3.6	25.6
Cambodia		..	..	..	1.7	2.0	7.6
Cameroon	1993	0.4	..	..	1.2	3.2	12.2
Canada	1997	5.4	1994	54.3	6.8	5.2	9.1
Central African Republic	1990	0.3	..	..	2.3	1.9	..
Chad	1997	0.1	..	..	2.0	2.5 [d]	14.2
Chile	2001	2.9	1993	56.1	3.1	3.9	15.1
China	1996	2.7	..	..	2.0	2.2	11.5
Hong Kong, China		..	..	..	..	..	..
Colombia	1994	1.1	1989	72.2	3.6	4.4	19.5
Congo, Dem. Rep.		..	..	..	1.5	..	..
Congo, Rep.	1992	0.9	..	..	1.4	0.1	..
Costa Rica	1997	4.2	1993	76.1	4.9	4.7	19.1
Côte d'Ivoire	1997	0.3	..	..	1.3	4.6	22.0
Croatia	2001	13.2	..	..	7.3	4.2	5.8
Cuba	1992	12.6	..	..	6.2	8.5	42.6
Czech Republic	1999	9.8	1996	37.0	6.7	4.4	20.6
Denmark	1997	8.8	1994	46.7	7.0	8.3	37.7
Dominican Republic	2000	0.8	2000	42.0	2.2	2.4	..
Ecuador	2002	1.4	2002	55.3	2.3	..	..
Egypt, Arab Rep.	1994	2.5	1994	45.0	1.9	..	..
El Salvador	1997	1.3	..	..	3.7	2.5	8.6
Eritrea	2001	0.3	..	..	3.7	2.7	..
Estonia	2002	6.7	1995	56.7	4.3	7.4	27.5
Ethiopia	1993	0.9	..	..	1.4	4.8	..
Finland	1997	12.1	1994	57.4	5.3	5.9	..
France	1997	13.4	..	..	7.3	5.8	..
Gabon		..	..	..	1.7	3.9	8.7
Gambia, The		..	..	..	3.2	2.7	..
Georgia	2000	2.7	1996	12.6	1.4	2.5	..
Germany	1997	12.1	1995	62.8	8.1	4.5	..
Ghana	1996	1.1	..	..	2.8	4.1	..
Greece	1993	11.9	1990	85.6	5.2	3.8	..
Guatemala	1995	0.7	1995	27.6	2.3	1.7	..
Guinea		..	..	..	1.9	1.9	..
Guinea-Bissau		..	..	..	3.2	2.1	..
Haiti		..	..	..	2.7	..	..

		Public expenditure on pensions			Public expenditure on health	Public expenditure on education	
	Year	% of GDP	Year	Average pension % of per capita income	% of GDP **2001**	% of GDP **2001/02** [a]	Per student % of GDP per capita **2001/02** [a]
Honduras	1994	0.6	..	..	3.2	*4.0*	..
Hungary	1996	9.7	1996	33.6	5.1	*4.9*	20.5
India		..	..	..	0.9	*4.1*	20.8
Indonesia		..	..	..	0.6	1.3	6.0
Iran, Islamic Rep.	1994	1.5	..	..	2.7	5.0	15.7
Iraq		..	..	..	1.0	..	..
Ireland	1997	4.6	1993	77.9	4.9	*4.3*	..
Israel	1996	5.9	1992	48.1	6.0	*7.3*	23.0
Italy	1997	17.6	..	..	6.3	*4.6*	..
Jamaica	1996	..	1989	25.9	2.9	6.3	23.1
Japan	1997	6.9	1989	33.9	6.2	*3.6*	20.4
Jordan	1995	4.2	1995	144.0	4.5	4.6	15.5
Kazakhstan	2001	3.8	2001	23.0	1.9	*4.4*	..
Kenya	1993	0.5	..	..	1.7	*6.3*	*4.7*
Korea, Dem. Rep.		..	..	..	1.9	..	..
Korea, Rep.	1997	1.3	..	..	2.6	3.6	*15.0*
Kuwait	1990	3.5	..	..	3.5	*6.1*	..
Kyrgyz Republic	1997	6.4	2001	45.0	1.9	3.1	*12.8*
Lao PDR		..	..	..	1.7	3.2	11.0
Latvia	1995	10.2	1994	47.6	3.4	*5.9*	*23.7*
Lebanon		..	..	..	*2.2*	2.9	..
Lesotho		..	..	..	4.3	*10.0*	..
Liberia		..	..	..	3.3	..	..
Libya		..	..	..	1.6	*2.7*	..
Lithuania	2002	7.1	1995	21.3	4.2	..	..
Macedonia, FYR	1998	8.7	1996	91.6	5.8	3.7 [d]	*19.7* [d]
Madagascar	1990	0.2	..	..	1.3	2.5	..
Malawi		..	..	..	2.7	*4.1*	..
Malaysia	1999	6.5	..	..	2.0	7.9	*23.2*
Mali	1991	0.4	..	..	2.2	*2.8*	*26.7*
Mauritania	1992	0.2	..	..	2.6	*3.6*	*22.5*
Mauritius	1999	4.4	..	..	2.0	3.3	13.0
Mexico	2000	0.3 [b]	..	..	2.7	*4.4*	*15.0*
Moldova	1996	7.5	..	..	2.8	*4.0*	..
Mongolia	2002	5.8	..	..	4.6	*6.2*	..
Morocco	1994	1.8	1994	118.0	2.0	*5.0*	..
Mozambique	1996	0.0	..	..	4.0	*2.4*	..
Myanmar		..	..	..	0.4	*1.3*	*7.8*
Namibia		..	..	..	4.7	*8.1*	*28.2*
Nepal		..	..	..	1.5	3.4	13.8
Netherlands	1997	11.1	1989	48.5	5.7	*4.8*	..
New Zealand	1997	6.5	..	..	6.4	6.6	*21.6*
Nicaragua	1996	2.5	..	..	3.8	*5.0*	..
Niger	1992	0.1	..	..	1.4	2.3	26.3
Nigeria	1991	0.1	1991	40.5	0.8	..	..
Norway	1997	8.2	1994	49.9	6.8	*6.8*	*25.9*
Oman		..	..	..	2.4	3.9	17.5
Pakistan	1993	0.9	..	..	1.0	*1.8*	..
Panama	1996	4.3	..	..	4.8	4.3	*19.1*
Papua New Guinea		..	..	..	3.9	*2.3*	*13.3*
Paraguay	2000	0.8 [c]	..	..	3.0	4.7	15.8
Peru	2000	2.6	..	..	2.6	*3.3*	..
Philippines	1993	1.0	..	..	1.5	3.2	11.4
Poland	1997	15.5	1995	61.2	4.6	*5.0*	18.8
Portugal	1997	10.0	1989	44.6	6.3	*5.8*	..
Puerto Rico		..	..	..	..	..	..

		Public expenditure on pensions			Public expenditure on health	Public expenditure on education	
	Year	% of GDP	Year	Average pension % of per capita income	% of GDP 2001	% of GDP 2001/02 [a]	Per student % of GDP per capita 2001/02 [a]
Romania	1996	5.1	1994	34.1	5.2	3.5	..
Russian Federation	1996	5.7	1995	18.3	3.7	3.1	..
Rwanda	..	..	..	..	3.1	2.8	12.8
Saudi Arabia	..	..	..	..	3.4	8.3	..
Senegal	1998	1.5	1997	85.0 [c]	2.8	6.5 [d]	21.0
Serbia and Montenegro	..	..	..	..	6.5	..	..
Sierra Leone	..	..	..	..	2.6	1.0	..
Singapore	1996	1.4	..	..	1.3	..	..
Slovak Republic	1994	9.1	1994	44.5	5.1	4.1	16.8
Slovenia	1996	13.6	1996	49.3	6.3	..	..
Somalia	..	..	..	..	1.2	..	..
South Africa	..	..	..	..	3.6	5.7	17.7
Spain	1997	10.9	1995	54.1	5.4	4.5	..
Sri Lanka	1996	2.4	..	..	1.8	1.3	6.1
Sudan	..	..	..	..	0.6	..	..
Swaziland	..	..	..	..	2.3	5.5	19.2
Sweden	1997	11.1	1994	78.0	7.4	7.7	30.7
Switzerland	1997	13.4	1993	44.4	6.4	5.5	28.9
Syrian Arab Republic	1991	0.5	..	..	2.4	4.1	..
Tajikistan	1996	3.0	..	..	1.0	2.4	..
Tanzania	..	..	..	..	2.0	2.2	..
Thailand	..	..	..	..	2.1	5.0	17.7
Togo	1997	0.6	1993	178.8	1.5	4.8	16.0
Trinidad and Tobago	1996	0.6	..	..	1.7	4.0	18.4
Tunisia	2000	4.2	1991	89.5	4.9	6.8	23.9
Turkey	1997	4.5	1993	56.0	4.4	3.7	16.4
Turkmenistan	1996	2.3	..	..	3.0	..	..
Uganda	1997	0.8	..	..	3.4	2.5	..
Ukraine	1996	8.6	1995	30.9	2.9	4.2	17.0
United Arab Emirates	..	..	..	..	2.6	1.9	10.0
United Kingdom	1997	10.3	..	..	6.3	4.4	15.8
United States	1997	7.5	1989	33.0	6.2	4.9	20.8
Uruguay	1996	15.0	1996	64.1	5.1	2.5	9.9
Uzbekistan	1995	5.3	1995	45.8	2.7	..	..
Venezuela, RB	2001	2.7	..	..	3.7	..	..
Vietnam	1998	1.6	..	..	1.5	2.8	..
West Bank and Gaza	..	..	..	..	..	..	..
Yemen, Rep.	1994	0.1	..	..	1.5	10.0	..
Zambia	1993	0.1	..	..	3.0	2.3	..
Zimbabwe	..	..	..	..	2.8	10.4	18.0
World					**5.6 w**	**4.1 m**	**.. m**
Low income					1.1	3.1	..
Middle income					3.1	4.5	..
Lower middle income					2.7	4.0	..
Upper middle income					3.7	4.4	15.0
Low & middle income					2.7	3.8	..
East Asia & Pacific					1.9	3.2	10.2
Europe & Central Asia					4.3	4.3	..
Latin America & Carib.					3.4	4.5	15.0
Middle East & N. Africa					2.8	4.3	..
South Asia					1.0	2.3	11.2
Sub-Saharan Africa					2.5	3.4	..
High income					6.3	5.2	..
Europe EMU					6.8	5.2	..

a. Data are preliminary. b. Refers only to the scheme for civil servants. c. Refers to system covering private sector workers. d. Data are for 2002/03.

About the data

Enhancing security for poor people means reducing their vulnerability to such risks as ill health, providing them the means to manage risk themselves, and strengthening market or public institutions for managing risk. The tools include microfinance programs, old age assistance and pensions, and public provision of basic health care and education.

Public interventions and institutions can provide services directly to poor people, although whether these work well for the poor is debated. State action is often ineffective, in part because governments can influence only a few of the many sources of well-being and in part because of difficulties in delivering goods and services. The effectiveness of public provision is further constrained by the fiscal resources at governments' disposal and the fact that state institutions may not be responsive to the needs of poor people.

The data on public pension spending are from national sources and cover all government expenditures, including the administrative costs of pension programs. They cover noncontributory pensions or social assistance targeted to the elderly and disabled and spending by social insurance schemes for which contributions had previously been made. The pattern of spending in a country is correlated with its demographic structure—spending increases as the population ages.

The lack of consistent national health accounting systems in most developing countries makes cross-country comparisons of health spending difficult. Compiling estimates of public health expenditures is complicated in countries where state or provincial and local governments are involved in financing and delivering health care because the data on public spending often are not aggregated. The data in the table are the product of an effort to collect all available information on health expenditures from national and local government budgets, national accounts, household surveys, insurance publications, international donors, and existing tabulations.

The data on education spending in the table refer solely to public spending—government spending on public education plus subsidies for private education. The data generally exclude foreign aid for education. They may also exclude spending by religious schools, which play a significant role in many developing countries. Data for some countries and for some years refer to spending by the ministry of education only (excluding education expenditures by other ministries and departments and local authorities). The share of gross domestic product (GDP) devoted to education

can be interpreted as reflecting a country's effort in education. It often bears a weak relationship to the output of the education system as reflected in educational attainment. The pattern in this relationship suggests wide variations across countries in the efficiency with which the government's resources are translated into education outcomes. Data for education expenditure are reported for school years.

	Public expenditure per student [a]						Public expenditure on education	Trained teachers in primary education	Primary pupil-teacher ratio
			% of GDP per capita				% of total government expenditure	% of total	pupils per teacher
	Primary		Secondary		Tertiary				
	1990/91	2001/02 [b]	1990/91	2001/02 [b]	1990/91	2001/02 [b]	2001/02 [b]	2001/02 [b]	2001/02 [b]
Afghanistan	..	..	..	..	..	..	..	..	43
Albania	..	..	..	..	..	..	..	..	22
Algeria	..	..	..	..	..	..	..	97.1	28
Angola	..	..	..	..	..	..	..	..	..
Argentina	..	12.4	..	15.8	..	17.8	13.7	67.0	20
Armenia	..	..	..	14.8	..	38.9	..	..	19
Australia	15.9	16.0	34.6	14.3	50.7	23.5	13.8	..	..
Austria	18.0	..	23.6	..	35.1	..	15.1	..	13
Azerbaijan	..	..	..	20.1	..	14.0	23.1	100.0	16
Bangladesh	..	8.3	15.2	13.4	26.0	42.5	15.8	65.6	55
Belarus	25.7	..	6.9	..	17.8	..	..	97.9	17
Belgium	..	..	27.1	..	29.0	..	11.6	..	12
Benin	..	10.1	..	18.5	..	..	..	65.0	53
Bolivia	..	12.0	..	10.2	..	45.0	18.4	74.1	25
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..
Botswana	7.4	6.0	44.2	5.5	161.5	88.6	..	89.5	27
Brazil	..	10.7	..	10.0	..	48.5	10.4	91.9	23
Bulgaria	22.1	..	..	..	30.9	..	..	..	17
Burkina Faso	..	..	..	..	..	..	..	80.4	47
Burundi	..	11.6	117.8	61.7	..	691.5	21.8	..	49
Cambodia	..	7.4	..	6.2	..	42.0	10.1	96.0	56
Cameroon	..	..	..	..	302.0	..	12.5	..	61
Canada	..	..	..	..	27.5	47.2	..	..	17
Central African Republic	..	..	17.7	..	347.1	..	..	..	..
Chad	7.0	9.5	..	28.4	..	422.7	..	..	71
Chile	8.4	14.3	7.7	14.7	27.1	19.2	17.5	94.9	32
China	5.4	..	12.5	..	102.4	..	..	96.8	20
Hong Kong, China	8.0	..	..	..	51.3	..	..	..	..
Colombia	..	16.4	10.4	18.5	33.0	38.5	18.0	..	26
Congo, Dem. Rep.	..	..	..	..	..	..	..	..	..
Congo, Rep.	..	0.4	..	..	..	8.8	12.6	64.6	56
Costa Rica	7.8	14.6	15.8	20.2	45.8	45.8	21.1	89.5	24
Côte d'Ivoire	..	14.9	..	49.4	328.5	..	21.5	99.1	44
Croatia	..	..	..	..	..	36.4	..	100.0	18
Cuba	..	32.7	..	43.3	..	96.5	16.8	100.0	14
Czech Republic	..	13.0	..	22.3	45.9	32.8	9.7	..	18
Denmark	21.9	23.4	31.2	37.7	40.4	69.0	15.3	..	10
Dominican Republic	2.5	6.6	..	5.0	..	..	13.2	..	33
Ecuador	..	..	9.5	..	23.9	..	8.0	68.6	24
Egypt, Arab Rep.	..	..	..	..	50.4	..	..	99.9	22
El Salvador	..	..	..	..	..	9.3	19.4	..	26
Eritrea	..	..	..	..	..	17.4	..	72.6	44
Estonia	..	23.6	38.7	29.7	55.9	31.8	..	..	14
Ethiopia	31.1	..	46.1	..	506.6	..	13.8	69.3	57
Finland	21.8	..	25.8	..	40.3	..	12.2	..	16
France	11.9	..	20.7	..	22.9	..	11.5	..	19
Gabon	..	4.7	..	18.9	..	..	..	95.3	63
Gambia, The	13.1	..	28.2	..	..	..	14.2	73.1	38
Georgia	..	..	..	..	..	..	13.1	87.6	14
Germany	..	..	..	..	..	..	9.9	..	15
Ghana	..	..	..	..	..	..	..	64.9	32
Greece	8.1	..	12.4	..	16.0	..	7.0	..	13
Guatemala	2.7	7.7	4.4	4.8	34.7	..	11.4	100.0	30
Guinea	10.8	9.2	34.9	..	572.0	..	25.6	..	47
Guinea-Bissau	..	..	..	..	..	..	4.8	35.1	44
Haiti	5.7	..	..	..	..	..	..	..	..

	Public expenditure per student [a]						Public expenditure on education	Trained teachers in primary education	Primary pupil-teacher ratio
	% of GDP per capita						% of total government expenditure	% of total	pupils per teacher
	Primary		Secondary		Tertiary				
	1990/91	2001/02 [b]	1990/91	2001/02 [b]	1990/91	2001/02 [b]	2001/02 [b]	2001/02 [b]	2001/02 [b]
Honduras	..	..	16.5	..	76.6	..	..	..	34
Hungary	20.3	19.2	25.4	18.8	81.3	31.4	14.1	..	11
India	..	13.7	13.6	23.0	92.0	85.8	12.7	..	40
Indonesia	..	3.7	..	7.3	..	21.0	9.6	93.5	21
Iran, Islamic Rep.	6.2	11.6	14.1	13.6	79.7	81.5	21.7	97.9	24
Iraq	..	..	..	..	..	..	..	..	21
Ireland	11.1	..	18.5	..	36.1	..	10.7	..	22
Israel	12.7	21.0	27.6	22.4	32.7	29.9	..	..	12
Italy	15.1	..	21.4	..	..	..	9.5	..	11
Jamaica	10.8	15.7	14.0	24.5	132.3	70.5	12.3	79.5	34
Japan	18.6	21.4	18.4	21.0	..	17.2	10.5	..	20
Jordan	..	16.0	..	19.0	78.9	..	20.6	..	20
Kazakhstan	..	..	..	..	..	..	..	..	19
Kenya	13.0	0.9	..	2.2	..	256.7	22.5	..	32
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..
Korea, Rep.	12.0	18.4	9.9	16.8	5.8	7.4	17.4	..	32
Kuwait	35.4	..	13.6	..	353.8	..	..	..	14
Kyrgyz Republic	..	..	28.4	..	53.5	..	18.6	49.3	24
Lao PDR	5.0	9.1	25.3	10.2	52.2	94.5	10.6	76.1	30
Latvia	..	23.1	19.4	24.7	18.6	22.0	..	..	15
Lebanon	..	8.3	..	..	..	9.8	11.1	14.9	17
Lesotho	16.7	21.4	61.8	52.9	609.1	..	18.4	74.8	47
Liberia	..	..	..	..	..	..	..	..	38
Libya	..	..	..	..	..	24.9	..	..	..
Lithuania	..	..	26.9	..	54.1	..	..	..	16
Macedonia, FYR	..	16.6 [c]	30.9	17.1 [c]	62.5	20.8 [c]	..	..	18 [c]
Madagascar	..	10.7	..	..	167.9	191.6	..	..	54 [c]
Malawi	6.5	..	44.0	..	851.2	..	..	51.2	..
Malaysia	12.4	17.0	16.9	27.5	116.6	83.5	25.2	..	20
Mali	..	14.4	..	..	..	..	..	..	56
Mauritania	16.9	14.0	85.2	44.0	396.3	..	..	..	39
Mauritius	10.1	9.0	17.1	13.9	177.1	48.7	13.3	100.0	25
Mexico	3.5	11.8	8.3	13.8	23.6	45.2	22.6	..	27
Moldova	..	..	..	..	..	..	15.0	..	20
Mongolia	..	..	..	..	119.4	..	..	92.9	32
Morocco	..	17.9	47.1	47.5	73.1	..	..	..	28
Mozambique	11.0	..	27.4	..	..	..	..	59.9	66
Myanmar	..	5.8	..	7.0	..	28.5	18.1	85.4	33
Namibia	..	..	50.1	..	259.5	..	21.0	36.0	32
Nepal	..	12.5	8.1	11.8	90.8	82.3	13.9	51.8	40
Netherlands	12.1	..	21.7	..	54.1	..	10.4	..	10
New Zealand	17.1	19.6	15.0	21.9	67.8	25.1	..	..	15
Nicaragua	10.0	..	9.7	..	..	..	13.0	72.9	37
Niger	..	16.8	105.4	56.7	..	304.5	..	72.7	41
Nigeria	..	..	..	..	..	..	..	..	40
Norway	..	26.8	17.2	17.1	27.7	40.9	16.2	..	..
Oman	..	12.6	17.2	20.8	56.3	50.2	..	99.8	23
Pakistan	..	..	14.7	..	155.1	..	7.8	..	44
Panama	..	10.5	12.9	13.8	43.5	41.2	7.3	75.7	24
Papua New Guinea	..	12.4	..	19.2	..	..	..	100.0	36
Paraguay	3.1	12.9	6.7	15.4	38.0	47.1	9.7	..	..
Peru	..	..	..	..	..	..	21.1	78.2	29
Philippines	..	11.8	..	9.4	..	13.9	..	..	35
Poland	..	28.8	..	11.8	..	16.1	12.2	..	11
Portugal	15.4	..	18.0	..	32.5	..	12.8	..	13
Puerto Rico	..	..	..	..	..	..	..	..	..

	Public expenditure per student [a]						Public expenditure on education	Trained teachers in primary education	Primary pupil-teacher ratio
			% of GDP per capita				% of total government expenditure	% of total	pupils per teacher
	Primary		Secondary		Tertiary				
	1990/91	2001/02 [b]	1990/91	2001/02 [b]	1990/91	2001/02 [b]	2001/02 [b]	2001/02 [b]	2001/02 [b]
Romania	23.2	..	5.0	..	32.3	..	..	..	20
Russian Federation	..	..	..	..	..	9.6	10.6	..	17
Rwanda	..	6.9	..	22.0	..	575.0	..	81.2	51
Saudi Arabia	..	..	..	..	133.2	..	..	93.3	12
Senegal	17.3	13.8	..	..	..	..	..	100.0	49
Serbia and Montenegro	..	..	..	..	..	..	..	100.0	20
Sierra Leone	..	..	..	..	..	..	..	60.7	31
Singapore	..	..	13.6	..	43.4	..	..	..	..
Slovak Republic	22.8	11.4	7.9	16.8	63.7	27.9	13.8	..	19
Slovenia	17.5	..	15.4	..	38.7	..	..	..	13
Somalia	..	..	..	..	..	..	..	..	..
South Africa	..	14.3	..	18.3	90.9	56.8	18.1	67.6	37
Spain	11.8	..	13.6	..	18.0	..	11.3	..	14
Sri Lanka	..	10.0	..	..	78.6	..	..	..	..
Sudan	..	..	..	..	..	..	..	..	..
Swaziland	7.0	10.4	..	29.7	305.1	253.2	..	90.4	32
Sweden	46.5	24.3	18.8	27.8	38.6	52.0	13.6	..	11
Switzerland	34.9	22.8	13.5	27.8	43.7	53.2	15.2	..	14
Syrian Arab Republic	..	12.8	15.0	23.1	46.6	..	..	..	24
Tajikistan	..	..	..	..	..	..	..	81.6	22
Tanzania	..	..	..	..	..	..	..	..	47
Thailand	13.3	15.9	15.9	13.0	..	31.1	28.3	..	19
Togo	8.3	11.0	36.4	26.0	572.8	297.7	23.2	80.5	35
Trinidad and Tobago	4.5	14.2	15.5	20.1	67.4	68.5	13.4	78.1	19
Tunisia	..	15.8	27.6	25.7	115.5	68.0	17.4	94.1	22
Turkey	..	11.6	8.4	13.8	..	48.5	..	..	..
Turkmenistan	..	..	..	..	..	..	..	..	..
Uganda	..	..	..	..	..	..	..	..	59
Ukraine	20.9	..	9.5	16.9	19.5	35.3	15.0	99.7	19
United Arab Emirates	..	..	..	..	..	..	..	..	15
United Kingdom	15.1	13.6	26.5	14.5	40.9	25.7	11.4	..	18
United States	20.2	18.0	22.1	22.5	20.2	23.0	15.5	..	15
Uruguay	..	7.2	8.6	8.3	24.0	24.6	10.0	..	21
Uzbekistan	..	..	..	..	..	..	..	..	..
Venezuela, RB	2.4	..	7.8	..	36.3	..	..	..	..
Vietnam	..	..	..	..	..	..	..	87.0	26
West Bank and Gaza	..	..	..	..	..	..	..	..	..
Yemen, Rep.	..	..	..	..	..	..	32.8	..	..
Zambia	5.6	..	..	..	..	..	..	100.0	45
Zimbabwe	20.1	16.2	34.0	24.2	195.9	..	..	95.3	38
World	.. m	.. m	.. m	.. m	.. m	.. m	.. m	86.2 m	28 m
Low income	..	..	..	..	..	..	..	76.1	40
Middle income	..	..	..	..	..	..	..	90.4	22
Lower middle income	..	..	..	..	..	..	..	93.0	22
Upper middle income	..	12.4	16.9	..	61.8	30.6	13.7	77.7	21
Low & middle income	..	..	..	..	..	..	..	84.9	30
East Asia & Pacific	..	5.7	..	10.4	..	..	..	93.5	22
Europe & Central Asia	..	..	..	..	49.9	..	..	..	17
Latin America & Carib.	..	13.1	9.9	..	..	44.9	13.2	76.7	26
Middle East & N. Africa	..	..	..	..	76.0	..	..	96.8	24
South Asia	..	8.7	14.7	10.4	90.8	60.4	13.0	66.9	42
Sub-Saharan Africa	..	..	..	..	..	..	..	80.4	45
High income	40.2	26.2	31.0	..	47.1	66.5	11.5	..	17
Europe EMU	..	..	..	..	..	..	..	..	14

a. Break in series between 1997 and 1998 due to change from International Standard Classification of Education 1976 (ISCED76) to ISCED97. For information on ISCED, see *About the data*.
b. Data are preliminary. c. Data are for 2002/03.

