

# 2 | PEOPLE



This section examines the progress of countries in reducing poverty in its income and non-income dimensions and in improving the welfare of their people. Evidence confirms that expanding economic opportunities for poor people—through pro-poor growth policies—raises their incomes. The key to expanding their economic opportunities is to help them build up their assets. Human capabilities such as health and education are of intrinsic value and also have powerful effects on material well-being. Broad access to such basic infrastructure as clean water and adequate sanitation is also important to the material prospects of poor people. And a range of public interventions, such as old-age pensions and unemployment insurance, can reduce their vulnerabilities.

The challenge for governments: formidable. The tables in this section track the progress of countries in reducing poverty and improving human capital. The expanded table on poverty (table 2.5) shows the poverty levels prevailing in countries and the longer term trends for regional and income groups. Other tables provide information on population size and growth, labor force participation, and employment by economic activity. Information is also available on the vulnerabilities in populations and government efforts to alleviate those vulnerabilities. The tables also provide information on improvements in education and health and some clues to remaining and emerging challenges. Together, the tables identify a country's accomplishments and the tasks that still lie ahead.

The third Millennium Development Goal: Promote gender equality and empower women

Gender issues are highly relevant to achieving all the Millennium Development Goals, from reducing poverty and hunger to protecting the environment. Because the Goals are mutually reinforcing, progress toward gender equality will advance other Goals, while success in achieving other Goals will positively affect gender equality. The target for the third Goal is to achieve gender parity in primary and secondary education, preferably by 2005 but no later than 2015, and in tertiary education by 2015. The indicator for monitoring progress toward this target is the ratio of female to male gross enrollment rates in primary, secondary, and tertiary education.

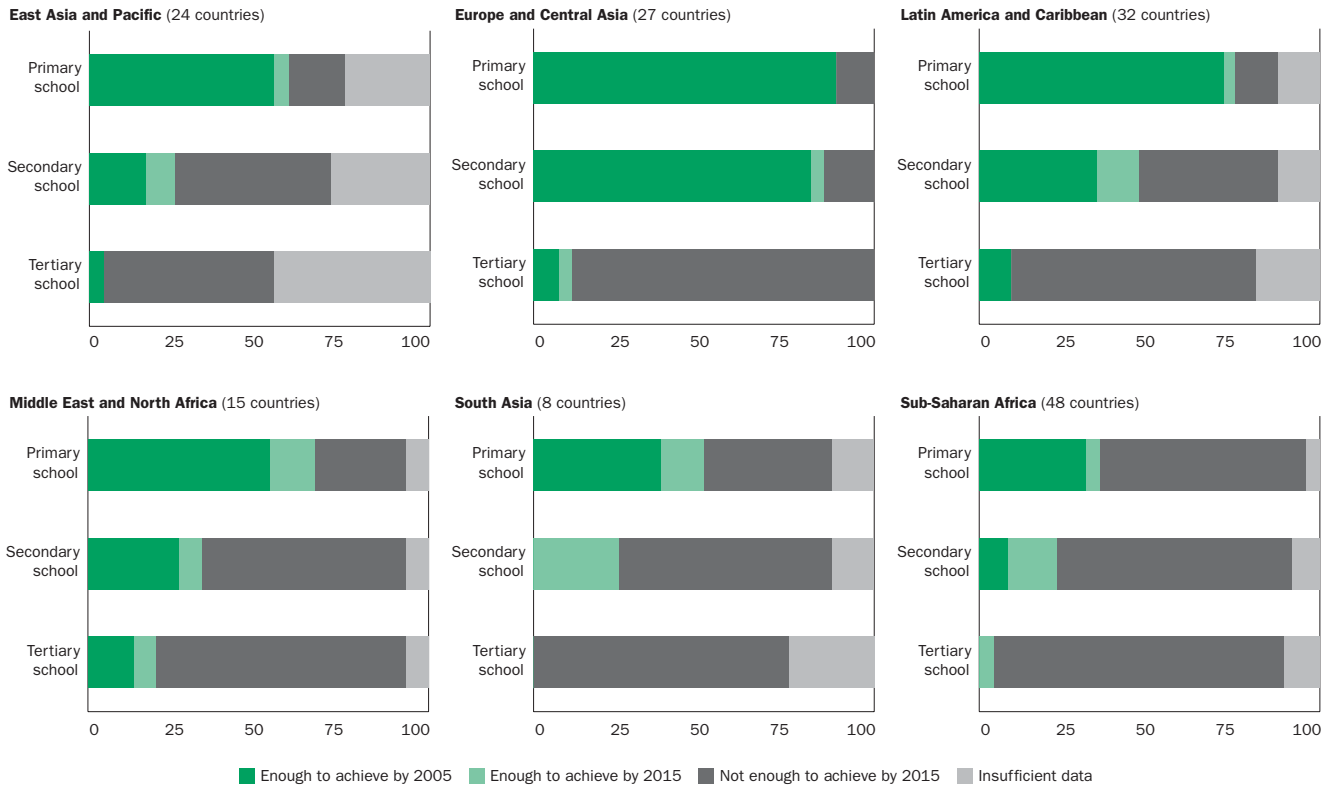
What do the statistics tell us about gender and equality? The 2005 milestone year for this goal is already upon us, so we need to map countries' progress. But a three-year delay in the production of education statistics and a lack of baseline and recent data in many countries make it impossible to assess with certainty how many countries will have achieved gender equality in education. The most recent data refer to the school period 2002/03. So conclusions about where countries stand in 2005 are based on the progress between 1990 and 2002 and on hypotheses of what would happen if progress continued at the same rate.

The data show that the prospects for achieving gender equality in education vary considerably between educational levels and regions. There has been more progress in gender equality in primary school enrollments than in secondary and tertiary enrollments (figure 2a). Still, more than

## 2a

Progress toward gender parity in primary, secondary, and tertiary education is uneven across regions

Share of countries in each region, around 2002 (%)



Source: UNESCO and World Bank staff estimates.

a third of developing countries will not achieve gender parity in primary school enrollments this year, and most of them risk not meeting the target in 2015 if they do not take immediate action to increase girls' school attendance. The risk is greatest for Sub-Saharan Africa and South Asia, the regions reporting the slowest progress in closing the gender gap in primary schooling.

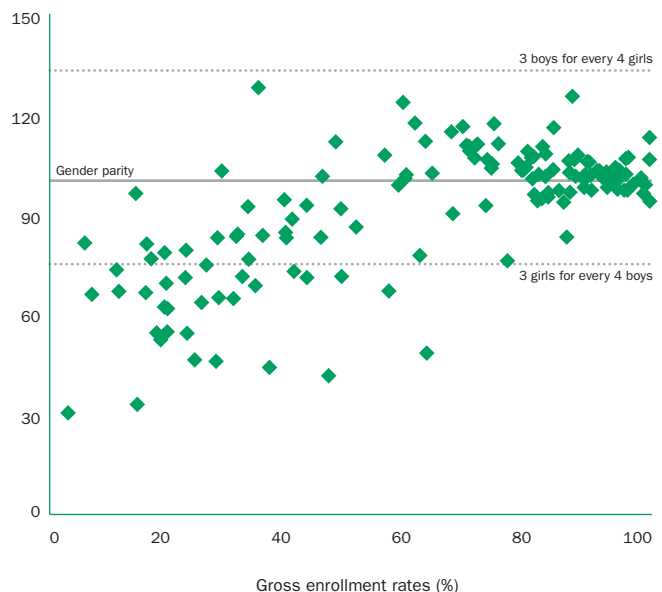
Fewer than 30 percent of developing countries have made enough progress in the last 15 years to achieve gender parity in secondary enrollments by 2005, and only 40 percent are expected to achieve this target by 2015 without stronger efforts to increase boys' and girls' enrollment in secondary education (figure 2b). Countries in South Asia and Sub-Saharan Africa are seriously off track. And on current trends only 9 percent of developing countries are making enough progress to achieve gender equality in tertiary education by 2015.

Even though the first target for the third Millennium Development Goal has not been met globally, in the two regions with the deepest educational inequality an impressive number of countries have achieved it for primary education. In Sub-Saharan Africa they include Botswana, Mauritius, Namibia, Seychelles, Tanzania, and Uganda, and in South Asia, Sri Lanka. Several other countries are working to increase intake rates to make school accessible to previously unenrolled

## 2b

Achieving equal access to education for boys and girls leads to progress toward the goal

Female to male enrollment ratio, around 2002 (%)



Source: UNESCO.

## 2c

### Population estimates and enrollment rates

Population estimates are generally based on extrapolations from the most recent census—and are the product of demographic modeling. Extrapolations are uncertain because the present demographic situation is not known perfectly, and future trends of births, deaths, and net migration, even in the very short term, are subject to unpredictable influences.

Errors in projecting population totals are generally accompanied by errors in the sizes of particular age groups. Projections of younger and older age groups tend to be unreliable because of age-heaping and underenumeration of children, particularly of girls and women in countries where gender inequality remains pervasive.

How does this affect enrollment rates? Used as a denominator, population estimates bias enrollment rates, with the extent and direction of the bias often unknown. Efforts are made to adjust for the bias, but as noted above, models may miss important demographic events. Three other conceptual and technical issues relating to population that affect enrollment rates, especially their international comparability, are *de facto* versus *de jure* enumeration, completeness of coverage, and availability and recency of population data.

populations. But a lack of recent data on enrollments makes it difficult to monitor whether these actions are working.

Equally difficult is to assess accurately where individual countries stand in relation to the target, because measuring the dynamics of education and gender is highly complex. Several technical and conceptual factors are responsible for this. First, the data for gender equality in education come from two sources: enrollment data from school censuses reported by education ministries and national agencies, and estimates of the school age population based commonly on population censuses and population estimates and projections. The reliability of enrollment data collected through school censuses is suspect in some countries because of overreporting, perhaps linked to financial incentives or other factors. And the lack of reliable population estimates biases enrollment rates, with the extent and direction of the bias unclear (box 2c).

Second, the indicator is only an approximation of gender differences in school enrollment among school-age children. As such, it can overestimate or underestimate the extent of gender inequalities, but the size of the error is difficult to assess. Two factors, in particular, affect the accuracy of the ratio of female to male gross enrollment rates as a measure of gender inequality:

- Underreporting of private education by officials underestimates enrollment rates. This may affect the ratio of girls to boys enrolled in school if girls and boys have different probabilities of attending a private school. A recent study in Pakistan suggests that this may be the case in countries where the determinants of school attendance differ for girls and boys (Alderman, Orazem, and Paterno 2001).

- Repetition rates are generally higher for boys than for girls. A high pattern of male repetition is likely to underestimate actual progress in gender parity.

Third, the indicator does not reflect how many of the girls and boys who should be in school are actually attending school. Improvements in the gender ratio can result from an increase in girls' school attendance or a decrease in boys'. In Cambodia, for example, the ratio of girls to boys in secondary school increased from 0.43 in 1990 to 0.60 in 2001. The improvement was the result not of an increase in girls' gross enrollment—it fell from 19 percent to 17 percent—but of a marked decrease in boy's enrollment, which fell from 45 percent to 27 percent.

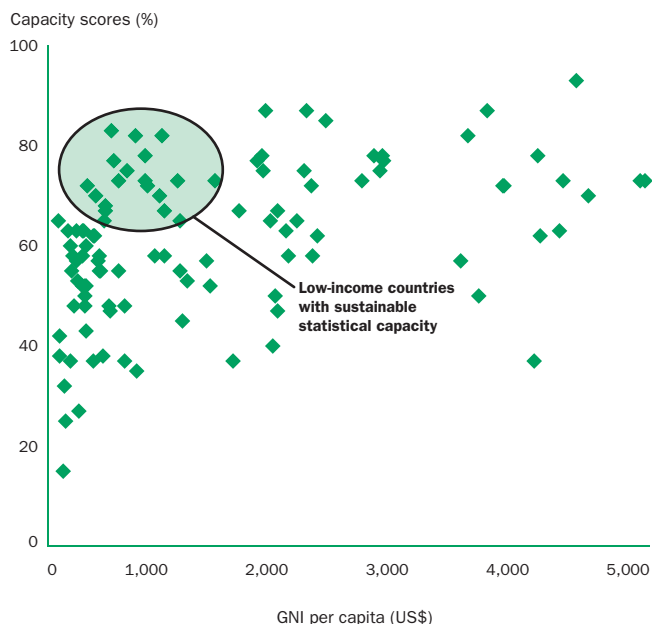
This analysis demonstrates the urgency to take action on two fronts as countries endeavor to achieve this target by 2015.

### What needs to be done

Promoting gender equality in education requires addressing the conditions that prevent girls and boys from attending school. Evidence shows that scholarships, lower fees, and subsidies in the form of food and cash transfers conditional on school attendance increase girls' and boys' enrollment rates. They also reduce the probability of dropping out of school and close gender gaps in school attainment. In countries where girls are less likely than boys to attend school, these subsidies have a larger effect on girls' attendance than on boys', even when girls are not targeted. Subsidies are even more effective in reducing gender disparities in schooling when they are directed to girls. For example, the Female Secondary School Assistance Program in Bangladesh paid tuition and stipends directly into

## 2d

### Sustainable statistical capacity is possible in low-income countries



Source: World Bank.

a national bank for all girls attending school for at least 75 percent of the school year. An assessment of the pilot phase shows that girls' secondary enrollment in the program area rose from 27 percent to 44 percent in five years—more than double the national average increase (World Bank 2001).

Equally important is the need for countries to implement standardized concepts and methodologies of data collection. This is likely to place a stress on poor countries with weak administrative systems. Generally, statistical capacity is low in low-income countries, but several low-income countries have sustainable statistical capacity, including Albania, Armenia, India, Nicaragua, and Senegal (figure 2d).

#### Building capacity for monitoring progress

Countries acknowledge the role of reliable and timely data, both for analyzing, evaluating, and monitoring the

effectiveness of current and longer term policies and for reporting to the international development community on country progress on international initiatives such as the Millennium Development Goals. A sophisticated international statistical system has been developed over the years by the international community. This system relies considerably on data originated in national statistical systems, many of which are institutionally weak and undervalued.

Managing for results and monitoring the Millennium Development Goals generate demand that may result in trapping these systems in a vicious spiral of underperformance, domestic underfunding, and conflicting donor agendas. An effective and efficient national statistical system, providing the data needed to support better policies and to monitor progress, needs to be put in place before further demands are made by the international community.

## Key gender performance indicators

The third Millennium Development Goal recognizes that promoting gender equality and empowering women involves more than gender parity in education enrollments. Three additional indicators are proposed to obtain a more rounded assessment:

- Ratio of literate women to men 15 to 24 years old.
- Share of women in wage employment in the nonagricultural sector.
- Proportion of seats held by women in national parliaments.

No targets were set for these indicators, and progress has been slow, especially in women's participation in nonagricultural employment and in parliament (table 1.5).

All the Goal 3 indicators still fail to capture many important dimensions of gender equality and women's empowerment. Working women have less social protection and fewer employment rights than do men. In some countries as many as 40 percent of women have been victims of physical violence by an intimate partner. More than 500,000 women die each year in pregnancy and childbirth. And rates of HIV/AIDS infection among women are rapidly increasing. To eliminate other gender inequali-

ties in society, women must enjoy equal rights with men, equal economic opportunities, use of productive assets, freedom from domestic drudgery, equal representation in decisionmaking bodies (including those at the local level), and freedom from threats of violence and coercion (UN Millennium Project 2005).

There is, therefore, strong support in the international development community for supplementing the four indicators. The UN Millennium Project Task Force on Education and Gender Equality identified seven strategic priorities for empowering women and redressing gender differences and proposed 12 indicators to monitor progress (see table).

Measuring and monitoring these proposed indicators will pose an additional challenge for both countries and the specialized UN agencies. Countries need to develop capacity within line ministries to collect and analyze the recommended data and to set up or expand coordination mechanisms across ministries. UN specialized agencies need to work with bilateral and multilateral partners to develop improved methodologies and systems for the national production of these statistics.

## Proposed indicators to monitor progress in achieving the third Millennium Development Goal

Goal and proposed indicators	Data source
Ensure universal primary education and strengthen opportunities for postprimary education <ul style="list-style-type: none"> <li>• Ratio of female to male gross enrollment rates in primary, secondary, and tertiary education*</li> <li>• Ratio of female to male completion rates in primary, secondary, and tertiary education</li> </ul>	United Nations Educational, Scientific and Cultural Organization
Guarantee sexual and reproductive health and rights <ul style="list-style-type: none"> <li>• Proportion of contraceptive demand satisfied</li> <li>• Adolescent fertility rate</li> </ul>	Specialized household surveys—Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys—and United Nations Population Fund
Invest in infrastructure to reduce women's and girls' time burden <ul style="list-style-type: none"> <li>• Hours per day (or year) women and men spend fetching water and collecting fuel</li> </ul>	Time-use surveys and certain household surveys such as Living Standards Measurement Study (LSMS) surveys
Guarantee women's and girls' property rights and inheritance <ul style="list-style-type: none"> <li>• Land ownership by male, female, and jointly held</li> <li>• Housing title, disaggregated by male, female, and jointly held</li> </ul>	Land registry and certain household surveys such as LSMS UN-HABITAT project, housing titles registry, and certain household surveys such as LSMS
Eliminate gender inequality in employment <ul style="list-style-type: none"> <li>• Share of women in employment, both wage and self-employed, by type</li> <li>• Gender gaps in earnings in wage and self-employment</li> </ul>	International Labour Organization (ILO), Women in Informal Employment: Globalizing and Organizing (WIEGO), and labor force and household surveys such as LSMS ILO, labor force surveys, and certain household surveys
Increase women's share of seats in national parliaments and local government bodies <ul style="list-style-type: none"> <li>• Percentage of seats held by women in national parliament*</li> <li>• Percentage of seats held by women in local government bodies</li> </ul>	Inter-Parliamentary Union
Combat violence against women <ul style="list-style-type: none"> <li>• Prevalence of domestic violence</li> </ul>	United Cities and Local Governments, DHS, World Health Organization multicountry study on women's health and domestic violence, and other national surveys with similar methodologies

\* Current Millennium Development Goal indicators.  
Source: UN Millennium Project 2005.