Data on education are compiled by the UNESCO Institute for Statistics from official responses to surveys and from reports provided by education authorities in each country. Such data are used for monitoring, policymaking, and resource allocation. For a variety of reasons, however, education statistics generally fail to provide a complete and accurate picture of a country's education system. Statistics often lag by two to three years, though an effort is being made to shorten the delay. Moreover, coverage and data collection methods vary across countries and over time within countries, so the results of comparisons should be interpreted with caution.

The data on education spending in the table refer solely to public spending—government spending on public education plus subsidies for private education. The data generally exclude foreign aid for education. They may also exclude spending by religious schools, which play a significant role in many developing countries. Data for some countries and for some years refer to spending by the ministry of education only (excluding education expenditures by other ministries and departments and local authorities).

Many developing countries have sought to supplement public funds for education. Some countries have adopted tuition fees to recover part of the cost of providing education services or to encourage development of private schools. Charging fees raises difficult questions relating to equity, efficiency, access, and taxation, however, and some governments have used scholarships, vouchers, and other methods of public finance to counter criticism. Data for a few countries include private spending, although national practices vary with respect to whether parents or schools pay for books, uniforms, and other supplies. For greater detail, see the country- and indicator-specific notes in the source.

The share of public expenditure devoted to education allows an assessment of the priority a government assigns to education relative to other public investments. It also reflects a government's commitment to investing in human capital development.

The share of trained teachers in primary schools measures the quality of the teaching staff. It does not take account of competencies acquired by teachers through their professional experience or self-instruction, or of such factors as work experience, teaching methods and materials, or classroom conditions, all of which may affect the quality of teaching. Since the training teachers receive varies greatly, care should be taken in comparing across countries.

The comparability of pupil-teacher ratios across countries is affected by the definition of teachers and by differences in class size by grade and in the number of hours taught. Moreover, the underlying enrollment levels are subject to a variety of reporting errors (for further discussion of enrollment data, see *About the data* for table 2.11). While the pupil-teacher ratio is often used to compare the quality of schooling across countries, it is often weakly related to the value added of schooling systems (Behrman and Rosenzweig 1994).

Data for education are reported for school years. For two decades the International Standard Classification of Education, 1976 (ISCED76), was used to assemble, compile, and present education statistics. In 1998 UNESCO introduced ISCED97 and adjusted its data collection program and country reporting of education statistics to this new classification. The adjustments were made to ease the international compilation and comparison of education statistics and to take into account new types of learning opportunities and activities for both children and adults. Thus the time-series data for the years through 1997 are not consistent with those for 1998 and later. Any time-series analysis should therefore be undertaken with extreme caution.

• **Public expenditure per student** is public current spending on education divided by the number of students by level, as a percentage of gross domestic product (GDP) per capita. • **Public expenditure on education** is current and capital public expenditure on education expressed as a percentage of total government expenditure. • **Trained teachers in primary education** are the percentage of primary school teachers who have received the minimum organized teacher training (preservice or in service) required for teaching. • **Primary pupil-teacher ratio** is the number of pupils enrolled in primary school divided by the number of primary school teachers (regardless of their teaching assignment).

2.10a

Education suffers in primary schools with high teacher absence rates

Teacher absence rate, 2000–03 (%)
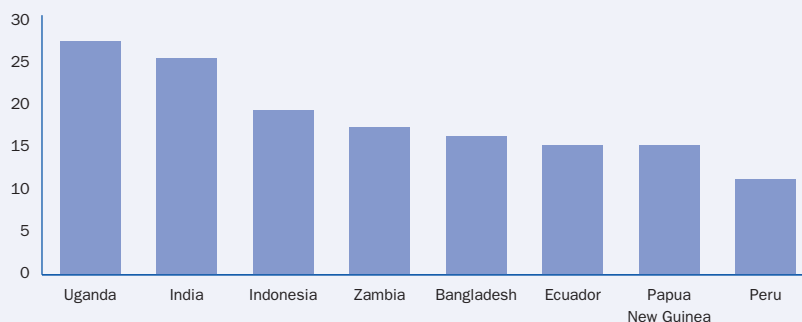
The primary school teacher absence rate is the percentage of full-time teachers who were absent from a random sample of primary schools during a surprise visit, regardless of the reasons for their absence. Many teachers were absent for valid reasons, but even authorized absences reduce the quantity and quality of primary education.

Source: Chaudhury and others 2004; NRI and World Bank 2003; Habyarimana and others 2003.

	Gross enrollment ratio [a]							Net enrollment ratio [a]			
	% of relevant age group							% of relevant age group			
	Preprimary	Primary		Secondary		Tertiary		Primary		Secondary	
	2001/02 [b]	1990/91	2001/02 [b]	1990/91	2001/02 [b]	1990/91	2001/02 [b]	1990/91	2001/02 [b]	1990/91	2001/02 [b]
Afghanistan	..	27	23	9	12	2	..	..	..	..	..
Albania	44	100	107	78	78	7	15	..	97	..	74
Algeria	4	100	108	61	72	11	..	93	95	54	62
Angola	..	92	..	12	19	1	1	..	..	..	..
Argentina	61	106	120	71	100	39	57	..	100	..	81
Armenia	30	104	96	93	87	20	26	..	85	..	85
Australia	104	108	102	82	154	35	65	99	96	79	88
Austria	82	102	103	104	99	35	57	90	91	91	88
Azerbaijan	23	114	93	90	80	24	23	..	80	..	76
Bangladesh	19	72	98	19	47	4	6	64	87	18	44
Belarus	99	95	110	93	84	48	62	..	94	..	78
Belgium	112	101	105	103	154	40	58	97	100	88	..
Benin	6	58	104	12	26	3	4	49	71	..	20
Bolivia	47	95	114	37	84	21	39	91	94	29	67
Bosnia and Herzegovina	..	70	..	65	..	15	..	..	..	..	..
Botswana	..	113	103	43	73	3	5	93	81	34	55
Brazil	67	106	148	38	108	11	18	86	97	15	72
Bulgaria	70	98	99	75	94	31	40	86	90	63	87
Burkina Faso	1	33	48 [c]	7	10	1	..	27	35	7	8
Burundi	1	73	71	6	11	1	2	52	53	5	8
Cambodia	7	121	123	32	22	1	3	..	86	..	21
Cameroon	14	101	107	28	33	3	5	..	..	..	..
Canada	65	103	100	101	106	95	59	97	100	89	98
Central African Republic	..	65	66	12	..	2	2	53	..	..	..
Chad	..	54	73	8	12	1	1	..	58	..	8
Chile	77	100	103	73	85	21	37	88	89	55	75
China	27	125	114	49	68	3	13	97	93	..	..
Hong Kong, China	..	102	..	80	..	19	..	..	..	..	..
Colombia	37	102	110	50	65	13	24	69	87	34	54
Congo, Dem. Rep.	1	70	..	22	..	2	..	54	..	15	..
Congo, Rep.	4	133	86	53	32	5	4	..	..	..	..
Costa Rica	115	101	108	42	67	27	21	86	91	36	51
Côte d'Ivoire	3	67	80	22	23	3	..	47	63	..	..
Croatia	38	85	96	76	88	24	36	79	88	63	86
Cuba	111	98	100	89	89	21	27	92	96	69	83
Czech Republic	92	96	104	91	95	16	30	..	90	..	88
Denmark	90	98	102	109	128	36	59	98	99	87	89
Dominican Republic	35	97	126	40	67	20	..	..	97	..	41
Ecuador	73	116	117	55	59	20	..	..	99	..	50
Egypt, Arab Rep.	12	94	97	76	85	16	..	..	90	..	78
El Salvador	46	81	112	26	56	16	17	75	89	..	46
Eritrea	5	46	61	15	28	..	2	24	43	..	21
Estonia	102	111	103	102	110	26	59	94	98	82	92
Ethiopia	2 [c]	33	62 [c]	14	17 [c]	1	2	..	46	..	15
Finland	54	99	102	116	126	49	85	99	100	93	95
France	114	108	105	99	108	40	54	100	100	86	92
Gabon	13	..	134	..	51	..	..	..	78	..	..
Gambia, The	20	64	79	19	34	..	..	51	73	18	28
Georgia	41	97	92	95	79	37	36	..	91	..	..
Germany	101	101	103	98	99	34	..	84	86	89	88
Ghana	41	75	81	36	38	1	3	..	60	..	30
Greece	70	98	97	93	96	36	61	94	95	83	85
Guatemala	55	78	103	23	33	8	..	..	85	..	28
Guinea	..	37	77	10	..	1	..	..	61	..	..
Guinea-Bissau	3	56	70	9	18	1	0 [d]	..	45	..	..
Haiti	..	74	..	21	..	1	..	22	..	..	..

	Gross enrollment ratio [a]							Net enrollment ratio [a]			
	% of relevant age group							% of relevant age group			
	Preprimary	Primary		Secondary		Tertiary		Primary		Secondary	
	2001/02 [b]	1990/91	2001/02 [b]	1990/91	2001/02 [b]	1990/91	2001/02 [b]	1990/91	2001/02 [b]	1990/91	2001/02 [b]
Honduras	21	109	106	33	..	9	14	89	87	21	..
Hungary	79	95	102	79	98	14	40	91	90	75	87
India	26	97	99	44	48	6	11	..	83	..	..
Indonesia	20	115	111	44	58	9	15	97	92	38	47
Iran, Islamic Rep.	23	112	92	55	81	10	19	97	87	..	..
Iraq	5	111	99	47	38	13	14	79	91	37	33
Ireland	3	103	119	101	..	29	47	91	90	80	..
Israel	112	95	114	85	93	34	53	..	100	..	88
Italy	96	103	101	83	96	32	50	..	100	..	88
Jamaica	87	101	101	65	84	7	17	96	95	64	75
Japan	84	100	101	97	102	30	48	100	100	97	100
Jordan	31	71	99	45	86	16	31	66	91	33	80
Kazakhstan	13	87	99	98	89	40	39	..	90	..	84
Kenya	44	95	96	24	32	2	4	..	70	..	24
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	79	105	100	90	94	39	82	100	99	86	91
Kuwait	73	60	94	43	85	12	..	45	85	45	77
Kyrgyz Republic	14	111	102	100	85	14	44	..	82	..	..
Lao PDR	8	105	115	25	41	1	4	61	83	15	31
Latvia	57	94	99	93	93	25	64	83	91	..	89
Lebanon	74	120	103	73	77	29	45	..	90	..	..
Lesotho	21	112	124	25	34	1	2	73	84	15	22
Liberia	56	29	105	14	..	3	..	..	70	..	..
Libya	8	105	114	86	105	15	58	96	..	..	..
Lithuania	53	91	104	92	98	34	59	..	97	..	92
Macedonia, FYR	29	99	99	56	85	17	24	94	93	..	82
Madagascar	3	103	104	18	..	3	2	..	69	..	..
Malawi	..	68	..	8	..	1	..	50	..	..	..
Malaysia	89	94	95	56	70	7	26	..	95	..	69
Mali	2	26	57	7	..	1	2	21	..	5	..
Mauritania	..	49	86	14	22	3	3	..	67	..	15
Mauritius	87	109	106	53	80	4	11	95	93	..	62
Mexico	75	114	110	53	73	15	20	100	99	45	58
Moldova	39	93	85	80	72	36	29	..	78	..	68
Mongolia	32	97	99	82	76	14	35	..	87	..	71
Morocco	60	67	107	35	41	11	10	58	88	..	31
Mozambique	..	67	99	8	13	0 [d]	1	47	60	7	11
Myanmar	2	106	90	23	39	4	11	..	82	..	35
Namibia	23	129	106	44	61	3	7	89	78	31	38
Nepal	13	108	122	33	44	5	5	..	70	..	..
Netherlands	96	102	108	120	124	40	55	95	99	84	90
New Zealand	87	106	99	89	113	40	72	100	98	85	92
Nicaragua	26	94	105	40	57	8	..	72	82	..	37
Niger	1	29	40	7	6	1	1	25	34	6	5
Nigeria	..	91	96	25	..	4	..	..	..	..	..
Norway	79	100	101	103	115	42	70	100	100	88	95
Oman	5	86	83	46	79	4	7	70	75	49	68
Pakistan	55	61	73	23	..	3	..	..	67	..	..
Panama	51	106	110	63	69	21	34	91	99	51	62
Papua New Guinea	39	72	77	12	23	3	..	..	77	..	23
Paraguay	30	105	112	31	64	8	18	93	92	26	50
Peru	60	118	121	67	..	30	..	..	100	..	..
Philippines	33	111	112	73	82	28	30	97	93	57	56
Poland	49	98	100	81	101	22	55	97	98	76	91
Portugal	70	123	121	67	114	23	50	100	..	70	85
Puerto Rico	..	121	..	61	..	45	..	..	..	..	..

	Gross enrollment ratio [a]							Net enrollment ratio [a]			
	% of relevant age group							% of relevant age group			
	Preprimary	Primary		Secondary		Tertiary		Primary		Secondary	
	2001/02 [b]	1990/91	2001/02 [b]	1990/91	2001/02 [b]	1990/91	2001/02 [b]	1990/91	2001/02 [b]	1990/91	2001/02 [b]
Romania	73	91	99	92	82	10	27	77	93	..	80
Russian Federation	92	109	114	93	92	52	68	..	..	..	..
Rwanda	3	70	117	8	14	1	2	66	96	7	..
Saudi Arabia	5	73	67	44	69	12	22	59	59	31	53
Senegal	3 [c]	59	75	16	19	3	..	48	58	..	..
Serbia and Montenegro	44	72	99	63	89	18	36	69	75	62	..
Sierra Leone	4	50	76	17	..	1	2	..	..	..	..
Singapore	..	104	..	68	..	19	..	..	..	..	..
Slovak Republic	81	98	103	87	87	19	30	..	89	..	75
Slovenia	75	108	100	91	106	24	61	..	93	..	96
Somalia	..	11	..	6	..	3	..	..	..	..	..
South Africa	35	122	105	74	86	13	15	99	90	51	62
Spain	102	109	107	104	114	37	57	100	100	..	93
Sri Lanka	..	106	110	74	81	5	..	..	..	..	..
Sudan	20	53	59	24	32	3	..	..	46	..	..
Swaziland	..	111	100	44	45	4	5	88	77	33	32
Sweden	74	100	110	90	149	32	70	100	100	85	96
Switzerland	95	90	107	99	100	26	42	84	99	80	88
Syrian Arab Republic	10	108	112	52	45	18	..	95	98	46	39
Tajikistan	10	91	107	102	82	22	15	..	98	..	79
Tanzania	..	70	70	5	6	0 [d]	1	51	54	..	5
Thailand	86	99	98	30	83	17	37	..	86	..	..
Togo	3	109	124	24	36	3	4	75	92	18	27
Trinidad and Tobago	63	97	105	80	70	7	7	91	94	65	65
Tunisia	20	113	112	45	79	9	23	94	97	43	68
Turkey	7	99	94	47	76	13	25	89	88	41	..
Turkmenistan	..	91	..	107	..	22	..	..	..	..	..
Uganda	4	71	136	13	..	1	3	..	..	..	..
Ukraine	72	89	90	93	97	47	57	..	82	..	91
United Arab Emirates	71	104	92	67	79	9	..	94	81	59	72
United Kingdom	82	104	101	85	158	30	59	97	100	79	95
United States	58	102	100	93	94	75	71	96	94	86	87
Uruguay	63	109	108	81	101	30	38	91	90	..	72
Uzbekistan	21	81	103	99	99	30	9	..	..	..	..
Venezuela, RB	52	96	106	35	69	29	18	88	92	19	57
Vietnam	43	103	103	32	70	2	10	..	94	..	65
West Bank and Gaza	..	..	..	..	..	..	..	..	..	..	..
Yemen, Rep.	0 [d]	58	81	58	46	4	..	..	67	..	35
Zambia	..	99	79	24	..	2	2	..	66	..	..
Zimbabwe	39	116	99	50	43	5	4	..	83	..	40
World	**40** w	**102** w	**103** w	**55** w	**70** w	**16** w	**24** w	**..** w	**88** w	**..** w	**..** w
Low income	24	88	94	35	46	5	10	..	80	..	..
Middle income	40	113	111	56	75	13	22	95	92	..	..
Lower middle income	36	115	112	55	75	12	20	95	91	..	..
Upper middle income	63	102	104	64	81	20	33	92	93	50	69
Low & middle income	33	102	103	47	63	10	17	..	86	..	..
East Asia & Pacific	29	121	111	47	66	5	14	97	92	..	..
Europe & Central Asia	58	98	103	85	89	34	48	..	..	..	..
Latin America & Carib.	60	106	129	49	89	17	23	89	94	29	65
Middle East & N. Africa	21	96	96	57	70	12	..	..	83	..	54
South Asia	28	90	95	39	48	5	10	..	82	..	..
Sub-Saharan Africa	..	74	87	23	..	3	..	..	..	..	..
High income	90	103	102	94	106	47	61	98	97	87	91
Europe EMU	98	105	104	97	106	35	54	93	99	87	90

a. Break in series between 1997 and 1998 due to change from ISCED76 to ISCED97. For information on ISCED, see *About the data* for table 2.10. b. Data are preliminary. c. Data are for 2002/03. d. Less than 0.5.

About the data

School enrollment data are reported to the UNESCO Institute for Statistics by national education authorities. Enrollment ratios help to monitor two important issues for universal primary education: whether the Millennium Development Goal that implies achieving a net primary enrollment ratio of 100 percent is on track, and whether an education system has sufficient capacity to meet the needs of universal primary education, as indicated in part by its gross enrollment ratios. The gross enrollment ratio shows the share of children in the population who are enrolled in school regardless of their age. Net enrollment ratios show the share of children of primary school age who are enrolled in school and thus also the share who are not.

Enrollment ratios, while a useful measure of participation in education, also have significant limitations. They are based on data collected during annual school surveys, which are typically conducted at the beginning of the school year. They do not reflect actual rates of attendance or dropouts during the school year. And school administrators may report exaggerated enrollments, especially if there is a financial incentive to do so. Often the number of teachers paid by the government is related to the number of pupils enrolled.

Overage or underage enrollments frequently occur, particularly when parents prefer, for cultural or economic reasons, to have children start school at other than the official age. Children's age at enrollment may be inaccurately estimated or misstated, especially in communities where registration of births is not strictly enforced. Parents who want to enroll their underage children in primary school may do so by overstating the age of the children. And in some education systems ages for children repeating a grade may be deliberately or inadvertently underreported. As an international indicator, the gross primary enrollment ratio has been used to indicate broad levels of participation as well as school capacity. It has an inherent weakness: the length of primary education differs significantly across countries. A short duration tends to increase the ratio, and a long duration to decrease it (in part because there are more dropouts among older children).

Other problems affecting cross-country comparisons of enrollment data stem from errors in estimates of school-age populations. Age-gender structures from censuses or vital registration systems, the primary sources of data on school-age populations, are commonly subject to underenumeration (especially of young children) aimed at circumventing laws or regulations; errors are also introduced when parents round up children's ages. While census data are often adjusted for age bias, adjustments are rarely made for inadequate vital registration systems. Compounding these problems, pre- and post-census estimates of school-age children are interpolations or projections based on models that may miss important demographic events (see the discussion of demographic data in *About the data* for table 2.1).

In using enrollment data, it is also important to consider repetition rates. These rates are quite high in some developing countries, leading to a substantial number of overage children enrolled in each grade and raising the gross enrollment ratio. A common error that may also distort enrollment ratios is the lack of distinction between new entrants and repeaters, which, other things equal, leads to underreporting of repeaters and overestimation of dropouts.

Thus gross enrollment ratios indicate the capacity of each level of the education system, but a high ratio does not necessarily mean a successful education system. The net enrollment ratio excludes overage students in an attempt to capture more accurately the system's coverage and internal efficiency. It does not solve the problem completely, however, because some children fall outside the official school age because of late or early entry rather than because of grade repetition. The difference between gross and net enrollment ratios shows the incidence of overage and underage enrollments.

Definitions

• **Gross enrollment ratio** is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. • **Net enrollment ratio** is the ratio of children of official school age (as defined by the national education system) who are enrolled in school to the population of the corresponding official school age. Based on the International Standard Classification of Education 1997 (ISCED97). • **Preprimary education** refers to the initial stage of organized instruction, designed primarily to introduce very young children to a school-type environment. • **Primary education** provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music. • **Secondary education** completes the provision of basic education that began at the primary level and aims at laying the foundations for lifelong learning and human development by offering more subject- or skill-oriented instruction using more specialized teachers. • **Tertiary education,** whether or not leading to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level.

2.11a

Girls from rural areas and poor households have the lowest attendance rates in Guinea

Net attendance ratio, 1999
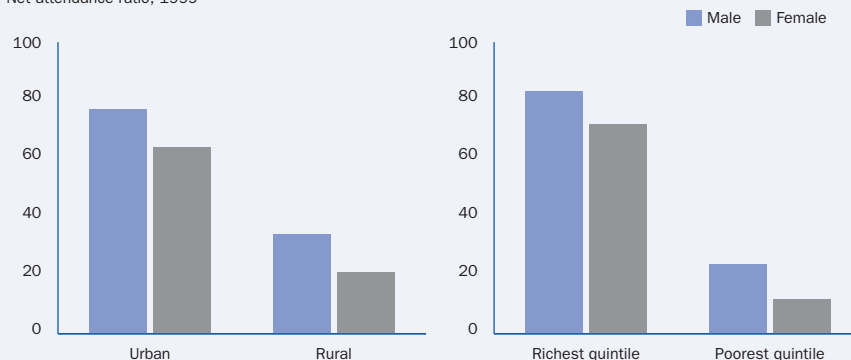
Household surveys can provide data on attendance at school that cannot usually be derived from administrative data. In Guinea more children attend school in urban areas than in rural areas, and more than four times as many rich children attend school as poor children. Regardless of location and wealth, more boys than girls attend school.

Source: *Global Education Report 2003,* UNESCO Institute for Statistics 2003.

Data source

The data are from the UNESCO Institute for Statistics.

	Apparent intake rate in grade 1 % of relevant age group		Share of cohort reaching grade 5 % of grade 1 students				Primary completion rate % of relevant age group			Repeaters in primary school % of enrollment		
	Male	Female	Male		Female		Total	Male	Female	Total	Male	Female
	2001/02 [a]	2001/02 [a]	1990/91	2000/01 [a]	1990/91	2000/01 [a]	2000/01– 2002/03 [a,b]	2000/01– 2002/03 [a,b]	2000/01– 2002/03 [a,b]	2001/02 [a]	2001/02 [a]	2001/02 [a]
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..
Albania	*103*	*101*	..	..	..	..	100	101	99	*4.1*	*4.6*	*3.4*
Algeria	102	100	95	95	93	97	96	96	95	11.7	14.2	9.0
Angola	..	..	..	..	..	..	..	..	..	*29.0*	*29.0*	*29.0*
Argentina	112	112	..	91	..	95	100	98	102	6.2	7.3	5.0
Armenia	97	95	..	..	..	..	74	74	74	0.1	0.1	0.1
Australia	..	..	..	..	..	..	..	..	..	..	..	..
Austria	*108*	*105*	..	..	..	..	..	..	..	..	..	..
Azerbaijan	91	88	..	..	..	..	100	101	99	0.3	0.3	0.3
Bangladesh	106	108	..	63	..	68	77	76	78	6.3	6.7	6.0
Belarus	..	..	..	..	..	..	131	..	..	0.3	*0.6*	*0.6*
Belgium	..	..	..	..	..	..	..	..	..	..	..	..
Benin	*127*	*96*	55	*89*	56	*78*	45	58	32	20.1	20.1	20.1
Bolivia	119	121	..	79	..	77	89	91	87	2.7	2.9	2.5
Bosnia and Herzegovina	..	..	..	..	..	..	77	..	..	..	..	..
Botswana	114	110	94	87	98	92	91	87	95	3.2	4.0	2.5
Brazil	130	119	..	..	..	..	82	..	..	21.5	*25.0*	*25.0*
Bulgaria	98	98	91	..	90	..	94	95	92	*2.4*	*2.8*	*2.0*
Burkina Faso	53	39	71	*68*	68	*71*	29	34	24	14.0 [c]	17.5	17.7
Burundi	92	73	65	68	58	59	27	30	24	26.3	25.6	27.2
Cambodia	174	161	..	71	..	70	71	75	66	9.6	10.2	8.9
Cameroon	115	99	..	63	..	60	57	58	56	25.2	25.9	24.4
Canada	..	..	..	..	..	..	..	..	..	..	..	..
Central African Republic	76	53	25	..	22	..	..	..	..	..	..	..
Chad	94	70	58	*58*	43	*48*	22	31	13	25.5	25.3	25.9
Chile	*97*	*96*	..	*101*	..	*101*	96	95	97	*2.0*	*2.4*	*1.6*
China	..	..	..	..	..	..	102	..	..	*0.6*	..	..
Hong Kong, China	..	..	..	..	..	..	..	..	..	..	..	..
Colombia	130	125	71	59	50	63	90	87	92	6.6	7.3	5.9
Congo, Dem. Rep.	..	..	58	..	50	..	..	..	..	..	..	..
Congo, Rep.	67	61	58	..	67	..	58	59	56	24.8	25.1	24.4
Costa Rica	101	101	81	93	84	95	90	89	92	8.2	9.5	6.9
Côte d'Ivoire	82	62	75	*73*	70	*65*	48	57	38	23.3	23.1	23.6
Croatia	97	98	..	..	..	..	90	90	89	0.4	0.5	0.3
Cuba	95	96	..	95	..	96	100	101	99	1.2	1.7	0.6
Czech Republic	*102*	*101*	..	98	..	99	..	..	..	*1.1*	*1.3*	*0.9*
Denmark	*100*	*100*	94	..	94	..	..	..	..	..	..	..
Dominican Republic	148	137	..	*71*	..	*79*	95	91	100	5.9	7.1	4.6
Ecuador	139	138	*40*	77	*41*	79	99	99	99	2.0	2.3	1.8
Egypt, Arab Rep.	*95*	*92*	..	*99*	..	*99*	91	92	89	*5.2*	*6.4*	*3.9*
El Salvador	135	128	*56*	67	*60*	73	86	86	86	6.5	7.3	5.6
Eritrea	70	59	*85*	89	*80*	74	33	38	29	17.5	17.1	17.9
Estonia	*98*	*94*	92	*100*	94	*99*	103	108	98	*2.3*	*3.2*	*1.3*
Ethiopia	96	74	*61*	63	*54*	59	18	..	..	9.9 [c]	8.6 [c]	11.7 [c]
Finland	*98*	*98*	100	*99*	100	*101*	..	..	..	*0.5*	*0.7*	*0.3*
France	..	..	..	*98*	..	*97*	..	..	..	*4.2*	*4.2*	*4.2*
Gabon	97	97	..	102	..	102	92	92	92	34.4	35.1	33.7
Gambia, The	*88*	*88*	85	*75*	89	*63*	69	77	60	*10.6*	*10.7*	*10.5*
Georgia	93	92	..	..	..	..	92	92	91	0.3	0.5	0.2
Germany	*100*	*99*	..	..	..	..	..	..	..	*1.8*	*2.0*	*1.6*
Ghana	86	84	81	*67*	79	*65*	59	61	57	5.2	5.3	5.0
Greece	..	..	99	..	100	..	..	..	..	..	..	..
Guatemala	126	123	..	57	..	54	59	63	55	14.2	14.8	13.5
Guinea	77	67	64	*90*	48	*77*	..	..	..	20.8	19.7	22.4
Guinea-Bissau	*106*	*79*	..	*41*	..	*34*	..	..	..	*24.0*	*23.6*	*24.5*
Haiti	..	..	..	..	..	..	..	..	..	..	..	..

	Apparent intake rate in grade 1		Share of cohort reaching grade 5				Primary completion rate			Repeaters in primary school		
	% of relevant age group		% of grade 1 students				% of relevant age group			% of enrollment		
	Male	Female	Male		Female		Total	Male	Female	Total	Male	Female
	2001/02 [a]	2001/02 [a]	1990/91	2000/01 [a]	1990/91	2000/01 [a]	2000/01–2002/03 [a,b]	2000/01–2002/03 [a,b]	2000/01–2002/03 [a,b]	2001/02 [a]	2001/02 [a]	2001/02 [a]
Honduras	138	138	..	..	..	..	70	69	70	..	..	..
Hungary	99	97	..	..	..	..	..	..	..	2.5	3.0	2.0
India	136	114	..	59	..	59	77	85	69	3.7	3.7	3.7
Indonesia	119	113	..	87	..	92	107	106	108	5.3	5.5	5.1
Iran, Islamic Rep.	86	86	91	94	89	94	123	125	120	4.3	5.2	3.3
Iraq	118	104	..	..	..	..	..	..	..	12.3	14.1	10.0
Ireland	101	100	100	98	100	99	..	..	..	1.6	1.7	1.4
Israel	..	..	..	..	..	..	..	..	..	..	..	..
Italy	96	95	100	95	100	98	..	..	..	0.3	0.4	0.2
Jamaica	99	99	..	88	..	93	90	88	92	3.5	4.3	2.6
Japan	..	..	100	..	100	..	..	..	..	..	..	..
Jordan	103	103	100	98	100	97	98	97	99	0.5	0.5	0.5
Kazakhstan	107	106	..	..	..	..	99	99	99	0.2	0.2	0.1
Kenya	105	101	..	..	..	..	56	54	58	..	..	..
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	102	100	99	100	100	100	..	..	..	..	..	..
Kuwait	96	95	..	..	..	..	..	..	..	2.8	2.9	2.7
Kyrgyz Republic	111	108	..	..	..	..	94	96	92	0.2	0.2	0.1
Lao PDR	133	117	56	62	50	63	73	78	69	20.0	21.2	18.5
Latvia	94	93	..	..	..	..	90	..	..	2.0	2.7	1.2
Lebanon	98	96	..	92	..	96	68	65	71	8.7	10.1	7.2
Lesotho	158	139	58	60	83	74	65	55	75	19.7	22.1	17.3
Liberia	204	174	..	44	..	21	..	..	..	2.7	2.4	3.0
Libya	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	102	100	..	..	..	..	106	106	106	0.7	0.9	0.5
Macedonia, FYR	98	98	..	..	..	..	95	96	95	0.1	0.1	0.1
Madagascar	119	116	22	33	21	34	41	40	41	29.0 [c]	31.5	29.4
Malawi	..	..	71	..	57	..	55	62	48	..	..	..
Malaysia	93	93	98	96	98	96	..	..	..	..	..	..
Mali	65	54	73	88	70	79	39	48	31	19.3	19.0	19.7
Mauritania	114	110	75	54	75	56	46	48	43	14.1	13.8	14.4
Mauritius	90	93	98	99	98	99	108	108	107	4.3	4.9	3.7
Mexico	110	110	81	88	82	89	96	96	97	5.5	6.5	4.4
Moldova	95	92	..	..	..	..	80	80	80	..	..	..
Mongolia	100	103	..	..	..	..	107	106	109	0.6	0.7	0.6
Morocco	119	115	75	84	76	83	68	72	64	12.6	14.1	10.8
Mozambique	126	112	37	56	28	47	22	27	17	22.9	22.5	23.4
Myanmar	116	117	..	59	..	61	71	71	71	0.7	0.7	0.7
Namibia	96	98	61	94	65	94	95	91	100	13.0	14.7	11.3
Nepal	128	117	52	57	52	69	73	78	67	21.6	21.8	21.4
Netherlands	99	98	..	..	..	..	..	..	..	..	..	..
New Zealand	99	98	90	..	91	..	..	..	..	..	..	..
Nicaragua	142	134	51	51	57	58	75	71	79	6.7	7.7	5.7
Niger	67	48	61	73	65	68	21	25	17	8.6	8.5	8.7
Nigeria	..	..	..	..	..	..	..	..	..	..	..	..
Norway	..	..	100	..	100	..	..	..	..	..	..	..
Oman	74	74	95	96	96	96	72	75	69	4.3	5.2	3.3
Pakistan	107	80	..	..	..	..	..	..	..	..	..	..
Panama	120	117	..	88	..	89	86	85	87	5.6	6.6	4.6
Papua New Guinea	102	90	60	61	58	58	59	63	55	..	..	..
Paraguay	114	112	69	76	72	78	89	88	90	8.0	9.2	6.7
Peru	115	116	..	88	..	87	98	98	99	10.7	10.9	10.4
Philippines	137	127	..	76	..	83	90	87	94	2.3	2.9	1.6
Poland	98	97	..	99	..	99	95	94	95	0.6	1.0	0.2
Portugal	..	..	..	..	..	..	..	..	..	..	..	..
Puerto Rico	..	..	..	..	..	..	..	..	..	..	..	..

	Apparent intake rate in grade 1 % of relevant age group		Share of cohort reaching grade 5 % of grade 1 students				Primary completion rate % of relevant age group			Repeaters in primary school % of enrollment		
	Male	Female	Male		Female		Total	Male	Female	Total	Male	Female
	2001/02 a	2001/02 a	1990/91	2000/01 a	1990/91	2000/01 a	2000/01– 2002/03 a, b	2000/01 – 2002/03 a, b	2000/01 – 2002/03 a, b	2001/02 a	2001/02 a	2001/02 a
Romania	102	102	..	..	..	..	94	95	94	3.2	3.8	2.5
Russian Federation	..	..	..	..	..	..	99	..	..	0.9	..	..
Rwanda	132	133	61	39	59	41	25	25	24	36.1	36.0	36.2
Saudi Arabia	68	67	82	94	84	94	66	66	66	5.2	6.3	3.9
Senegal	87	86	..	70	..	65	49	53	44	13.6	13.7	13.6
Serbia and Montenegro	98	99	..	..	..	..	..	..	..	1.0	1.0	1.0
Sierra Leone	..	..	..	..	..	..	..	..	..	..	..	..
Singapore	..	..	..	..	..	..	..	..	..	..	..	..
Slovak Republic	100	100	..	..	..	..	..	..	..	2.4	2.6	2.1
Slovenia	106	106	..	..	..	..	96	99	93	0.8	0.9	0.6
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	117	116	72	..	79	..	90	89	91	8.8	10.2	7.3
Spain	..	..	100	..	100	..	..	..	..	..	..	..
Sri Lanka	..	..	94	..	95	..	108	113	103	0.8	..	..
Sudan	58	48	90	..	95	..	..	..	..	11.3	10.9	11.8
Swaziland	100	96	74	69	78	79	74	77	72	16.7	18.9	14.3
Sweden	..	..	100	..	100	..	..	..	..	..	..	..
Switzerland	92	96	76	101	75	101	..	..	..	1.7	1.8	1.5
Syrian Arab Republic	124	121	94	93	94	92	89	93	85	6.8	7.7	5.7
Tajikistan	117	112	..	..	..	..	101	104	98	0.4	0.3	0.4
Tanzania	107	100	77	79	81	83	58	57	59	2.5	2.5	2.5
Thailand	99	92	..	92	..	96	91	92	90	3.9	4.0	3.7
Togo	117	104	55	88	44	80	84	100	67	22.5	21.9	23.2
Trinidad and Tobago	100	96	96	98	96	101	108	107	110	8.0	8.4	7.5
Tunisia	98	99	92	95	78	96	98	99	98	9.8	11.5	8.0
Turkey	..	..	98	..	97	..	95	105	85	..	..	..
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	..	..	..	..	..	..	67	73	62	..	..	..
Ukraine	119	118	..	..	..	..	98	98	97	0.2	0.2	0.2
United Arab Emirates	100	98	80	97	80	98	..	..	..	2.8	3.2	2.4
United Kingdom	..	..	..	..	..	..	..	..	..	..	..	..
United States	..	..	..	..	..	..	..	..	..	..	..	..
Uruguay	104	104	93	87	96	90	95	93	97	9.0	10.5	7.4
Uzbekistan	104	104	..	..	..	..	98	98	98	..	..	..
Venezuela, RB	107	104	83	82	90	88	58	51	65	7.7	9.3	5.9
Vietnam	103	97	..	90	..	88	104	106	101	2.4	2.8	1.9
West Bank and Gaza	..	..	..	..	..	..	66	61	72	..	..	..
Yemen, Rep.	104	79	..	80	..	98	68	90	45	9.0	11.1	5.5
Zambia	86	87	..	79	..	75	59	64	54	6.2	6.5	5.9
Zimbabwe	121	118	96	..	89	..	..	..	..	..	..	..
World	**116** w	**104** w	.. w	.. w	.. w	.. w	.. w	.. w	.. w	**5.6** w	.. w	.. w
Low income	121	105	..	66	..	68	74	78	68	6.7	6.8	6.7
Middle income	98	98	..	..	..	..	98	98	97	4.8	..	..
Lower middle income	98	97	..	..	..	..	97	98	96	4.7	..	..
Upper middle income	101	101	..	90	..	92	89	88	90	5.2	6.2	4.2
Low & middle income	117	105	..	..	..	..	86	88	82	5.7	..	..
East Asia & Pacific	96	97	..	..	..	..	100	101	98	2.0	..	..
Europe & Central Asia	93	92	..	..	..	..	97	99	95	..	..	..
Latin America & Carib.	125	118	..	..	..	..	87	83	92	13.0	12.5	11.3
Middle East & N. Africa	96	95	..	93	..	95	91	94	87	7.8	9.3	6.1
South Asia	130	110	..	59	..	61	78	84	71	4.6	4.6	4.6
Sub-Saharan Africa	92	82	..	..	..	..	48 d	51 d	44 d	..	..	..
High income	..	..	..	..	..	..	..	..	..	..	..	..
Europe EMU	99	98	..	..	..	..	..	..	..	2.2	2.3	2.1

a. Data are preliminary. b. Data are for the most recent year available. c. Data are for 2002/03. d. Represent only 60% of the population.

Indicators of students' progress through school are estimated by the UNESCO Institute for Statistics and the World Bank. These indicators measure an education system's success in extending coverage to all students, maintaining the flow of students from one grade to the next, and, ultimately, imparting a particular level of education.

Apparent intake rate indicates the general level of access to primary education. It also indicates the capacity of the education system to provide access to primary education. Low apparent intake rates in grade 1 reflect the fact that many children do not enter primary school even though school attendance, at least through the primary level, is mandatory in all countries. Because the apparent intake rate includes all new entrants regardless of age, it can be more than 100 percent. Once enrolled, students drop out for a variety of reasons, including low quality of schooling, discouragement over poor performance, and the direct and indirect costs of schooling. Students' progress to higher grades may also be limited by the availability of teachers, classrooms, and educational materials.

The cohort survival rate is estimated as the proportion of an entering cohort of grade 1 students that eventually reaches grade 5. It measures the holding power and internal efficiency of an education system. Cohort survival rates approaching 100 percent indicate a high level of retention and a low level of dropout.

Cohort survival rates are typically estimated from data on enrollment and repetition by grade for two consecutive years, in a procedure called the reconstructed cohort method. This method makes three simplifying assumptions: dropouts never return to school; promotion, repetition, and dropout rates remain constant over the entire period in which the cohort is enrolled in school; and the same rates apply to all pupils enrolled in a given grade, regardless of whether they previously repeated a grade (Fredricksen 1993). Given these assumptions, cross-country comparisons should be made with caution, because other flows—caused by new entrants, reentrants, grade skipping, migration, or school transfers during the school year—are not considered.

The UNESCO Institute for Statistics measures cohort survival to grade 5 because research suggests that five to six years of schooling is a critical threshold for the achievement of sustainable basic literacy and numeracy skills. But the cohort survival rate only indirectly reflects the quality of schooling, and a high rate does not guarantee these learning outcomes. Measuring actual learning outcomes requires setting curriculum standards and measuring students' learning progress against those standards through standardized assessments or tests.

The World Bank and the UNESCO Institute for Statistics are working jointly on development of the primary completion rate indicator. The primary completion rate is increasingly used as a core indicator of an education system's performance. It reflects both the coverage of the education system and the educational attainment of students. It is vital as a key measure of educational outcome at the primary level and of progress on the Millennium Development Goals and the Education for All initiative. However, because curricula and standards for school completion vary across countries, a high rate of primary completion does not necessarily mean high levels of student learning.

The primary completion rate reflects the primary cycle as nationally defined, ranging from three or four years of primary education (in a very small number of countries) to five or six years (in most countries) and seven or eight years (in a small number of countries).

The data shown in the table are for the proxy primary completion rate, calculated by subtracting the number of students who repeat the final primary grade from the number of students in that grade and dividing the result by the number of children of official graduation age in the population. Data limitations preclude adjusting this number for students who drop out during the final year of primary school. Thus proxy rates should be taken as an upper-bound estimate of the actual primary completion rate.

The numerator may include overage children who have repeated one or more grades of primary school but are now graduating successfully as well as children who entered school early. The denominator is the number of children of official graduation age, which could cause the primary completion rate to exceed 100 percent. There are other data limitations that contribute to completion rates exceeding 100 percent, such as the use of estimates for the population, the conduct of the school and population surveys at different times of year, and other discrepancies in the numbers used in the calculation.

Repeaters not only increase the cost of education for the family and for the school system, but also use up limited school resources. Countries have different policies on repetition and promotion of students; in some cases the number of repeaters is controlled because of limited capacity of the school system. Care should be taken in cross-country comparisons of this indicator.

• **Apparent intake rate in grade 1** is the number of new entrants in the first grade of primary education regardless of age, expressed as a percentage of the population of the official primary school entrance age. • **Share of cohort reaching grade 5** is the percentage of children enrolled in the first grade of primary school who eventually reach grade 5. The estimate is based on the reconstructed cohort method (see *About the data*). • **Primary completion rate** is the percentage of students successfully completing the last year of primary school. It is calculated by taking the total number of students in the last grade of primary school, minus the number of repeaters in that grade, divided by the total number of children of official graduation age. • **Repeaters in primary school** refer to the total number of pupils who are enrolled in the same grade as in a previous year, expressed as a percentage of the total enrollment. It is calculated by taking the total number of students in the last grade of primary school, minus the number of repeaters in that grade, divided by the total number of children of official graduation age.

The data on the apparent intake rate, the cohort reaching grade 5, and repeaters are from the UNESCO Institute for Statistics. The data on the primary completion rate are compiled by staff in the Development Data Group of the World Bank, in collaboration with the Education Anchor of the Human Development Network of the World Bank and the UNESCO Institute for Statistics.

	Adult literacy rate				Youth literacy rate				Expected years of schooling			
	% ages 15 and older				% ages 15–24							
	Male		Female		Male		Female		Male		Female	
	1990	2002[a]	1990	2002[a]	1990	2002[a]	1990	2002[a]	1990/91	2000/01	1990/91	2000/01
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..
Albania	87	99[b]	67	98[b]	97	99[b]	92	99[b]	..	11	..	11
Algeria	64	78	41	60	86	94	68	86	11	..	9	..
Angola	..	..	..	..	..	..	..	..	..	..	..	..
Argentina	96	97	96	97	98	98	98	99	..	14	..	15
Armenia	99	100[b]	96	99[b]	100	100[b]	99	100[b]	..	8	..	9
Australia	..	..	..	..	..	..	..	..	13	17	13	17
Austria	..	..	..	..	..	..	..	..	15	15	14	15
Azerbaijan	..	..	..	..	..	..	..	..	..	11	..	10
Bangladesh	44	50	24	31	51	58	33	41	6	8	4	8
Belarus	100	100	99	100	100	100	100	100	..	12	..	13
Belgium	..	..	..	..	..	..	..	..	14	16	14	16
Benin	38	55	15	26	57	73	25	38	..	9	..	5
Bolivia	87	93[b]	70	81[b]	96	99[b]	89	96[b]	..	..	..	..
Bosnia and Herzegovina	..	98	..	91	..	100	..	100	..	..	..	..
Botswana	66	76	70	82	79	85	87	93	10	12	11	12
Brazil	83	86[b]	81	87[b]	91	93[b]	93	96[b]	..	13	..	14
Bulgaria	98	99	96	98	100	100	99	100	12	13	12	13
Burkina Faso	25	19[b]	8	8[b]	36	26[b]	14	14[b]	3	..	2	..
Burundi	48	58	27	44	58	67	45	65	6	..	4	..
Cambodia	78	81	49	59	81	85	66	76	..	8	..	7
Cameroon	69	77[c]	48	60[c]	86	..	76	..	..	..	..	..
Canada	..	..	..	..	..	..	..	..	17	14	17	15
Central African Republic	47	65[c]	21	33[c]	66	70[c]	39	47[c]	..	..	..	..
Chad	37	55	19	38	58	76	38	64	..	7	..	4
Chile	94	96[b]	94	96[b]	98	99[b]	98	99[b]	..	14	..	13
China	87	95[b]	69	87[b]	97	99[b]	93	99[b]	..	..	..	..
Hong Kong, China	..	..	..	..	..	..	..	..	..	..	..	..
Colombia	89	92	88	92	94	97	96	98	..	11	..	11
Congo, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Congo, Rep.	77	89	58	77	95	98	90	97	..	..	..	..
Costa Rica	94	96	94	96	97	98	98	99	..	10	..	10
Côte d'Ivoire	51	..	26	..	65	70[c]	40	52[c]	..	..	..	..
Croatia	99	99[b]	95	97[b]	100	100[b]	100	100[b]	..	12	..	12
Cuba	95	97	95	97	99	100	99	100	12	12	13	12
Czech Republic	..	..	..	..	..	..	..	..	..	14	..	14
Denmark	..	..	..	..	..	..	..	..	14	15	14	16
Dominican Republic	80	84	79	84	87	91	88	92	..	..	..	..
Ecuador	90	92[b]	85	90[b]	96	96[b]	95	96[b]	..	..	..	..
Egypt, Arab Rep.	60	67[b]	34	44[b]	71	79[b]	51	67[b]	..	10	..	10
El Salvador	76	82	69	77	85	90	83	88	..	11	..	11
Eritrea	..	..	..	..	..	..	..	..	..	6	..	4
Estonia	100	100[b]	100	100[b]	100	100[b]	100	100[b]	12	14	12	15
Ethiopia	37	49	20	34	52	63	34	52	..	6	..	4
Finland	..	..	..	..	..	..	..	..	15	16	16	17
France	..	..	..	..	..	..	..	..	14	15	15	16
Gabon	..	..	..	..	..	..	..	..	..	..	..	..
Gambia, The	..	..	..	..	..	..	..	..	..	..	..	..
Georgia	..	..	..	..	..	..	..	..	..	6	..	6
Germany	..	..	..	..	..	..	..	..	15	15	14	15
Ghana	70	82	47	66	88	94	75	90	..	8	..	7
Greece	98	99	92	96	99	100	100	100	13	15	13	15
Guatemala	69	77	53	62	80	86	66	74	..	..	..	..
Guinea	..	..	..	..	..	..	..	..	..	..	..	..
Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	..	..
Haiti	43	54	37	50	56	66	54	67	..	..	..	..