	Total population			Average annual population growth rate		Population age composition			Dependency ratio		Crude death rate	Crude birth rate
	1990	millions		%		Ages 0-14 2003	%		dependents as proportion of working-age population		per 1,000 people 2003	per 1,000 people 2003
		2003	2015	1990-2003	2003-15		Ages 15-64 2003	Ages 65+ 2003	Young 2003	Old 2003		
Afghanistan	17.7	..	..	..	..	..	..	..	..	..	..	..
Albania	3.3	3.2	3.5	-0.3	0.8	27.3	65.4	7.3	0.4	0.1	6	17
Algeria	25.0	31.8	38.3	1.9	1.5	33.9	62.0	4.1	0.5	0.1	5	22
Angola	9.3	13.5	18.9	2.8	2.8	47.6	49.4	2.9	1.0	0.1	19	50
Argentina	32.3	36.8	42.9	1.0	1.3	27.0	63.2	9.8	0.4	0.2	8	18
Armenia	3.5	3.1	3.0	-1.1	-0.1	20.5	69.3	10.2	0.3	0.1	8	9
Australia	17.1	19.9	21.9	1.2	0.8	20.0	67.5	12.5	0.3	0.2	7	13
Austria	7.7	8.1	8.1	0.4	-0.0	16.2	67.8	16.0	0.2	0.2	10	10
Azerbaijan	7.2	8.2	9.0	1.1	0.7	27.0	65.5	7.5	0.4	0.1	7	16
Bangladesh	110.0	138.1	166.0	1.7	1.5	35.5	61.2	3.4	0.6	0.1	8	28
Belarus	10.2	9.9	9.3	-0.2	-0.5	16.8	69.1	14.0	0.2	0.2	14	9
Belgium	10.0	10.4	10.5	0.3	0.1	17.0	66.3	16.8	0.3	0.3	10	11
Benin	4.7	6.7	9.0	2.7	2.4	45.0	52.4	2.7	0.9	0.1	13	38
Bolivia	6.7	8.8	10.8	2.1	1.7	38.4	57.3	4.4	0.7	0.1	8	29
Bosnia and Herzegovina	4.5	4.1	4.2	-0.6	0.2	17.2	71.9	10.9	0.2	0.2	8	12
Botswana	1.3	1.7	1.8	2.3	0.4	41.5	56.2	2.3	0.7	0.0	23	29
Brazil	148.0	176.6	201.0	1.4	1.1	27.5	67.1	5.4	0.4	0.1	7	19
Bulgaria	8.7	7.8	7.2	-0.8	-0.7	14.4	69.2	16.4	0.2	0.2	14	8
Burkina Faso	8.9	12.1	15.6	2.4	2.1	46.9	50.4	2.7	0.9	0.1	19	43
Burundi	5.5	7.2	8.8	2.1	1.7	45.3	52.1	2.5	0.9	0.1	20	38
Cambodia	9.6	13.4	16.4	2.6	1.7	41.0	55.8	3.2	0.7	0.1	12	29
Cameroon	11.7	16.1	19.7	2.5	1.7	41.1	55.2	3.7	0.7	0.1	16	35
Canada	27.8	31.6	33.5	1.0	0.5	18.2	69.0	12.8	0.3	0.2	7	11
Central African Republic	2.9	3.9	4.6	2.1	1.5	41.8	54.7	3.5	0.8	0.1	20	35
Chad	5.8	8.6	12.1	3.0	2.8	48.0	49.2	2.8	1.0	0.1	16	45
Chile	13.1	15.8	17.8	1.4	1.0	26.9	65.7	7.4	0.4	0.1	5	17
China	1,135.2	1,288.4	1,389.5	1.0	0.6	23.6	69.1	7.3	0.3	0.1	8	15
Hong Kong, China	5.7	6.8	7.0	1.4	0.2	15.8	72.6	11.6	0.2	0.2	5	7
Colombia	35.0	44.6	51.8	1.9	1.2	31.8	63.5	4.8	0.5	0.1	6	22
Congo, Dem. Rep.	37.4	53.2	75.2	2.7	2.9	47.9	49.5	2.6	1.0	0.1	18	45
Congo, Rep.	2.5	3.8	5.2	3.2	2.8	46.9	50.1	3.1	0.9	0.1	14	44
Costa Rica	3.1	4.0	4.7	2.1	1.4	29.8	64.4	5.8	0.5	0.1	4	17
Côte d'Ivoire	11.8	16.8	20.2	2.7	1.5	41.5	55.9	2.6	0.7	0.1	17	37
Croatia	4.8	4.4	4.3	-0.6	-0.3	16.2	68.1	15.8	0.2	0.2	12	10
Cuba	10.6	11.3	11.7	0.5	0.3	20.3	69.2	10.4	0.3	0.2	8	13
Czech Republic	10.4	10.2	9.9	-0.1	-0.3	15.5	70.6	13.9	0.2	0.2	11	9
Denmark	5.1	5.4	5.4	0.4	0.1	18.6	66.5	14.9	0.3	0.2	11	12
Dominican Republic	7.1	8.7	10.1	1.6	1.2	32.0	63.5	4.5	0.5	0.1	7	22
Ecuador	10.3	13.0	15.3	1.8	1.4	32.7	62.4	4.9	0.5	0.1	6	23
Egypt, Arab Rep.	52.4	67.6	80.9	1.9	1.5	33.5	62.2	4.3	0.5	0.1	6	24
El Salvador	5.1	6.5	7.9	1.9	1.5	34.7	60.3	5.0	0.6	0.1	6	25
Eritrea	3.1	4.4	5.6	2.6	2.0	44.3	53.0	2.7	0.8	0.1	13	37
Estonia	1.6	1.4	1.3	-1.1	-0.5	16.1	68.6	15.2	0.2	0.2	13	10
Ethiopia	51.2	68.6	87.3	2.3	2.0	45.4	51.8	2.8	0.9	0.1	20	40
Finland	5.0	5.2	5.3	0.3	0.1	17.6	67.0	15.3	0.3	0.2	9	11
France	56.7	59.8	61.8	0.4	0.3	18.6	65.3	16.1	0.3	0.2	9	13
Gabon	1.0	1.3	1.7	2.6	2.2	40.4	54.0	5.5	0.7	0.1	15	35
Gambia, The	0.9	1.4	1.8	3.3	1.9	40.5	56.2	3.2	0.7	0.1	14	36
Georgia	5.5	5.1	4.7	-0.5	-0.7	18.4	67.3	14.3	0.3	0.2	10	8
Germany	79.4	82.5	80.6	0.3	-0.2	14.9	67.8	17.3	0.2	0.3	10	9
Ghana	15.3	20.7	25.8	2.3	1.9	41.9	53.7	4.4	0.8	0.1	13	31
Greece	10.2	11.0	11.0	0.6	-0.0	14.7	66.7	18.7	0.2	0.3	9	9
Guatemala	8.8	12.3	16.3	2.6	2.3	42.5	54.1	3.5	0.8	0.1	7	33
Guinea	5.8	7.9	9.8	2.4	1.8	43.6	53.8	2.5	0.8	0.1	17	38
Guinea-Bissau	1.0	1.5	2.0	2.9	2.6	44.4	52.1	3.4	0.9	0.1	20	49
Haiti	6.5	8.4	10.3	2.0	1.6	39.0	57.5	3.5	0.7	0.1	14	32

# Population dynamics

# 2.1

PEOPLE

	Total population			Average annual population growth rate		Population age composition			Dependency ratio		Crude death rate	Crude birth rate
	millions			%		Ages 0-14	% Ages 15-64	Ages 65+	dependents as proportion of working-age population		per 1,000 people	per 1,000 people
	1990	2003	2015	1990-2003	2003-15	2003	2003	2003	Young 2003	Old 2003	2003	2003
Honduras	4.9	7.0	8.9	2.8	2.0	40.8	55.9	3.3	0.7	0.1	6	30
Hungary	10.4	10.1	9.6	-0.2	-0.5	16.3	69.0	14.7	0.2	0.2	13	10
India	849.5	1,064.4	1,231.6	1.7	1.2	32.4	62.5	5.1	0.5	0.1	8	24
Indonesia	178.2	214.7	246.8	1.4	1.2	29.7	65.4	4.9	0.5	0.1	7	21
Iran, Islamic Rep.	54.4	66.4	77.5	1.5	1.3	29.5	65.8	4.7	0.4	0.1	6	18
Iraq	18.1	24.7	31.1	2.4	1.9	39.4	57.6	3.1	0.7	0.1	8	29
Ireland	3.5	4.0	4.4	1.0	0.8	21.3	67.5	11.2	0.3	0.2	7	16
Israel	4.7	6.7	7.9	2.8	1.4	27.4	63.0	9.7	0.4	0.2	6	20
Italy	56.7	57.6	55.1	0.1	-0.4	14.0	67.0	19.0	0.2	0.3	10	9
Jamaica	2.4	2.6	3.0	0.8	1.0	29.7	63.5	6.9	0.5	0.1	6	19
Japan	123.5	127.6	124.8	0.2	-0.2	14.2	67.2	18.6	0.2	0.3	8	9
Jordan	3.2	5.3	6.8	4.0	2.1	37.4	59.4	3.2	0.6	0.1	4	28
Kazakhstan	16.3	14.9	15.5	-0.7	0.3	24.5	67.4	8.1	0.4	0.1	10	15
Kenya	23.4	31.9	37.5	2.4	1.3	42.1	55.2	2.7	0.8	0.1	17	34
Korea, Dem. Rep.	20.0	22.6	24.0	1.0	0.5	25.7	67.7	6.6	0.4	0.1	11	17
Korea, Rep.	42.9	47.9	50.0	0.9	0.4	20.7	71.7	7.6	0.3	0.1	7	12
Kuwait	2.1	2.4	3.0	0.9	1.9	24.8	73.3	1.9	0.3	0.0	3	20
Kyrgyz Republic	4.4	5.1	5.8	1.0	1.1	31.7	62.2	6.1	0.5	0.1	8	19
Lao PDR	4.1	5.7	7.3	2.4	2.1	41.8	54.7	3.5	0.8	0.1	12	35
Latvia	2.7	2.3	2.1	-1.1	-0.7	15.1	69.3	15.5	0.2	0.2	14	9
Lebanon	3.6	4.5	5.2	1.6	1.2	30.3	63.8	5.9	0.5	0.1	6	19
Lesotho	1.6	1.8	2.0	1.0	0.9	41.4	53.4	5.1	0.8	0.1	24	33
Liberia	2.4	3.4	4.4	2.5	2.2	44.1	53.1	2.8	0.8	0.1	20	43
Libya	4.3	5.6	6.9	2.0	1.7	32.5	63.8	3.7	0.5	0.1	4	27
Lithuania	3.7	3.5	3.3	-0.5	-0.4	17.7	68.2	14.2	0.3	0.2	12	9
Macedonia, FYR	1.9	2.1	2.2	0.6	0.5	21.5	67.8	10.7	0.3	0.2	9	14
Madagascar	11.6	16.9	22.5	2.9	2.4	44.1	52.9	3.0	0.8	0.1	12	38
Malawi	8.5	11.0	13.6	2.0	1.8	44.9	51.8	3.4	0.9	0.1	25	44
Malaysia	18.2	24.8	29.6	2.4	1.5	33.0	62.6	4.4	0.5	0.1	5	21
Mali	8.5	11.7	15.6	2.5	2.4	47.2	50.1	2.8	0.9	0.1	23	48
Mauritania	2.0	2.8	3.6	2.6	1.9	42.6	54.3	3.1	0.8	0.1	15	34
Mauritius	1.1	1.2	1.4	1.1	0.9	25.0	68.6	6.4	0.4	0.1	7	16
Mexico	83.2	102.3	120.6	1.6	1.4	32.3	62.5	5.2	0.5	0.1	5	19
Moldova	4.4	4.2	4.1	-0.2	-0.2	20.4	68.6	11.1	0.3	0.2	13	11
Mongolia	2.1	2.5	2.9	1.3	1.3	31.7	64.2	4.1	0.5	0.1	6	22
Morocco	24.0	30.1	35.4	1.7	1.4	32.9	62.7	4.4	0.5	0.1	6	22
Mozambique	14.2	18.8	22.7	2.2	1.6	42.3	54.1	3.6	0.8	0.1	21	40
Myanmar	40.5	49.4	55.7	1.5	1.0	31.9	63.6	4.5	0.5	0.1	12	23
Namibia	1.4	2.0	2.3	2.8	1.1	41.9	54.3	3.8	0.8	0.1	21	35
Nepal	18.1	24.7	31.1	2.4	1.9	40.1	56.1	3.8	0.7	0.1	10	31
Netherlands	15.0	16.2	16.6	0.6	0.2	18.3	67.7	14.0	0.3	0.2	9	12
New Zealand	3.4	4.0	4.5	1.2	0.9	21.9	66.4	11.7	0.3	0.2	7	14
Nicaragua	3.8	5.5	7.0	2.8	2.0	40.9	56.0	3.1	0.7	0.1	5	29
Niger	7.7	11.8	16.3	3.3	2.7	48.9	48.8	2.3	1.0	0.1	20	48
Nigeria	96.2	136.5	173.8	2.7	2.0	44.1	53.3	2.6	0.8	0.1	18	43
Norway	4.2	4.6	4.7	0.6	0.3	19.7	65.4	14.9	0.3	0.2	9	12
Oman	1.6	2.6	3.4	3.6	2.2	41.3	55.9	2.8	0.7	0.1	3	26
Pakistan	108.0	148.4	192.8	2.4	2.2	40.1	56.6	3.4	0.7	0.1	8	32
Panama	2.4	3.0	3.5	1.7	1.2	30.0	64.2	5.8	0.5	0.1	5	20
Papua New Guinea	4.0	5.5	6.9	2.5	1.8	40.9	56.6	2.5	0.7	0.1	10	33
Paraguay	4.2	5.6	7.2	2.4	2.0	38.4	58.1	3.5	0.7	0.1	5	30
Peru	21.6	27.1	31.6	1.8	1.3	33.0	62.2	4.9	0.5	0.1	6	22
Philippines	61.0	81.5	98.2	2.2	1.6	36.0	60.0	4.0	0.6	0.1	6	26
Poland	38.1	38.2	37.9	0.0	-0.1	17.6	69.9	12.5	0.3	0.2	9	9
Portugal	9.9	10.4	10.5	0.4	0.0	17.3	67.6	15.2	0.3	0.2	10	11
Puerto Rico	3.5	3.9	4.2	0.7	0.7	23.4	66.3	10.3	0.4	0.2	8	15





# 2.1

## Population dynamics

	Total population			Average annual population growth rate		Population age composition			Dependency ratio		Crude death rate	Crude birth rate
	1990	millions 2003	2015	%		Ages 0-14 2003	Ages 15-64 2003	Ages 65+ 2003	dependents as proportion of working- age population		per 1,000 people 2003	per 1,000 people 2003
				1990-2003	2003-15				Young 2003	Old 2003		
Romania	23.2	21.7	21.1	-0.5	-0.3	16.7	69.5	13.9	0.2	0.2	12	10
Russian Federation	148.3	143.4	134.5	-0.3	-0.5	16.3	70.4	13.2	0.2	0.2	15	10
Rwanda	6.9	8.4	10.1	1.5	1.5	45.7	51.3	3.0	0.9	0.1	22	43
Saudi Arabia	15.8	22.5	30.8	2.7	2.6	40.2	56.9	2.9	0.7	0.1	4	31
Senegal	7.3	10.2	13.0	2.6	2.0	43.6	53.7	2.7	0.8	0.1	13	35
Serbia and Montenegro	10.5 <sup>a</sup>	8.1	10.7	0.1 <sup>b</sup>	2.3	19.6	66.4	14.0	0.3	0.2	14	11
Sierra Leone	4.0	5.3	6.7	2.2	1.9	43.6	53.8	2.6	0.8	0.1	25	44
Singapore	3.1	4.3	4.8	2.6	1.1	20.7	71.7	7.6	0.3	0.1	5	11
Slovak Republic	5.3	5.4	5.3	0.2	-0.1	18.2	70.4	11.4	0.3	0.2	10	10
Slovenia	2.0	2.0	2.0	-0.0	-0.1	15.0	70.4	14.6	0.2	0.2	10	9
Somalia	7.2	9.6	14.0	2.3	3.1	47.8	49.8	2.4	1.0	0.1	18	50
South Africa	35.2	45.8	47.2	2.0	0.3	32.0	63.6	4.4	0.5	0.1	20	25
Spain	38.8	41.1	41.5	0.4	0.1	15.0	68.0	17.1	0.2	0.3	9	10
Sri Lanka	16.3	19.2	21.5	1.3	0.9	25.1	68.2	6.7	0.4	0.1	6	19
Sudan	24.9	33.5	42.6	2.3	2.0	39.5	56.9	3.6	0.7	0.1	10	33
Swaziland	0.8	1.1	1.3	2.8	1.1	42.1	55.1	2.8	0.8	0.1	19	35
Sweden	8.6	9.0	9.0	0.3	0.1	17.5	65.0	17.5	0.3	0.3	10	11
Switzerland	6.7	7.4	7.6	0.7	0.2	16.6	67.8	15.6	0.2	0.2	9	10
Syrian Arab Republic	12.1	17.4	22.0	2.8	1.9	38.2	58.7	3.1	0.7	0.1	4	29
Tajikistan	5.3	6.3	7.2	1.3	1.1	36.5	58.8	4.6	0.6	0.1	7	23
Tanzania	25.5	35.9	43.9	2.6	1.7	44.7	52.9	2.4	0.8	0.1	18	38
Thailand	55.6	62.0	66.3	0.8	0.6	22.9	70.5	6.6	0.3	0.1	8	15
Togo	3.5	4.9	6.2	2.6	2.0	43.2	53.6	3.2	0.8	0.1	15	35
Trinidad and Tobago	1.2	1.3	1.4	0.6	0.8	23.7	69.8	6.5	0.3	0.1	7	16
Tunisia	8.2	9.9	11.5	1.5	1.3	27.5	66.5	6.1	0.4	0.1	6	17
Turkey	56.2	70.7	81.2	1.8	1.2	28.3	65.8	5.9	0.4	0.1	7	21
Turkmenistan	3.7	4.9	5.7	2.2	1.3	33.8	61.7	4.5	0.5	0.1	8	22
Uganda	17.4	25.3	35.9	2.9	2.9	49.8	48.4	1.8	1.0	0.0	18	44
Ukraine	51.9	48.4	44.7	-0.5	-0.7	16.0	68.9	15.1	0.2	0.2	15	9
United Arab Emirates	1.8	4.0	3.7	6.3	-0.7	24.8	72.1	3.1	0.3	0.0	4	17
United Kingdom	57.6	59.3	60.0	0.2	0.1	18.2	65.7	16.1	0.3	0.2	10	12
United States	249.6	290.8	318.0	1.2	0.7	21.0	66.6	12.4	0.3	0.2	9	14
Uruguay	3.1	3.4	3.6	0.7	0.6	24.4	63.0	12.6	0.4	0.2	9	16
Uzbekistan	20.5	25.6	30.1	1.7	1.3	33.3	61.9	4.9	0.5	0.1	6	20
Venezuela, RB	19.8	25.7	30.4	2.0	1.4	32.2	63.1	4.7	0.5	0.1	5	23
Vietnam	66.2	81.3	92.4	1.6	1.1	30.6	64.1	5.3	0.5	0.1	6	18
West Bank and Gaza	2.0	3.4	4.9	4.1	3.1	45.1	51.8	3.1	0.9	0.1	4	34
Yemen, Rep.	11.9	19.2	27.3	3.7	2.9	45.2	52.1	2.6	0.9	0.1	10	41
Zambia	7.8	10.4	12.9	2.2	1.8	46.8	50.5	2.7	0.9	0.1	23	38
Zimbabwe	10.2	13.1	14.1	1.9	0.6	43.4	53.5	3.1	0.8	0.1	22	29
<b>World</b>	<b>5,253.4 s</b>	<b>6,272.5 s</b>	<b>7,100.9 s</b>	<b>1.4 w</b>	<b>1.0 w</b>	<b>28.9 w</b>	<b>64.0 w</b>	<b>7.1 w</b>	<b>0.5 w</b>	<b>0.1 w</b>	<b>9 w</b>	<b>21 w</b>
Low income	1,777.6	2,311.9	2,794.9	2.0	1.6	36.9	59.0	4.2	0.6	0.1	11	30
Middle income	2,588.7	2,988.6	3,299.0	1.1	0.8	26.2	66.8	7.0	0.4	0.1	8	17
Lower middle income	2,305.8	2,655.5	2,918.3	1.1	0.8	25.9	67.2	6.9	0.4	0.1	8	17
Upper middle income	282.9	333.1	380.6	1.3	1.1	28.5	64.1	7.4	0.4	0.1	7	18
Low & middle income	4,366.2	5,300.5	6,093.9	1.5	1.2	30.8	63.4	5.8	0.5	0.1	9	23
East Asia & Pacific	1,597.1	1,854.6	2,039.7	1.2	0.8	25.8	67.6	6.6	0.4	0.1	8	17
Europe & Central Asia	466.2	472.2	477.3	0.1	0.1	20.4	68.2	11.4	0.3	0.2	12	13
Latin America & Carib.	434.9	532.7	620.2	1.6	1.3	30.5	63.9	5.6	0.5	0.1	6	21
Middle East & N. Africa	237.1	311.6	382.7	2.1	1.7	34.6	61.4	4.0	0.6	0.1	5	22
South Asia	1,120.4	1,424.7	1,683.3	1.8	1.4	33.8	61.5	4.7	0.5	0.1	9	26
Sub-Saharan Africa	510.4	704.5	890.8	2.5	2.0	43.7	53.3	3.0	0.8	0.1	18	39
High income	887.2	972.1	1,007.0	0.7	0.3	18.2	67.3	14.5	0.3	0.2	9	12
Europe EMU	293.3	306.9	305.9	0.3	-0.0	15.8	67.4	16.8	0.2	0.3	10	10

a. Includes population of Kosovo until 2001. b. Data are for 1990 to 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, 118 (about 78 percent) conducted a census between 1995 and 2004. 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 2003 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 1990 and 2003 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.