	Adult literacy rate				Youth literacy rate				Expected years of schooling			
	% ages 15 and older				% ages 15–24							
	Male		Female		Male		Female		Male		Female	
	1990	2002^a	1990	2002^a	1990	2002^a	1990	2002^a	1990/91	2000/01	1990/91	2000/01
Honduras	69	*80*^b	67	*80*^b	78	*87*^b	81	*91*^b	..	..	..	..
Hungary	99	99	99	99	100	100	100	100	11	*13*	11	*14*
India	62	..	36	..	73	..	54	..	..	..	..	..
Indonesia	87	92	73	83	97	99	93	98	*10*	..	*9*	..
Iran, Islamic Rep.	72	*84*^c	54	*70*^c	92	..	81	..	..	..	..	..
Iraq	..	..	..	..	..	..	..	..	..	*10*	..	*8*
Ireland	..	..	..	..	..	..	..	..	12	*14*	13	*15*
Israel	95	97	88	93	99	100	98	99	..	*14*	..	*15*
Italy	98	99	97	98	100	100	100	100	..	*15*	..	*15*
Jamaica	78	84	86	91	87	91	95	98	11	*11*	11	*11*
Japan	..	..	..	..	..	..	..	..	..	*14*	..	*14*
Jordan	90	96	72	86	98	99	95	100	*9*	*12*	*9*	*13*
Kazakhstan	99	100	98	99	100	100	100	100	..	*12*	..	*12*
Kenya	81	90	61	79	93	96	87	95	..	*8*	..	*8*
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	..	..	..	..	..	..	..	..	14	*16*	13	*14*
Kuwait	79	85	73	81	88	92	87	94	*7*	*8*	*7*	*9*
Kyrgyz Republic	..	..	..	..	..	..	..	..	..	..	..	..
Lao PDR	70	77	43	55	79	86	61	73	*9*	*9*	*6*	*7*
Latvia	100	*100*^b	100	*100*^b	100	*100*^b	100	*100*^b	..	*12*	..	*14*
Lebanon	..	..	..	..	..	..	..	..	..	*13*	..	*13*
Lesotho	65	*74*^c	89	*90*^c	77	..	97	..	*9*	*10*	*11*	*10*
Liberia	55	72	23	39	75	86	39	55	..	*11*	..	*8*
Libya	83	92	51	71	99	100	83	94	..	..	..	..
Lithuania	100	*100*^b	99	*100*^b	100	*100*^b	100	*100*^b	..	*14*	..	*15*
Macedonia, FYR	..	..	..	..	..	..	..	..	..	*12*	..	*12*
Madagascar	..	..	..	..	..	..	..	..	..	*6*	..	*6*
Malawi	69	76	36	49	76	82	51	63	..	..	..	..
Malaysia	87	*92*^b	74	*85*^b	95	*97*^b	94	*97*^b	..	*12*	..	*12*
Mali	28	*27*^b	10	*12*^b	38	*32*^b	17	*17*^b	3	..	1	..
Mauritania	46	51	24	31	56	57	36	42	..	*7*	..	*6*
Mauritius	85	*88*^b	75	*81*^b	91	*94*^b	91	*95*^b	..	*12*	..	*12*
Mexico	91	*93*^b	84	*89*^b	96	*97*^b	94	*96*^b	..	*12*	..	*11*
Moldova	99	100	96	99	100	100	100	100	..	*9*	..	*10*
Mongolia	98	*98*^b	97	*98*^b	99	*97*^b	99	*98*^b	..	*9*	..	*11*
Morocco	53	63	25	38	68	77	42	61	..	*9*	..	*7*
Mozambique	49	62	18	31	66	77	32	49	*4*	*7*	*3*	*5*
Myanmar	87	89	74	81	90	92	86	91	..	*7*	..	*7*
Namibia	77	84	72	83	86	91	89	94	..	*12*	..	*12*
Nepal	47	62	14	26	67	78	27	46	..	..	..	..
Netherlands	..	..	..	..	..	..	..	..	15	*16*	15	*16*
New Zealand	..	..	..	..	..	..	..	..	14	*16*	15	*17*
Nicaragua	63	*77*^c	63	*77*^c	68	*84*^c	69	*89*^c	..	..	..	..
Niger	18	25	5	9	25	34	9	15	..	*3*	..	*2*
Nigeria	59	74	38	59	81	91	66	87	..	..	..	..
Norway	..	..	..	..	..	..	..	..	14	*16*	14	*18*
Oman	67	82	38	65	95	100	75	97	*10*	*9*	*9*	*9*
Pakistan	49	*53*^b	20	*29*^b	63	*65*^b	31	*42*^b	..	..	..	..
Panama	90	93	88	92	96	97	95	97	..	*12*	..	*13*
Papua New Guinea	..	..	..	..	..	..	..	..	..	*6*	..	*6*
Paraguay	92	*93*^c	88	*90*^c	96	*96*^c	95	*96*^c	9	*10*	8	*10*
Peru	92	*91*^c	79	*80*^c	97	*98*^c	92	*96*^c	..	*13*	..	*11*
Philippines	92	*93*^b	91	*93*^b	97	*94*^b	97	*96*^b	..	*11*	..	*12*
Poland	..	..	..	..	..	..	..	..	12	*14*	12	*15*
Portugal	91	95	84	91	99	100	100	100	*13*	*15*	*14*	*16*
Puerto Rico	92	94	91	94	95	97	97	98	..	..	..	..

	Adult literacy rate				Youth literacy rate				Expected years of schooling			
	% ages 15 and older				% ages 15–24							
	Male		Female		Male		Female		Male		Female	
	1990	2002 a	1990	2002 a	1990	2002 a	1990	2002 a	1990/91	2000/01	1990/91	2000/01
Romania	99	98 b	96	96 b	99	98 b	99	98 b	*11*	12	*11*	12
Russian Federation	100	100	99	99	100	100	100	100	..	..	..	..
Rwanda	63	75	44	63	78	86	67	84	..	..	..	..
Saudi Arabia	76	84	50	69	91	95	79	92	9	..	7	*9*
Senegal	38	49	19	30	50	61	30	44	..	..	..	..
Serbia and Montenegro	..	..	..	..	..	..	..	..	..	10	..	11
Sierra Leone	..	..	..	..	..	..	..	..	..	7	..	5
Singapore	94	97 b	83	89 b	99	99 b	99	100 b	..	..	..	..
Slovak Republic	..	100 b	..	100 b	..	100 b	..	100 b	..	13	..	13
Slovenia	100	100	100	100	100	100	100	100	..	*14*	..	*15*
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	82	87	80	85	89	92	88	92	*13*	13	*13*	13
Spain	98	99	95	97	100	100	100	100	..	15	..	16
Sri Lanka	93	95	85	90	96	97	94	97	..	..	..	..
Sudan	60	71	32	49	76	84	54	74	..	..	..	..
Swaziland	74	82	70	80	85	90	85	92	*11*	13	*10*	12
Sweden	..	..	..	..	..	..	..	..	13	*15*	13	*17*
Switzerland	..	..	..	..	..	..	..	..	14	16	13	15
Syrian Arab Republic	82	91	48	74	92	97	67	93	11	..	9	..
Tajikistan	99	100 b	97	99 b	100	100 b	100	100 b	..	11	..	9
Tanzania	76	85	51	69	89	94	77	89	..	5	..	5
Thailand	95	95 b	89	91 b	99	98 b	98	98 b	..	11	..	11
Togo	60	74	29	45	79	88	48	67	11	*12*	6	*8*
Trinidad and Tobago	98	99	96	98	100	100	100	100	*11*	11	*11*	12
Tunisia	72	83	47	63	93	98	75	91	*11*	14	*10*	14
Turkey	89	93 b	66	75 b	97	98 b	88	93 b	..	..	..	..
Turkmenistan	..	99 b	..	98 b	..	100 b	..	100 b	..	..	..	..
Uganda	69	79	43	59	80	86	60	74	..	..	..	..
Ukraine	100	100	99	100	100	100	100	100	..	*11*	..	*12*
United Arab Emirates	71	76	71	81	82	88	89	95	10	..	11	..
United Kingdom	..	..	..	..	..	..	..	..	14	16	14	17
United States	..	..	..	..	..	..	..	..	15	15	16	16
Uruguay	96	97	97	98	98	99	99	99	..	*13*	..	*14*
Uzbekistan	99	100	98	99	100	100	100	100	..	..	..	..
Venezuela, RB	90	94	88	93	95	98	97	99	..	10	..	11
Vietnam	94	94 b	87	87 b	94	..	94	..	..	..	..	..
West Bank and Gaza	..	..	..	..	..	..	..	..	..	..	..	..
Yemen, Rep.	55	69	13	29	74	84	25	51	..	*11*	..	*5*
Zambia	79	86	59	74	86	91	76	87	..	7	..	7
Zimbabwe	87	94	75	86	97	99	91	96	..	10	..	9
World	**79 w**	**84 w**	**63 w**	**71 w**	**87 w**	**89 w**	**78 w**	**83 w**	**.. w**	**.. w**	**.. w**	**.. w**
Low income	64	72	42	53	75	82	59	70	..	..	..	..
Middle income	88	92	75	83	95	97	91	94	..	..	..	..
Lower middle income	87	92	74	82	95	96	91	94	..	..	..	..
Upper middle income	92	95	88	92	97	98	95	98	..	..	..	..
Low & middle income	78	83	62	70	86	89	77	82	..	..	..	..
East Asia & Pacific	88	93	71	82	97	98	93	97	..	..	..	..
Europe & Central Asia	98	99	95	96	99	100	98	99	..	..	..	..
Latin America & Carib.	87	90	83	89	93	95	93	96	..	..	..	..
Middle East & N. Africa	66	76	40	55	81	87	61	75	..	..	..	..
South Asia	59	67	34	44	70	77	50	61	..	..	..	..
Sub-Saharan Africa	60	71	40	56	75	83	60	74	..	..	..	..
High income	..	..	..	..	..	..	..	..	15	..	15	..
Europe EMU	..	..	..	..	..	..	..	..	15	..	15	..

a. Data are preliminary. b. National estimates based on census data. c. National estimates based on survey data.

About the data

Many governments collect and publish statistics that indicate how their education systems are working and developing—statistics on enrollment and on such efficiency indicators as repetition rates, pupil-teacher ratios, and cohort progression through school. But until recently, despite an obvious interest in what education achieves, few systems in high-income or developing countries had systematically collected information on outcomes of education.

Basic student outcomes include achievements in reading and mathematics judged against established standards. In many countries national learning assessments are enabling ministries of education to monitor progress in these outcomes. Internationally, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics has established literacy as an outcome indicator based on an internationally agreed definition.

The literacy rate is defined as the percentage of people who can, with understanding, both read and write a short, simple statement about their everyday life. In practice, literacy is difficult to measure. To estimate literacy using such a definition requires census or survey measurements under controlled conditions. Many countries estimate the number of literate people from self-reported data. Some use educational attainment data as a proxy but apply different lengths of school attendance or level of completion. Because definition and methodologies of data collection differ across countries, data need to be used with caution.

The reported literacy data are national estimates or UNESCO Institute for Statistics estimates. The national estimates are received from countries and are based on national censuses or household surveys during 1995–2004. The UNESCO Institute for Statistics estimates were assessed in July 2002. The estimation methodology can be reviewed at www.uis.unesco.org.

Literacy statistics for most countries cover the population ages 15 and older, by five-year age groups, but some include younger ages or are confined to age ranges that tend to inflate literacy rates. As an alternative, the UNESCO Institute for Statistics has proposed the narrower age range of 15–24, which better captures the ability of participants in the formal education system. The youth illiteracy rate reported in the table measures the accumulated outcomes of primary education over the previous 10 years or so by indicating the proportion of people who have passed through the primary education system without acquiring basic literacy and numeracy skills (or never entered the system). Reasons for this may include difficulties in attending school or dropping out before reaching grade 5 (see *About the data* for table 2.12) and thereby failing to achieve basic learning competencies.

Expected years of schooling is an estimate of the total years of schooling that a typical child at the age of school entry will receive, including years spent on repetition, given the current patterns of enrollment across cycles of education. It may also be interpreted as an indicator of the total education resources, measured in school years, that a child will acquire over his or her "lifetime" in school—or as an indicator of an education system's overall level of development.

Because the calculation of this indicator assumes that the probability of a child's being enrolled in school at any future age is equal to the current enrollment ratio for that age, it does not account for changes and trends in future enrollment ratios. The expected number of years and the expected number of grades completed are not necessarily consistent, because the first includes years spent in repetition. Comparability across countries and over time may be affected by differences in the length of the school year or changes in policies on automatic promotions and grade repetition.

Definitions

• **Adult literacy rate** is the percentage of people ages 15 and older who can, with understanding, both read and write a short, simple statement about their everyday life. • **Youth literacy rate** is the literacy rate among people ages 15–24. • **Expected years of schooling** are the average number of years of formal schooling that children are expected to receive, including university education and years spent in repetition. They reflect the underlying age-specific enrollment ratios for primary, secondary, and tertiary education.

2.13a

There is a strong positive relationship between primary school enrollment ratios and literacy among youth

Literacy rate, 2002 (%)

Gross primary enrollment ratio, 1990
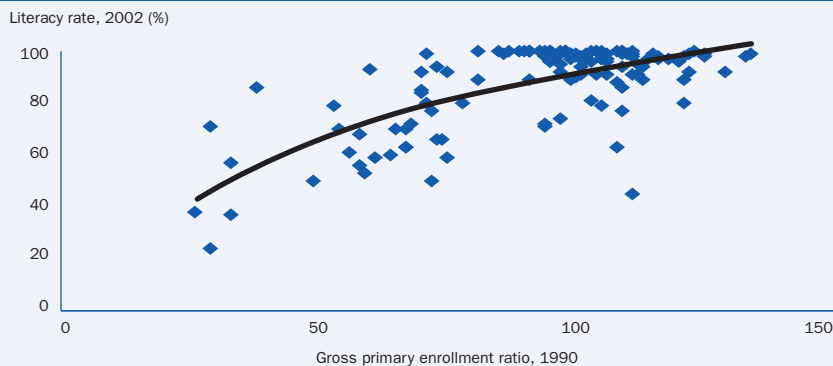
Children learn basic reading and writing along with other subjects in primary school. The primary school enrollment ratio and the literacy rate among young people (15–24) have a strong positive relationship, suggesting the push to achieve universal primary education will increase the number of literate young people.

Source: UNESCO Institute for Statistics.

	Health expenditure			Health expenditure per capita	Physicians		Hospital beds		Inpatient admission rate	Average length of stay	Outpatient visits per capita
					per 1,000 people		per 1,000 people		% of population	days	
	Total % of GDP 2001	Public % of GDP 2001	Public % of total 2001	$ 2001	1980	1995–2002[a]	1980	1995–2002[a]	1995–2002[a]	1995–2002[a]	1995–2002[a]
Afghanistan	5.2	2.7	52.6	8	..	0.1	..	..	..	..	..
Albania	3.7	2.4	64.6	48	1.4	1.4	4.3	3.3	..	..	..
Algeria	4.1	3.1	75.0	73	..	1.0	..	2.1	..	..	..
Angola	4.4	2.8	63.1	31	..	0.1	..	..	..	..	..
Argentina	9.5	5.1	53.4	679	..	2.7	..	3.3	..	..	..
Armenia	7.8	3.2	41.2	28	3.2	2.9	8.4	4.3	8	15	2
Australia	9.2	6.2	67.9	1,741	..	2.5	12.3	7.9	16	16	6
Austria	8.0	5.5	69.3	1,866	1.6	3.2	11.2	8.6	30	9	7
Azerbaijan	0.9	0.6	75.1	8	3.4	3.6	9.7	8.5	6	..	1
Bangladesh	3.5	1.5	44.2	12	0.1	0.2	0.2	..	..	..	..
Belarus	5.6	4.8	86.7	68	3.0	4.5	12.5	12.6	26	18	11
Belgium	8.9	6.4	71.7	1,983	2.3	3.9	9.4	7.3	20	12	7
Benin	4.4	2.1	46.9	16	0.1	0.1	1.5	..	..	..	..
Bolivia	5.3	3.5	66.3	49	..	1.3	..	1.7	..	..	..
Bosnia and Herzegovina	7.5	2.8	36.8	85	1.0	1.4	4.8	3.2	..	15	..
Botswana	6.6	4.4	66.2	190	0.1	..	2.4	..	..	..	..
Brazil	7.6	3.2	41.6	222	..	1.3	..	3.1	0 [b]	..	2
Bulgaria	4.8	3.9	82.1	81	2.5	3.4	8.9	7.2	..	12	..
Burkina Faso	..	2.0	..	..	0.0 [c]	0.0 [c]	..	1.4	2	3	0 [b]
Burundi	3.6	2.1	59.0	4	..	..	..	..	..	..	..
Cambodia	11.8	1.7	14.9	30	..	0.3	..	..	..	..	..
Cameroon	3.3	1.2	37.1	20	..	0.1	..	..	..	..	..
Canada	9.5	6.8	70.8	2,163	1.8	2.1	6.8	3.9	10	9	6
Central African Republic	4.5	2.3	51.2	12	0.0 [c]	0.0 [c]	1.6	..	..	..	..
Chad	2.6	2.0	76.0	5	..	..	..	..	..	..	..
Chile	7.0	3.1	44.0	296	..	1.1	3.4	2.7	..	..	..
China	5.5	2.0	37.2	49	1.2	1.4	2.2	2.5	4	12	..
Hong Kong, China	..	..	..	..	0.8	1.3	4.0	..	..	..	..
Colombia	5.5	3.6	65.7	105	..	1.2	1.6	1.5	..	..	..
Congo, Dem. Rep.	3.5	1.5	44.4	5	..	0.1	..	..	..	..	..
Congo, Rep.	2.1	1.4	63.8	18	..	0.3	..	..	..	..	..
Costa Rica	7.2	4.9	68.5	293	..	0.9	3.3	1.7	9	6	1
Côte d'Ivoire	6.2	1.0	16.0	41	..	0.1	..	..	..	..	..
Croatia	9.0	7.3	81.8	394	1.7	2.4	7.2	6.0	..	..	..
Cuba	7.2	6.2	86.2	185	..	5.3	..	5.1	..	..	..
Czech Republic	7.4	6.7	91.4	407	2.3	3.4	11.3	8.8	21	11	13
Denmark	8.4	7.0	82.4	2,545	2.2	3.4	8.1	4.5	20	6	6
Dominican Republic	6.1	2.2	36.1	153	..	2.2	..	1.5	..	..	..
Ecuador	4.5	2.3	50.3	76	..	1.7	1.9	1.6	..	..	..
Egypt, Arab Rep.	3.9	1.9	48.9	46	1.1	1.6	2.0	2.1	3	6	4
El Salvador	8.0	3.7	46.7	174	0.3	1.1	..	1.6	..	..	..
Eritrea	5.7	3.7	65.1	10	..	0.0 [c]	..	..	..	..	..
Estonia	5.5	4.3	77.8	226	2.9	3.1	12.2	6.7	18	9	5
Ethiopia	3.6	1.4	40.5	3	0.0 [c]	..	0.3	..	..	..	..
Finland	7.0	5.3	75.6	1,631	1.7	3.1	15.6	7.5	27	11	4
France	9.6	7.3	76.0	2,109	2.0	3.3	11.1	8.2	23	13	7
Gabon	3.6	1.7	47.9	127	..	..	..	..	..	..	..
Gambia, The	6.4	3.2	49.4	19	..	0.0 [c]	..	..	..	..	..
Georgia	3.6	1.4	37.8	22	4.1	3.9	10.2	4.3	5	11	1
Germany	10.8	8.1	74.9	2,412	2.3	3.3	11.5	9.1	24	12	7
Ghana	4.7	2.8	59.6	12	..	0.1	..	..	..	..	..
Greece	9.4	5.2	56.0	1,001	2.4	4.4	6.2	4.9	15	8	3
Guatemala	4.8	2.3	48.3	86	..	0.9	..	1.0	..	..	..
Guinea	3.5	1.9	54.1	13	..	0.1	..	..	..	..	..
Guinea-Bissau	5.9	3.2	53.8	8	0.1	0.2	1.9	..	..	..	..
Haiti	5.0	2.7	53.4	22	..	0.2	0.7	0.7	..	..	..

	Health expenditure			Health expenditure per capita	Physicians		Hospital beds		Inpatient admission rate	Average length of stay	Outpatient visits per capita
	Total % of GDP 2001	Public % of GDP 2001	Public % of total 2001	$ 2001	per 1,000 people 1980	1995– 2002[a]	per 1,000 people 1980	1995– 2002[a]	% of population 1995– 2002[a]	days 1995– 2002[a]	1995– 2002[a]
Honduras	6.1	3.2	53.1	59	..	0.8	1.3	1.1	..	..	..
Hungary	6.8	5.1	75.0	345	2.3	2.9	9.1	8.2	24	9	12
India	5.1	0.9	17.9	24	0.4	..	0.8	..	..	..	..
Indonesia	2.4	0.6	25.1	16	..	..	..	..	..	..	..
Iran, Islamic Rep.	6.6	2.7	41.9	363	..	0.9	1.5	1.6	..	..	..
Iraq	3.2	1.0	31.8	225	0.6	0.6	1.9	1.5	..	..	..
Ireland	6.5	4.9	76.0	1,711	..	2.4	13.0	9.7	15	8	..
Israel	8.7	6.0	69.2	1,641	3.1	3.7	6.8	6.2	..	..	..
Italy	8.4	6.3	75.3	1,584	2.6	4.3	9.6	4.9	18	8	6
Jamaica	6.8	2.9	42.1	191	..	1.4	..	2.1	..	..	..
Japan	8.0	6.2	77.9	2,627	1.3	1.9	13.7	16.5	10	40	14
Jordan	9.5	4.5	47.0	163	0.8	1.7	1.3	1.8	11	4	..
Kazakhstan	3.1	1.9	60.4	44	3.0	3.6	13.1	7.0	15	16	0[b]
Kenya	7.8	1.7	21.4	29	..	0.1	..	..	..	..	..
Korea, Dem. Rep.	2.5	1.9	73.4	22	..	3.0	..	..	..	..	..
Korea, Rep.	6.0	2.6	44.4	532	..	1.4	1.7	6.1	6	13	9
Kuwait	4.3	3.5	81.0	630	1.7	1.9	4.1	2.8	..	..	..
Kyrgyz Republic	4.0	1.9	48.7	12	2.6	2.6	12.0	5.5	21	13	1
Lao PDR	3.1	1.7	55.5	10	..	0.2	..	..	..	..	..
Latvia	6.4	3.4	52.5	210	3.6	2.9	13.9	8.2	21	14	4
Lebanon	*12.4*	*2.2*	*18.0*	..	..	2.1	..	2.7	17	4	..
Lesotho	5.5	4.3	78.9	23	..	0.1	..	..	..	..	..
Liberia	4.3	3.3	75.9	1	..	0.0	c	..	..	..	.. ..
Libya	2.9	1.6	56.0	143	1.3	1.3	..	4.3	..	..	..
Lithuania	6.0	4.2	70.5	206	..	4.0	12.1	9.2	24	11	7
Macedonia, FYR	6.8	5.8	84.9	115	1.3	2.2	5.2	4.8	9	12	3
Madagascar	2.0	1.3	65.9	6	..	0.1	..	0.4	1	5	1
Malawi	7.8	2.7	35.0	13	..	..	..	1.3	..	..	2
Malaysia	3.8	2.0	53.7	143	0.3	0.7	..	2.0	..	..	..
Mali	4.3	1.7	38.6	11	0.0[c]	0.1	..	0.2	1	7	0[b]
Mauritania	3.6	2.6	72.4	12	..	0.1	..	..	..	..	..
Mauritius	3.4	2.0	59.5	128	0.5	0.9	3.1	..	..	..	..
Mexico	6.1	2.7	44.3	370	..	1.5	0.7	1.1	6	4	3
Moldova	5.1	2.8	55.8	18	2.8	2.7	12.1	5.9	19	18	8
Mongolia	6.4	4.6	72.3	25	..	2.4	11.2	..	..	..	..
Morocco	5.1	2.0	39.3	59	..	0.5	..	1.0	3	7	..
Mozambique	5.9	4.0	67.4	11	0.0[c]	..	1.1	..	..	..	..
Myanmar	2.1	0.4	17.8	197	..	0.3	0.9	..	..	..	..
Namibia	7.0	4.7	67.8	110	..	0.3	..	..	..	..	..
Nepal	5.2	1.5	29.7	12	0.0[c]	0.0[c]	0.2	0.2	..	..	..
Netherlands	8.9	5.7	63.3	2,138	1.9	3.3	12.3	10.8	10	33	6
New Zealand	8.3	6.4	76.8	1,073	1.6	2.2	10.2	6.2	13	8	4
Nicaragua	7.8	3.8	48.5	60	0.4	0.9	..	1.5	..	..	..
Niger	3.7	1.4	39.1	6	..	0.0[c]	..	0.1	28	5	0[b]
Nigeria	3.4	0.8	23.2	15	0.1	..	0.9	..	..	..	..
Norway	8.0	6.8	85.5	2,981	2.0	3.0	16.5	14.6	17	9	..
Oman	3.0	2.4	80.7	225	0.5	1.3	1.6	2.2	9	4	4
Pakistan	3.9	1.0	24.4	16	0.3	0.6	0.6	..	..	..	..
Panama	7.0	4.8	69.0	258	..	1.7	..	2.2	..	..	..
Papua New Guinea	4.4	3.9	89.0	24	0.1	0.1	5.5	..	..	..	..
Paraguay	8.0	3.0	38.3	97	..	1.1	..	1.3	..	..	..
Peru	4.7	2.6	55.0	97	0.7	0.9	..	1.5	1	6	..
Philippines	3.3	1.5	45.2	30	0.1	1.2	1.7	..	..	..	..
Poland	6.1	4.6	71.9	289	1.8	2.2	5.6	4.9	16	8	6
Portugal	9.2	6.3	69.0	982	2.0	3.2	5.2	4.0	12	9	3
Puerto Rico	..	..	..	..	..	1.8	..	3.3	..	..	..

	Health expenditure			Health expenditure per capita	Physicians		Hospital beds		Inpatient admission rate	Average length of stay	Outpatient visits per capita
	Total % of GDP	Public % of GDP	Public % of total	$	per 1,000 people		per 1,000 people		% of population	days	
	2001	**2001**	**2001**	**2001**	**1980**	**1995–2002** [a]	**1980**	**1995–2002** [a]	**1995–2002** [a]	**1995–2002** [a]	**1995–2002** [a]
Romania	6.5	5.2	79.2	117	1.5	1.9	8.8	7.5	18	10	4
Russian Federation	5.4	3.7	68.2	115	..	4.2	..	10.8	22	17	8
Rwanda	5.5	3.1	55.5	11	0.0 [c]	..	1.5	..	..	..	..
Saudi Arabia	4.6	3.4	74.6	375	..	1.7	..	2.3	11	4	1
Senegal	4.8	2.8	58.8	22	..	0.1	..	0.4	..	10	1
Serbia and Montenegro	8.2	6.5	79.2	103	..	2.1	..	5.3	..	12	2
Sierra Leone	4.3	2.6	61.0	7	0.1	0.1	1.2	..	..	..	..
Singapore	3.9	1.3	33.5	816	0.9	1.6	4.0	..	..	..	..
Slovak Republic	5.7	5.1	89.3	216	..	3.6	..	7.8	19	10	..
Slovenia	8.4	6.3	74.9	821	1.8	2.2	7.0	5.2	..	..	..
Somalia	2.6	1.2	44.6	6	0.0 [c]	0.0 [c]	..	..	..	..	..
South Africa	8.6	3.6	41.4	222	..	0.6	..	..	..	..	..
Spain	7.5	5.4	71.4	1,088	..	3.3	5.4	4.1	12	9	9
Sri Lanka	3.6	1.8	48.9	30	0.1	0.4	2.9	..	..	..	..
Sudan	3.5	0.6	18.7	14	0.1	0.1	0.9	..	..	..	..
Swaziland	3.3	2.3	68.5	41	..	0.2	..	..	..	..	..
Sweden	8.7	7.4	85.2	2,150	2.2	3.0	15.1	3.6	18	6	3
Switzerland	11.1	6.4	57.1	3,779	2.4	3.5	..	17.9	15	13	..
Syrian Arab Republic	5.4	2.4	43.9	65	0.4	1.3	1.1	1.4	..	..	..
Tajikistan	3.4	1.0	28.9	6	..	2.1	..	6.4	..	..	..
Tanzania	4.4	2.0	46.7	12	..	0.0 [c]	1.4	..	..	..	..
Thailand	3.7	2.1	57.1	69	0.1	0.4	1.5	2.0	..	..	1
Togo	2.8	1.5	48.6	8	0.1	0.1	..	..	..	..	..
Trinidad and Tobago	4.0	1.7	43.3	279	0.7	0.8	..	5.1	..	..	..
Tunisia	6.4	4.9	75.7	134	0.3	0.7	2.1	1.7	..	..	..
Turkey	*6.9*	*4.4*	*63.0*	..	0.6	1.3	2.2	2.6	8	6	3
Turkmenistan	4.1	3.0	73.3	57	2.8	3.0	10.5	7.1	..	..	..
Uganda	5.9	3.4	57.5	14	..	..	..	..	..	..	..
Ukraine	4.3	2.9	67.8	33	3.5	3.0	12.1	8.7	20	..	10
United Arab Emirates	3.5	2.6	75.8	849	1.1	1.8	2.8	2.6	..	..	..
United Kingdom	7.6	6.3	82.2	1,835	1.3	2.0	8.1	4.1	15	10	5
United States	13.9	6.2	44.4	4,887	2.0	2.7	6.0	3.6	12	7	9
Uruguay	10.9	5.1	46.3	603	..	3.7	..	4.4	..	..	..
Uzbekistan	3.6	2.7	74.5	17	2.7	2.9	9.2	5.3	..	..	..
Venezuela, RB	6.0	3.7	62.1	307	0.8	2.4	0.3	1.5	..	..	..
Vietnam	5.1	1.5	28.5	21	0.2	0.5	3.5	1.7	8	7	..
West Bank and Gaza	..	..	..	..	..	0.5	..	1.2	9	3	4
Yemen, Rep.	4.5	1.5	34.1	20	..	0.2	..	0.6	..	..	..
Zambia	5.7	3.0	53.1	19	0.1	0.1	..	..	..	..	..
Zimbabwe	6.2	2.8	45.3	45	0.2	0.1	3.0	..	..	..	..
World	**9.8 w**	**5.6 w**	**59.2 w**	**500 w**	**1.1 w**	**.. w**	**3.7 w**	**.. w**	**9 w**	**.. w**	**.. w**
Low income	4.4	1.1	26.3	23	0.4	..	1.2	..	..	..	..
Middle income	6.0	3.1	51.1	118	1.2	1.9	3.0	3.7	7	11	..
Lower middle income	5.8	2.7	47.2	85	1.2	2.0	2.9	3.7	6	12	..
Upper middle income	6.4	3.7	57.7	357	..	1.8	3.8	3.4	11	6	5
Low & middle income	5.8	2.7	47.0	72	0.8	..	2.2	..	..	..	..
East Asia & Pacific	4.9	1.9	38.8	48	1.0	1.4	2.2	2.5	4	12	..
Europe & Central Asia	5.8	4.3	72.4	123	..	3.1	..	8.9	18	13	6
Latin America & Carib.	7.0	3.4	48.0	255	..	1.4	..	2.2	2	..	2
Middle East & N. Africa	4.9	2.8	59.3	166	..	..	..	..	..	..	..
South Asia	4.8	1.0	21.6	22	0.3	..	0.7	..	..	..	..
Sub-Saharan Africa	6.0	2.5	41.3	29	..	..	..	..	..	..	..
High income	10.8	6.3	62.1	2,841	1.9	2.8	8.6	7.4	14	14	8
Europe EMU	9.3	6.8	73.5	1,856	2.2	3.5	9.9	8.0	20	12	7

a. Data are for the most recent year available. b. Less than 0.5. c. Less than 0.05.

About the data

National health accounts track financial flows in the health sector, including public and private expenditures, by source of funding. In contrast with high-income countries, few developing countries have health accounts that are methodologically consistent with national accounting approaches. The difficulties in creating national health accounts go beyond data collection. To establish a national health accounting system, a country needs to define the boundaries of the health care system and to define a taxonomy of health care delivery institutions. The accounting system should be comprehensive and standardized, providing not only accurate measures of financial flows but also information on the equity and efficiency of health financing to inform health policy.

The absence of consistent national health accounting systems in most developing countries makes cross-country comparisons of health spending difficult. Records of private out-of-pocket spending are often lacking. And compiling estimates of public health expenditures is complicated in countries where state or provincial and local governments are involved in financing and delivering health care, because the data on public spending often are not aggregated. The data in the table are the product of an effort by the World Health Organization (WHO), the Organisation for Economic Co-operation and Development (OECD), and the World Bank to collect all available information on health expenditures from national and local government budgets, national accounts, household surveys, insurance publications, international donors, and existing tabulations.

Indicators on health services (physicians and hospital beds per 1,000 people) and health care utilization (inpatient admission rates, average length of stay, and outpatient visits) come from a variety of sources (see *Data sources*). Data are lacking for many countries, and for others comparability is limited by differences in definitions. In estimates of health personnel, for example, some countries incorrectly include retired physicians (because deletions to physician rosters are made only periodically) or those working outside the health sector. There is no universally accepted definition of hospital beds. Moreover, figures on physicians and hospital beds are indicators of availability, not of quality or use. They do not show how well trained the physicians are or how well equipped the hospitals or medical centers are. And physicians and hospital beds tend to be concentrated in urban areas, so these indicators give only a partial view of health services available to the entire population.

The average length of stay in hospitals is an indicator of the efficiency of resource use. Longer stays may reflect a waste of resources if patients are kept in hospitals beyond the time medically required, inflating demand for hospital beds and increasing hospital costs. Aside from differences in cases and financing methods, cross-country variations in average length of stay may result from differences in the role of hospitals. Many developing countries do not have separate extended care facilities, so hospitals become the source of both long-term and acute care. Other factors may also explain the variations. Data for some countries may not include all public and private hospitals. Admission rates may be overstated in some countries if outpatient surgeries are counted as hospital admissions. And in many countries outpatient visits, especially emergency visits, may result in double counting if a patient receives treatment in more than one department.

Definitions

• **Total health expenditure** is the sum of public and private health expenditure. It covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation. • **Public health expenditure** consists of recurrent and capital spending from government (central and local) budgets, external borrowings and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds. • **Physicians** are graduates of any faculty or school of medicine who are working in the country in any medical field (practice, teaching, research). • **Hospital beds** include inpatient beds available in public, private, general, and specialized hospitals and rehabilitation centers. In most cases beds for both acute and chronic care are included. • **Inpatient admission rate** is the percentage of the population admitted to hospitals during a year. • **Average length of stay** is the average duration of inpatient hospital admissions. • **Outpatient visits per capita** are the number of visits to health care facilities per capita, including repeat visits.

2.14a

High health personnel absence rates lower the quality of health care

Health personnel absence rate, 2000–03 (%)
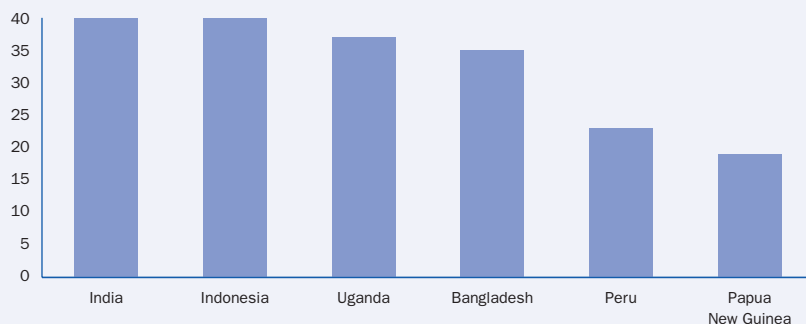
Health personnel absence rate is the percentage of full-time medical personnel who were absent from a random sample of primary health centers during surprise visits. Some personnel were absent for valid reasons, but even authorized absences reduce the quantity and quality of primary health care. Absence rates tend to be higher in remote areas, affecting the quality of health care available in these areas.

Source: Chaudhury and others 2004; NRI and World Bank 2003; Habyarimana and others 2003.

	Access to an improved water source (% of population)		Access to improved sanitation facilities (% of population)		Tetanus vaccinations (% of pregnant women)	Child immunization rate (% of children ages 12–23 months [a])		Children sleeping under treated bednets [b] (% of children under age 5)	Tuberculosis treatment success rate (% of registered cases)	DOTS detection rate (% of estimated cases)
	1990	2000	1990	2000	2002	Measles 2002	DPT 2002	1999–2001 [c]	2001	2002
Afghanistan	..	13	..	12	34	44	47	..	84	19
Albania	..	97	..	91	..	96	98	..	98	24
Algeria	..	89	..	92	..	81	86	..	84	114
Angola	..	38	..	44	62	74	47	2.3	66	91
Argentina	94	..	82	..	..	97	88	..	64	51
Armenia	..	..	..	..	..	91	94	..	90	28
Australia	100	100	100	100	..	94	93	..	66	25
Austria	100	100	100	100	..	78	83	..	64	41
Azerbaijan	..	78	..	81	..	97	97	1.4	66	43
Bangladesh	94	97	41	48	89	77	85	..	84	32
Belarus	..	100	..	..	..	99	99	..	..	..
Belgium	..	..	..	..	..	75	90	..	64	64
Benin	..	63	20	23	66	78	79	7.4	79	98
Bolivia	71	83	52	70	..	79	81	..	82	75
Bosnia and Herzegovina	..	..	..	..	..	89	80	..	98	47
Botswana	93	95	60	66	..	90	97	..	78	73
Brazil	83	87	71	76	..	93	96	..	67	10
Bulgaria	..	100	..	100	..	90	94	..	87	43
Burkina Faso	..	42	..	29	44	46	41	..	65	18
Burundi	69	78	87	88	42	75	74	1.3	80	28
Cambodia	..	30	..	17	36	52	54	..	92	52
Cameroon	51	58	77	79	65	62	48	1.3	62	60
Canada	100	100	100	100	..	96	97	..	67	52
Central African Republic	48	70	24	25	63	35	40	1.5	61	49
Chad	..	27	18	29	39	55	40	0.6	..	42
Chile	90	93	97	96	..	95	94	..	83	112
China	71	75	29	40	..	65	79	..	96	27
Hong Kong, China	..	..	..	..	..	..	..	..	78	51
Colombia	94	91	83	86	..	89	85	0.7	85	9
Congo, Dem. Rep.	..	45	..	21	44	45	43	0.7	77	52
Congo, Rep.	..	51	..	..	41	37	41	..	66	69
Costa Rica	..	95	..	93	..	94	94	..	72	79
Côte d'Ivoire	80	81	46	52	80	56	54	1.1	73	25
Croatia	..	..	..	..	..	95	95	..	..	..
Cuba	..	91	..	98	..	98	99	..	93	91
Czech Republic	..	..	..	..	..	97	98	..	73	57
Denmark	..	100	..	..	..	99	98	..	..	..
Dominican Republic	83	86	66	67	..	92	72	..	85	43
Ecuador	71	85	70	86	..	80	89	..	82	31
Egypt, Arab Rep.	94	97	87	98	70	97	97	..	82	53
El Salvador	66	77	73	82	..	93	81	..	88	57
Eritrea	..	46	..	13	50	84	83	..	80	14
Estonia	..	..	..	..	..	95	97	..	64	61
Ethiopia	25	24	8	12	24	52	56	..	76	33
Finland	100	100	100	100	..	96	98	..	..	..
France	..	..	..	..	..	85	98	..	..	..
Gabon	..	86	..	53	50	55	38	..	49	73
Gambia, The	..	62	..	37	..	90	90	14.7	71	73
Georgia	..	79	..	100	..	73	84	..	67	50
Germany	..	..	..	..	..	89	97	..	67	52
Ghana	53	73	61	72	73	81	80	..	42	41
Greece	..	..	..	..	..	88	88	..	..	..
Guatemala	76	92	70	81	..	92	84	1.2	85	45
Guinea	45	48	55	58	43	54	47	..	74	54
Guinea-Bissau	..	56	44	56	41	47	50	7.4	51	43
Haiti	53	46	23	28	52	53	43	..	75	41

Disease prevention: coverage and quality

	Access to an improved water source		Access to improved sanitation facilities		Tetanus vaccinations	Child immunization rate		Children sleeping under treated bednets [b]	Tuberculosis treatment success rate	DOTS detection rate
	% of population		% of population		% of pregnant women	% of children ages 12–23 months [a]		% of children under age 5	% of registered cases	% of estimated cases
	1990	2000	1990	2000	2002	Measles 2002	DPT 2002	1999–2001 [c]	2001	2002
Honduras	83	88	61	75	..	97	95	..	86	114
Hungary	99	99	99	99	..	99	99	..	46	39
India	68	84	16	28	78	67	70	..	85	31
Indonesia	71	78	47	55	81	76	75	0.1	86	30
Iran, Islamic Rep.	..	92	..	83	..	99	99	..	84	60
Iraq	..	85	..	79	70	90	81	..	89	21
Ireland	..	..	..	..	..	73	84	..	..	..
Israel	..	..	..	..	..	95	97	..	79	58
Italy	..	..	..	..	..	70	95	..	40	63
Jamaica	93	92	99	99	..	86	87	..	78	68
Japan	..	..	..	..	..	98	95	..	75	33
Jordan	97	96	98	99	..	95	95	..	86	72
Kazakhstan	..	91	..	99	..	95	95	..	78	93
Kenya	45	57	80	87	60	78	84	2.9	80	49
Korea, Dem. Rep.	..	100	..	99	..	..	..	..	91	88
Korea, Rep.	..	92	..	63	..	97	97	..	..	..
Kuwait	..	..	..	..	..	99	98	..	..	..
Kyrgyz Republic	..	77	..	100	..	98	98	..	81	45
Lao PDR	..	37	..	30	35	55	55	..	77	43
Latvia	..	..	..	..	..	98	97	..	73	78
Lebanon	..	100	..	99	..	96	92	..	91	68
Lesotho	..	78	..	49	..	70	79	..	71	61
Liberia	..	..	..	..	41	57	51	..	..	..
Libya	71	72	97	97	..	91	93	..	..	*106*
Lithuania	..	..	..	..	..	98	95	..	75	62
Macedonia, FYR	..	..	..	..	..	98	96	..	88	37
Madagascar	44	47	36	42	35	61	62	0.2	69	62
Malawi	49	57	73	76	82	69	64	2.9	70	36
Malaysia	..	..	..	..	..	92	96	..	79	78
Mali	55	65	70	69	32	33	57	..	50	15
Mauritania	37	37	30	33	40	81	83	..	..	..
Mauritius	100	100	100	99	..	84	88	..	93	25
Mexico	80	88	70	74	..	96	91	..	83	73
Moldova	..	92	..	99	..	94	97	..	66	19
Mongolia	..	60	..	30	..	98	98	..	87	69
Morocco	75	80	58	68	..	96	94	..	87	83
Mozambique	..	57	..	43	67	58	60	..	77	45
Myanmar	..	72	..	64	71	75	77	..	81	73
Namibia	72	77	33	41	85	68	77	..	68	76
Nepal	67	88	20	28	69	71	72	..	88	64
Netherlands	100	100	100	100	..	96	98	..	*76*	54
New Zealand	..	..	..	..	..	85	90	..	9	48
Nicaragua	70	77	76	85	..	98	84	..	83	85
Niger	53	59	15	20	36	48	23	1.0	..	*22*
Nigeria	53	62	53	54	44	40	26	..	79	12
Norway	100	100	..	..	..	88	91	..	87	26
Oman	37	39	84	92	..	99	99	..	90	106
Pakistan	83	90	36	62	56	57	63	..	77	13
Panama	..	90	..	92	..	79	89	..	65	88
Papua New Guinea	40	42	82	82	34	71	57	..	67	15
Paraguay	63	78	93	94	..	82	77	..	86	8
Peru	74	80	60	71	..	95	89	..	90	84
Philippines	87	86	74	83	87	73	70	..	88	58
Poland	..	..	..	..	..	98	99	..	77	55
Portugal	..	..	..	..	..	87	96	..	78	94
Puerto Rico	..	..	..	..	..	..	..	..	80	65

	Access to an improved water source % of population		Access to improved sanitation facilities % of population		Tetanus vaccinations % of pregnant women	Child immunization rate % of children ages 12–23 months [a]		Children sleeping under treated bednets [b] % of children under age 5	Tuberculosis treatment success rate % of registered cases	DOTS detection rate % of estimated cases
	1990	2000	1990	2000	2002	Measles 2002	DPT 2002	1999–2001 [c]	2001	2002
Romania	..	58	..	53	..	98	99	..	78	41
Russian Federation	..	99	..	..	..	98	96	..	67	6
Rwanda	..	41	..	8	83	69	88	5.0	*61*	29
Saudi Arabia	..	95	..	100	..	97	95	..	77	37
Senegal	72	78	57	70	75	54	60	1.7	53	54
Serbia and Montenegro	..	98	..	100	..	92	95	..	88	22
Sierra Leone	..	57	..	66	60	60	50	1.5	80	36
Singapore	100	100	100	100	..	91	92	..	88	39
Slovak Republic	..	100	..	100	..	99	99	..	87	35
Slovenia	100	100	..	..	..	94	92	..	82	68
Somalia	..	..	..	..	60	45	40	0.3	86	28
South Africa	86	86	86	87	52	78	82	..	65	96
Spain	..	..	..	..	..	97	96	..	..	..
Sri Lanka	68	77	85	94	..	99	98	..	80	79
Sudan	67	75	58	62	35	49	40	0.4	80	33
Swaziland	..	..	..	..	..	72	77	0.1	36	31
Sweden	100	100	100	100	..	94	99	..	62	59
Switzerland	100	100	100	100	..	79	95	..	..	..
Syrian Arab Republic	..	80	..	90	..	98	99	..	81	42
Tajikistan	..	60	..	90	..	84	84	1.9	..	3
Tanzania	38	68	84	90	86	89	89	2.1	81	43
Thailand	80	84	79	96	..	94	96	..	75	73
Togo	51	54	37	34	38	58	64	2.0	55	6
Trinidad and Tobago	91	90	99	99	..	88	89	..	..	..
Tunisia	75	80	76	84	..	94	96	..	90	92
Turkey	79	82	87	90	37	82	78	..	..	..
Turkmenistan	..	..	..	..	..	88	98	..	75	36
Uganda	45	52	..	79	50	77	72	0.2	56	47
Ukraine	..	98	..	99	..	99	99	..	..	..
United Arab Emirates	..	..	..	..	..	94	94	..	62	25
United Kingdom	100	100	100	100	..	83	91	..	..	..
United States	100	100	100	100	..	..	..	..	70	87
Uruguay	..	98	..	94	..	92	93	..	85	70
Uzbekistan	..	85	..	89	..	97	98	..	76	24
Venezuela, RB	..	83	..	68	..	78	63	..	80	65
Vietnam	55	77	29	47	89	96	75	15.8	93	82
West Bank and Gaza	..	..	..	..	..	..	..	..	..	..
Yemen, Rep.	..	69	32	38	39	65	69	..	80	49
Zambia	52	64	63	78	60	85	78	1.1	75	40
Zimbabwe	78	83	56	62	77	58	58	..	71	46
World	**74 w**	**81 w**	**45 w**	**55 w**		**72 w**	**75 w**			
Low income	66	76	30	43		65	65			
Middle income	76	82	47	60		80	85			
Lower middle income	75	81	45	58		78	84			
Upper middle income	..	..	..	..		94	90			
Low & middle income	71	79	39	51		71	73			
East Asia & Pacific	71	76	35	46		70	78			
Europe & Central Asia	..	91	..	..		93	92			
Latin America & Carib.	82	86	72	77		91	88			
Middle East & N. Africa	..	88	..	85		92	92			
South Asia	72	84	22	34		66	70			
Sub-Saharan Africa	53	58	54	53		58	54			
High income	..	..	..	..		90	95			
Europe EMU	..	..	..	..		85	96			

a. Refers to children who were immunized before 12 months or, in some cases, at any time before the survey (between 12–23 months). b. For malaria prevention only. c. Data are for the most recent year available.

The indicators in the table are based on data provided to the World Health Organization (WHO) by member states as part of their efforts to monitor and evaluate progress in implementing national health strategies. Because reliable, observation-based statistical data for these indicators do not exist in some developing countries, some of the data are estimated.

People's health is influenced by the environment in which they live. Lack of clean water and basic sanitation is the main reason diseases transmitted by feces are so common in developing countries. The data on access to an improved water source measure the share of the population with ready access to water for domestic purposes. The data are based on surveys and estimates provided by governments to the Joint Monitoring Programme of the WHO and United Nations Children's Fund (UNICEF). The coverage rates for water and sanitation are based on information from service users on the facilities their households actually use rather than on information from service providers, who may include nonfunctioning systems. Access to drinking water from an improved source does not ensure that the water is safe or adequate, as these characteristics are not tested at the time of the surveys.

Neonatal tetanus is an important cause of infant mortality in some developing countries. It can be prevented through immunization of the mother during pregnancy. Recommended doses for full protection are generally two tetanus shots during the first pregnancy

2.15a

Children under five sleeping under bednets, 2000 (%)

■ Untreated bednets   ■ Insecticide-treated bednets

Even though malaria is often more prevalent in rural areas, fewer children under age five sleep under a bednet in rural areas than in urban ones. The ratio of urban-rural difference is even greater for insecticide-treated bednets because they are more expensive than untreated bednets, and retreatment of insecticide-treated nets is still uncommon, especially in rural areas.

Source: WHO and UNICEF 2003.

and one booster shot during each subsequent pregnancy, with five doses considered adequate for lifetime protection. Information on tetanus shots during pregnancy is collected through surveys in which pregnant respondents are asked to show antenatal cards on which tetanus shots have been recorded. Because not all women have antenatal cards, respondents are also asked about their receipt of these injections. Poor recall may result in a downward bias in estimates of the share of births protected. But in settings where receiving injections is common, respondents may erroneously report having received tetanus shots.