## Data sources

The World Bank's population estimates are produced by its Human Development Network and Development Data Group in consultation with its operational staff and country offices. Important inputs to the World Bank's demographic work come from the following sources: census reports and other statistical publications from national statistical offices; Demographic and Health Surveys conducted by national agencies, Macro International, and the U.S. Centers for Disease Control and Prevention; United Nations Statistics Division, Population and Vital Statistics Report (quarterly); United Nations Population Division, World Population Prospects: The 2002 Revision; Eurostat, Demographic Statistics (various years); Centro Latinoamericano de Demografía, Boletín Demográfico (various years); and U.S. Bureau of the Census, International Database.

	Labor force participation rate					Labor force				
	Male		% ages 15–64		Female	Total millions		Average annual growth rate %	Female % of labor force	
	1990	2003	1990	2003		1990	2003		1990	2003
Afghanistan	87.9	..	48.1	..		7.2	..	..	34.0	..
Albania	86.2	85.3	63.2	65.7		1.6	1.6	0.2	40.2	41.5
Algeria	79.5	80.1	20.1	35.1		7.0	11.7	3.9	21.1	29.9
Angola	91.0	89.9	76.1	74.6		4.4	6.1	2.5	46.5	46.2
Argentina	85.5	84.3	33.7	45.4		12.1	15.4	1.8	28.5	35.1
Armenia	79.5	78.1	69.1	71.2		1.7	1.6	-0.4	47.8	48.9
Australia	84.7	82.3	61.9	67.3		8.5	10.1	1.4	41.3	44.3
Austria	80.2	78.1	55.2	56.6		3.6	3.7	0.4	40.7	41.6
Azerbaijan	77.7	77.9	56.4	61.4		3.0	3.9	2.0	43.3	44.6
Bangladesh	89.4	88.6	67.3	68.4		53.6	70.8	2.1	41.1	43.2
Belarus	82.1	81.1	72.6	73.4		5.3	5.4	0.1	48.8	49.0
Belgium	72.4	71.8	47.8	51.8		4.0	4.3	0.4	39.4	41.3
Benin	85.3	82.3	78.6	75.2		2.1	3.1	2.8	48.2	48.1
Bolivia	84.1	83.5	46.3	49.7		2.7	3.7	2.5	36.9	38.1
Bosnia and Herzegovina	79.0	77.8	47.4	49.1		2.0	1.9	-0.2	37.6	38.2
Botswana	84.6	82.6	68.2	65.0		0.5	0.8	2.6	47.4	44.4
Brazil	89.0	87.1	47.6	46.9		65.5	82.3	1.8	34.8	35.5
Bulgaria	77.7	77.3	72.2	70.6		4.4	4.1	-0.7	48.0	47.7
Burkina Faso	91.7	88.7	79.3	77.2		4.5	5.7	1.8	48.8	47.9
Burundi	94.4	93.4	86.5	85.0		3.0	3.8	2.0	49.0	48.6
Cambodia	86.3	84.3	85.2	83.9		4.6	6.7	2.8	53.5	51.9
Cameroon	87.8	85.6	48.5	51.7		4.7	6.7	2.8	36.9	38.3
Canada	84.9	82.4	68.2	72.0		14.7	17.0	1.1	44.0	46.2
Central African Republic	88.8	86.0	70.3	67.3		1.4	1.8	1.9	47.1	46.4
Chad	89.8	88.6	69.3	70.5		2.7	3.9	2.8	44.2	45.1
Chile	82.1	81.8	35.0	44.7		5.0	6.6	2.2	29.9	35.1
China	89.6	88.8	79.9	79.2		670.7	772.9	1.1	45.0	45.0
Hong Kong, China	86.2	85.6	54.7	57.7		2.9	3.7	1.9	36.8	39.5
Colombia	83.1	83.3	45.2	52.6		13.9	19.7	2.7	36.0	39.7
Congo, Dem. Rep.	86.1	84.3	64.1	62.2		15.9	21.5	2.3	43.9	43.3
Congo, Rep.	84.5	83.1	58.4	58.7		1.0	1.5	2.9	43.2	43.2
Costa Rica	87.2	83.9	35.5	41.4		1.2	1.6	2.7	28.1	32.6
Côte d'Ivoire	90.1	87.4	44.2	45.6		4.6	6.9	3.2	31.4	33.2
Croatia	76.8	75.4	56.4	60.2		2.2	2.1	-0.5	42.7	44.7
Cuba	82.7	84.9	47.3	57.8		4.8	5.7	1.3	36.0	40.1
Czech Republic	82.2	82.3	74.1	74.0		5.5	5.7	0.3	47.4	47.0
Denmark	87.3	84.0	77.5	76.5		2.9	2.9	0.0	46.1	46.7
Dominican Republic	86.3	86.1	35.5	44.2		2.8	3.9	2.6	27.1	32.0
Ecuador	85.9	85.6	28.9	36.3		3.6	5.3	2.9	24.7	29.2
Egypt, Arab Rep.	83.4	82.3	32.0	38.9		18.3	26.7	2.9	27.1	31.4
El Salvador	87.9	85.3	39.1	51.2		1.9	2.8	2.9	31.3	38.5
Eritrea	87.7	86.5	77.6	76.4		1.6	2.2	2.5	47.5	47.4
Estonia	83.1	81.6	75.7	74.0		0.9	0.8	-0.9	49.4	49.4
Ethiopia	86.5	85.2	59.4	58.5		23.1	30.1	2.0	42.0	41.4
Finland	79.4	75.1	72.4	71.4		2.6	2.6	0.0	47.2	48.2
France	74.6	74.9	57.0	62.4		24.7	27.0	0.7	43.4	45.5
Gabon	87.1	85.1	66.4	66.9		0.5	0.6	2.0	44.2	44.5
Gambia, The	91.7	90.8	69.8	70.6		0.5	0.7	3.4	44.7	45.0
Georgia	80.2	79.5	63.6	67.0		2.7	2.6	-0.1	46.1	46.9
Germany	83.0	80.6	61.2	62.9		39.9	40.5	0.1	41.8	42.6
Ghana	82.5	82.3	82.4	80.8		7.1	10.3	2.9	50.9	50.1
Greece	77.8	78.3	42.5	49.2		4.2	4.8	1.1	35.4	38.3
Guatemala	91.0	86.8	29.0	40.8		3.0	4.6	3.3	23.4	31.3
Guinea	88.9	87.1	81.6	79.6		2.9	3.9	2.4	47.4	47.1
Guinea-Bissau	91.2	91.2	59.6	59.3		0.5	0.7	2.7	40.2	40.7
Haiti	82.8	80.9	59.2	57.5		2.7	3.7	2.3	43.3	43.4

# Labor force structure

# 2.2

PEOPLE

	Labor force participation rate					Labor force				
	1990	% ages 15-64		1990	2003	1990	2003	Average annual growth rate % 1990-2003	Female % of labor force	
		Male	Female						1990	2003
Honduras	88.5	83.1	34.9	44.3	1.7	2.6	3.4	27.7	34.5	
Hungary	78.4	77.9	59.3	61.0	4.7	4.8	0.2	44.0	44.6	
India	87.9	86.6	42.4	45.2	360.6	473.3	2.1	31.2	32.6	
Indonesia	84.4	84.7	52.1	59.5	78.3	106.6	2.4	38.1	41.2	
Iran, Islamic Rep.	83.1	80.2	22.2	33.8	16.5	24.6	3.1	20.3	29.4	
Iraq	76.3	76.3	15.1	20.9	4.6	7.0	3.2	16.3	20.9	
Ireland	79.7	79.7	38.3	45.5	1.3	1.7	2.1	31.6	35.9	
Israel	79.5	78.9	48.9	58.0	1.8	2.9	3.6	37.9	42.2	
Italy	78.3	78.4	45.0	50.4	24.4	25.4	0.3	36.7	39.0	
Jamaica	83.4	81.6	72.1	73.0	1.1	1.3	1.3	47.0	47.6	
Japan	84.2	84.9	56.2	62.9	64.1	68.1	0.5	39.8	41.8	
Jordan	75.9	79.7	17.8	30.3	0.8	1.7	6.0	17.1	25.5	
Kazakhstan	81.7	80.0	68.0	69.1	7.7	7.5	-0.2	46.2	47.3	
Kenya	90.8	88.9	76.5	76.7	11.1	16.6	3.1	46.3	46.2	
Korea, Dem. Rep.	82.2	82.7	65.3	64.8	10.3	11.6	0.9	43.5	43.3	
Korea, Rep.	77.4	79.9	51.1	59.7	19.6	25.0	1.8	39.3	40.7	
Kuwait	85.6	79.6	38.9	42.9	0.9	1.1	1.4	22.8	23.9	
Kyrgyz Republic	78.0	77.9	65.0	68.0	1.8	2.3	1.8	46.2	47.3	
Lao PDR	91.2	90.0	76.9	77.9	2.0	2.9	2.6	46.6	46.7	
Latvia	83.5	82.4	75.6	74.6	1.5	1.3	-0.9	49.6	49.6	
Lebanon	77.6	80.9	26.5	33.8	1.1	1.7	3.0	26.6	30.1	
Lesotho	86.8	85.3	48.1	49.9	0.7	0.8	1.2	36.2	38.2	
Liberia	82.5	82.5	55.5	55.3	0.9	1.3	3.0	39.5	39.5	
Libya	82.4	78.1	21.4	27.9	1.3	1.9	3.2	18.4	24.7	
Lithuania	81.7	81.4	70.6	71.1	1.9	1.8	-0.3	48.0	48.0	
Macedonia, FYR	77.8	75.9	52.6	57.3	0.8	1.0	1.0	40.1	42.6	
Madagascar	90.4	89.3	71.6	70.6	5.7	8.1	2.8	44.7	44.5	
Malawi	88.3	86.2	80.1	78.0	4.2	5.3	1.7	49.5	48.7	
Malaysia	84.0	81.4	46.4	51.9	7.4	10.7	2.9	35.0	38.4	
Mali	90.8	89.3	75.0	73.2	4.3	5.6	2.1	46.4	46.0	
Mauritania	88.7	87.3	66.5	65.0	0.9	1.3	2.5	44.3	43.8	
Mauritius	84.9	83.5	37.2	42.2	0.4	0.5	1.7	30.3	33.4	
Mexico	85.1	85.3	35.5	43.2	30.7	43.6	2.7	30.0	34.4	
Moldova	81.5	79.5	70.4	69.9	2.1	2.2	0.3	48.6	48.5	
Mongolia	87.5	86.2	75.6	77.6	1.0	1.3	2.4	46.3	45.8	
Morocco	83.3	82.3	40.5	44.6	8.9	12.2	2.4	34.5	35.2	
Mozambique	91.5	90.1	84.3	83.1	7.5	9.8	2.0	48.4	49.0	
Myanmar	90.1	89.3	68.5	68.5	20.9	27.0	2.0	43.3	43.6	
Namibia	83.5	81.8	55.9	56.4	0.6	0.8	2.6	41.6	41.7	
Nepal	89.1	86.5	57.4	58.4	8.8	11.7	2.2	38.5	39.5	
Netherlands	80.1	77.7	52.9	56.4	6.9	7.5	0.6	39.0	41.2	
New Zealand	82.7	81.5	62.6	68.3	1.7	2.0	1.5	43.0	46.1	
Nicaragua	88.3	83.8	42.0	51.6	1.4	2.2	3.5	32.1	38.2	
Niger	94.2	92.4	71.9	70.8	3.6	5.4	3.1	43.3	43.4	
Nigeria	88.1	85.6	48.1	49.4	38.0	54.5	2.8	34.6	36.5	
Norway	81.2	80.6	68.9	73.8	2.1	2.4	0.8	44.9	46.8	
Oman	83.6	77.9	13.4	23.3	0.5	0.8	4.0	10.7	20.1	
Pakistan	87.9	85.6	29.5	39.3	39.4	55.7	2.7	23.6	30.3	
Panama	82.7	81.0	41.4	47.9	0.9	1.3	2.4	32.4	36.6	
Papua New Guinea	89.2	86.9	68.6	69.2	1.9	2.7	2.6	41.2	42.6	
Paraguay	89.5	87.5	35.6	39.9	1.5	2.2	2.8	27.9	30.7	
Peru	81.1	81.7	30.6	38.3	7.3	10.7	2.9	27.5	31.8	
Philippines	83.0	82.6	48.1	52.0	24.0	34.6	2.8	36.5	38.3	
Poland	80.1	77.7	65.1	66.2	18.7	20.0	0.5	45.5	46.5	
Portugal	82.8	82.2	58.7	63.7	4.8	5.3	0.7	42.7	44.1	
Puerto Rico	73.1	73.9	35.3	42.8	1.2	1.5	1.6	34.0	38.3	



	Labor force participation rate					Labor force				
	Male		% ages 15–64		Female		Total millions	Average annual growth rate %	Female % of labor force	
	1990	2003	1990	2003	1990	2003			1990	2003
Romania	76.7	76.8	60.5	61.2	10.6	10.5	-0.1	44.3	44.8	
Russian Federation	81.6	79.8	71.7	72.3	77.2	78.4	0.1	48.4	49.1	
Rwanda	94.6	94.4	86.2	85.1	3.6	4.6	1.7	48.9	50.2	
Saudi Arabia	85.9	78.8	15.7	25.2	5.0	6.9	2.5	11.4	20.2	
Senegal	87.8	86.6	62.9	63.6	3.3	4.6	2.6	42.4	43.2	
Serbia and Montenegro	77.0	76.4	54.9	58.9	4.9 <sup>a</sup>	3.9	0.4 <sup>b</sup>	41.7	43.1	
Sierra Leone	85.8	84.3	43.9	47.2	1.5	2.0	2.1	35.5	37.2	
Singapore	83.8	81.7	54.4	54.5	1.6	2.1	2.3	38.9	38.6	
Slovak Republic	82.5	82.0	74.1	74.0	2.7	3.0	0.8	47.7	47.6	
Slovenia	77.1	75.5	65.8	66.0	1.0	1.0	0.0	46.3	46.4	
Somalia	88.3	87.0	65.4	64.4	3.1	4.1	2.0	43.3	43.4	
South Africa	82.9	82.0	49.2	50.3	13.7	19.1	2.6	37.5	38.4	
Spain	79.0	79.8	41.5	48.8	15.8	18.2	1.1	34.6	37.8	
Sri Lanka	83.7	82.6	42.8	47.8	6.8	8.8	2.0	31.4	36.1	
Sudan	86.8	86.2	31.2	37.1	9.4	13.4	2.7	27.1	30.3	
Swaziland	83.8	82.3	41.3	44.7	0.3	0.4	3.1	34.0	36.4	
Sweden	84.9	83.5	80.6	80.9	4.6	4.9	0.4	47.7	48.0	
Switzerland	90.9	89.9	60.7	65.1	3.6	3.9	0.7	39.2	40.7	
Syrian Arab Republic	80.7	80.7	24.5	31.7	3.4	5.8	4.1	24.4	27.9	
Tajikistan	77.6	77.3	56.2	64.1	1.9	2.7	2.6	42.2	45.5	
Tanzania	89.1	88.1	84.6	82.4	13.1	18.6	2.7	49.7	48.9	
Thailand	89.5	89.7	78.5	77.7	31.9	37.0	1.1	47.2	47.0	
Togo	88.1	87.2	54.4	54.9	1.4	2.1	2.7	39.9	40.0	
Trinidad and Tobago	82.3	81.3	43.0	50.1	0.5	0.6	2.0	34.0	38.4	
Tunisia	83.0	83.0	34.5	41.3	2.9	4.2	2.9	29.1	32.7	
Turkey	85.6	84.6	45.0	54.0	24.3	33.7	2.5	34.6	38.9	
Turkmenistan	81.2	80.4	64.2	67.3	1.5	2.2	2.9	44.7	46.0	
Uganda	92.7	90.8	82.8	80.9	8.8	12.3	2.5	47.6	47.1	
Ukraine	79.7	78.7	69.8	69.8	26.0	25.2	-0.3	48.9	48.8	
United Arab Emirates	91.9	88.2	30.1	34.6	0.9	2.1	6.4	10.7	14.5	
United Kingdom	86.2	83.1	63.8	67.2	28.6	29.8	0.3	42.4	44.1	
United States	82.6	80.7	66.5	70.2	125.8	149.4	1.3	44.3	46.6	
Uruguay	83.7	82.3	52.4	59.6	1.4	1.5	0.9	39.3	42.6	
Uzbekistan	77.9	78.1	64.2	68.2	8.1	11.6	2.8	45.6	46.8	
Venezuela, RB	83.9	83.0	40.0	47.8	7.4	10.8	3.0	31.3	35.7	
Vietnam	88.1	83.5	81.0	77.3	33.6	43.3	1.9	48.3	48.6	
West Bank and Gaza	67.4	72.0	6.5	11.1	0.4	0.7	5.0	..	12.8	
Yemen, Rep.	82.8	83.5	29.4	32.2	3.6	5.8	3.7	29.7	28.9	
Zambia	88.4	87.4	67.2	66.2	3.4	4.4	2.1	43.7	43.0	
Zimbabwe	86.7	85.2	67.1	65.7	4.6	5.9	1.8	44.0	44.0	
<b>World</b>	<b>86.1 w</b>	<b>85.2 w</b>	<b>59.2 w</b>	<b>60.9 w</b>	<b>2,483.7 t</b>	<b>3,062.5 t</b>	<b>1.6 w</b>	<b>39.9 w</b>	<b>40.8 w</b>	
Low income	87.5	86.3	51.8	54.6	775.8	1,040.0	2.3	36.4	37.6	
Middle income	86.6	85.8	64.7	65.1	1,287.4	1,549.4	1.4	41.5	42.2	
Lower middle income	87.0	86.2	67.2	67.2	1,173.5	1,404.2	1.4	42.2	42.7	
Upper middle income	83.3	82.4	44.8	49.4	114.0	145.2	1.9	34.8	37.7	
Low & middle income	87.0	86.0	59.3	60.4	2,063.3	2,589.4	1.7	39.6	40.4	
East Asia & Pacific	88.6	87.9	75.0	75.0	887.4	1,058.3	1.4	44.2	44.6	
Europe & Central Asia	80.9	79.9	65.4	66.8	225.8	241.8	0.5	45.7	46.6	
Latin America & Carib.	86.2	85.4	41.4	46.3	173.6	232.8	2.3	32.5	35.7	
Middle East & N. Africa	82.0	80.8	26.3	34.5	74.2	111.6	3.1	23.8	29.2	
South Asia	88.0	86.7	43.9	47.3	476.7	632.6	2.2	31.9	33.8	
Sub-Saharan Africa	88.1	86.6	62.2	62.3	225.6	312.3	2.5	42.0	42.1	
High income	81.9	80.9	58.9	63.7	420.4	473.1	0.9	41.5	43.3	
Europe EMU	79.1	78.5	52.8	57.1	132.3	141.1	0.5	39.9	41.5	

a. Includes population of Kosovo until 2001. b Data are for 1990 to 2001.