Governments in developing countries usually finance immunization against measles and diphtheria, pertussis (whooping cough), and tetanus (DPT) as part of the basic public health package. In many developing countries, however, lack of precise information on the size of the cohort of children under one year of age makes immunization coverage difficult to estimate. The data shown here are based on an assessment of national immunization coverage rates by the WHO and UNICEF. The assessment considered both administrative data from service providers and household survey data on children's immunization histories. Based on the data available, consideration of potential biases, and contributions of local experts, the most likely true level of immunization coverage was determined for each year.

Sleeping under treated bednets, if properly used and maintained, is one of the most important malaria preventive strategies to limit human-mosquito contact. Studies have emphasized that mortality rates could be reduced by about 25–30 percent if every child under five in malaria-risk areas such as Africa slept under a treated bednet every night.

Data on the success rate of tuberculosis treatment are provided for countries that have implemented the recommended control strategy: directly observed treatment, short course (DOTS). Countries that have not adopted DOTS or have only recently done so are omitted because of lack of data or poor comparability or reliability of reported results. The treatment success rate for tuberculosis provides a useful indicator of the quality of health services. A low rate or no success suggests that infectious patients may not be receiving adequate treatment. An essential complement to the tuberculosis treatment success rate is the DOTS detection rate, which indicates whether there is adequate coverage by the recommended case detection and treatment strategy. A country with a high treatment success rate may still face big challenges if its DOTS detection rate remains low.

• **Access to an improved water source** refers to the percentage of the population with reasonable access to an adequate amount of water from an improved source, such as a household connection, public standpipe, borehole, protected well or spring, or rainwater collection. Unimproved sources include vendors, tanker trucks, and unprotected wells and springs. Reasonable access is defined as the availability of at least 20 liters a person a day from a source within 1 kilometer of the dwelling. • **Access to improved sanitation facilities** refers to the percentage of the population with at least adequate access to excreta disposal facilities (private or shared but not public) that can effectively prevent human, animal, and insect contact with excreta. Improved facilities range from simple but protected pit latrines to flush toilets with a sewerage connection. To be effective, facilities must be correctly constructed and properly maintained. • **Tetanus vaccinations** refer to the percentage of pregnant women who receive two tetanus toxoid injections during their first pregnancy and one booster shot during each subsequent pregnancy, with five doses considered adequate for a lifetime. • **Child immunization rate** is the percentage of children ages 12–23 months who received vaccinations before 12 months or at any time before the survey for four diseases—measles and diphtheria, pertussis (whooping cough), and tetanus (DPT). A child is considered adequately immunized against measles after receiving one dose of vaccine and against DPT after receiving three doses. • **Children sleeping under treated bednets** refer to the percentage of children under age five who slept under an insecticide-impregnated bednet to prevent malaria. • **Tuberculosis treatment success rate** is the percentage of new, registered smear-positive (infectious) cases that were cured or in which a full course of treatment was completed. • **DOTS detection rate** is the percentage of estimated new infectious tuberculosis cases detected under the directly observed treatment, short course case detection and treatment strategy.
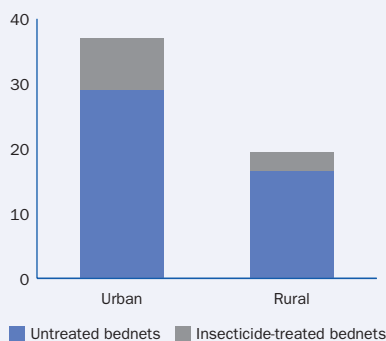
	Total fertility rate		Adolescent fertility rate	Women at risk of unintended pregnancy	Contraceptive prevalence rate	Births attended by skilled health staff		Maternal mortality ratio	
			births per 1,000 women	% of married women	% of women			per 100,000 live births	
								National	Modeled
	births per woman		ages 15–19	ages 15–49	ages 15–49	% of total		estimates	estimates
	1980	2002	2002	1990–2002 [a]	1990–2002 [a]	1985	1995–2002 [a]	1985–2002 [a]	2000
Afghanistan	7.0	6.8	151	..	..	..	12	..	1,900
Albania	3.6	2.2	11	..	..	..	99	20	55
Algeria	6.7	2.8	17	..	51	..	92	140	140
Angola	6.9	7.0	225	..	..	..	45	..	1,700
Argentina	3.3	2.4	60	..	..	..	98	41	82
Armenia	2.3	1.1	35	12	61	..	97	22	55
Australia	1.9	1.8	18	..	..	..	100	..	8
Austria	1.6	1.3	20	..	..	..	100 [b]	..	4
Azerbaijan	3.2	2.1	44	..	55	..	84	25	94
Bangladesh	6.1	3.0	129	15	54	..	12	380	380
Belarus	2.0	1.3	21	..	..	100	100	14	35
Belgium	1.7	1.6	11	..	..	100	100 [b]	..	10
Benin	7.0	5.3	103	27	19	..	66	500	850
Bolivia	5.5	3.8	75	26	49	..	69	390	420
Bosnia and Herzegovina	2.1	1.3	23	..	..	..	100	10	31
Botswana	6.1	3.8	68	..	..	..	94	330	100
Brazil	3.9	2.1	68	7	77	81	88	160	260
Bulgaria	2.0	1.3	49	..	..	..	..	15	32
Burkina Faso	7.5	6.3	133	26	12	..	31	480	1,000
Burundi	6.8	5.8	50	..	..	19	25	..	1,000
Cambodia	5.7	3.8	57	30	24	..	32	440	450
Cameroon	6.4	4.6	127	20	19	..	60	430	730
Canada	1.7	1.5	20	..	..	100	98	..	6
Central African Republic	5.8	4.6	124	16	15	..	44	1,100	1,100
Chad	6.9	6.2	182	10	4	..	16	830	1,100
Chile	2.8	2.2	43	..	..	..	100	23	31
China	2.5	1.9	15	..	83	..	76	53	56
Hong Kong, China	2.0	1.0	6	..	..	..	..	..	..
Colombia	3.9	2.5	75	6	77	..	86	78	130
Congo, Dem. Rep.	6.6	6.7	226	..	..	..	61	950	990
Congo, Rep.	6.3	6.3	146	..	..	..	..	..	510
Costa Rica	3.6	2.3	69	..	..	97	98	29	43
Côte d'Ivoire	7.4	4.6	118	28	15	..	63	600	690
Croatia	1.9	1.5	18	..	..	..	100	2	8
Cuba	2.0	1.6	67	..	..	..	100	30	33
Czech Republic	2.1	1.2	23	..	69	..	99	3	9
Denmark	1.5	1.7	8	..	..	100	100 [b]	10	5
Dominican Republic	4.2	2.6	89	12	70	..	98	230 [b]	150
Ecuador	5.0	2.8	64	..	66	..	69	160	130
Egypt, Arab Rep.	5.1	3.0	46	11	56	..	61	84	84
El Salvador	4.9	2.9	87	..	60	..	90	120	150
Eritrea	7.5	4.8	101	28	8	..	21	1,000	630
Estonia	2.0	1.3	26	..	..	..	..	46	63
Ethiopia	6.6	5.6	135	36	8	..	6	870	850
Finland	1.6	1.7	10	..	..	..	100 [b]	6	6
France	1.9	1.9	10	..	71	..	99 [b]	10	17
Gabon	4.5	4.1	156	28	33	..	86	520	420
Gambia, The	6.5	4.8	139	..	..	..	55	..	540
Georgia	2.3	1.1	27	..	41	..	96	67	32
Germany	1.4	1.4	14	..	..	100	100 [b]	8	8
Ghana	6.5	4.1	81	23	22	..	44	210 [b]	540
Greece	2.2	1.3	17	..	..	..	..	1	9
Guatemala	6.3	4.3	100	23	38	35	41	190	240
Guinea	6.1	5.0	153	24	6	..	35	530	740
Guinea-Bissau	7.1	6.6	215	..	..	..	35	910	1,100
Haiti	5.9	4.2	72	40	28	..	24	520	680

Reproductive health

	Total fertility rate (births per woman)		Adolescent fertility rate (births per 1,000 women ages 15–19)	Women at risk of unintended pregnancy (% of married women ages 15–49)	Contraceptive prevalence rate (% of women ages 15–49)	Births attended by skilled health staff (% of total)		Maternal mortality ratio (per 100,000 live births) National estimates	Modeled estimates
	1980	2002	2002	1990–2002 [a]	1990–2002 [a]	1985	1995–2002 [a]	1985–2002 [a]	2000
Honduras	6.5	4.0	110	..	62	41	56	110	110
Hungary	1.9	1.3	21	..	73	..	..	5	16
India	5.0	2.9	98	16	52	..	43	540	540
Indonesia	4.3	2.3	52	9	57	36	64	380	230
Iran, Islamic Rep.	6.7	2.0	25	..	73	..	90	37	76
Iraq	6.4	4.1	35	..	..	..	72	290	250
Ireland	3.2	1.9	15	..	60	..	100	6	5
Israel	3.2	2.7	19	..	..	99	99 [b]	5	17
Italy	1.6	1.3	8	..	..	..	..	7	5
Jamaica	3.7	2.3	84	..	65	..	95	97	87
Japan	1.8	1.3	3	..	..	..	100	8	10
Jordan	6.8	3.5	30	14	56	..	97	41	41
Kazakhstan	2.9	1.8	35	9	66	..	99	50	210
Kenya	7.8	4.2	100	24	39	..	44	590	1,000
Korea, Dem. Rep.	2.8	2.1	2	..	..	..	97	110	67
Korea, Rep.	2.6	1.5	4	..	..	..	100	20	20
Kuwait	5.3	2.5	30	..	..	96	98	5	5
Kyrgyz Republic	4.1	2.4	29	12	60	..	98	44	110
Lao PDR	6.7	4.8	91	..	25	..	19	530	650
Latvia	1.9	1.2	32	..	..	..	100	25	42
Lebanon	4.0	2.2	23	..	61	..	89	100 [b]	150
Lesotho	5.5	4.3	77	..	23	..	60	..	550
Liberia	6.8	5.8	196	..	..	..	51	580	760
Libya	7.3	3.3	32	..	45	..	94	77	97
Lithuania	2.0	1.3	33	..	..	..	..	13	13
Macedonia, FYR	2.5	1.8	31	..	..	..	97	15	23
Madagascar	6.6	5.2	157	26	17	..	46	490	550
Malawi	7.6	6.1	137	30	31	..	56	1,100	1,800
Malaysia	4.2	2.8	23	..	..	..	97	30	41
Mali	7.1	6.4	176	29	8	32	41	580	1,200
Mauritania	6.4	4.6	113	32	8	..	57	750	1,000
Mauritius	2.7	2.0	39	..	75	..	99	21	24
Mexico	4.7	2.4	62	..	65	..	86	79	83
Moldova	2.4	1.4	44	..	74	..	99	44	36
Mongolia	5.3	2.4	45	..	60	..	97	160	110
Morocco	5.4	2.8	44	20	59	26	40	230	220
Mozambique	6.5	5.0	153	23	6	..	44	1,100	1,000
Myanmar	4.9	2.8	29	..	..	..	56	230	360
Namibia	5.9	4.8	103	22	29	..	78	270	300
Nepal	6.1	4.2	112	28	39	..	11	540	740
Netherlands	1.6	1.7	5	..	75	..	100	7	16
New Zealand	2.0	1.9	30	..	..	..	100	15	7
Nicaragua	6.3	3.4	122	15	60	..	67	120	230
Niger	8.0	7.1	205	17	8	..	16	590	1,600
Nigeria	6.9	5.1	111	17	15	..	42	..	800
Norway	1.7	1.8	10	..	..	..	100 [b]	6	16
Oman	9.9	4.0	54	..	24	87	95	23	87
Pakistan	7.0	4.5	62	32	28	..	20	530	500
Panama	3.7	2.4	75	..	..	..	90	70	160
Papua New Guinea	5.8	4.3	68	..	26	..	53	370 [b]	300
Paraguay	5.2	3.8	75	15	57	..	71	190	170
Peru	4.5	2.6	61	10	69	..	59	190	410
Philippines	4.8	3.2	33	19	47	..	58	170	200
Poland	2.3	1.3	15	..	..	99	99 [b]	4	13
Portugal	2.2	1.5	23	..	..	..	100	8	5
Puerto Rico	2.6	1.9	64	..	78	..	..	..	25

	Total fertility rate		Adolescent fertility rate	Women at risk of unintended pregnancy	Contraceptive prevalence rate	Births attended by skilled health staff		Maternal mortality ratio	
			births per 1,000 women	% of married women	% of women			per 100,000 live births	
	births per woman		ages 15–19	ages 15–49	ages 15–49	% of total		National estimates	Modeled estimates
	1980	2002	2002	1990–2002 [a]	1990–2002 [a]	1985	1995–2002 [a]	1985–2002 [a]	2000
Romania	2.4	1.3	41	..	64	..	98	34	49
Russian Federation	1.9	1.3	46	..	34	..	99	37	67
Rwanda	8.3	5.7	52	36	13	..	31	1,100	1,400
Saudi Arabia	7.3	5.3	91	..	21	..	91	..	23
Senegal	6.8	4.9	89	35	11	41	58	560	690
Serbia and Montenegro	2.3	1.7	32	..	..	..	99	7	11
Sierra Leone	6.5	5.6	182	..	..	..	42	1,800	2,000
Singapore	1.7	1.4	8	..	..	..	100	6	30
Slovak Republic	2.3	1.3	25	..	..	..	..	16	3
Slovenia	2.1	1.1	9	..	..	..	100 [b]	17	17
Somalia	7.3	6.9	204	..	..	..	34	..	1,100
South Africa	4.6	2.8	43	15	62	..	84	150	230
Spain	2.2	1.3	9	..	..	..	..	0	4
Sri Lanka	3.5	2.1	20	..	..	..	97	92	92
Sudan	6.1	4.4	56	..	10	..	86 [b]	550	590
Swaziland	6.2	4.2	103	..	..	..	70	230	370
Sweden	1.7	1.6	9	..	..	100	100 [b]	5	2
Switzerland	1.5	1.5	5	..	..	..	..	5	7
Syrian Arab Republic	7.4	3.4	38	..	45	..	76 [b]	110 [b]	160
Tajikistan	5.6	2.9	24	..	..	..	71	45	100
Tanzania	6.7	5.0	115	22	25	..	36	530	1,500
Thailand	3.5	1.8	72	..	72	..	99	36	44
Togo	6.8	4.9	82	32	24	..	49	480	570
Trinidad and Tobago	3.3	1.8	42	..	..	98	96	70	160
Tunisia	5.2	2.1	10	..	60	..	90	69	120
Turkey	4.3	2.2	55	10	64	..	81	130 [b]	70
Turkmenistan	4.9	2.7	16	10	62	..	97	9	31
Uganda	7.2	6.0	182	35	23	..	39	510	880
Ukraine	2.0	1.2	31	..	72	..	100	18	35
United Arab Emirates	5.4	3.0	64	..	..	..	96	3	54
United Kingdom	1.9	1.7	27	..	..	..	99	7	13
United States	1.8	2.1	47	..	64	..	99	8	17
Uruguay	2.7	2.2	64	..	..	..	100	26	27
Uzbekistan	4.8	2.3	37	14	56	..	96	34	24
Venezuela, RB	4.2	2.7	90	..	..	..	94	60	96
Vietnam	5.0	1.9	28	7	79	..	70	95	130
West Bank and Gaza	..	4.9	81	..	42	..	..	..	..
Yemen, Rep.	7.9	6.0	97	39	21	..	22	350	570
Zambia	7.0	5.1	129	27	26	..	43	650	750
Zimbabwe	6.4	3.7	86	13	54	..	73	700	1,100
World	**3.7 w**	**2.6 w**	**63 w**		**.. w**	**.. w**	**60 w**		**403 w**
Low income	5.5	3.5	98		..	..	41		657
Middle income	3.2	2.1	36		..	..	80		106
Lower middle income	3.1	2.1	33		86	..	78		112
Upper middle income	3.6	2.4	54		..	..	92		67
Low & middle income	4.1	2.8	68		..	..	56		440
East Asia & Pacific	3.1	2.1	25		83	..	72		115
Europe & Central Asia	2.5	1.6	38		..	..	93		58
Latin America & Carib.	4.1	2.5	70		..	..	82		193
Middle East & N. Africa	6.2	3.1	41		53	..	70		165
South Asia	5.3	3.2	98		50	..	35		506
Sub-Saharan Africa	6.6	5.1	126		..	..	44		917
High income	1.9	1.7	24		..	..	99		13
Europe EMU	1.8	1.5	11		..	..	..		10

a. Data are for most recent year available. b. Data refer to period other than specified, differ from the standard definition, or refer to only part of a country.

About the data

Reproductive health is a state of physical and mental well-being in relation to the reproductive system and its functions and processes. Means of achieving reproductive health include education and services during pregnancy and childbirth, provision of safe and effective contraception, and prevention and treatment of sexually transmitted diseases. The complications of pregnancy and childbirth are the leading cause of death and disability among women of reproductive age in developing countries. Reproductive health services will need to expand rapidly over the next two decades, when the number of women and men of reproductive age is projected to increase by more than 600 million.

Total and adolescent fertility rates are based on data on registered live births from vital registration systems or, in the absence of such systems, from censuses or sample surveys. As long as the surveys are fairly recent, the estimated rates are generally considered reliable measures of fertility in the recent past. Where no empirical information on age-specific fertility rates is available, a model is used to estimate the share of births to adolescents. For countries without vital registration systems, fertility rates are generally based on extrapolations from trends observed in censuses or surveys from earlier years.

An increasing number of couples in the developing world want to limit or postpone childbearing but are not using effective contraceptive methods. These couples face the risk of unintended pregnancy, shown in the table as the percentage of married women of reproductive age who do not want to become pregnant but are not using contraception (Bulatao 1998). Information on this indicator is collected through surveys and excludes women not exposed to the risk of unintended pregnancy because of menopause, infertility, or postpartum anovulation. Common reasons for not using contraception are lack of knowledge about contraceptive methods and concerns about their possible health side-effects.

Contraceptive prevalence reflects all methods—ineffective traditional methods as well as highly effective modern methods. Contraceptive prevalence rates are obtained mainly from Demographic and Health Surveys and contraceptive prevalence surveys (see *Primary data documentation* for the most recent survey year). Unmarried women are often excluded from such surveys, which may bias the estimates.

The share of births attended by skilled health staff is an indicator of a health system's ability to provide adequate care for pregnant women. Good antenatal and postnatal care improve maternal health and reduce maternal and infant mortality. But data may not reflect such improvements because health information systems are often weak, maternal deaths are underreported, and rates of maternal mortality are difficult to measure.

Maternal mortality ratios are generally of unknown reliability, as are many other cause-specific mortality indicators. Household surveys such as the Demographic and Health Surveys attempt to measure maternal mortality by asking respondents about survivorship of sisters. The main disadvantage of this method is that the estimates of maternal mortality that it produces pertain to 12 years or so before the survey, making them unsuitable for monitoring recent changes or observing the impact of interventions. In addition, measurement of maternal mortality is subject to many types of errors. Even in high-income countries with vital registration systems, misclassification of maternal deaths has been found to lead to serious underestimation.

The maternal mortality ratios shown in the table as national estimates are based on national surveys, vital registration, or surveillance or are derived from community and hospital records. Those shown as modeled estimates are based on an exercise carried out by the World Health Organization (WHO), United Nations Children's Fund (UNICEF), and United Nations Population Fund (UNFPA). In this exercise maternal mortality was estimated with a regression model using information on fertility, birth attendants, and HIV prevalence. Neither set of ratios can be assumed to provide an accurate estimate of maternal mortality in any of the countries in the table.

Definitions

- **Total fertility rate** is the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current age-specific fertility rates.
- **Adolescent fertility rate** is the number of births per 1,000 women ages 15–19. • **Women at risk of unintended pregnancy** are fertile, married women of reproductive age who do not want to become pregnant and are not using contraception. • **Contraceptive prevalence rate** is the percentage of women who are practicing, or whose sexual partners are practicing, any form of contraception. It is usually measured for married women ages 15–49 only. • **Births attended by skilled health staff** are the percentage of deliveries attended by personnel trained to give the necessary supervision, care, and advice to women during pregnancy, labor, and the postpartum period; to conduct deliveries on their own; and to care for newborns. • **Maternal mortality ratio** is the number of women who die from pregnancy-related causes during pregnancy and childbirth, per 100,000 live births.

2.16a

Does household wealth affect antenatal care?

Pregnant women attending antenatal clinics, by wealth quintile (%)
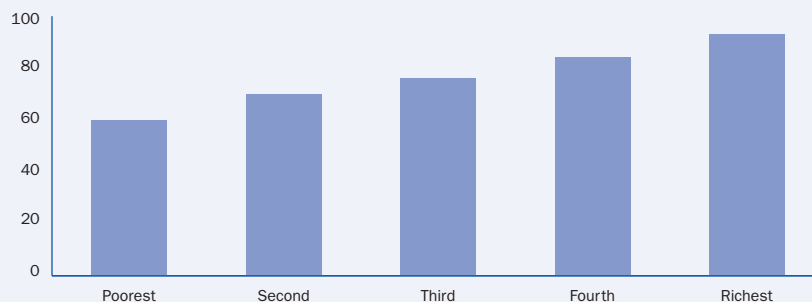
Across 22 countries in Sub-Saharan Africa rich women were about 1.5 times more likely to attend antenatal clinics than were poor women. The lack of care can contribute to women's death during pregnancy or childbirth and can also compromise the health and survival of their infants.

Source: WHO and UNICEF 2003.

Data sources

The data on reproductive health come from Demographic and Health Surveys, the WHO's *Coverage of Maternity Care* (1997) and other WHO sources, UNICEF, and national statistical offices. Modeled estimates for maternal mortality ratios are from Carla AbouZahr and Tessa Wardlaw's "Maternal Mortality in 2000: Estimates Developed by WHO, UNICEF, and UNFPA" (2003).

2.17 Nutrition

	Prevalence of undernourishment		Prevalence of child malnutrition		Prevalence of overweight		Low-birthweight babies	Exclusive breastfeeding	Consumption of iodized salt	Vitamin A supplementation
	% of population		% of children under age 5 Weight for age	Height for age	Year	% of children under age 5	% of births	% of children under 6 months	% of households	% of children 6–59 months
	1990–92	1999–2001	1996–2002 [a]	1996–2002 [a]			1998–2002 [a]	1995–2002 [a]	1997–2002 [a]	2001
Afghanistan	58	70 [b]	49	48	1997	4.0	..	..	2	84
Albania	5 [c]	4	14	32	2000	22.5	3	6	62	..
Algeria	5	6	6	18	2000	10.1	7	13	69	..
Angola	61	49	31	45	1996	0.5	12	11	35	75
Argentina	<3	<3	5	12	1995–96	9.2	7	..	90 [e]	..
Armenia	55 [c]	51	3	13	2000–01	10.4	7	30	84	..
Australia	..	..	0	0	1995–96	5.2	7	..	..	..
Austria	..	..	..	..		..	7	..	..	..
Azerbaijan	37 [c]	21	17	20	2000	3.8	11	7	26	..
Bangladesh	35	32	48	45	1999–2000	0.4	30	46	70	90
Belarus	<3 [c]	3	..	..		..	5	..	37	..
Belgium	..	..	..	..		..	8 [e]	..	..	..
Benin	20	16	23	31	2001	1.8	16	38	72	95
Bolivia	26	22	8	27	1998	6.5	9	39	65	31
Bosnia and Herzegovina	13 [c]	8	4	10	2000	13.2	4	6	77	..
Botswana	18	24	13	23	2000	6.9	10	34	66	85
Brazil	12	9	6	11	1996	4.9	10 [e]	42 [f]	95 [e]	..
Bulgaria	8 [c]	16	..	..		..	10	..	..	..
Burkina Faso	22	17	34	37	1998–99	1.0	19	6	23 [e]	97
Burundi	49	70	45	57	1987	1.1	16	62	96	95
Cambodia	43	38	45	45	2000	2.0	11	12	14	57
Cameroon	33	27	22	29	1998	5.0	11	12	84	100
Canada	..	..	..	..		..	6	..	..	..
Central African Republic	50	44	..	..	1995	0.8	14	17	86	90
Chad	58	34	28	29	2000	1.5	17 [e]	10	58	91
Chile	8	4	1	2	2002	8.0	5	73 [f]	100	..
China	17 [d]	11 [d]	10	14	2000	2.6	6	67 [f]	93	..
Hong Kong, China	<3	<3	..	..		..	..	..	..	..
Colombia	17	13	7	14	2000	3.7	9	32	92	..
Congo, Dem. Rep.	31	75	31	38	2001	3.9	12	24	72	98
Congo, Rep.	37	30	..	..	1987	0.7	..	4 [f]	..	100
Costa Rica	7	6	5	6	1996	6.2	7	35 [e, f]	97 [e]	..
Côte d'Ivoire	18	15	21	25	1998–99	2.5	17	10	31	97
Croatia	18 [c]	12	1	1	1995–96	5.9	6	23	90	..
Cuba	8	11	4	5		..	6	41	73	..
Czech Republic	<3 [c]	<3	..	..	1991	4.1	7	..	..	..
Denmark	..	..	..	..		..	5	..	..	..
Dominican Republic	27	25	5	6	1996	4.9	14	11	18	35
Ecuador	8	4	14	26		..	16	29 [f]	99	50
Egypt, Arab Rep.	5	3	4	19	1995–96	8.6	12	57	28	..
El Salvador	12	14	12	23	1998	2.6	13	16	91 [e]	..
Eritrea	..	61	40	38	1995–96	0.9	21 [e]	52	97	61
Estonia	10 [c]	4	..	..		..	4	..	..	..
Ethiopia	..	42	47	52	2000	1.2	15	55	28	16
Finland	..	..	..	..		..	4	..	..	..
France	..	..	..	..		..	7	..	..	..
Gabon	11	7	12	21	2000–01	3.7	14	6	15	89
Gambia, The	22	27	17	19		..	17	26	8	91
Georgia	45 [c]	26	3	12	1999	12.7	6	18 [f]	8	..
Germany	..	..	..	..		..	7	..	..	..
Ghana	35	12	25	26	1998–99	1.7	11	31	28	100
Greece	..	..	..	..		..	8	..	..	..
Guatemala	16	25	24	46	1998–99	4.4	13	39	49	..
Guinea	40	28	33	41	1999	2.7	12	11	12	93
Guinea-Bissau	..	..	25	30		..	22	37	2	100
Haiti	65	49	17	23	2000	2.0	21	24	11	..