## 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 both concepts and methodologies. The single most important contributor to data comparability is the nature of the data source. Labor force data obtained from population censuses are often based on a limited number of questions on the economic characteristics of individuals, with little scope to probe. The resulting data are often contrary to labor force survey data, which themselves may vary from economy to economy, depending on their scope and coverage. Establishment censuses and surveys on the other hand only provide data on the employed population, leaving out unemployed workers, workers in small establishments, and workers in the informal sector (ILO, Key Indicators of the Labour Market 2001–2002).

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.

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. 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.

## Definitions

- Labor force participation rate is the proportion of the population ages 15–64 that is economically active: all people who supply labor for the production of goods and services during a specified period.
- Total labor force comprises people who meet the ILO definition of the economically active population. It includes both the employed and the unemployed. While national practices vary in the treatment of such groups as the armed forces and seasonal or part-time workers, the labor force generally includes the armed forces, the unemployed, and first-time job-seekers, but excludes homemakers and other unpaid caregivers and workers in the informal sector.
- Average annual growth rate of the labor force is calculated using the exponential endpoint method (see Statistical methods for more information).
- Females as a percentage of the labor force show the extent to which women are active in the labor force.

## Data sources

The labor force participation rates are from the ILO database Estimates and Projections of the Economically Active Population, 1950–2010, Fourth edition. The ILO publishes estimates of the economically active population in its Yearbook of Labour Statistics.



	Agriculture <sup>a</sup>				Industry <sup>a</sup>				Services <sup>a</sup>			
	Male % of male employment		Female % of female employment		Male % of male employment		Female % of female employment		Male % of male employment		Female % of female employment	
	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>
Afghanistan	63	..	85	..	10	..	13	..	28	..	3	..
Albania	..	..	..	..	..	..	..	..	..	..	..	..
Algeria	18	..	57	..	38	..	7	..	45	..	36	..
Angola	65	..	86	..	14	..	2	..	21	..	13	..
Argentina	0 <sup>c</sup>	1	0 <sup>c</sup>	0 <sup>c</sup>	40	30	18	12	59	69	81	87
Armenia	..	..	..	..	..	..	..	..	..	..	..	..
Australia	6	6	4	3	32	30	12	10	62	64	85	87
Austria	..	5	..	6	..	43	..	14	..	52	..	80
Azerbaijan	..	37	..	43	..	14	..	7	..	49	..	50
Bangladesh	54	53	85	77	16	11	9	9	26	30	2	12
Belarus	..	..	..	..	..	..	..	..	..	..	..	..
Belgium	3	..	2	..	38	..	13	..	57	..	84	..
Benin	62	..	65	..	12	..	4	..	27	..	30	..
Bolivia	3	6	1	3	42	39	17	14	55	55	82	82
Bosnia and Herzegovina	9	..	16	..	54	..	37	..	37	..	48	..
Botswana	..	22	..	17	..	26	..	14	..	51	..	67
Brazil	31	24	25	16	27	27	10	10	43	49	65	74
Bulgaria	..	..	..	..	..	..	..	..	..	..	..	..
Burkina Faso	91	..	94	..	2	..	2	..	7	..	5	..
Burundi	..	..	..	..	..	..	..	..	..	..	..	..
Cambodia	..	..	..	..	..	..	..	..	..	..	..	..
Cameroon	62	..	83	..	12	..	3	..	26	..	14	..
Canada	6	4	3	2	31	33	11	11	63	64	86	87
Central African Republic	74	..	87	..	6	..	0	..	20	..	13	..
Chad	77	..	91	..	7	..	1	..	16	..	8	..
Chile	24	18	6	5	32	29	15	13	45	53	79	83
China	..	..	..	..	..	..	..	..	..	..	..	..
Hong Kong, China	1	0 <sup>c</sup>	0 <sup>c</sup>	0 <sup>c</sup>	37	27	27	10	63	73	73	90
Colombia	2	33	1	7	35	19	25	17	63	48	74	76
Congo, Dem. Rep.	58	..	81	..	20	..	5	..	23	..	14	..
Congo, Rep.	33	..	69	..	23	..	4	..	44	..	27	..
Costa Rica	32	22	5	4	27	27	25	15	41	51	69	80
Côte d'Ivoire	54	..	72	..	12	..	6	..	34	..	22	..
Croatia	..	16	..	15	..	37	..	21	..	47	..	63
Cuba	24	..	8	..	36	..	21	..	41	..	71	..
Czech Republic	9	6	7	3	55	50	33	28	36	44	61	68
Denmark	..	5	..	2	..	36	..	14	..	59	..	85
Dominican Republic	26	21	3	2	23	26	21	17	52	53	76	81
Ecuador	10	10	2	4	29	30	17	16	62	60	81	79
Egypt, Arab Rep.	35	27	52	39	25	25	10	7	41	48	37	54
El Salvador	48	34	15	4	23	25	23	22	29	42	63	74
Eritrea	77	..	85	..	8	..	2	..	16	..	13	..
Estonia	23	10	13	4	42	42	30	23	36	48	57	73
Ethiopia	..	..	..	..	..	..	..	..	..	..	..	..
Finland	12	7	6	4	39	40	15	14	49	53	78	82
France	2	2	1	1	40	34	17	13	58	64	83	86
Gabon	46	..	59	..	21	..	10	..	33	..	32	..
Gambia, The	74	..	92	..	12	..	2	..	14	..	6	..
Georgia	..	53	..	53	..	12	..	6	..	35	..	41
Germany	4	3	4	2	51	44	24	18	45	52	72	80
Ghana	66	..	59	..	10	..	10	..	23	..	32	..
Greece	20	15	26	18	32	30	17	12	48	56	56	70
Guatemala	..	50	..	18	..	18	..	23	..	27	..	56
Guinea	83	..	92	..	3	..	1	..	15	..	7	..
Guinea-Bissau	78	..	96	..	3	..	1	..	19	..	3	..
Haiti	..	..	..	..	..	..	..	..	..	..	..	..

# Employment by economic activity

	Agriculture <sup>a</sup>				Industry <sup>a</sup>				Services <sup>a</sup>			
	Male % of male employment		Female % of female employment		Male % of male employment		Female % of female employment		Male % of male employment		Female % of female employment	
	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>
Honduras	53	..	6	..	18	..	25	..	29	..	69	..
Hungary	15	9	8	4	42	42	29	26	44	49	64	71
India	..	..	..	..	..	..	..	..	..	..	..	..
Indonesia	54	..	57	..	15	..	13	..	31	..	31	..
Iran, Islamic Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Iraq	12	..	39	..	19	..	9	..	69	..	52	..
Ireland	19	11	3	2	33	39	18	14	48	50	78	83
Israel	5	3	2	1	38	34	15	12	57	62	83	86
Italy	8	6	9	5	38	39	22	20	54	55	70	75
Jamaica	36	..	16	..	25	..	12	..	39	..	72	..
Japan	6	5	7	5	40	37	27	21	54	57	65	73
Jordan	..	..	..	..	..	..	..	..	..	..	..	..
Kazakhstan	..	..	..	..	..	..	..	..	..	..	..	..
Kenya	19	..	20	..	23	..	9	..	58	..	71	..
Korea, Dem. Rep.	35	..	42	..	38	..	23	..	27	..	35	..
Korea, Rep.	14	9	18	12	40	34	28	19	46	57	54	70
Kuwait	1	..	1	..	32	..	2	..	67	..	98	..
Kyrgyz Republic	..	..	..	..	..	..	..	..	..	..	..	..
Lao PDR	76	..	81	..	7	..	5	..	17	..	14	..
Latvia	25	18	14	12	37	35	26	16	38	47	59	72
Lebanon	6	..	10	..	34	..	22	..	60	..	68	..
Lesotho	29	..	59	..	41	..	5	..	30	..	36	..
Liberia	65	..	84	..	9	..	1	..	26	..	16	..
Libya	7	..	28	..	27	..	5	..	66	..	68	..
Lithuania	..	20	..	12	..	34	..	21	..	45	..	67
Macedonia, FYR	..	..	..	..	..	..	..	..	..	..	..	..
Madagascar	70	..	88	..	10	..	3	..	20	..	9	..
Malawi	..	..	..	..	..	..	..	..	..	..	..	..
Malaysia	23	21	20	14	31	34	32	29	46	45	48	57
Mali	83	..	89	..	2	..	2	..	15	..	9	..
Mauritania	49	..	63	..	16	..	4	..	35	..	34	..
Mauritius	17	..	11	..	32	..	64	..	48	..	24	..
Mexico	33	24	10	6	25	28	18	22	43	48	72	72
Moldova	..	52	..	50	..	18	..	10	..	31	..	40
Mongolia	..	..	..	..	..	..	..	..	..	..	..	..
Morocco	4	..	3	..	33	..	46	..	63	..	51	..
Mozambique	70	..	96	..	15	..	1	..	15	..	3	..
Myanmar	..	..	..	..	..	..	..	..	..	..	..	..
Namibia	46	33	67	29	21	17	12	7	33	49	21	63
Nepal	..	..	..	..	..	..	..	..	..	..	..	..
Netherlands	..	4	..	2	..	31	..	9	..	64	..	86
New Zealand	13	12	8	6	31	32	13	12	56	56	80	82
Nicaragua	..	..	..	..	..	..	..	..	..	..	..	..
Niger	..	..	..	..	..	..	..	..	..	..	..	..
Nigeria	..	..	..	..	..	..	..	..	..	..	..	..
Norway	8	6	3	2	35	33	10	9	57	58	86	88
Oman	48	..	19	..	23	..	35	..	30	..	46	..
Pakistan	45	44	69	73	20	20	15	9	35	36	16	18
Panama	35	29	3	6	20	20	11	10	45	51	85	85
Papua New Guinea	72	..	89	..	9	..	3	..	19	..	8	..
Paraguay	3	39	0 <sup>c</sup>	20	33	21	19	10	64	40	80	69
Peru	1	11	0 <sup>c</sup>	6	30	24	13	10	69	65	87	84
Philippines	53	45	32	25	17	18	14	12	29	37	55	63
Poland	..	19	..	19	..	40	..	18	..	40	..	63
Portugal	11	12	13	14	40	44	24	23	49	44	63	63
Puerto Rico	5	3	0 <sup>c</sup>	0 <sup>c</sup>	27	27	19	14	67	69	80	86



# 2.3 | Employment by economic activity

	Agriculture <sup>a</sup>				Industry <sup>a</sup>				Services <sup>a</sup>			
	Male % of male employment		Female % of female employment		Male % of male employment		Female % of female employment		Male % of male employment		Female % of female employment	
	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>	1990-92 <sup>b</sup>	2000-02 <sup>b</sup>
Romania	29	40	38	45	44	30	30	22	28	30	33	33
Russian Federation	..	..	..	..	..	..	..	..	..	..	..	..
Rwanda	86	..	98	..	6	..	1	..	8	..	2	..
Saudi Arabia	20	..	12	..	21	..	6	..	59	..	82	..
Senegal	70	..	86	..	10	..	4	..	20	..	11	..
Serbia and Montenegro	..	..	..	..	..	..	..	..	..	..	..	..
Sierra Leone	60	..	81	..	22	..	4	..	18	..	16	..
Singapore	1	0 <sup>c</sup>	0 <sup>c</sup>	0 <sup>c</sup>	36	31	32	18	63	69	68	81
Slovak Republic	..	8	..	4	..	48	..	26	..	44	..	71
Slovenia	..	10	..	10	..	46	..	29	..	43	..	61
Somalia	66	..	87	..	13	..	2	..	21	..	11	..
South Africa	..	..	..	..	..	..	..	..	..	..	..	..
Spain	11	8	8	5	41	42	16	15	48	51	76	81
Sri Lanka	..	..	..	..	..	..	..	..	..	..	..	..
Sudan	64	..	84	..	10	..	5	..	26	..	11	..
Swaziland	..	..	..	..	..	..	..	..	..	..	..	..
Sweden	5	3	2	1	40	36	12	11	55	61	86	88
Switzerland	5	5	4	3	39	36	16	13	56	59	80	84
Syrian Arab Republic	..	..	..	..	..	..	..	..	..	..	..	..
Tajikistan	..	..	..	..	..	..	..	..	..	..	..	..
Tanzania	78	..	90	..	7	..	1	..	15	..	8	..
Thailand	60	50	62	48	18	20	13	17	22	30	25	35
Togo	66	..	65	..	12	..	7	..	22	..	29	..
Trinidad and Tobago	15	..	6	..	34	..	14	..	51	..	80	..
Tunisia	..	..	..	..	..	..	..	..	..	..	..	..
Turkey	33	24	72	56	26	28	11	15	41	48	17	29
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	91	..	91	..	4	..	6	..	5	..	3	..
Ukraine	..	22	..	17	..	39	..	22	..	33	..	55
United Arab Emirates	9	9	0	0 <sup>c</sup>	30	36	3	14	61	55	97	86
United Kingdom	1	2	1	1	34	36	15	11	45	62	75	88
United States	4	3	1	1	33	32	14	12	62	65	85	87
Uruguay	7	6	1	2	36	32	21	14	57	62	78	85
Uzbekistan	..	..	..	..	..	..	..	..	..	..	..	..
Venezuela, RB	17	15	2	2	32	28	16	12	52	57	82	86
Vietnam	..	..	..	..	..	..	..	..	..	..	..	..
West Bank and Gaza	20	9	20	26	43	32	30	11	37	58	50	62
Yemen, Rep.	50	..	88	..	22	..	6	..	29	..	7	..
Zambia	68	..	83	..	13	..	3	..	19	..	14	..
Zimbabwe	..	..	..	..	..	..	..	..	..	..	..	..
<b>World</b>	<b>.. W</b>	<b>.. W</b>	<b>.. W</b>	<b>.. W</b>	<b>.. W</b>	<b>.. W</b>	<b>.. W</b>	<b>.. W</b>	<b>.. W</b>	<b>.. W</b>	<b>.. W</b>	<b>.. W</b>
Low income	..	..	..	..	..	..	..	..	..	..	..	..
Middle income	..	..	..	..	..	..	..	..	..	..	..	..
Lower middle income	..	..	..	..	..	..	..	..	..	..	..	..
Upper middle income	22	17	8	8	32	32	22	19	46	51	70	73
Low & middle income	..	..	..	..	..	..	..	..	..	..	..	..
East Asia & Pacific	..	..	..	..	..	..	..	..	..	..	..	..
Europe & Central Asia	..	..	..	..	..	..	..	..	..	..	..	..
Latin America & Carib.	23	21	13	9	29	27	15	14	48	52	71	76
Middle East & N. Africa	23	..	39	..	27	..	19	..	50	..	41	..
South Asia	..	..	..	..	..	..	..	..	..	..	..	..
Sub-Saharan Africa	..	..	..	..	..	..	..	..	..	..	..	..
High income	6	4	4	3	38	35	19	15	55	60	76	82
Europe EMU	7	5	6	4	43	40	20	16	51	55	74	80

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

## 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.

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 wealth within the world remains strongly correlated with employment by economic activity. The wealthier economies are those with the largest share of total employment in services, whereas the poorer economies are largely agriculture-based.

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.

## 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 labor force		Female labor force		Total labor force		% of total unemployment			% of total unemployment		
	1990-92 <sup>a</sup>	2000-02 <sup>a</sup>	1990-92 <sup>a</sup>	2000-02 <sup>a</sup>	1990-92 <sup>a</sup>	2000-02 <sup>a</sup>	Male 2000-02 <sup>a</sup>	Female 2000-02 <sup>a</sup>	Total 2000-02 <sup>a</sup>	Primary 1999-2001 <sup>a</sup>	Secondary 1999-2001 <sup>a</sup>	Tertiary 1999-2001 <sup>a</sup>
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..
Albania	24.8	13.6	28.3	19.1	26.5	15.8	..	..	..	..	..	..
Algeria	24.2	..	20.3	..	23.0	27.3	..	..	..	..	..	..
Angola	..	..	..	..	..	..	..	..	..	..	..	..
Argentina	6.4	20.2	7.0	18.8	6.7	19.6	..	..	..	..	..	..
Armenia	1.3	6.1	2.4	13.1	1.8	9.4	72.2	70.8	71.6	..	..	..
Australia	11.3	6.2	9.5	5.8	10.5	6.0	25.9	17.1	22.1	54.3	31.5	14.0
Austria	3.5	4.1	3.8	3.9	3.7	4.0	25.8	24.2	25.1	36.0	57.6	6.4
Azerbaijan	0.1	1.2	0.2	1.5	0.2	1.3	..	..	..	4.5	35.4	60.1
Bangladesh	2.0	3.2	1.9	3.3	1.9	3.3	..	..	..	54.3	22.7	8.4
Belarus	0.2	2.3	0.8	3.5	0.5	3.0	..	..	..	7.9	15.3	76.9
Belgium	5.7	6.2	10.7	7.8	7.7	6.9	45.8	53.3	49.4	50.0	34.9	15.1
Benin	..	..	..	..	..	..	..	..	..	..	..	..
Bolivia	5.5	4.5	5.6	6.2	5.5	5.2	..	..	..	60.2	32.5	4.4
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..	..	..
Botswana	..	14.7	..	17.2	..	15.8	..	..	..	..	..	..
Brazil	5.6	7.5	8.0	11.9	6.5	9.4	..	..	..	26.1	20.2	2.5
Bulgaria	..	18.3	..	16.9	15.3	17.6	..	..	..	36.7	53.0	10.3
Burkina Faso	..	..	..	..	..	..	..	..	..	46.8	19.3	5.6
Burundi	..	..	..	..	..	..	..	..	..	..	..	..
Cambodia	..	1.5	..	2.2	..	1.8	..	..	..	..	..	..
Cameroon	..	..	..	..	..	..	..	..	..	..	..	..
Canada	12.0	8.1	10.1	7.1	11.2	7.7	9.9	8.4	9.3	30.7	30.3	39.0
Central African Republic	..	..	..	..	..	..	..	..	..	..	..	..
Chad	..	..	..	..	..	..	..	..	..	..	..	..
Chile	4.1	7.5	5.6	8.5	4.4	7.8	..	..	..	22.7	54.9	21.6
China	..	..	..	..	2.3	4.0	..	..	..	..	..	..
Hong Kong, China	2.0	8.4	1.9	6.0	2.0	7.3	..	..	..	..	..	..
Colombia	6.5	11.6	12.6	..	9.2	..	..	..	..	22.8	57.2	17.2
Congo, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Congo, Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Costa Rica	3.5	5.6	5.4	7.9	4.1	6.4	8.9	13.3	10.9	71.6	15.2	10.0
Côte d'Ivoire	..	..	..	..	..	..	..	..	..	..	..	..
Croatia	..	13.4	..	16.6	15.3	14.8	..	..	56.4	19.1	71.3	9.1
Cuba	..	..	..	..	4.6	3.3	..	..	..	..	..	..
Czech Republic	2.2	5.9	3.0	9.0	2.6	7.3	50.2	51.0	50.6	27.3	69.1	3.6
Denmark	8.3	4.2	9.9	4.3	9.0	4.3	17.1	22.1	19.5	35.1	44.9	20.0
Dominican Republic	11.7	9.4	34.9	26.0	20.3	15.6	2.2	1.3	1.6	..	..	..
Ecuador	6.0	6.0	13.2	14.0	8.9	9.3	..	..	..	26.8	50.8	20.2
Egypt, Arab Rep.	6.4	5.1	17.0	22.7	9.0	9.0	..	..	..	..	..	..
El Salvador	8.4	8.1	7.2	3.5	7.9	6.2	..	..	..	..	..	..
Eritrea	..	..	..	..	..	..	..	..	..	..	..	..
Estonia	3.9	10.8	3.5	9.7	3.7	10.3	..	..	..	19.3	62.7	18.1
Ethiopia	..	..	..	..	..	..	..	..	..	26.9	61.3	8.1
Finland	13.7	9.0	9.7	9.1	11.8	9.0	30.0	22.6	26.2	38.2	45.8	16.0
France	7.9	7.9	12.7	10.1	10.0	8.9	30.2	33.1	31.7	..	..	..
Gabon	..	..	..	..	..	..	..	..	..	..	..	..
Gambia, The	..	..	..	..	..	..	..	..	..	..	..	..
Georgia	..	13.7	..	10.7	..	12.3	..	..	..	5.5	33.1	61.4
Germany	5.3	8.7	8.4	8.3	6.6	8.6	44.9	48.7	46.6	26.8	60.4	12.8
Ghana	..	..	..	..	..	..	..	..	..	..	..	..
Greece	4.9	6.2	12.9	14.6	7.8	9.6	47.1	55.7	52.4	35.1	49.4	14.5
Guatemala	2.6	1.6	4.6	2.3	3.2	1.8	..	..	..	..	..	..
Guinea	..	..	..	..	..	..	..	..	..	..	..	..
Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	..	..
Haiti	..	..	..	..	..	..	..	..	..	..	..	..