	Prevalence of undernourishment		Prevalence of child malnutrition		Prevalence of overweight		Low-birthweight babies	Exclusive breastfeeding	Consumption of iodized salt	Vitamin A supplemen-tation
	% of population		% of children under age 5			% of children under age 5	% of births	% of children under 6 months	% of households	% of children 6–59 months
			Weight for age	Height for age						
	1990–92	1999–2001	1996–2002 [a]	1996–2002 [a]	Year		1998–2002 [a]	1995–2002 [a]	1997–2002 [a]	2001
Honduras	23	20	17	29	2001	2.2	14	35	80	62
Hungary	<3 [c]	<3	..	..	1980–88	2.0	9	..	..	..
India	25	21	47	45	1998–99	2.2	30	37 [f]	50	25
Indonesia	9	6	25	..	1995	4.0	10 [e]	42	65	61
Iran, Islamic Rep.	5	5	11	15	1998	4.3	7 [e]	44	94	..
Iraq	7	27 [b]	16	22		..	15	12	40	..
Ireland	..	..	..	..		..	6	..	..	..
Israel	..	..	..	..		..	8	..	..	..
Italy	..	..	..	..	1975–77	4.4	6	..	..	..
Jamaica	14	9	4	4	1999	3.8	9	..	100	..
Japan	..	..	..	..	1978–81	1.6	8	..	..	..
Jordan	4	6	5	8	1997	2.8	10 [e]	34	88	..
Kazakhstan	<3 [c]	22	4	10	1999	3.0	8	36	20	..
Kenya	44	37	22	33	1993	3.5	11	5	91	90
Korea, Dem. Rep.	18	34	28	45		..	7	97 [f]	..	99
Korea, Rep.	<3	<3	..	..		..	4	..	..	..
Kuwait	22	4	2	3	1996–97	5.7	7	12 [f]	..	..
Kyrgyz Republic	28 [c]	7	6	25	1997	6.3	7 [e]	24	27	..
Lao PDR	29	22	40	41		..	14	23	75	70
Latvia	3 [c]	6	..	..		..	5	..	..	..
Lebanon	3	3	3	12		..	6	27 [f]	87	..
Lesotho	27	25	18	45		..	14	15	69	..
Liberia	33	42	27	40	1999–2000	2.3	..	35	..	100
Libya	<3	<3	..	..		..	7 [e]	..	90 [e]	..
Lithuania	4 [c]	<3	..	..		..	4	..	..	..
Macedonia, FYR	15 [c]	10	6	7	1999	4.9	5	37	100	..
Madagascar	35	36	33	49	1997	2.0	14	41	52	73
Malawi	49	33	25	49	2000	4.3	16	44	49	63
Malaysia	3	<3	..	..		..	10	29 [f]	..	..
Mali	25	21	33	38	2001	1.5	23	38	74	74
Mauritania	14	10	32	35		..	42	20	2	98
Mauritius	6	5	..	..	1995	4.0	13	16 [e, f]	0 [e]	..
Mexico	5	5	8	18	1998–99	5.3	9	38 [e, f]	90	..
Moldova	5 [c]	12	..	..		..	5	..	33	..
Mongolia	34	38	13	25	1999	4.8	8	51	45	93
Morocco	6	7	9	23	1992	6.8	11 [e]	66 [f]	41	..
Mozambique	69	53	26	36	1997	3.4	14 [e]	30	62 [e]	71
Myanmar	10	7	28	42	1997	7.7	15	11	48	97
Namibia	20	7	..	..	1992	3.3	16 [e]	26 [f]	63	84
Nepal	18	17	48	51	2001	0.2	21	69	63	98
Netherlands	..	..	..	..	1980	1.6	..	..	..	..
New Zealand	..	..	..	..		..	6	..	83	..
Nicaragua	30	29	10	20	1998	2.6	13	31	96	..
Niger	42	34	40	40	2000	0.8	17	1	15	89
Nigeria	13	8	31	34	1993	3.3	12	17	98	77
Norway	..	..	..	..		..	5	..	..	..
Oman	..	..	18	10	1998	1.0	8	..	61	..
Pakistan	26	19	..	..	1990–94	1.3	19 [e]	16 [f]	17	100
Panama	20	26	8	18	1997	4.2	10 [e]	25	95	..
Papua New Guinea	25	27	..	..	1982–83	1.6	11 [e]	59	..	..
Paraguay	18	13	..	..	1990	3.9	9 [e]	7 [f]	83	..
Peru	40	11	7	25	2000	7.6	11 [e]	71	93	6
Philippines	26	22	32	32	1998	1.0	20	37	24	84
Poland	<3 [c]	<3	..	..		..	6	..	..	..
Portugal	..	..	..	..		..	8	..	..	..
Puerto Rico	..	..	..	..		..	..	..	..	..

	Prevalence of undernourishment % of population		Prevalence of child malnutrition % of children under age 5		Prevalence of overweight	% of children under age 5	Low-birthweight babies % of births	Exclusive breastfeeding % of children under 6 months	Consumption of iodized salt % of households	Vitamin A supplementation % of children 6–59 months
	1990–92	1999–2001	Weight for age 1996–2002 [a]	Height for age 1996–2002 [a]	Year		1998–2002 [a]	1995–2002 [a]	1997–2002 [a]	2001
Romania	<3 [c]	<3	3	10	2002	5.5	9	..	..	..
Russian Federation	4 [c]	4	6	11		..	6	..	30 [e]	..
Rwanda	43	41	24	43	2000	4.0	9	84	90	94
Saudi Arabia	4	3	..	..		..	11 [e]	31 [f]	..	..
Senegal	23	24	23	25	2000	2.2	18	24 [f]	16	85
Serbia and Montenegro	5 [c]	9	2	5	1996	12.9	4	11 [f]	73	..
Sierra Leone	46	50	27	34		..	..	4	23	91
Singapore	..	..	..	..	1970–77	0.5	8	..	..	..
Slovak Republic	4 [c]	5	..	..		..	7	..	..	..
Slovenia	3 [c]	<3	..	..		..	6	..	..	..
Somalia	68	71 [b]	26	23		..	..	9	..	62
South Africa	..	..	..	..	1995	6.7	15	7	62	..
Spain	..	..	..	..		..	6 [e]	..	..	..
Sri Lanka	29	25	33	..	1987	0.1	22	54 [f]	88	..
Sudan	31	25	11	..		..	31	16	1	92
Swaziland	10	12	10	30		..	9	24	59	..
Sweden	..	..	..	..		..	4	..	..	..
Switzerland	..	..	..	..		..	6	..	..	..
Syrian Arab Republic	5	4	7	19		..	6	81 [f]	40	..
Tajikistan	22 [c]	71	..	31		..	15	14	20	..
Tanzania	35	43	29	44	1999	1.7	13	32	67	93
Thailand	28	19	..	..	1995	2.8	9	4 [f]	74	..
Togo	33	25	25	22	1998	1.5	15	18	67	77
Trinidad and Tobago	13	12	6	4	1987	3.0	23	2	1	..
Tunisia	<3	<3	4	12	1996–97	4.5	7	46	97	..
Turkey	<3	3	8	16	1998	2.2	16	7	64	..
Turkmenistan	15 [c]	7	12	22		..	6	13	75	..
Uganda	23	19	23	39	1995	2.8	12	65	95	37
Ukraine	<3 [c]	4	3	16	2000	20.1	5	22	5	..
United Arab Emirates	4	<3	7	..		..	15 [e]	34 [f]	..	..
United Kingdom	..	..	..	..		..	8	..	..	..
United States	..	..	..	..	1988–94	4.5	8	..	..	..
Uruguay	6	3	..	..	1992–93	6.2	8	..	..	..
Uzbekistan	10 [c]	26	19	31	1996	14.4	7	16	19	..
Venezuela, RB	11	18	4	13	2000	3.2	7	7 [f]	90	..
Vietnam	27	19	34	37	2000	2.7	9	31	40	59
West Bank and Gaza	..	..	4	7	1996	2.3	..	..	..	..
Yemen, Rep.	35	33	46	52	1996	4.3	32 [e]	18	39	100
Zambia	45	50	28	47	2001–02	3.0	10	40	68	83
Zimbabwe	43	39	13	27	1999	7.0	11	33	93	..
World	**21 w**	**17 w**	**.. w**	**.. w**			**15 w**		**66 w**	**.. w**
Low income	26	24	42	..			21		52	55
Middle income	15	10	..	25			9		79	..
Lower middle income	16	11	9	17			9		78	..
Upper middle income	..	..	..	..			8		89	..
Low & middle income	21	17	..	..			16		66	*51*
East Asia & Pacific	17	12	15	14			8		82	..
Europe & Central Asia	..	9	..	..			9		36	..
Latin America & Carib.	14	11	9	19			10		88	..
Middle East & N. Africa	7	8	..	..			12		58	..
South Asia	27	23	48	47			28		48	42
Sub-Saharan Africa	31	32	..	..			14		62	76
High income	..	..	..	..			7			..
Europe EMU	..	..	..	..			7			..

a. Data are for the most recent year available. b. Data are for 1998–2000. c. Data are for 1993–95. d. Includes Taiwan, China. e. Data refer to period other than specified, differ from the standard definition, or refer to only part of a country. f. Refers to exclusive breastfeeding for less than four months.

About the data

Data on undernourishment are produced by the Food and Agriculture Organization (FAO) based on the calories available from local food production, trade, and stocks; the number of calories needed by different age and gender groups; the proportion of the population represented by each age group; and a coefficient of distribution to take account of inequality in access to food (FAO 2000). From a policy and program standpoint, however, this measure has its limits. First, food insecurity exists even where food availability is not a problem because of inadequate access of poor households to food. Second, food insecurity is an individual or household phenomenon, and the average food available to each person, even corrected for possible effects of low income, is not a good predictor of food insecurity among the population. And third, nutrition security is determined not only by food security but also by the quality of care of mothers and children and the quality of the household's health environment (Smith and Haddad 2000).

Estimates of child malnutrition, based on weight for age (underweight) and height for age (stunting), are from national survey data. The proportion of children who are underweight is the most common indicator of malnutrition. Being underweight, even mildly, increases the risk of death and inhibits cognitive development in children. Moreover, it perpetuates the problem from one generation to the next, as malnourished women are more likely to have low-birthweight babies. Height for age reflects linear growth achieved pre- and postnatally, and a deficit indicates long-term, cumulative effects of inadequacies of health, diet, or care. It is often argued that stunting is a proxy for multifaceted deprivation and is a better indicator of long term changes in malnutrition.

Estimates of children who are overweight are also from national survey data. Overweight in children has become a growing concern in developing countries. Researchers show an association between obesity in childhood and a high prevalence of diabetes, respiratory disease, high blood pressure, and psychosocial and orthopedic disorders (de Onis and Blossner 2000). The survey data were analyzed in a standardized way by the World Health Organization (WHO) to allow comparisons across countries.

Low birthweight, which is associated with maternal malnutrition, raises the risk of infant mortality and stunts growth in infancy and childhood. There is also emerging evidence that low-birthweight babies are more prone to noncommunicable diseases such as diabetes and cardiovascular heart diseases. Estimates of low-birthweight infants are drawn mostly from hospital records and household surveys. Many births in developing countries take place at home, and these births are seldom recorded. A hospital birth may indicate higher income and therefore better nutrition, or it could indicate a higher-risk birth, possibly skewing the data on birthweights downward. The data should therefore be treated with caution.

It is estimated that breastfeeding can save some 1.5 million children a year. Breast milk alone contains all the nutrients, antibodies, hormones, and antioxidants an infant needs to thrive. It protects babies from diarrhea and acute respiratory infections, stimulates their immune systems and response to vaccination, and according to some studies, confers cognitive benefits as well. The data on breastfeeding are derived from national surveys.

Iodine deficiency is the single most important cause of preventable mental retardation, and it contributes significantly to the risk of stillbirth and miscarriage. Iodized salt is the best source of iodine, and a global campaign to iodize edible salt is significantly reducing the risks (UNICEF, *The State of the World's Children 1999*).

Vitamin A is essential for the functioning of the immune system. A child deficient in vitamin A faces a 23 percent greater risk of dying from a range of childhood ailments such as measles, malaria, and diarrhea. Improving the vitamin A status of pregnant women helps reduce anemia, improves their resistance to infection, and may reduce their risk of dying during pregnancy and childbirth. Giving vitamin A to new mothers who are breastfeeding helps to protect their children during the first months of life.

Definitions

• **Prevalence of undernourishment** is the percentage of the population that is undernourished.
• **Prevalence of child malnutrition** is the percentage of children under five whose weight for age or height for age is more than two standard deviations below the median for the international reference population ages 0–59 months. For children up to two years of age height is measured by recumbent length. For older children height is measured by stature while standing. The reference population, adopted by the WHO in 1983, is based on children from the United States, who are assumed to be well nourished.
• **Prevalence of overweight** is the percentage of children under five whose weight for height is more than two standard deviations above the median for the international reference population of the corresponding age, established by the U.S. National Center for Health Statistics and the WHO. • **Low-birthweight babies** are newborns weighing less than 2,500 grams, with the measurement taken within the first hours of life, before significant postnatal weight loss has occurred. • **Exclusive breastfeeding** refers to the percentage of children less than 6 months old who are fed breast milk alone (no other liquids). • **Consumption of iodized salt** refers to the percentage of households that use edible salt fortified with iodine. • **Vitamin A supplementation** refers to the percentage of children ages 6–59 months who received at least one high-dose vitamin A capsule in the previous six months.

	Prevalence of smoking		Incidence of tuberculosis	Prevalence of HIV		
	% of adults		per 100,000 people	% of adults	% ages 15–24 [a]	
	Male	Female			Male	Female
	2000	**2000**	**2002**	**2001**	**2001**	**2001**
Afghanistan	..	..	333	*<0.01*	..	..
Albania	60	18	27	*<0.01*	..	..
Algeria	44	7	52	0.10	..	..
Angola	..	..	335	5.50	2.23	5.74
Argentina	47	34	46	0.70	0.86	0.34
Armenia	64	1	77	0.20	0.22	0.06
Australia	21	18	6	0.10	0.12	0.01
Austria	30	19	15	0.20	0.22	0.12
Azerbaijan	30	1	82	<0.10	0.06	0.01
Bangladesh	54	24	221	<0.10	0.01	0.01
Belarus	55	5	83	0.30	0.58	0.19
Belgium	30	26	14	0.20	0.12	0.12
Benin	..	..	86	3.60	1.17	3.71
Bolivia	43	18	234	<0.10	0.11	0.05
Bosnia and Herzegovina	..	..	60	0.10	..	..
Botswana	..	..	657	38.80	16.08	37.49
Brazil	38	29	62	0.70	0.64	0.48
Bulgaria	49	24	48	<0.10	..	..
Burkina Faso	..	..	157	6.50	3.97	9.73
Burundi	..	..	359	8.30	4.95	11.05
Cambodia	66	8	549	2.70	0.96	2.48
Cameroon	..	..	188	11.80	5.44	12.67
Canada	27	23	6	0.30	0.28	0.17
Central African Republic	..	..	338	12.90	5.82	13.54
Chad	24	..	222	3.60	2.38	4.28
Chile	26	18	18	0.30	0.35	0.13
China	67	4	113	0.10	0.16	0.09
Hong Kong, China	..	..	93	0.10	0.00	0.00
Colombia	24	21	45	0.40	0.85	0.19
Congo, Dem. Rep.	..	6	383	4.90	2.92	5.91
Congo, Rep.	..	..	395	7.20	3.28	7.80
Costa Rica	29	7	15	0.60	0.58	0.27
Côte d'Ivoire	42	2	412	9.70	2.91	8.31
Croatia	34	32	47	<0.10	0.00	0.00
Cuba	48	26	12	<0.10	0.09	0.05
Czech Republic	36	22	13	<0.10	0.00	0.00
Denmark	32	29	13	0.20	0.14	0.06
Dominican Republic	24	17	95	2.50	2.10	2.76
Ecuador	46	17	137	0.30	0.31	0.15
Egypt, Arab Rep.	35	2	29	<0.10	..	..
El Salvador	38	12	60	0.60	0.77	0.35
Eritrea	..	..	268	2.80	2.78	4.30
Estonia	44	20	55	1.00	2.48	0.62
Ethiopia	..	..	370	6.40	4.39	7.82
Finland	27	20	10	<0.10	0.04	0.03
France	39	30	14	0.30	0.26	0.17
Gabon	..	..	248	*4.16*	*2.32*	*4.72*
Gambia, The	34	2	230	1.60	0.52	1.35
Georgia	61	15	85	<0.10	0.08	0.02
Germany	39	31	10	0.10	0.10	0.05
Ghana	28	4	211	3.00	1.36	2.97
Greece	47	29	20	0.20	0.14	0.06
Guatemala	38	18	77	1.00	0.90	0.85
Guinea	60	44	215	*1.54*	*0.57*	*1.43*
Guinea-Bissau	..	..	196	2.80	1.06	2.98
Haiti	11	9	319	6.10	4.06	4.95

	Prevalence of smoking		Incidence of tuberculosis	Prevalence of HIV		
	% of adults		per 100,000 people	% of adults	% ages 15–24 [a]	
	Male	Female			Male	Female
	2000	**2000**	**2002**	**2001**	**2001**	**2001**
Honduras	36	11	86	1.60	1.20	1.50
Hungary	44	27	32	0.10	0.09	0.02
India	29	3	168	0.80	0.34	0.71
Indonesia	59	4	256	0.10	0.06	0.06
Iran, Islamic Rep.	27	3	29	<0.10	0.05	0.01
Iraq	40	5	167	<0.10	..	..
Ireland	32	31	13	0.10	0.06	0.05
Israel	33	24	10	0.10	*0.06*	*0.06*
Italy	32	17	8	0.40	0.28	0.26
Jamaica	..	..	8	1.20	0.82	0.86
Japan	53	13	33	<0.10	0.01	0.04
Jordan	48	10	5	<0.10	..	..
Kazakhstan	60	7	146	0.10	0.13	0.03
Kenya	67	32	540	6.70 [b]	6.01	15.56
Korea, Dem. Rep.	..	..	160	*<0.01*	..	..
Korea, Rep.	65	5	91	<0.10	0.03	0.01
Kuwait	30	2	26	*0.12*	..	..
Kyrgyz Republic	60	16	142	<0.10	0.00	0.00
Lao PDR	41	15	170	<0.10	0.05	0.03
Latvia	49	13	78	0.40	0.94	0.24
Lebanon	46	35	14	*0.09*	..	..
Lesotho	39	1	726	31.00	17.40	38.08
Liberia	..	..	247	*2.80*	..	..
Libya	..	..	21	0.20	..	..
Lithuania	51	16	66	0.10	0.16	0.05
Macedonia, FYR	40	32	41	<0.10	0.00	0.00
Madagascar	..	..	234	0.30	0.06	0.23
Malawi	20	9	431	15.00	6.35	14.89
Malaysia	49	4	95	0.40	0.70	0.12
Mali	..	..	334	1.70 [c]	1.37	2.08
Mauritania	..	..	188	*0.52*	*0.38*	*0.59*
Mauritius	45	3	64	0.10	*0.04*	*0.04*
Mexico	51	18	33	0.30	0.37	0.09
Moldova	46	18	154	0.20	0.46	0.14
Mongolia	68	26	209	<0.10	..	..
Morocco	35	2	114	0.10	..	..
Mozambique	..	..	436	13.00	6.13	14.67
Myanmar	44	22	154	*1.99*	*1.04*	*1.72*
Namibia	65	35	751	22.50	11.10	24.29
Nepal	48	29	190	0.50	0.26	0.28
Netherlands	37	29	8	0.20	0.20	0.09
New Zealand	25	25	11	0.10	0.05	0.01
Nicaragua	..	..	64	0.20	0.23	0.08
Niger	..	..	193	*1.35*	*0.95*	*1.50*
Nigeria	15	2	304	5.80	2.99	5.82
Norway	31	32	6	0.10	0.08	0.04
Oman	16	2	11	0.10	..	..
Pakistan	36	9	181	0.10	0.06	0.05
Panama	56	20	47	1.50	1.88	1.25
Papua New Guinea	46	28	254	0.70	0.33	0.39
Paraguay	24	6	70	*0.11*	*0.13*	*0.04*
Peru	42	16	202	0.40	0.41	0.18
Philippines	54	11	320	<0.10	0.01	0.01
Poland	44	25	32	0.10	0.09	0.05
Portugal	30	7	47	0.50	0.41	0.19
Puerto Rico	..	..	7	..	..	..

	Prevalence of smoking		Incidence of tuberculosis	Prevalence of HIV		
	% of adults		per 100,000	% of adults	% ages 15–24 [a]	
	Male	Female	people	adults	Male	Female
	2000	**2000**	**2002**	**2001**	**2001**	**2001**
Romania	62	25	148	<0.10	*0.02*	*0.02*
Russian Federation	63	10	126	0.90	1.87	0.67
Rwanda	7	4	389	8.90	4.91	11.20
Saudi Arabia	22	1	42	*0.01*	..	..
Senegal	..	..	242	0.50	0.19	0.54
Serbia and Montenegro	52	42	38	0.20	..	..
Sierra Leone	..	..	405	7.00	2.48	7.53
Singapore	27	3	43	0.20	0.14	0.16
Slovak Republic	55	30	24	<0.10	0.00	0.00
Slovenia	30	20	21	<0.10	0.00	0.00
Somalia	..	..	405	1.00	..	..
South Africa	42	11	558	15.60 [d]	10.66	25.64
Spain	42	25	30	0.50	0.51	0.24
Sri Lanka	26	2	54	<0.10	0.03	0.04
Sudan	24	1	217	2.60	1.08	3.13
Swaziland	25	2	1,067	33.40	15.23	39.49
Sweden	19	19	5	0.10	0.06	0.05
Switzerland	39	28	8	0.50	0.46	0.40
Syrian Arab Republic	51	10	44	*0.01*	..	..
Tajikistan	..	..	109	<0.10	0.00	0.00
Tanzania	50	12	363	7.80	3.55	8.06
Thailand	44	3	128	1.80	1.11	1.66
Togo	..	..	361	6.00	2.05	5.93
Trinidad and Tobago	42	8	13	2.50	2.41	3.23
Tunisia	62	8	23	*0.04*	..	..
Turkey	65	24	32	<0.10	..	..
Turkmenistan	27	1	94	<0.10	0.00	0.00
Uganda	52	17	377	5.00	1.99	4.63
Ukraine	51	19	95	1.00	1.96	0.88
United Arab Emirates	18	1	18	*0.18*	..	..
United Kingdom	27	26	12	0.10	0.10	0.05
United States	26	22	5	0.60	0.47	0.22
Uruguay	32	14	29	0.30	0.52	0.20
Uzbekistan	49	9	101	<0.10	0.01	0.00
Venezuela, RB	42	39	42	0.50	*0.65*	*0.15*
Vietnam	51	4	192	0.30	0.31	0.17
West Bank and Gaza	..	..	27	..	..	..
Yemen, Rep.	60	29	92	0.10	..	..
Zambia	35	10	668	15.60 [e]	8.06	20.98
Zimbabwe	34	1	683	33.70	12.38	33.01
World	**46 w**	**11 w**	**142 w**	**1.27 w**	**0.83 w**	**1.57 w**
Low income	37	7	226	2.31	1.11	2.51
Middle income	56	10	108	0.69	0.68	0.91
Lower middle income	58	9	116	0.70	0.69	0.98
Upper middle income	44	21	43	0.57	0.56	0.44
Low & middle income	48	9	164	1.45	0.91	1.77
East Asia & Pacific	63	5	147	0.19	0.19	0.17
Europe & Central Asia	56	17	88	0.45	1.03	0.39
Latin America & Carib.	40	24	67	0.67	0.68	0.47
Middle East & N. Africa	37	6	57	0.10	..	..
South Asia	33	6	176	0.64	0.27	0.54
Sub-Saharan Africa	..	..	358	8.38	4.14	9.44
High income	36	21	18	0.33	0.26	0.14
Europe EMU	37	26	15	0.28	0.25	0.15

a. Average of high and low estimates. b. Demographic and Health Survey 2003. c. Demographic and Health Survey 2001. d. Demographic and Health Survey 2002. e. Demographic and Health Survey 2001/02.