	Unemployment						Long-term unemployment			Unemployment by level of educational attainment		
	Male		Female		Total		% of total unemployment			% of total unemployment		
	% of male labor force 1990-92 <sup>a</sup>	2000-02 <sup>a</sup>	% of female labor force 1990-92 <sup>a</sup>	2000-02 <sup>a</sup>	% of total labor force 1990-92 <sup>a</sup>	2000-02 <sup>a</sup>	Male 2000-02 <sup>a</sup>	Female 2000-02 <sup>a</sup>	Total 2000-02 <sup>a</sup>	Primary 1999-2001 <sup>a</sup>	Secondary 1999-2001 <sup>a</sup>	Tertiary 1999-2001 <sup>a</sup>
Honduras	3.2	3.4	3.0	4.7	3.1	3.8	..	..	..	..	..	..
Hungary	11.0	6.1	8.7	5.4	9.9	5.8	47.1	41.7	44.8	35.4	60.5	4.1
India	..	..	..	..	..	..	..	..	..	29.0	40.3	30.7
Indonesia	..	..	..	..	..	9.1	..	..	..	46.0	36.6	6.7
Iran, Islamic Rep.	..	8.2	..	4.1	..	12.3	..	..	..	..	..	..
Iraq	..	..	..	..	..	..	..	..	..	..	..	..
Ireland	15.2	4.6	15.2	3.7	15.2	4.2	35.9	18.2	29.4	60.8	20.8	16.1
Israel	9.2	10.1	13.9	10.6	11.2	10.3	..	..	..	20.7	44.2	34.1
Italy	8.1	6.9	17.3	12.2	11.6	9.0	58.0	61.6	59.9	49.1	41.9	7.2
Jamaica	9.4	..	22.2	..	15.4	..	24.4	36.2	31.7	..	..	..
Japan	2.1	5.6	2.2	5.1	2.2	5.4	34.8	21.6	29.7	21.5	53.4	24.8
Jordan	..	11.8	..	20.7	..	13.2	..	..	..	..	..	..
Kazakhstan	..	..	..	..	0.4	2.6	..	..	..	7.2	52.5	40.3
Kenya	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	2.8	3.5	2.1	2.5	2.5	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	..	..	..	..	..	..	..	..	..	33.4	55.7	10.9
Lao PDR	..	..	..	..	..	..	..	..	..	..	..	..
Latvia	1.8	12.9	2.8	11.0	2.3	12.0	..	..	..	24.6	67.0	8.2
Lebanon	..	..	..	..	..	..	..	..	..	..	..	..
Lesotho	..	..	..	..	..	..	..	..	..	..	..	..
Liberia	..	..	..	..	..	..	..	..	..	..	..	..
Libya	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	4.3	14.6	2.8	12.9	3.5	13.8	..	..	57.8	15.4	55.8	28.8
Macedonia, FYR	22.1	31.7	32.5	32.3	26.3	31.9	..	..	..	..	..	..
Madagascar	..	..	..	..	..	..	..	..	..	29.3	47.7	..
Malawi	..	..	..	..	..	..	..	..	..	..	..	..
Malaysia	..	..	..	..	3.7	3.8	..	..	..	..	..	..
Mali	..	..	..	..	..	..	..	..	..	..	..	..
Mauritania	..	..	..	..	..	..	..	..	..	..	..	..
Mauritius	..	..	..	..	..	..	..	..	..	35.5	63.9	..
Mexico	2.7	2.4	4.0	2.4	3.1	2.4	1.0	0.3	0.7	51.5	23.9	22.2
Moldova	..	8.1	..	5.5	0.7	6.8	..	..	..	..	..	..
Mongolia	..	..	..	..	..	3.4	..	..	..	..	..	..
Morocco	13.0	11.6	25.3	12.5	16.0	11.6	..	..	..	..	..	..
Mozambique	..	..	..	..	..	..	..	..	..	..	..	..
Myanmar	..	..	..	..	..	..	..	..	..	..	..	..
Namibia	20.0	28.3	19.0	39.0	19.0	33.8	..	..	..	..	..	..
Nepal	..	..	..	..	..	..	..	..	..	..	..	..
Netherlands	4.2	2.8	7.2	3.6	5.4	3.1	21.5	20.7	21.1	49.5	35.9	13.2
New Zealand	10.9	5.0	9.6	5.3	10.3	5.2	14.9	10.0	12.6	0.5	44.5	19.2
Nicaragua	11.3	..	19.4	..	14.4	12.2	..	..	..	56.3	23.4	14.7
Niger	..	..	..	..	..	..	..	..	..	..	..	..
Nigeria	..	..	..	..	..	..	..	..	..	..	..	..
Norway	6.6	4.1	5.1	3.7	5.9	3.9	8.1	3.7	6.2	25.0	50.0	22.6
Oman	..	..	..	..	..	..	..	..	..	..	..	..
Pakistan	4.3	6.1	14.2	17.3	5.8	7.8	..	..	..	..	..	..
Panama	10.8	10.5	22.3	18.2	14.7	13.2	24.0	35.7	29.3	47.0	35.5	11.3
Papua New Guinea	..	..	..	..	..	..	..	..	..	..	..	..
Paraguay	6.4	..	3.8	..	5.3	..	..	..	..	..	..	..
Peru	7.5	7.5	12.5	10.0	9.4	8.7	..	..	..	15.8	54.9	28.3
Philippines	7.9	9.4	9.8	10.3	8.6	9.8	..	..	..	..	..	..
Poland	12.2	19.1	14.7	20.9	13.3	19.9	45.1	52.0	48.4	19.1	76.8	4.2
Portugal	3.5	4.2	5.0	6.1	4.1	5.1	31.9	31.4	31.6	73.3	13.6	8.1
Puerto Rico	19.0	13.2	12.8	10.9	16.6	12.3	..	..	..	..	..	..

# 2.4 | Unemployment

	Unemployment						Long-term unemployment			Unemployment by level of educational attainment		
	Male		Female		Total		% of total unemployment			% of total unemployment		
	% of male labor force	1990-92 <sup>a</sup>	2000-02 <sup>a</sup>	% of female labor force	1990-92 <sup>a</sup>	2000-02 <sup>a</sup>	1990-92 <sup>a</sup>	2000-02 <sup>a</sup>	2000-02 <sup>a</sup>	Primary 1999-2001 <sup>a</sup>	Secondary 1999-2001 <sup>a</sup>	Tertiary 1999-2001 <sup>a</sup>
Romania	6.2	8.9	10.3	7.7	8.2	8.4	..	..	..	20.6	72.7	5.5
Russian Federation	5.2	9.9	5.2	8.8	5.2	8.6	..	..	..	16.8	41.6	41.6
Rwanda	0.6	..	0.2	..	0.3	..	..	..	..	60.7	24.1	5.9
Saudi Arabia	..	3.9	..	9.1	..	4.6	..	..	..	..	..	..
Senegal	..	..	..	..	..	..	..	..	..	..	..	..
Serbia and Montenegro	..	12.4	..	15.8	..	13.8	..	..	..	..	..	..
Sierra Leone	..	..	..	..	..	..	..	..	..	..	..	..
Singapore	2.7	5.4	2.6	5.0	2.7	5.2	..	..	..	25.5	26.9	32.0
Slovak Republic	11.1	18.6	11.7	18.7	11.4	18.6	..	..	..	19.8	77.1	3.0
Slovenia	..	5.7	..	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	13.9	8.0	25.8	16.4	18.1	11.4	31.6	41.8	37.5	57.1	19.7	22.2
Sri Lanka	10.6	8.7	21.0	12.8	14.1	8.7	..	..	..	41.0	..	56.1
Sudan	..	..	..	..	..	..	..	..	..	..	..	..
Swaziland	..	..	..	..	..	..	..	..	..	..	..	..
Sweden	6.7	5.6	4.6	4.7	5.7	5.2	23.0	18.1	20.9	28.6	56.6	13.1
Switzerland	2.3	2.8	3.5	3.1	2.8	2.9	19.0	23.9	21.3	43.0	43.0	14.0
Syrian Arab Republic	5.2	8.3	14.0	24.1	6.8	11.7	..	..	..	..	..	..
Tajikistan	0.4	..	0.4	..	0.4	..	..	..	..	..	..	..
Tanzania	2.7	..	3.6	..	3.2	..	..	..	..	..	..	..
Thailand	1.3	2.7	1.5	2.5	1.4	2.6	..	..	..	70.6	7.2	19.2
Togo	..	..	..	..	..	..	..	..	..	..	..	..
Trinidad and Tobago	17.0	8.6	23.9	14.4	19.6	10.8	20.3	34.7	27.6	38.2	60.7	0.8
Tunisia	..	..	..	..	..	15.6	..	..	..	..	..	..
Turkey	8.6	10.9	7.6	9.9	8.3	10.6	26.4	34.5	28.5	60.1	29.0	8.4
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	1.2	..	0.7	..	0.9	..	..	..	..	..	..	..
Ukraine	..	10.3	..	10.0	..	10.2	..	..	..	8.6	27.3	64.1
United Arab Emirates	..	2.2	..	2.6	..	2.3	..	..	..	..	..	..
United Kingdom	11.5	5.6	7.3	4.4	9.7	5.1	26.4	17.0	22.8	33.7	44.4	12.7
United States	7.9	5.9	7.0	5.6	7.5	5.8	8.9	8.1	8.5	20.3	35.3	44.4
Uruguay	6.9	11.5	11.9	19.7	9.0	18.6	..	..	..	50.7	21.2	27.8
Uzbekistan	0.2	..	0.3	..	0.2	..	..	..	..	..	..	..
Venezuela, RB	8.1	14.3	6.8	18.1	7.7	15.8	..	..	..	57.9	24.0	14.4
Vietnam	..	..	..	..	..	..	..	..	..	..	..	..
West Bank and Gaza	..	33.5	..	17.1	..	31.3	..	..	..	..	..	..
Yemen, Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Zambia	11.7	..	13.7	..	12.4	..	..	..	..	..	..	..
Zimbabwe	..	..	..	..	..	..	..	..	..	16.4	81.8	0.8
<b>World</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>30.0 w</b>	<b>40.2 w</b>	<b>25.2 w</b>
Low income	..	..	..	..	..	..	..	..	..	29.0	40.6	30.4
Middle income	2.7	..	4.1	..	4.6	6.4	..	..	..	28.6	39.4	21.3
Lower middle income	2.5	..	3.8	..	4.3	6.0	..	..	..	27.3	..	23.4
Upper middle income	6.2	..	7.3	..	6.6	10.1	..	..	..	34.8	52.6	11.3
Low & middle income	..	..	..	..	..	..	..	..	..	28.8	40.0	25.8
East Asia & Pacific	1.1	..	1.6	..	2.5	4.7	..	..	..	..	..	..
Europe & Central Asia	6.4	..	6.8	..	6.6	10.3	..	..	..	21.3	45.8	32.6
Latin America & Carib.	5.6	..	8.3	..	6.6	9.0	..	..	..	31.3	28.3	9.6
Middle East & N. Africa	..	11.3	..	15.5	..	13.5	..	..	..	..	..	..
South Asia	..	..	..	..	..	..	..	..	..	29.3	40.3	31.0
Sub-Saharan Africa	..	..	..	..	..	..	..	..	..	..	..	..
High income	7.0	..	8.3	..	7.5	6.5	24.7	22.8	24.1	31.1	41.8	25.9
Europe EMU	7.5	..	13.3	..	9.8	8.5	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 2.11.

## 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).

## Data sources

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

	National poverty line								International poverty line				
	Survey year	Population below the poverty line			Survey year	Population below the poverty line			Survey year	Population below \$1 a day %	Poverty gap at \$1 a day %	Population below \$2 a day %	Poverty gap at \$2 a day %
		Rural %	Urban %	National %		Rural %	Urban %	National %					
Afghanistan		..	..	..		..	..	..		..	..	..	..
Albania	2002	29.6	19.8	25.4		..	..	..	2002 <sup>a</sup>	<2	<0.5	11.8	2.0
Algeria	1995	30.3	14.7	22.6	1998	16.6	7.3	12.2	1995 <sup>a</sup>	<2	<0.5	15.1	3.8
Angola		..	..	..		..	..	..		..	..	..	..
Argentina	1995	..	28.4	..	1998	..	29.9	..	2001 <sup>b</sup>	3.3	0.5	14.3	4.7
Armenia	1998–99	50.8	58.3	55.1	2001	48.7	51.9	50.9	1998 <sup>a</sup>	12.8	3.3	49.0	17.3
Australia		..	..	..		..	..	..		..	..	..	..
Austria		..	..	..		..	..	..		..	..	..	..
Azerbaijan	1995	..	..	68.1	2001	42.0	55.0	49.0	2001 <sup>a</sup>	3.7	0.6	9.1	3.5
Bangladesh	1995–96	55.2	29.4	51.0	2000	53.0	36.6	49.8	2000 <sup>a</sup>	36.0	8.1	82.8	36.3
Belarus	2000	..	..	41.9		..	..	..	2000 <sup>a</sup>	<2	<0.5	<2	<0.5
Belgium		..	..	..		..	..	..		..	..	..	..
Benin	1995	25.2	28.5	26.5	1999	33.0	23.3	29.0		..	..	..	..
Bolivia	1997	77.3	53.8	63.2	1999	81.7	50.6	62.7	1999 <sup>a</sup>	14.4	5.4	34.3	14.9
Bosnia and Herzegovina	2001–02	19.9	13.8	19.5		..	..	..		..	..	..	..
Botswana		..	..	..		..	..	..	1993 <sup>a</sup>	30.7	12.7	55.7	28.5
Brazil	1996	54.0	15.4	23.9	1998	51.4	14.7	22.0	2001 <sup>b</sup>	8.2	2.1	22.4	8.8
Bulgaria	1997	..	..	36.0	2001	..	..	12.8	2001 <sup>a</sup>	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 <sup>a</sup>	44.9	14.4	81.0	40.6
Burundi	1990	36.0	43.0	36.4		..	..	..	1998 <sup>a</sup>	54.6	22.7	87.6	48.9
Cambodia	1997	40.1	21.1	36.1	1999	40.1	13.9	35.9	1997 <sup>a</sup>	34.1	9.7	77.7	34.5
Cameroon	1996	59.6	41.4	53.3	2001	49.9	22.1	40.2	2001 <sup>a</sup>	17.1	4.1	50.6	19.3
Canada		..	..	..		..	..	..		..	..	..	..
Central African Republic		..	..	..		..	..	..	1993 <sup>a</sup>	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 <sup>b</sup>	<2	<0.5	9.6	2.5
China	1996	7.9	<2	6.0	1998	4.6	<2	4.6	2001 <sup>a</sup>	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 <sup>b</sup>	8.2	2.2	22.6	8.8
Congo, Dem. Rep.		..	..	..		..	..	..		..	..	..	..
Congo, Rep.		..	..	..		..	..	..		..	..	..	..
Costa Rica	1992	25.5	19.2	22.0		..	..	..	2000 <sup>b</sup>	2.0	0.7	9.5	3.0
Côte d'Ivoire		..	..	..		..	..	..	2002 <sup>a</sup>	10.8	1.9	38.4	13.6
Croatia		..	..	..		..	..	..	2001 <sup>a</sup>	<2	<0.5	<2	<0.5
Cuba		..	..	..		..	..	..		..	..	..	..
Czech Republic		..	..	..		..	..	..	1996 <sup>b</sup>	<2	<0.5	<2	<0.5
Denmark		..	..	..		..	..	..		..	..	..	..
Dominican Republic	1992	49.0	19.3	33.9	1998	42.1	20.5	28.6	1998 <sup>b</sup>	<2	<0.5	<2	<0.5
Ecuador	1994	47.0	25.0	35.0		..	..	..	1998 <sup>b</sup>	17.7	7.1	40.8	17.7
Egypt, Arab Rep.	1995–96	23.3	22.5	22.9	1999–2000	..	..	16.7	1999–2000 <sup>a</sup>	3.1	<0.5	43.9	11.3
El Salvador	1992	55.7	43.1	48.3		..	..	..	2000 <sup>b</sup>	31.1	14.1	58.0	29.7
Eritrea	1993–94	..	..	53.0		..	..	..		..	..	..	..
Estonia	1995	14.7	6.8	8.9		..	..	..	1998 <sup>a</sup>	<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 <sup>a</sup>	23.0	4.8	77.8	29.6
Finland		..	..	..		..	..	..		..	..	..	..
France		..	..	..		..	..	..		..	..	..	..
Gabon		..	..	..		..	..	..		..	..	..	..
Gambia, The	1992	..	..	64.0	1998	61.0	48.0	57.6	1998 <sup>a</sup>	59.3	28.8	82.9	51.1
Georgia	1997	9.9	12.1	11.1		..	..	..	2001 <sup>a</sup>	2.7	0.9	15.7	4.6
Germany		..	..	..		..	..	..		..	..	..	..
Ghana	1992	..	..	50.0	1998–99	49.9	18.6	39.5	1998–99 <sup>a</sup>	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 <sup>b</sup>	16.0	4.6	37.4	16.0
Guinea	1994	..	..	40.0		..	..	..		..	..	..	..
Guinea-Bissau		..	..	..		..	..	..		..	..	..	..
Haiti	1987	..	..	65.0	1995	66.0	..	..		..	..	..	..

	National poverty line								International poverty line				
	Survey year	Population below the poverty line			Survey year	Population below the poverty line			Survey year	Population below \$1 a day %	Poverty gap at \$1 a day %	Population below \$2 a day %	Poverty gap at \$2 a day %
		Rural %	Urban %	National %		Rural %	Urban %	National %					
Honduras	1992	46.0	56.0	50.0	1993	51.0	57.0	53.0	1999 <sup>b</sup>	20.7	7.5	44.0	20.2
Hungary	1993	..	..	14.5	1997	..	..	17.3	2002 <sup>a</sup>	<2	<0.5	<2	<0.5
India	1993-94	37.3	32.4	36.0	1999-2000	30.2	24.7	28.6	1999-2000 <sup>a</sup>	34.7	8.2	79.9	35.3
Indonesia	1996	..	..	15.7	1999	..	..	27.1	2002 <sup>a</sup>	7.5	0.9	52.4	15.7
Iran, Islamic Rep.	..	..	..	..	..	..	..	..	1998 <sup>a</sup>	<2	<0.5	7.3	1.5
Iraq	..	..	..	..	..	..	..	..	..	..	..	..	..
Ireland	..	..	..	..	..	..	..	..	..	..	..	..	..
Israel	..	..	..	..	..	..	..	..	..	..	..	..	..
Italy	..	..	..	..	..	..	..	..	..	..	..	..	..
Jamaica	1995	37.0	18.7	27.5	2000	25.1	12.8	18.7	2000 <sup>a</sup>	<2	<0.5	13.3	2.7
Japan	..	..	..	..	..	..	..	..	..	..	..	..	..
Jordan	1991	..	..	15.0	1997	..	..	11.7	1997 <sup>a</sup>	<2	<0.5	7.4	1.4
Kazakhstan	1996	39.0	30.0	34.6	..	..	..	..	2003 <sup>a</sup>	<2	<.5	24.9	6.3
Kenya	1994	47.0	29.0	40.0	1997	53.0	49.0	52.0	1997 <sup>a</sup>	22.8	5.9	58.3	23.9
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	..	..	..	..	..	..	..	..	1998 <sup>b</sup>	<2	<0.5	<2	<0.5
Kuwait	..	..	..	..	..	..	..	..	..	..	..	..	..
Kyrgyz Republic	2000	56.4	43.9	52.0	2001	51.0	41.2	47.6	2002 <sup>a</sup>	<2	<0.5	24.7	5.8
Lao PDR	1993	48.7	33.1	45.0	1997-98	41.0	26.9	38.6	1997-98 <sup>a</sup>	26.3	6.3	73.2	29.6
Latvia	..	..	..	..	..	..	..	..	1998 <sup>a</sup>	<2	<0.5	8.3	2.0
Lebanon	..	..	..	..	..	..	..	..	..	..	..	..	..
Lesotho	..	..	..	..	..	..	..	..	1995 <sup>a</sup>	36.4	19.0	56.1	33.1
Liberia	..	..	..	..	..	..	..	..	..	..	..	..	..
Libya	..	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	..	..	..	..	..	..	..	..	2000 <sup>a</sup>	<2	<0.5	6.9	1.5
Macedonia, FYR	..	..	..	..	..	..	..	..	1998 <sup>a</sup>	<2	<0.5	4.0	0.6
Madagascar	1997	76.0	63.2	73.3	1999	76.7	52.1	71.3	2001 <sup>a</sup>	61.0	27.9	85.1	51.8
Malawi	1990-91	..	..	54.0	1997-98	66.5	54.9	65.3	1997-98 <sup>a</sup>	41.7	14.8	76.1	38.3
Malaysia	1989	..	..	15.5	..	..	..	..	1997 <sup>b</sup>	<2	<0.5	9.3	2.0
Mali	1998	75.9	30.1	63.8	..	..	..	..	1994 <sup>a</sup>	72.3	37.4	90.6	60.5
Mauritania	1996	65.5	30.1	50.0	2000	61.2	25.4	46.3	2000 <sup>a</sup>	25.9	7.6	63.1	26.8
Mauritius	..	..	..	..	..	..	..	..	..	..	..	..	..
Mexico	1988	..	..	10.1	..	..	..	..	2000 <sup>a</sup>	9.9	3.7	26.3	10.9
Moldova	1997	26.7	19.3	23.3	..	..	..	..	2001 <sup>a</sup>	22.0	5.8	63.7	25.1
Mongolia	1995	33.1	38.5	36.3	1998	32.6	39.4	35.6	1998 <sup>a</sup>	27.0	8.1	74.9	30.6
Morocco	1990-91	18.0	7.6	13.1	1998-99	27.2	12.0	19.0	1999 <sup>a</sup>	<2	<0.5	14.3	3.1
Mozambique	1996-97	71.3	62.0	69.4	..	..	..	..	1996 <sup>a</sup>	37.9	12.0	78.4	36.8
Myanmar	..	..	..	..	..	..	..	..	..	..	..	..	..
Namibia	..	..	..	..	..	..	..	..	1993 <sup>b</sup>	34.9	14.0	55.8	30.4
Nepal	1995-96	44.0	23.0	42.0	..	..	..	..	1995-96 <sup>a</sup>	39.1	11.0	80.9	37.6
Netherlands	..	..	..	..	..	..	..	..	..	..	..	..	..
New Zealand	..	..	..	..	..	..	..	..	..	..	..	..	..
Nicaragua	1993	76.1	31.9	50.3	1998	68.5	30.5	47.9	2001 <sup>a</sup>	45.1	16.7	79.9	41.2
Niger	1989-93	66.0	52.0	63.0	..	..	..	..	1995 <sup>a</sup>	60.6	34.0	85.8	54.6
Nigeria	1985	49.5	31.7	43.0	1992-93	36.4	30.4	34.1	1997 <sup>a</sup>	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	1998-99 <sup>a</sup>	13.4	2.4	65.6	22.0
Panama	1997	64.9	15.3	37.3	..	..	..	..	2000 <sup>b</sup>	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	..	..	..	..	2002 <sup>b</sup>	16.4	7.4	33.2	16.2
Peru	1994	67.0	46.1	53.5	1997	64.7	40.4	49.0	2000 <sup>b</sup>	18.1	9.1	37.7	18.5
Philippines	1994	53.1	28.0	40.6	1997	50.7	21.5	36.8	2000 <sup>a</sup>	15.5	3.0	47.5	17.8
Poland	1993	..	..	23.8	..	..	..	..	2001 <sup>a</sup>	<2	<0.5	<2	<0.5
Portugal	..	..	..	..	..	..	..	..	1994 <sup>b</sup>	<2	<0.5	<2	<0.5
Puerto Rico	..	..	..	..	..	..	..	..	..	..	..	..	..



	National poverty line								International poverty line				
	Survey year	Population below the poverty line			Survey year	Population below the poverty line			Survey year	Population below \$1 a day	Poverty gap at \$1 a day	Population below \$2 a day	Poverty gap at \$2 a day
		Rural %	Urban %	National %		Rural %	Urban %	National %		%	%	%	%
Romania	1994	27.9	20.4	21.5		..	..	..	2002 <sup>a</sup>	<2	0.5	14.0	3.4
Russian Federation	1994	..	..	30.9		..	..	..	2002 <sup>a</sup>	<2	<0.5	7.5	1.3
Rwanda	1993	..	..	51.2	1999–2000	65.7	14.3	60.3	1999–2000 <sup>a</sup>	51.7	20.0	83.7	45.5
Saudi Arabia		..	..	..		..	..	..		..	..	..	..
Senegal	1992	40.4	23.7	33.4		..	..	..	1995 <sup>a</sup>	22.3	5.7	63.0	25.2
Serbia and Montenegro		..	..	..		..	..	..		..	..	..	..
Sierra Leone	1989	76.0	53.0	82.8	2003–04	79.0	56.4	70.2	1989 <sup>a</sup>	57.0	39.5	74.5	51.8
Singapore		..	..	..		..	..	..		..	..	..	..
Slovak Republic		..	..	..		..	..	..	1996 <sup>b</sup>	<2	<0.5	2.9	0.8
Slovenia		..	..	..		..	..	..	1998 <sup>a</sup>	<2	<0.5	<2	<0.5
Somalia		..	..	..		..	..	..		..	..	..	..
South Africa		..	..	..		..	..	..	2000 <sup>a</sup>	10.7	1.7	34.1	12.6
Spain		..	..	..		..	..	..		..	..	..	..
Sri Lanka	1990–91	22.0	15.0	20.0	1995–96	27.0	15.0	25.0	1999–2000 <sup>a</sup>	7.6	1.5	50.7	15.2
Sudan		..	..	..		..	..	..		..	..	..	..
Swaziland	1995	..	..	40.0		..	..	..	1994 <sup>b</sup>	8.0	2.5	22.5	8.9
Sweden		..	..	..		..	..	..		..	..	..	..
Switzerland		..	..	..		..	..	..		..	..	..	..
Syrian Arab Republic		..	..	..		..	..	..		..	..	..	..
Tajikistan		..	..	..		..	..	..	2003 <sup>a</sup>	7.4	1.3	42.8	13.0
Tanzania	1991	40.8	31.2	38.6	2000–01	38.7	29.5	35.7	1993 <sup>a</sup>	19.9	4.8	59.7	23.0
Thailand	1990	..	..	18.0	1992	15.5	10.2	13.1	2000 <sup>a</sup>	<2	<0.5	32.5	9.0
Togo	1987–89	..	..	32.3		..	..	..		..	..	..	..
Trinidad and Tobago	1992	20.0	24.0	21.0		..	..	..	1992 <sup>b</sup>	4.0	1.0	20.0	6.3
Tunisia	1990	13.1	3.5	7.4	1995	13.9	3.6	7.6	2000 <sup>a</sup>	<2	<0.5	6.6	1.3
Turkey		..	..	..		..	..	..	2000 <sup>a</sup>	<2	<0.5	10.3	2.5
Turkmenistan		..	..	..		..	..	..	1998 <sup>a</sup>	12.1	2.6	44.0	15.4
Uganda	1993	..	..	55.0	1997	..	..	44.0		..	..	..	..
Ukraine	1995	..	..	31.7		..	..	..	1999 <sup>a</sup>	2.9	0.6	45.7	16.3
United Arab Emirates		..	..	..		..	..	..		..	..	..	..
United Kingdom		..	..	..		..	..	..		..	..	..	..
United States		..	..	..		..	..	..		..	..	..	..
Uruguay		..	..	..		..	..	..	2000 <sup>b</sup>	<2	<0.5	3.9	0.8
Uzbekistan	2000	30.5	22.5	27.5		..	..	..	2000 <sup>a</sup>	17.3	4.3	71.7	25.2
Venezuela, RB	1989	..	..	31.3		..	..	..	1998 <sup>b</sup>	14.3	6.6	30.6	14.5
Vietnam	1998	45.5	9.2	37.4	2002	35.6	6.6	28.9	2000 <sup>a</sup>	<2	<0.5	33.4	8.3
West Bank and Gaza		..	..	..		..	..	..		..	..	..	..
Yemen, Rep.	1998	45.0	30.8	41.8		..	..	..	1998 <sup>a</sup>	15.7	4.5	45.2	15.0
Zambia	1996	82.8	46.0	69.2	1998	83.1	56.0	72.9	1998 <sup>a</sup>	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	1995–96 <sup>a</sup>	56.1	24.2	83.0	48.2

a. Expenditure base. b. Income base.

## 2.5a

## Regional poverty estimates

## People living on less than \$1 a day (millions)

Region	1981	1984	1987	1990	1993	1996	1999	2001
East Asia & Pacific	796	562	426	472	415	287	282	271
China	634	425	308	375	334	212	223	212
Europe & Central Asia	3	2	2	2	17	20	30	17
Latin America & Caribbean	36	46	45	49	52	52	54	50
Middle East & North Africa	9	8	7	6	4	5	8	7
South Asia	475	460	473	462	476	461	429	431
Sub-Saharan Africa	164	198	219	227	242	271	294	313
Total	1,482	1,277	1,171	1,218	1,208	1,097	1,096	1,089
Excluding China	848	852	863	844	873	886	873	877

## Share of people living on less than \$1 a day (%)

Region	1981	1984	1987	1990	1993	1996	1999	2001
East Asia & Pacific	57.7	38.9	28.0	29.6	24.9	16.6	15.7	14.9
China	63.8	41.0	28.5	33.0	28.4	17.4	17.8	16.6
Europe & Central Asia	0.7	0.5	0.4	0.5	3.7	4.3	6.3	3.6
Latin America & Caribbean	9.7	11.8	10.9	11.3	11.3	10.7	10.5	9.5
Middle East & North Africa	5.1	3.8	3.2	2.3	1.6	2.0	2.6	2.4
South Asia	51.5	46.8	45.0	41.3	40.1	36.6	32.2	31.3
Sub-Saharan Africa	41.6	46.3	46.8	44.6	44.0	45.6	45.7	46.4
Total	40.4	32.8	28.4	27.9	26.3	22.8	21.8	21.1
Excluding China	31.7	29.8	28.4	26.1	25.6	24.6	23.1	22.5

## People living on less than \$2 a day (millions)

Region	1981	1984	1987	1990	1993	1996	1999	2001
East Asia & Pacific	1,170	1,109	1,028	1,116	1,079	922	900	864
China	876	814	731	825	803	650	627	594
Europe & Central Asia	20	18	15	23	81	98	113	93
Latin America & Caribbean	99	119	115	125	136	117	127	128
Middle East & North Africa	52	50	53	51	52	61	70	70
South Asia	821	859	911	958	1,005	1,029	1,039	1,064
Sub-Saharan Africa	288	326	355	382	410	447	489	516
Total	2,450	2,480	2,478	2,654	2,764	2,674	2,739	2,735
Excluding China	1,574	1,666	1,747	1,829	1,961	2,024	2,111	2,142

## Share of people living on less than \$2 a day (%)

Region	1981	1984	1987	1990	1993	1996	1999	2001
East Asia & Pacific	84.8	76.6	67.7	69.9	64.8	53.3	50.3	47.4
China	88.1	78.5	67.4	72.6	68.1	53.4	50.1	46.7
Europe & Central Asia	4.7	4.1	3.3	4.9	17.2	20.7	23.8	19.7
Latin America & Caribbean	26.9	30.4	27.8	28.4	29.5	24.1	25.1	24.5
Middle East & North Africa	28.9	25.2	24.2	21.4	20.2	22.3	24.3	23.2
South Asia	89.1	87.2	86.7	85.5	84.5	81.7	78.1	77.2
Sub-Saharan Africa	73.3	76.1	76.1	75.0	74.6	75.1	76.1	76.6
Total	66.7	63.7	60.1	60.8	60.2	55.5	54.4	52.9
Excluding China	58.8	58.4	57.5	56.6	57.4	56.3	55.8	54.9

## About the data

The World Bank produced its first global poverty estimates for World Development Report 1990 for developing countries using household survey data for 22 countries (Ravallion, Datt, and van de Walle 1991). Incorporating survey data collected during the last 15 years, the database has expanded considerably and now includes 440 surveys representing almost 100 developing countries. Some 1.1 million randomly sampled households were interviewed in these surveys, representing 93 percent of the population of developing countries. The surveys asked detailed questions on sources of income and how it was spent, and on other household characteristics such as the number of people sharing that income. Most interviews were conducted by staff of government statistics offices. Along with improvements in data coverage and quality, the underlying methodology has also improved, resulting in better and more comprehensive estimates.

**Data availability.** Since 1979 there has been considerable expansion in the number of countries that field such surveys, the frequency of the surveys, and the quality of their data (table 6.5a). The number of data sets rose dramatically from a mere 13 between 1979 and 1981 to 100 between 1997 and 1999. The drop to 41 available surveys after 1999 reflects the lag between the time data are collected and the time they become available for analysis, not a reduction in data collection. Data coverage is improving in all regions, but Sub-Saharan Africa continues to lag, with only 28 countries out of 48 having at least one data set available.

**Data quality.** The problems of estimating poverty and comparing poverty rates do not end with data availability. Several other issues, some related to data quality, also arise in measuring household living standards from survey data. One relates to the choice of income or consumption as a welfare indicator. Income is generally more difficult to measure accurately, and consumption comes closer to the notion of standard of living. And income can vary over time even if the standard of living does not. But consumption data are not always available. Another issue is that household surveys can differ widely, for example, in the number of consumer goods they identify. And even similar surveys may not be strictly comparable because of differences in timing or the quality and training of survey enumerators.

Comparisons of 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 own production, particularly important in underdeveloped rural economies) should be included in total consumption expenditure. Similarly, imputed profit from the 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 farmgate selling price.

Whenever possible, the table uses consumption data for deciding who is poor and income surveys only when consumption data are unavailable. In recent editions there has been a change in how income surveys are used. In the past, average household income was adjusted to accord with consumption and income data from national accounts. But in testing this approach using data for some 20 countries for which income and consumption expenditure data were both available from the same surveys, income was found to yield a higher mean than consumption but also higher inequality. When poverty measures based on consumption and income were compared, these two effects roughly cancelled each other out: statistically, there was no significant difference. So recent editions use income data to estimate poverty directly, without adjusting average income measures.

International poverty lines. International comparisons of poverty estimates entail both conceptual

and practical problems. 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?

Poverty measures based on an international poverty line attempt to hold the real value of the poverty line constant across countries, as is done when making comparisons over time. 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 for comparing aggregates from national accounts, not for making international poverty comparisons. As a result, there is no certainty that an international poverty line measures the same degree of need or deprivation across countries.

Early editions of World Development Indicators used PPPs from the Penn World Tables. Recent editions use 1993 consumption PPP estimates produced by the World Bank. Recalculated in 1993 PPP terms, the original international poverty line of \$1 a day in 1985 PPP terms is now about \$1.08 a day.

## 2.5b

Coverage of survey data by developing country region, 1978–81 to 2000–01

	1979–81	1982–84	1985–87	1988–90	1991–93	1994–96	1997–99	2000–01	Number of countries
East Asia	3	4	7	6	11	11	16	7	9
China	2	1	4	1	5	6	6	2	1
Eastern Europe and Central Asia	0	0	5	18	18	24	30	17	26
Latin America and Caribbean	6	2	11	23	16	26	28	12	22
Middle East and North Africa	0	1	3	5	2	4	5	1	7
South Asia	2	5	7	9	6	11	5	1	5
India	2	2	4	6	4	6	4	0	1
Sub-Saharan Africa	2	1	8	6	20	18	12	5	28
Total	13	13	41	67	73	94	100	43	97

Source: Computed from PovcalNet, February 2005.

## Definitions

Any revisions in the PPP of a country to incorporate better price indexes can produce dramatically different poverty lines in local currency.

Issues also arise when comparing poverty measures within countries. For example, the cost of living is typically higher in urban than in rural areas. One reason is that food staples tend to be more expensive in urban 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 reflects only differences in the cost of living. In some countries the urban poverty line in common use has a higher real value—meaning that it allows the purchase of more commodities for consumption—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.

By combining all this information, a team in the World Bank's Development Research Group calculates the number of people living below various international poverty lines, as well as other poverty and inequality measures that are published in World Development Indicators. The database is updated annually as new survey data become available, and a major reassessment of progress against poverty is made about every three years.

**Do it yourself:** PovcalNet. Recently this research team developed PovcalNet, an interactive web-based computational tool that allows users to replicate the calculations by the World Bank's researchers in estimating the extent of absolute poverty in the world. PovcalNet is self-contained and powered by reliable built-in software that performs the relevant calculations from a primary database. The underlying software can also be downloaded from the site and used with distributional data of various formats. The PovcalNet primary database consists of distributional data calculated directly from household survey data. Detailed information for each of these is also available from the site.

Estimation from distributional data requires an interpolation method. The method chosen was Lorenz curves with flexible functional forms, which have proved reliable in past work. The Lorenz curve can be graphed as the cumulative percentages of total

consumption or income against the cumulative number of people, starting with the poorest individual. The empirical Lorenz curves estimated by PovcalNet are weighted by household size, so they are based on percentiles of population, not households.

PovcalNet also allows users to calculate poverty measures under different assumptions. For example, instead of \$1 a day, users can specify a different poverty line, say \$1.50 or \$3. Users can also specify different PPP rates and aggregate the estimates using alternative country groupings (for example, UN country groupings or groupings based on average incomes) or a selected set of individual countries. PovcalNet is available online at <http://iresearch.worldbank.org/povcalnet/>.

- 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 for individual countries cannot be compared with poverty rates reported in earlier editions.
- 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.

## Data sources

The poverty measures are prepared by the World Bank's Development Research Group. The national poverty lines are based on the Bank's country poverty assessments. The international poverty lines are based on nationally representative primary household surveys conducted by national statistical offices or by private agencies under the supervision of government or international agencies and obtained from government statistical offices and World Bank Group country departments. The World Bank Group has prepared an annual review of its poverty work since 1993. For details on data sources and methods used in deriving the Bank's latest estimates, see Chen and Ravallion (2004), "How Have the World's Poorest Fared Since the Early 1980s?"