About the data

The limited availability of data on health status is a major constraint in assessing the health situation in developing countries. Surveillance data are lacking for many major public health concerns. Estimates of prevalence and incidence are available for some diseases but are often unreliable and incomplete. National health authorities differ widely in their capacity and willingness to collect or report information. To compensate for the paucity of data and ensure reasonable reliability and international comparability, the World Health Organization (WHO) prepares estimates in accordance with epidemiological models and statistical standards.

Smoking is the most common form of tobacco use in many countries, and the prevalence of smoking is therefore a good measure of the extent of the tobacco epidemic (Corrao and others 2000). While the prevalence of smoking has been declining in some high-income countries, it has been increasing in many developing countries. Tobacco use causes heart and other vascular diseases and cancers of the lung and other organs. Given the long delay between starting to smoke and the onset of disease, the health impact of smoking in developing countries will increase rapidly in the next few decades. Because the data present a one-time estimate, with no information on the intensity or duration of smoking, they should be interpreted with caution.

Tuberculosis is one of the main causes of death from a single infectious agent among adults in developing countries. In high-income countries tuberculosis has reemerged largely as a result of cases among immigrants. The estimates of tuberculosis incidence in the table are based on a new approach in which reported cases are adjusted using the ratio of case notifications to the estimated share of cases detected by panels of 80 epidemiologists convened by the WHO.

Adult HIV prevalence rates reflect the rate of HIV infection in each country's population. Low national prevalence rates can be very misleading, however. They often disguise serious epidemics that are initially concentrated in certain localities or among specific population groups and threaten to spill over into the wider population. In many parts of the developing world most new infections occur in young adults, with young women especially vulnerable. The estimates of HIV prevalence are based on extrapolations from data collected through surveys and surveillance of small, nonrepresentative groups.

Estimates from recent Demographic and Health Surveys (DHS) that have collected data on HIV/AIDS differ from those of the Joint United Nations Programme on HIV/AIDS (UNAIDS) and WHO, which are based on surveillance systems that focus on pregnant women who attend sentinel antenatal clinics. There are reasons to be cautious about comparing the two sets of estimates. DHS is a household survey that uses a representative sample from the whole population, whereas surveillance data from antenatal clinics is limited to pregnant women. Representative household surveys also frequently provide better coverage of rural populations. However, the fact that some respondents refuse to participate or are absent from the household adds considerable uncertainty to survey-based HIV estimates, because the possible association of absence or refusal with higher HIV prevalence is unknown. UNAIDS and WHO estimates are generally based on surveillance systems that focus on pregnant women who attend sentinel antenatal clinics. UNAIDS and WHO use a methodology to estimate HIV prevalence for the adult population (ages 15–49) that assumes that prevalence among pregnant women is a good approximation of prevalence among men and women. However, this assumption might not apply to all countries or over time. There are also other potential biases associated with the use of antenatal clinic data, such as differences among women who attend antenatal clinics and those who do not.

2.18a

HIV prevalence rates vary by method of data collection

Prevalence rate (%)

| Country	UNAIDS and WHO surveillance data	Demographic and Health Survey data
Zambia	21.5	15.6
South Africa	20.1	15.6
Kenya	15.0	6.7
Mali	1.7	1.7

Recent household survey data from Demographic and Health Surveys show significantly lower HIV prevalence rates than those from UNAIDS and WHO, which are based on surveillance. This indicates that different data collection methodologies, and their quality and coverage, record different prevalence rates.

Source: UNAIDS and WHO 2002; Demographic and Health Survey data.

2.18b

In some countries men know more about preventing HIV than women do

Population with correct knowledge of HIV prevention (%)
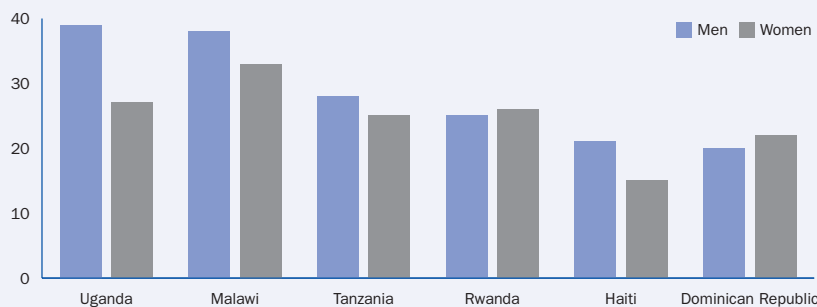
More men correctly identified the ways of preventing HIV transmission and had fewer misconceptions about it than did women. Countries where populations are more informed about HIV transmission do not necessarily have a low HIV prevalence rate, because it takes time to change people's behavior. However, there is no doubt that knowledge is an important prerequisite for behavior change.

Source: Demographic and Health Surveys, 1996–2000.

Definitions

• **Prevalence of smoking** is the percentage of men and women who smoke cigarettes. The age range varies among countries but in most is 18 and older or 15 and older. • **Incidence of tuberculosis** is the estimated number of new tuberculosis cases (pulmonary, smear positive, extrapulmonary). • **Prevalence of HIV** is the percentage of people who are infected with HIV.

Data sources

The data are drawn from a variety of sources, including the WHO's *World Health Report 2003, Tobacco Atlas 2002,* and *Global Tuberculosis Control Report 2003;* the National Tobacco Information Online System (NATIONS) database (http://apps.nccd.cdc.gov/nations/); and the Joint United Nations Programme on HIV/AIDS (UNAIDS) and WHO's *AIDS Epidemic Update 2002.*

	Life expectancy at birth		Infant mortality rate		Under-five mortality rate		Child mortality rate		Adult mortality rate		Survival to age 65	
							per 1,000				% of cohort	
			per 1,000				Male	Female	per 1,000			
	years		live births		per 1,000		1997–	1997–	Male	Female	Male	Female
	1980	2002	1980	2002	1980	2002	2002[a]	2002[a]	2000–02[a]	2000–02[a]	2002	2002
Afghanistan	40	43	183	165	280	257	..	..	437	376	32	33
Albania	69	74	56	22	66	24	..	..	209	95	77	85
Algeria	59	71	94	39	134	49	..	..	155	119	73	79
Angola	41	47	158	154	265	260	..	..	492	386	34	39
Argentina	70	74	33	16	38	19	..	..	184	92	75	87
Armenia	73	75	22	30	80	35	5	3	223	106	70	83
Australia	74	79	11	6	13	6	..	..	100	52	84	92
Austria	73	79	14	5	17	5	..	..	122	58	83	91
Azerbaijan	68	65	91	76	117	96	..	..	261	150	58	72
Bangladesh	49	62	129	48	205	73	28	38	262	252	59	61
Belarus	71	68	21	17	26	20	..	..	381	133	54	81
Belgium	73	79	12	5	15	6	..	..	126	65	82	91
Benin	48	53	126	93	213	151	72	79	384	328	43	50
Bolivia	52	64	112	56	170	71	26	29	264	219	59	67
Bosnia and Herzegovina	70	74	31	15	39	18	..	..	200	93	75	86
Botswana	58	38	62	80	84	110	..	..	703	669	13	18
Brazil	63	69	67	33	86	37	..	..	259	136	62	79
Bulgaria	71	72	20	14	24	16	..	..	239	103	69	83
Burkina Faso	44	43	140	107	247	207	131	128	559	507	28	32
Burundi	47	42	114	123	190	208	..	..	648	603	26	29
Cambodia	39	54	110	96	190	138	34	30	386	334	42	48
Cameroon	50	48	105	95	173	166	69	75	488	440	35	41
Canada	75	79	11	5	13	7	..	..	101	57	83	92
Central African Republic	46	42	121	115	189	180	..	..	620	573	24	29
Chad	42	48	124	117	225	200	106	99	449	361	38	43
Chile	69	76	31	10	39	12	..	..	151	67	79	89
China	67	71	49	30	64	38	..	..	161	110	72	79
Hong Kong, China	74	80	..	..	..	..	..	..	97	50	85	92
Colombia	66	72	40	19	56	23	4	3	238	115	71	83
Congo, Dem. Rep.	49	45	130	129	210	205	..	..	571	493	31	35
Congo, Rep.	50	52	88	81	125	108	..	..	475	406	35	44
Costa Rica	73	78	24	9	26	11	..	..	131	78	82	90
Côte d'Ivoire	49	45	114	116	172	191	83	58	553	494	31	34
Croatia	70	74	20	7	23	8	..	..	150	110	71	87
Cuba	74	77	22	7	22	9	..	..	143	94	81	88
Czech Republic	70	75	17	4	19	5	..	..	160	75	75	88
Denmark	74	77	9	4	10	4	..	..	128	80	80	88
Dominican Republic	63	67	71	32	92	38	13	8	234	146	63	75
Ecuador	63	70	64	25	98	29	..	..	199	120	72	77
Egypt, Arab Rep.	56	69	118	33	173	39	15	16	210	147	69	75
El Salvador	57	70	84	33	118	39	..	..	250	148	68	81
Eritrea	44	51	141	59	210	80	55	50	493	441	37	42
Estonia	69	71	21	10	24	12	..	..	316	114	60	85
Ethiopia	42	42	143	114	220	171	83	86	594	535	26	30
Finland	73	78	8	4	9	5	..	..	144	61	80	91
France	74	79	10	4	13	6	..	..	130	57	82	92
Gabon	48	53	75	63	105	85	32	33	380	330	45	51
Gambia, The	40	53	144	91	231	126	..	..	373	320	40	47
Georgia	71	73	34	24	43	29	..	..	250	133	71	87
Germany	73	78	13	4	16	5	..	..	125	59	82	91
Ghana	53	55	96	60	157	97	53	51	379	326	47	51
Greece	74	78	20	5	23	5	..	..	114	47	83	91
Guatemala	57	65	97	36	139	49	15	18	286	182	58	72
Guinea	40	46	175	106	300	165	101	98	432	366	32	33
Guinea-Bissau	39	45	173	130	290	211	..	..	495	427	34	39
Haiti	51	52	132	79	195	123	52	54	524	373	38	47

	Life expectancy at birth		Infant mortality rate		Under-five mortality rate		Child mortality rate		Adult mortality rate		Survival to age 65	
	years		per 1,000 live births		per 1,000		per 1,000 Male 1997–	Female 1997–	per 1,000 Male	Female	% of cohort Male	Female
	1980	2002	1980	2002	1980	2002	2002 [a]	2002 [a]	2000–02 [a]	2000–02 [a]	2002	2002
Honduras	60	66	75	32	103	42	..	..	221	157	59	72
Hungary	70	72	24	8	26	9	..	..	295	123	67	85
India	54	63	113	65	173	90	25	37	250	191	62	66
Indonesia	55	67	79	32	125	43	19	20	227	175	64	72
Iran, Islamic Rep.	58	69	92	34	130	41	..	..	170	139	71	75
Iraq	62	63	63	102	83	125	..	..	258	208	63	67
Ireland	73	77	12	6	14	6	..	..	108	62	80	89
Israel	73	79	16	6	19	6	..	..	99	56	84	90
Italy	74	78	15	4	17	6	..	..	110	53	81	91
Jamaica	71	76	28	17	34	20	..	..	169	127	80	87
Japan	76	82	8	3	11	5	..	..	98	44	86	94
Jordan	*64*	72	52	27	67	33	5	5	199	144	74	81
Kazakhstan	67	62	45	76	58	99	11	6	366	201	47	71
Kenya	55	46	73	78	115	122	36	38	578	529	28	33
Korea, Dem. Rep.	67	62	32	42	43	55	..	..	238	192	55	62
Korea, Rep.	67	74	16	5	18	5	..	..	186	71	72	86
Kuwait	71	77	29	9	35	10	..	..	100	68	82	88
Kyrgyz Republic	65	65	90	52	115	61	10	11	335	299	56	75
Lao PDR	45	55	135	87	200	100	..	..	355	299	45	50
Latvia	69	70	21	17	26	21	..	..	328	122	60	84
Lebanon	65	71	38	28	44	32	..	..	192	136	71	79
Lesotho	53	38	115	91	168	132	..	..	667	630	15	20
Liberia	51	47	157	157	235	235	..	..	448	385	33	37
Libya	60	72	55	16	70	19	..	..	210	157	73	83
Lithuania	71	73	21	8	22	9	..	..	286	106	66	87
Macedonia, FYR	..	73	53	22	69	26	..	..	160	89	75	84
Madagascar	51	55	106	84	175	135	75	68	385	322	49	55
Malawi	44	38	157	113	265	182	101	102	701	653	20	23
Malaysia	67	73	31	8	42	8	..	..	202	113	72	83
Mali	42	41	176	122	300	222	132	125	518	446	25	29
Mauritania	47	51	118	120	175	183	38	38	357	302	43	49
Mauritius	66	73	33	17	40	19	..	..	228	109	70	85
Mexico	67	74	56	24	74	29	..	..	180	101	75	85
Moldova	66	67	41	27	53	32	..	..	325	165	58	75
Mongolia	58	65	97	58	140	71	..	..	280	199	65	71
Morocco	58	68	99	39	144	43	..	..	174	113	68	76
Mozambique	44	41	140	128	233	205	85	82	674	612	25	30
Myanmar	51	57	94	77	134	108	..	..	343	245	46	58
Namibia	53	42	84	55	114	67	..	..	695	661	22	25
Nepal	48	60	124	62	183	83	28	40	314	314	58	56
Netherlands	76	78	9	5	11	5	..	..	95	64	83	90
New Zealand	73	78	13	6	16	6	..	..	108	69	83	90
Nicaragua	59	69	85	32	120	41	12	11	225	161	67	77
Niger	40	46	191	155	320	264	184	202	473	308	30	37
Nigeria	46	45	108	100	216	201	66	69	443	393	33	36
Norway	76	79	9	4	11	4	..	..	105	59	84	91
Oman	60	74	73	11	95	13	..	..	187	135	78	84
Pakistan	55	64	105	76	156	101	..	..	221	198	64	70
Panama	70	75	34	19	46	25	..	..	145	93	78	86
Papua New Guinea	51	57	79	70	108	94	..	..	359	329	49	53
Paraguay	67	71	46	26	61	30	..	..	173	129	70	80
Peru	60	70	89	30	126	39	19	17	190	139	69	78
Philippines	61	70	55	28	81	37	21	19	249	142	70	77
Poland	70	74	21	8	24	9	..	..	226	88	71	87
Portugal	71	76	25	5	31	6	..	..	164	66	77	89
Puerto Rico	74	77	..	..	..	..	..	..	148	55	76	91

	Life expectancy at birth (years)		Infant mortality rate (per 1,000 live births)		Under-five mortality rate (per 1,000)		Child mortality rate (per 1,000) Male 1997–2002[a]	Female 1997–2002[a]	Adult mortality rate (per 1,000) Male 2000–02[a]	Female 2000–02[a]	Survival to age 65 (% of cohort) Male 2002	Female 2002
	1980	2002	1980	2002	1980	2002						
Romania	69	70	29	19	36	21	..	..	260	117	64	81
Russian Federation	67	66	28	18	35	21	..	..	420	149	48	77
Rwanda	46	40	130	118	219	203	105	97	667	599	23	25
Saudi Arabia	61	73	65	23	85	28	..	..	181	116	76	83
Senegal	45	52	128	79	218	138	76	74	355	303	38	47
Serbia and Montenegro	70	73	36	16	44	19	..	..	180	100	73	83
Sierra Leone	35	37	192	165	336	284	..	..	587	531	24	29
Singapore	71	78	11	3	13	4	..	..	114	61	83	89
Slovak Republic	70	73	20	8	23	9	..	..	204	82	70	86
Slovenia	70	76	16	4	18	5	..	..	170	76	76	89
Somalia	43	47	133	133	225	225	..	..	516	452	38	44
South Africa	57	46	64	52	91	65	18	13	621	583	27	33
Spain	76	78	13	5	16	6	..	..	122	49	83	92
Sri Lanka	68	74	34	16	46	19	..	..	244	124	76	84
Sudan	48	58	86	64	142	94	..	..	341	291	53	58
Swaziland	52	44	99	106	143	149	..	..	642	602	26	30
Sweden	76	80	7	3	9	3	..	..	87	55	85	92
Switzerland	76	80	9	5	11	6	..	..	99	58	85	93
Syrian Arab Republic	62	70	54	23	73	28	..	..	170	132	69	79
Tajikistan	66	67	..	90	..	116	..	..	293	204	62	75
Tanzania	50	43	106	104	175	165	61	58	569	520	27	31
Thailand	64	69	45	24	58	28	..	..	245	150	67	77
Togo	49	50	106	87	176	140	73	65	460	406	37	42
Trinidad and Tobago	68	72	35	17	40	20	..	..	209	133	74	82
Tunisia	62	73	72	21	100	26	..	..	169	99	75	83
Turkey	61	70	103	35	133	41	10	13	218	120	69	79
Turkmenistan	64	65	86	70	109	86	19	17	280	156	57	72
Uganda	48	43	107	83	185	141	78	70	617	567	25	28
Ukraine	69	68	22	16	27	20	..	..	365	135	56	80
United Arab Emirates	68	75	23	8	27	9	..	..	143	93	80	85
United Kingdom	74	77	12	5	14	7	..	..	108	65	81	89
United States	74	77	13	7	15	8	..	..	135	80	81	91
Uruguay	70	75	37	14	42	15	..	..	185	89	74	88
Uzbekistan	67	67	51	55	60	65	..	..	282	176	63	77
Venezuela, RB	68	74	34	19	42	22	..	..	178	99	75	85
Vietnam	60	70	44	20	66	26	10	13	203	139	68	78
West Bank and Gaza	..	73	..	..	..	..	..	..	154	97	74	83
Yemen, Rep.	49	57	135	83	205	114	33	36	278	226	50	53
Zambia	50	37	90	102	155	182	89	74	725	687	16	21
Zimbabwe	55	39	69	76	108	123	35	31	650	612	18	20
World	**63 w**	**67 w**	**79 w**	**55 w**	**119 w**	**81 w**	**.. w**	**.. w**	**234 w**	**166 w**	**69 w**	**78 w**
Low income	53	59	110	79	174	121	..	..	310	259	64	69
Middle income	66	70	57	30	76	37	..	..	211	128	63	80
Lower middle income	65	69	59	32	79	40	..	..	212	131	61	78
Upper middle income	68	73	42	19	54	22	..	..	197	103	68	82
Low & middle income	60	65	86	60	131	88	..	..	255	186	64	73
East Asia & Pacific	64	69	56	32	79	42	..	..	184	129	69	76
Europe & Central Asia	68	69	45	31	57	37	..	..	317	137	59	80
Latin America & Carib.	65	71	61	28	82	34	..	..	222	125	67	81
Middle East & N. Africa	58	69	94	44	134	54	..	..	193	143	68	73
South Asia	54	63	115	68	176	95	25	37	252	202	62	65
Sub-Saharan Africa	48	46	116	103	197	174	..	..	519	461	40	46
High income	74	78	12	5	15	7	..	..	128	66	81	90
Europe EMU	74	78	13	4	16	6	..	..	125	58	..	..

a. Data are for the most recent year available.

Mortality rates for different age groups—infants, children, or adults—and overall indicators of mortality—life expectancy at birth or survival to a given age—are important indicators of health status in a country. Because data on the incidence and prevalence of diseases (morbidity data) are frequently unavailable, mortality rates are often used to identify vulnerable populations. And they are among the indicators most frequently used to compare levels of socioeconomic development across countries.

The main sources of mortality data are vital registration systems and direct or indirect estimates based on sample surveys or censuses. A "complete" vital registration system—one covering at least 90 percent of vital events in the population—is the best source of age-specific mortality data. But such systems are fairly uncommon in developing countries. Thus estimates must be obtained from sample surveys or derived by applying indirect estimation techniques to registration, census, or survey data. Survey data are subject to recall error, and surveys estimating infant deaths require large samples because households in which a birth or an infant death has occurred during a given year cannot ordinarily be preselected for sampling. Indirect estimates rely on estimated actuarial ("life") tables that may be inappropriate for the population concerned. Because life expectancy at birth is constructed using infant mortality data and model life tables, similar reliability issues arise for this indicator.

Life expectancy at birth and age-specific mortality rates are generally estimates based on vital registration or the most recent census or survey available

(see *Primary data documentation*). Extrapolations based on outdated surveys may not be reliable for monitoring changes in health status or for comparative analytical work.

To produce harmonized estimates of infant and under-five mortality rates that make use of all available information in a transparent way, the United Nations Children's Fund (UNICEF) and the World Bank developed and adopted a methodology that fits a regression line to the relationship between mortality rates and their reference dates using weighted least squares. (For further discussion of methodology for childhood mortality estimates, see Hill and others 1999.) Some of the estimates shown in the table this year are World Bank estimates. Estimates may change after the harmonization process with UNICEF and the World Health Organization is completed.

Infant and child mortality rates are higher for boys than for girls in countries in which parental gender preferences are insignificant. Child mortality captures the effect of gender discrimination better than does infant mortality, as malnutrition and medical interventions are more important in this age group. Where female child mortality is higher, as in some countries in South Asia, girls probably have unequal access to resources.

Adult mortality rates have increased in many countries in Sub-Saharan Africa and Europe and Central Asia. In Sub-Saharan Africa the increase stems from AIDS-related mortality and affects both men and women. In Europe and Central Asia the causes are more diverse and affect men more. They include a

high prevalence of smoking, a high-fat diet, excessive alcohol use, and stressful conditions related to the economic transition.

The percentage of a cohort surviving to age 65 reflects both child and adult mortality rates. Like life expectancy, it is a synthetic measure based on current age-specific mortality rates and used in the construction of life tables. It shows that even in countries where mortality is high, a certain share of the current birth cohort will live well beyond the life expectancy at birth, while in low-mortality countries close to 90 percent will reach at least age 65.

• **Life expectancy at birth** is the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life. • **Infant mortality rate** is the number of infants dying before reaching one year of age, per 1,000 live births in a given year. • **Under-five mortality rate** is the probability that a newborn baby will die before reaching age five, if subject to current age-specific mortality rates. The probability is expressed as a rate per 1,000. • **Child mortality rate** is the probability of dying between the ages of one and five, if subject to current age-specific mortality rates. The probability is expressed as a rate per 1,000. • **Adult mortality rate** is the probability of dying between the ages of 15 and 60—that is, the probability of a 15-year-old dying before reaching age 60—if subject to current age-specific mortality rates between ages 15 and 60. • **Survival to age 65** refers to the percentage of a cohort of newborn infants that would survive to age 65, if subject to current age-specific mortality rates.

2.19a

Under-five mortality rates are higher in poor households than in rich ones

Under-five mortality per 1,000 people, by income quintile
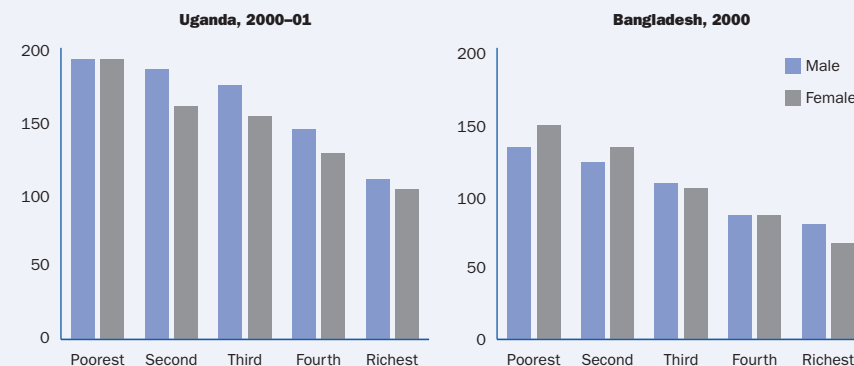
Higher under-five mortality rates for children from poor households than for those from wealthier households indicate the deprivation among the poor. Under-five mortality is usually higher for boys than for girls, except in cases of parental discrimination against girls.

Source: Demographic and Health Survey data.