	Survey year	Prevalence of child malnutrition		Under-five mortality rate		Child immunization rate		Contraceptive prevalence		Births attended by skilled health staff <sup>a</sup>	
		Underweight % of children under age 5		per 1,000		Measles % of children ages 12–23 months <sup>b</sup>		% 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 <sup>c</sup>	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 <sup>d</sup>	5	3	47
Colombia	2000	9	3	39	20	74	85	54	66	64	99
Comores	1996	36	18	129	87 <sup>c</sup>	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 <sup>d</sup>	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 <sup>c</sup>	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 <sup>d</sup>	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 (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 socioeconomic 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 household sample surveys, conducted periodically in developing countries, collect information on a large number of health, nutrition, and population measures as well as on respondents' social, demographic, and economic characteristics using a standard set of questionnaires. 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 consumer 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 standardized 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 socioeconomic 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 economic 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 indicators limits the types of analysis that can be performed. 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 services. In addition, some asset indicators may reflect household wealth better in some countries than in others—or reflect different degrees of wealth in different 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 malnutrition is the percentage of children whose weight for age is more than two standard deviations below the median reference standard for their age as established by the World Health Organization, the U.S. Centers for Disease Control and Prevention, and the U.S. National Center for Health Statistics. The figures 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 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. 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 at any time before the interview date. These data may differ from those in table 2.15.
- Contraceptive prevalence is the percentage of women who are practicing, or whose sexual partners are practicing, any modern method of contraception. It is usually measured 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.

## Data sources

The data are from an analysis of Demographic and Health Surveys by the World Bank and Macro International. Country reports are available at <http://www.worldbank.org/poverty/health/home/index.htm>.

	Survey year	Gini index	Percentage share of income or consumption						
			Lowest 10%	Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%	Highest 10%
Afghanistan		..	..	..	..	..	..	..	..
Albania	2002 <sup>a,b</sup>	28.2	3.8	9.1	13.5	17.3	22.8	37.4	22.4
Algeria	1995 <sup>a,b</sup>	35.3	2.8	7.0	11.6	16.1	22.7	42.6	26.8
Angola		..	..	..	..	..	..	..	..
Argentina <sup>e</sup>	2001 <sup>c,d</sup>	52.2	1.0	3.1	7.2	12.3	21.0	56.4	38.9
Armenia	1998 <sup>a,b</sup>	37.9	2.6	6.7	11.3	15.4	21.6	45.1	29.7
Australia	1994 <sup>c,d</sup>	35.2	2.0	5.9	12.0	17.2	23.6	41.3	25.4
Austria	1997 <sup>c,d</sup>	30.0	3.1	8.1	13.2	17.3	22.9	38.5	23.5
Azerbaijan	2001 <sup>a,b</sup>	36.5	3.1	7.4	11.5	15.3	21.2	44.5	29.5
Bangladesh	2000 <sup>a,b</sup>	31.8	3.9	9.0	12.5	15.9	21.2	41.3	26.7
Belarus	2000 <sup>a,b</sup>	30.4	3.5	8.4	13.0	17.0	22.5	39.1	24.1
Belgium	1996 <sup>c,d</sup>	25.0	2.9	8.3	14.1	17.7	22.7	37.3	22.6
Benin		..	..	..	..	..	..	..	..
Bolivia	1999 <sup>a,b</sup>	44.7	1.3	4.0	9.2	14.8	22.9	49.1	32.0
Bosnia and Herzegovina	2001 <sup>a,b</sup>	26.2	3.9	9.5	14.2	17.9	22.6	35.8	21.4
Botswana	1993 <sup>a,b</sup>	63.0	0.7	2.2	4.9	8.2	14.4	70.3	56.6
Brazil	2001 <sup>c,d</sup>	59.3	0.7	2.4	5.9	10.4	18.1	63.2	46.9
Bulgaria	2001 <sup>c,d</sup>	31.9	2.4	6.7	13.1	17.9	23.4	38.9	23.7
Burkina Faso	1998 <sup>a,b</sup>	48.2	1.8	4.5	7.4	10.6	16.7	60.7	46.3
Burundi	1998 <sup>a,b</sup>	33.3	1.7	5.1	10.3	15.1	21.5	48.0	32.8
Cambodia	1997 <sup>a,b</sup>	40.4	2.9	6.9	10.7	14.7	20.1	47.6	33.8
Cameroon	2001 <sup>a,b</sup>	44.6	2.3	5.6	9.3	13.7	20.4	50.9	35.4
Canada	1998 <sup>c,d</sup>	33.1	2.5	7.0	12.7	17.0	22.9	40.4	25.0
Central African Republic	1993 <sup>a,b</sup>	61.3	0.7	2.0	4.9	9.6	18.5	65.0	47.7
Chad		..	..	..	..	..	..	..	..
Chile	2000 <sup>c,d</sup>	57.1	1.2	3.3	6.6	10.5	17.4	62.2	47.0
China	2001 <sup>a,b</sup>	44.7	1.8	4.7	9.0	14.2	22.1	50.0	33.1
Hong Kong, China	1996 <sup>c,d</sup>	43.4	2.0	5.3	9.4	13.9	20.7	50.7	34.9
Colombia	1999 <sup>c,d</sup>	57.6	0.80	2.70	6.59	10.83	18.03	61.85	46.46
Congo, Dem. Rep.		..	..	..	..	..	..	..	..
Congo, Rep.		..	..	..	..	..	..	..	..
Costa Rica	2000 <sup>c,d</sup>	46.5	1.4	4.2	8.9	13.7	21.7	51.5	34.8
Côte d'Ivoire	2002 <sup>a,b</sup>	44.6	2.0	5.2	9.1	13.7	21.3	50.7	34.0
Croatia	2001 <sup>a,b</sup>	29.0	3.4	8.3	12.8	16.8	22.6	39.6	24.5
Cuba		..	..	..	..	..	..	..	..
Czech Republic	1996 <sup>c,d</sup>	25.4	4.3	10.3	14.5	17.7	21.7	35.9	22.4
Denmark	1997 <sup>c,d</sup>	24.7	2.6	8.3	14.7	18.2	22.9	35.8	21.3
Dominican Republic	1998 <sup>c,d</sup>	47.4	2.1	5.1	8.6	13.0	20.0	53.3	37.9
Ecuador	1998 <sup>a,b</sup>	43.7	0.9	3.3	7.5	11.7	19.4	58.0	41.6
Egypt, Arab Rep.	1999–2000 <sup>a,b</sup>	34.4	3.7	8.6	12.1	15.4	20.4	43.6	29.5
El Salvador	2000 <sup>c,d</sup>	53.2	0.9	2.9	7.4	12.4	20.2	57.1	40.6
Eritrea		..	..	..	..	..	..	..	..
Estonia	2000 <sup>c,d</sup>	37.2	1.9	6.1	12.1	15.9	22.0	44.0	28.5
Ethiopia	1999–2000 <sup>a,b</sup>	30.0	3.9	9.1	13.2	16.8	21.5	39.4	25.5
Finland	2000 <sup>c,d</sup>	26.9	4.0	9.6	14.1	17.5	22.1	36.7	22.6
France	1995 <sup>c,d</sup>	32.7	2.8	7.2	12.6	17.2	22.8	40.2	25.1
Gabon		..	..	..	..	..	..	..	..
Gambia, The	1998 <sup>a,b</sup>	47.5	1.8	4.8	8.7	12.8	20.3	53.4	37.0
Georgia	2001 <sup>a,b</sup>	36.9	2.3	6.4	11.4	16.1	22.6	43.6	27.9
Germany	2000 <sup>c,d</sup>	28.3	3.2	8.5	13.7	17.8	23.1	36.9	22.1
Ghana	1998–99 <sup>a,b</sup>	40.8	2.1	5.6	10.1	14.9	22.9	46.6	30.0
Greece	1998 <sup>c,d</sup>	35.4	2.9	7.1	11.4	15.8	22.0	43.6	28.5
Guatemala	2000 <sup>c,d</sup>	59.9	0.9	2.6	5.9	9.8	17.6	64.1	48.3
Guinea	1994 <sup>a,b</sup>	40.3	2.6	6.4	10.4	14.8	21.2	47.2	32.0
Guinea-Bissau	1993 <sup>a,b</sup>	47.0	2.1	5.2	8.8	13.1	19.4	53.4	39.3
Haiti		..	..	..	..	..	..	..	..



# Distribution of income or consumption

# 2.7

PEOPLE

	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 <sup>c,d</sup>	55.0	0.9	2.7	6.7	11.8	19.9	58.9	42.2
Hungary	2002 <sup>a,b</sup>	26.9	4.0	9.5	13.9	17.6	22.4	36.5	22.2
India	1999–00 <sup>a,b</sup>	32.5	3.9	8.9	12.3	16.0	21.2	43.3	28.5
Indonesia	2002 <sup>a,b</sup>	34.3	3.6	8.4	11.9	15.4	21.0	43.3	28.5
Iran, Islamic Rep.	1998 <sup>a,b</sup>	43.0	2.0	5.1	9.4	14.1	21.5	49.9	33.7
Iraq	..	..	..	..	..	..	..	..	..
Ireland	1996 <sup>c,d</sup>	35.9	2.8	7.1	11.8	15.8	22.0	43.3	27.6
Israel	1997 <sup>c,d</sup>	35.5	2.4	6.9	11.4	16.3	22.9	44.3	28.2
Italy	2000 <sup>c,d</sup>	36.0	2.3	6.5	12.0	16.8	22.8	42.0	26.8
Jamaica	2000 <sup>a,b</sup>	37.9	2.7	6.7	10.7	15.0	21.7	46.0	30.3
Japan	1993 <sup>c,d</sup>	24.9	4.8	10.6	14.2	17.6	22.0	35.7	21.7
Jordan	1997 <sup>a,b</sup>	36.4	3.3	7.6	11.4	15.5	21.1	44.4	29.8
Kazakhstan	2003 <sup>a,b</sup>	32.3	3.2	7.8	12.1	16.8	23.3	40.0	24.4
Kenya	1997 <sup>a,b</sup>	42.5	2.5	6.0	9.8	14.3	20.8	49.1	33.9
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..
Korea, Rep.	1998 <sup>c,d</sup>	31.6	2.9	7.9	13.6	18.0	23.1	37.5	22.5
Kuwait	..	..	..	..	..	..	..	..	..
Kyrgyz Republic	2002 <sup>a,b</sup>	34.8	3.2	7.7	11.8	15.7	21.8	43.0	27.9
Lao PDR	1997 <sup>a,b</sup>	37.0	3.2	7.6	11.4	15.3	20.8	45.0	30.6
Latvia	1998 <sup>c,d</sup>	33.6	2.8	7.3	12.3	16.7	22.5	41.1	26.1
Lebanon	..	..	..	..	..	..	..	..	..
Lesotho	1995 <sup>a,b</sup>	63.2	0.5	1.5	4.3	8.9	18.8	66.5	48.3
Liberia	..	..	..	..	..	..	..	..	..
Libya	..	..	..	..	..	..	..	..	..
Lithuania	2000 <sup>a,b</sup>	31.9	3.2	7.9	12.7	16.9	22.6	40.0	24.9
Macedonia, FYR	1998 <sup>a,b</sup>	28.2	3.3	8.4	14.0	17.7	23.1	36.7	22.1
Madagascar	2001 <sup>a,b</sup>	47.5	1.9	4.9	8.5	12.7	20.4	53.5	36.6
Malawi	1997 <sup>a,b</sup>	50.3	1.9	4.9	8.5	12.3	18.3	56.1	42.2
Malaysia	1997 <sup>c,d</sup>	49.2	1.7	4.4	8.1	12.9	20.3	54.3	38.4
Mali	1994 <sup>a,b</sup>	50.5	1.8	4.6	8.0	11.9	19.3	56.2	40.4
Mauritania	2000 <sup>a,b</sup>	39.0	2.5	6.2	10.6	15.2	22.3	45.7	29.5
Mauritius	..	..	..	..	..	..	..	..	..
Mexico	2000 <sup>a,b</sup>	54.6	1.0	3.1	7.2	11.7	19.0	59.1	43.1
Moldova	2002 <sup>a,b</sup>	36.9	2.7	6.8	11.2	15.6	22.3	44.1	28.4
Mongolia	1998 <sup>a,b</sup>	30.3	2.1	5.6	10.0	13.8	19.4	51.2	37.0
Morocco	1998–99 <sup>a,b</sup>	39.5	2.6	6.5	10.6	14.8	21.3	46.6	30.9
Mozambique	1996–97 <sup>a,b</sup>	39.6	2.5	6.5	10.8	15.1	21.1	46.5	31.7
Myanmar	..	..	..	..	..	..	..	..	..
Namibia	1993 <sup>c,d</sup>	70.7	0.5	1.4	3.0	5.4	11.5	78.7	64.5
Nepal	1995–96 <sup>a,b</sup>	36.7	3.2	7.6	11.5	15.1	21.0	44.8	29.8
Netherlands	1999 <sup>c,d</sup>	30.9	2.5	7.6	13.2	17.2	23.3	38.7	22.9
New Zealand	1997 <sup>c,d</sup>	36.2	2.2	6.4	11.4	15.8	22.6	43.8	27.8
Nicaragua	2001 <sup>a,b</sup>	43.1	2.2	5.6	9.8	14.2	21.1	49.3	33.8
Niger	1995 <sup>a,b</sup>	50.5	0.8	2.6	7.1	13.9	23.1	53.3	35.4
Nigeria	1996–97 <sup>a,b</sup>	50.6	1.6	4.4	8.2	12.5	19.3	55.7	40.8
Norway	2000 <sup>c,d</sup>	25.8	3.9	9.6	14.0	17.2	22.0	37.2	23.4
Oman	..	..	..	..	..	..	..	..	..
Pakistan	1998–99 <sup>a,b</sup>	33.0	3.7	8.8	12.5	15.9	20.6	42.3	28.3
Panama	2000 <sup>c,d</sup>	56.4	0.7	2.4	6.5	11.2	19.6	60.3	43.3
Papua New Guinea	1996 <sup>a,b</sup>	50.9	1.7	4.5	7.9	11.9	19.2	56.5	40.5
Paraguay	2002 <sup>c,d</sup>	57.8	0.6	2.2	6.3	11.3	18.8	61.3	45.4
Peru	2000 <sup>c,d</sup>	49.8	0.7	2.9	8.3	14.1	21.5	53.2	37.2
Philippines	2000 <sup>a,b</sup>	46.1	2.2	5.4	8.8	13.1	20.5	52.3	36.3
Poland	2002 <sup>a,b</sup>	34.1	3.1	7.6	12.0	16.2	22.3	41.9	26.7
Portugal	1997 <sup>c,d</sup>	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	2002 <sup>a,b</sup>	30.3	3.2	7.9	12.3	16.5	22.3	41.0	26.1
Russian Federation	2002 <sup>a,b</sup>	31.0	3.3	8.2	12.7	16.9	23.0	39.3	23.8
Rwanda	1983–85 <sup>a,b</sup>	28.9	4.2	9.7	13.2	16.5	21.6	39.1	24.2
Saudi Arabia		..	..	..	..	..	..	..	..
Senegal	1995 <sup>a,b</sup>	41.3	2.6	6.4	10.3	14.5	20.6	48.2	33.5
Serbia and Montenegro		..	..	..	..	..	..	..	..
Sierra Leone	1989 <sup>a,b</sup>	62.9	0.5	1.1	2.0	9.8	23.7	63.4	43.6
Singapore	1998 <sup>c,d</sup>	42.5	1.9	5.0	9.4	14.6	22.0	49.0	32.8
Slovak Republic	1996 <sup>c,d</sup>	25.8	3.1	8.8	14.9	18.7	22.8	34.8	20.9
Slovenia	1998–99 <sup>c,d</sup>	28.4	3.6	9.1	14.2	18.1	22.9	35.7	21.4
Somalia		..	..	..	..	..	..	..	..
South Africa	2000 <sup>a,b</sup>	57.8	1.4	3.5	6.3	10.0	18.0	62.2	44.7
Spain	1990 <sup>c,d</sup>	32.5	2.8	7.5	12.6	17.0	22.6	40.3	25.2
Sri Lanka	1999–2000 <sup>a,b</sup>	33.2	3.4	8.3	12.5	16.0	21.0	42.2	27.8
Sudan		..	..	..	..	..	..	..	..
Swaziland	1994 <sup>c,d</sup>	60.9	1.0	2.7	5.8	10.0	17.1	64.4	50.2
Sweden	2000 <sup>c,d</sup>	25.0	3.6	9.1	14.0	17.6	22.7	36.6	22.2
Switzerland	1992 <sup>c,d</sup>	33.1	2.6	6.9	12.7	17.3	22.9	40.3	25.2
Syrian Arab Republic		..	..	..	..	..	..	..	..
Tajikistan	2003 <sup>a,b</sup>	32.6	3.3	7.9	12.3	16.5	22.4	40.8	25.6
Tanzania	1993 <sup>a,b</sup>	38.2	2.8	6.8	11.0	15.1	21.6	45.5	30.1
Thailand	2000 <sup>a,b</sup>	43.2	2.5	6.1	9.5	13.5	20.9	50.0	33.8
Togo		..	..	..	..	..	..	..	..
Trinidad and Tobago	1992 <sup>c,d</sup>	40.3	2.1	5.5	10.3	15.5	22.7	45.9	29.9
Tunisia	2000 <sup>a,b</sup>	39.8	2.3	6.0	10.3	14.8	21.7	47.3	31.5
Turkey	2000 <sup>a,b</sup>	40.0	2.3	6.1	10.6	14.9	21.8	46.7	30.7
Turkmenistan	1998 <sup>a,b</sup>	40.8	2.6	6.1	10.2	14.7	21.5	47.5	31.7
Uganda	1999 <sup>a,b</sup>	43.0	2.3	5.9	10.0	14.0	20.3	49.7	34.9
Ukraine	1999 <sup>a,b</sup>	29.0	3.7	8.8	13.3	17.4	22.7	37.8	23.2
United Arab Emirates		..	..	..	..	..	..	..	..
United Kingdom	1999 <sup>c,d</sup>	36.0	2.1	6.1	11.4	16.0	22.5	44.0	28.5
United States	2000 <sup>c,d</sup>	40.8	1.9	5.4	10.7	15.7	22.4	45.8	29.9
Uruguay <sup>e</sup>	2000 <sup>c,d</sup>	44.6	1.8	4.8	9.3	14.2	21.6	50.1	33.5
Uzbekistan	2000 <sup>a,b</sup>	26.8	3.6	9.2	14.1	17.9	22.6	36.3	22.0
Venezuela, RB	1998 <sup>c,d</sup>	49.1	0.6	3.0	8.4	13.7	21.6	53.4	36.3
Vietnam	2002 <sup>a,b</sup>	37.0	3.2	7.5	11.2	14.8	21.1	45.4	29.9
West Bank and Gaza		..	..	..	..	..	..	..	..
Yemen, Rep.	1998 <sup>a,b</sup>	33.4	3.0	7.4	12.2	16.7	22.5	41.2	25.9
Zambia	1998 <sup>a,b</sup>	52.6	1.0	3.3	7.6	12.5	20.0	56.6	41.0
Zimbabwe	1995 <sup>a,b</sup>	56.8	1.8	4.6	8.1	12.2	19.3	55.7	40.3

a. Refers to expenditure shares by percentiles of population. b. Ranked by per capita expenditure. c. Refers to income shares by percentiles of population. d. Ranked by per capita income. e. Urban data.

## About the data

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 1983–85 and 2003. 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.

## Definitions

- 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.

## Data sources

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		Year	% of total	Year	% of labor force	% of working-age population	% of total 2002
	Male 1995–2002 <sup>a</sup>	Female 1995–2002 <sup>a</sup>	1995–2003 <sup>a</sup>	1995–2003 <sup>a</sup>	1990	2003						
Afghanistan	..	..	..	..	26	24	..	..	..	..	..	60.8
Albania	..	..	..	..	2	0	..	1995	32.0	31.0	30.7	
Algeria	..	..	..	..	3	0	..	1997	31.0	23.0	26.0	
Angola	..	..	..	..	28	26	..	..	..	..	58.1	
Argentina	..	..	31	33	7	2	..	1995	53.0	39.0	49.8	
Armenia	..	..	..	..	0	0	2000	2002	64.4	48.3	75.9	
Australia	..	..	13	12	0	0	..	..	..	..	32.1	
Austria	..	..	5	6	0	0	..	1993	95.8	76.6	30.1	
Azerbaijan	..	..	..	..	0	0	..	1996	52.0	46.0	77.9	
Bangladesh	..	..	11	10	32	27	1999–2000	9	1993	3.5	2.6	74.8
Belarus	..	..	..	..	0	0	..	1992	97.0	94.0	26.1	
Belgium	..	..	16	15	0	0	..	1995	86.2	65.9	28.8	
Benin	50	41	..	..	29	26	2001	21	1996	4.8	..	55.6
Bolivia	..	..	7	10	17	10	1998	19	1999	14.8	13.3	40.2
Bosnia and Herzegovina	..	..	..	..	0	0	..	..	..	..	50.2	
Botswana	..	..	38	47	19	13	..	..	..	..	38.1	
Brazil	27	27	15	22	18	13	1996	20	1996	36.0	31.0	54.1
Bulgaria	..	..	42	35	0	0	..	1994	64.0	63.0	39.1	
Burkina Faso	..	..	..	..	59	39	1998–99	7	1993	3.1	3.0	54.1
Burundi	..	..	..	..	49	48	..	1993	3.3	3.0	78.5	
Cambodia	..	..	..	..	26	23	2000	25	..	..	82.9	
Cameroon	..	..	..	..	28	22	1998	22	1993	13.7	11.5	73.8
Canada	..	..	15	12	0	0	..	1992	91.9	80.2	30.1	
Central African Republic	..	..	..	..	34	27	1994–95	21	..	..	58.4	
Chad	..	..	..	..	40	36	1996–97	22	1990	1.1	1.0	58.1
Chile	..	..	17	22	0	0	..	2001	54.8	34.9	54.9	
China	..	..	..	..	15	6	..	1994	17.6	17.4	66.3	
Hong Kong, China	..	..	14	9	0	0	..	..	..	..	..	
Colombia	..	..	32	41	7	6	2000	28	1999	35.0	29.3	17.1
Congo, Dem. Rep.	..	..	..	..	31	28	..	..	..	..	71.3	
Congo, Rep.	..	..	..	..	27	25	..	1992	5.8	5.6	29.7	
Costa Rica	..	..	12	16	7	3	..	1998	50.6	38.5	34.6	
Côte d'Ivoire	..	..	..	..	22	18	1998–99	14	1997	9.3	9.1	77.6
Croatia	..	..	35	40	0	0	..	2001	67.0	57.0	18.6	
Cuba	..	..	..	..	0	0	..	..	..	..	13.5	
Czech Republic	..	..	15	17	0	0	..	1995	85.0	67.2	8.6	
Denmark	..	..	9	5	0	0	..	1993	89.6	88.0	17.1	
Dominican Republic	..	..	16	34	19	11	1999	33	2001	26.8	17.7	63.6
Ecuador	..	..	11	20	7	4	..	2002	23.2	14.9	64.0	
Egypt, Arab Rep.	..	..	14	37	13	8	2000	12	1994	50.0	34.2	63.4
El Salvador	..	..	14	10	17	10	..	1996	26.2	25.0	55.3	
Eritrea	..	..	..	..	41	38	1995	31	..	..	36.3	
Estonia	..	..	19	26	0	0	..	1995	76.0	67.0	23.7	
Ethiopia	39	65	..	..	43	40	2000	24	..	..	55.1	
Finland	..	..	21	20	0	0	..	1993	90.3	83.6	24.3	
France	..	..	18	23	0	0	..	1993	88.4	74.6	24.0	
Gabon	..	..	..	..	23	11	2000	26	1995	15.0	14.0	58.7
Gambia, The	..	..	..	..	40	32	..	..	..	..	55.4	
Georgia	21	7	20	20	0	0	..	2000	41.7	40.2	72.9	
Germany	..	..	11	8	0	0	..	1995	94.2	82.3	21.5	
Ghana	..	..	..	..	15	11	1998	37	1993	7.2	9.0	59.0
Greece	..	..	19	34	0	0	..	1996	88.0	73.0	47.1	
Guatemala	..	..	..	..	18	13	1998–99	20	1999	22.8	19.3	52.5
Guinea	..	..	..	..	37	29	1999	13	1993	1.5	1.8	84.5
Guinea-Bissau	..	..	..	..	40	36	..	..	..	..	51.8	
Haiti	..	..	..	..	28	21	2000	43	..	..	60.6	

	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		Year	% of total	Year	% of labor force	% of working-age population	% of total 2002
	Male 1995–2002 <sup>a</sup>	Female 1995–2002 <sup>a</sup>	1995–2003 <sup>a</sup>	1995–2003 <sup>a</sup>	1990	2003						
Honduras	..	..	7	8	10	5	..	..	1999	20.6	17.7	48.8
Hungary	..	..	13	12	0	0	..	..	1996	77.0	65.0	29.8
India	54	41	..	..	17	11	1998–99	10	1992	10.6	7.9	78.7
Indonesia	..	..	12	15	11	7	1997	12	1995	8.0	7.0	64.0
Iran, Islamic Rep.	..	..	..	..	7	2	..	..	2000	30.0	15.9	52.2
Iraq	..	..	..	..	4	2	..	..	..	..	..	83.1
Ireland	..	..	9	7	0	0	..	..	1992	79.3	64.7	24.8
Israel	..	..	19	18	0	0	..	..	1992	82.0	63.0	34.3
Italy	..	..	23	31	0	0	..	..	1997	87.0	68.0	24.4
Jamaica	..	..	24	46	0	0	..	..	1999	44.4	45.8	42.6
Japan	..	..	11	9	0	0	..	..	1994	97.5	92.3	18.3
Jordan	..	..	..	..	1	0	1997	10	1995	40.0	25.0	53.9
Kazakhstan	..	..	..	..	0	0	1999	33	2001	38.0	28.3	46.8
Kenya	..	..	..	..	43	38	1998	32	1995	18.0	24.0	56.0
Korea, Dem. Rep.	..	..	..	..	0	0	..	..	..	..	..	23.4
Korea, Rep.	..	..	10	7	0	0	..	..	1996	58.0	43.0	47.1
Kuwait	..	..	..	..	0	0	..	..	..	..	..	24.8
Kyrgyz Republic	33	25	..	..	0	0	1997	26	1997	44.0	42.0	48.8
Lao PDR	..	..	..	..	29	24	..	..	..	..	..	49.1
Latvia	..	..	20	21	0	0	..	..	1995	60.5	52.3	35.9
Lebanon	..	..	..	..	0	0	..	..	..	..	..	69.9
Lesotho	..	..	38	59	23	20	..	..	..	..	..	15.1
Liberia	..	..	..	..	22	13	..	..	..	..	..	32.0
Libya	..	..	..	..	0	0	..	..	..	..	..	52.8
Lithuania	50	27	31	26	0	0	..	..	2002	77.0	60.0	31.4
Macedonia, FYR	..	..	..	..	0	0	..	..	1995	49.0	47.0	15.3
Madagascar	..	..	..	..	38	33	1997	22	1993	5.4	4.8	45.0
Malawi	..	..	..	..	39	29	2000	27	..	..	..	58.9
Malaysia	..	..	..	..	4	2	..	..	1993	48.7	37.8	46.2
Mali	..	..	..	..	58	49	2001	11	1990	2.5	2.0	49.2
Mauritania	..	..	..	..	26	21	2000–01	29	1995	5.0	4.0	25.8
Mauritius	..	..	..	..	4	1	..	..	1995	60.0	57.0	23.1
Mexico	18	22	5	6	9	6	..	..	1997	30.0	31.0	55.1
Moldova	..	..	..	..	0	0	..	..	..	..	..	41.8
Mongolia	..	..	..	..	2	1	..	..	2002	61.4	49.1	29.6
Morocco	..	..	16	15	11	0	1992	16	2000	17.3	11.3	67.2
Mozambique	..	..	..	..	35	32	1997	27	1995	2.0	2.1	29.0
Myanmar	..	..	..	..	26	22	..	..	..	..	..	81.5
Namibia	..	..	33	41	26	15	1992	31	..	..	..	29.9
Nepal	60	76	..	..	48	40	2001	16	..	..	..	72.8
Netherlands	..	..	6	6	0	0	..	..	1993	91.7	75.4	34.4
New Zealand	..	..	12	11	0	0	..	..	..	..	..	22.1
Nicaragua	..	..	20	20	16	9	1997–98	31	1999	14.3	13.3	50.9
Niger	..	..	..	..	47	43	1998	13	1992	1.3	1.5	49.2
Nigeria	..	..	..	..	28	23	1999	17	1993	1.3	1.3	74.4
Norway	..	..	12	11	0	0	..	..	1993	94.0	85.8	16.5
Oman	..	..	..	..	1	0	..	..	..	..	..	18.4
Pakistan	64	61	11	29	20	14	1991	7	1993	3.5	2.1	65.1
Panama	..	..	25	37	5	2	..	..	1998	51.6	40.7	28.3
Papua New Guinea	..	..	..	..	22	16	..	..	..	..	..	11.4
Paraguay	..	..	12	17	10	5	1990	17	2001	18.0	12.0	61.9
Peru	..	..	13	14	3	2	2000	19	2001	31.0	19.0	50.1
Philippines	16	19	17	23	11	4	1998	14	1996	28.3	13.6	61.0
Poland	..	..	44	44	0	0	..	..	1996	68.0	64.0	27.6
Portugal	..	..	10	14	2	1	..	..	1996	84.3	80.0	29.3
Puerto Rico	..	..	23	16	0	0	..	..	..	..	..	..



	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		Year	% of total	Year	% of labor force	% of working-age population	% of total 2002
	Male 1995–2002 <sup>a</sup>	Female 1995–2002 <sup>a</sup>	1995–2003 <sup>a</sup>	1995–2003 <sup>a</sup>	1990	2003						
Romania	..	..	18	17	0	0	..	..	1994	55.0	48.0	34.1
Russian Federation	10	9	24	26	0	0	..	..	..	..	..	44.2
Rwanda	..	..	..	..	42	41	2000	36	1993	9.3	13.3	42.8
Saudi Arabia	..	..	..	..	0	0	..	..	..	..	..	22.9
Senegal	..	..	..	..	35	25	1997	18	1998	4.3	4.7	54.8
Serbia and Montenegro	..	..	..	..	0	0	..	..	..	..	..	37.2
Sierra Leone	..	..	..	..	17	13	..	..	..	..	..	39.7
Singapore	..	..	4	6	0	0	..	..	1995	73.0	56.0	69.1
Slovak Republic	..	..	39	36	0	0	..	..	1996	73.0	72.0	10.6
Slovenia	..	..	15	18	0	0	..	..	1995	86.0	68.7	25.1
Somalia	..	..	..	..	35	30	..	..	..	..	..	55.4
South Africa	16	28	42	47	0	0	1998	42	..	..	..	59.4
Spain	..	..	18	27	0	0	..	..	1994	85.3	61.4	28.7
Sri Lanka	..	..	20	31	3	1	..	..	1992	28.8	20.8	51.3
Sudan	..	..	..	..	31	26	..	..	1995	12.1	12.0	79.3
Swaziland	..	..	42	48	15	11	..	..	..	..	..	40.5
Sweden	..	..	14	12	0	0	..	..	1994	91.1	88.9	14.7
Switzerland	..	..	7	4	0	0	..	..	1994	98.1	96.8	42.1
Syrian Arab Republic	..	..	..	..	9	2	..	..	..	..	..	54.2
Tajikistan	..	..	..	..	0	0	..	..	..	..	..	72.3
Tanzania	60	85	..	..	42	35	1999	23	1996	2.0	2.0	45.2
Thailand	..	..	7	6	20	10	..	..	1999	18.0	17.0	30.3
Togo	..	..	..	..	30	26	1998	24	1997	15.9	15.0	26.5
Trinidad and Tobago	..	..	22	31	0	0	..	..	..	..	..	62.7
Tunisia	..	..	..	..	0	0	..	..	2000	40.0	23.0	50.1
Turkey	10	6	21	18	16	6	1998	10	1997	37.1	27.4	34.2
Turkmenistan	..	..	..	..	0	0	2000	27	..	..	..	29.3
Uganda	..	..	..	..	47	43	2000–01	28	1994	8.2	..	72.1
Ukraine	5	5	23	25	0	0	..	..	1995	69.8	66.1	28.9
United Arab Emirates	..	..	6	6	0	0	..	..	..	..	..	26.6
United Kingdom	..	..	13	9	0	0	..	..	1994	89.7	84.5	16.6
United States	..	..	13	11	0	0	..	..	1993	94.0	91.9	55.1
Uruguay	..	..	29	42	3	1	..	..	1995	82.0	78.0	71.0
Uzbekistan	..	..	..	..	0	0	1996	22	..	..	..	54.5
Venezuela, RB	..	..	20	28	2	0	..	..	1999	23.6	18.2	53.1
Vietnam	..	..	..	..	13	4	1997	25	1998	8.4	10.0	70.8
West Bank and Gaza	..	..	..	..	1	0	..	..	..	..	..	..
Yemen, Rep.	..	..	..	..	22	18	1997	9	..	..	..	72.8
Zambia	..	..	..	..	17	15	2001–02	23	1994	10.2	7.9	47.1
Zimbabwe	..	..	17	11	32	26	1999	33	1995	12.0	10.0	48.4
<b>World</b>	..	..	.. w	.. w	15 w	10 w	..	..	..	..	..	40.0 w
Low income	..	..	..	..	23	18	..	..	..	..	..	72.2
Middle income	..	..	..	..	11	5	..	..	..	..	..	50.6
Lower middle income	..	..	..	..	12	5	..	..	..	..	..	54.6
Upper middle income	..	..	17	22	5	3	..	..	..	..	..	42.4
Low & middle income	..	..	..	..	17	12	..	..	..	..	..	53.8
East Asia & Pacific	..	..	..	..	15	6	..	..	..	..	..	62.2
Europe & Central Asia	..	..	22	24	3	1	..	..	..	..	..	34.4
Latin America & Carib.	..	..	13	19	11	8	..	..	..	..	..	52.2
Middle East & N. Africa	..	..	..	..	8	4	..	..	..	..	..	42.9
South Asia	..	..	..	..	19	14	..	..	..	..	..	76.0
Sub-Saharan Africa	..	..	..	..	32	28	..	..	..	..	..	59.5
High income	..	..	14	13	0	0	..	..	..	..	..	36.7
Europe EMU	..	..	16	20	0	0	..	..	..	..	..	25.4

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 in a country 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.

## Data sources

The data on urban informal sector employment and youth unemployment are from the International Labour Organization (ILO) database Key Indicators of the Labour Market, third edition. The child labor force participation rates are from the ILO database Estimates and Projections of the Economically Active Population, 1950–2010, Fourth edition. The data on female-headed household are from Demographic and Health Surveys by Macro International. The data on pension contributors are drawn from Robert Palacios and Montserrat Pallares-Miralles's "International Patterns of Pension Provision" (2000), and updates. For further updates, notes, and sources, go to "Knowledge and information" on the World Bank's Web site on pensions (<http://www.worldbank.org/pensions>). The data on private health expenditure for developing countries are largely from the World Health Organization's World Health Report 2004 and updates, from household surveys, and from World Bank poverty assessments and sector studies. The data on private health expenditure for member countries of the Organisation for Economic Co-operation and Development (OECD) are from the OECD.

	Public expenditure on pensions				Public expenditure on health	Public expenditure on education	
	Year	% of GDP	Year	Average pension % of per capita income	% of GDP 2002	% of GDP 2002/03	Per student % of GDP per capita 2002/03
Afghanistan		..		..	3.1	..	..
Albania	1995	5.1	1995	36.4	2.4	..	..
Algeria	1997	2.1	1991	75.0	3.2	..	..
Angola		..		..	2.1	2.8	..
Argentina	1994	6.2		..	4.5	4.6	14.5
Armenia	2002	2.5	1996	18.7	1.3	3.2	14.5
Australia	1997	5.9	1989	37.3	6.5	4.9	17.4
Austria	1995	14.9	1993	69.3	5.4	5.8	30.4
Azerbaijan	1996	2.5	1996	51.4	0.8	3.2	10.9
Bangladesh	1992	0.0		..	0.8	2.4	11.6
Belarus	1997	7.7	1995	31.2	4.7	6.0	..
Belgium	1997	12.9		..	6.5	..	..
Benin	1993	0.4	1993	189.7	2.1	3.3	..
Bolivia	2000	4.5		..	4.2	6.3	17.7
Bosnia and Herzegovina		..		..	4.6	..	..
Botswana		..		..	3.7	2.2	7.3
Brazil	1997	9.8		..	3.6	4.3	13.8
Bulgaria	1996	7.3	1995	39.3	4.4	3.5	18.6
Burkina Faso	1992	0.3	1992	207.3	2.0	..	..
Burundi	1991	0.2	1991	57.4	0.6	3.9	25.1
Cambodia		..		..	2.1	1.8	..
Cameroon	1993	0.4		..	1.2	3.8	..
Canada	1997	5.4	1994	54.3	6.7	5.2	..
Central African Republic	1990	0.3		..	1.6	..	..
Chad	1997	0.1		..	2.7	..	..
Chile	2001	2.9	1993	56.1	2.6	4.2	16.0
China	1996	2.7		..	2.0	..	..
Hong Kong, China		..		..	..	4.1	22.9
Colombia	1994	1.1	1989	72.2	6.7	5.2	18.1
Congo, Dem. Rep.		..		..	1.1	..	..
Congo, Rep.	1992	0.9		..	1.5	3.2	14.5
Costa Rica	1997	4.2	1993	76.1	6.1	5.1	21.2
Côte d'Ivoire	1997	0.3		..	1.4	4.6	..
Croatia	2001	13.2		..	5.9	4.5	24.8
Cuba	1992	12.6		..	6.5	9.0	41.4
Czech Republic	1999	9.8	1996	37.0	6.4	4.2	19.6
Denmark	1997	8.8	1994	46.7	7.3	8.5	38.3
Dominican Republic	2000	0.8	2000	42.0	2.2	2.3	..
Ecuador	2002	1.4	2002	55.3	1.7	1.0	..
Egypt, Arab Rep.	1994	2.5	1994	45.0	1.8	..	..
El Salvador	1997	1.3		..	3.6	2.9	9.9
Eritrea	2001	0.3		..	3.2	4.1	25.7
Estonia	2002	6.7	1995	56.7	3.9	5.5	22.8
Ethiopia	1993	0.9		..	2.6	4.6	..
Finland	1997	12.1	1994	57.4	5.5	6.2	26.2
France	1997	13.4		..	7.4	5.7	25.2
Gabon		..		..	1.8	3.9	..
Gambia, The		..		..	3.3	2.8	..
Georgia	2000	2.7	1996	12.6	1.0	2.2	..
Germany	1997	12.1	1995	62.8	8.6	4.6	23.4
Ghana	1996	1.1		..	2.3	..	..
Greece	1993	11.9	1990	85.6	5.0	3.9	19.6
Guatemala	1995	0.7	1995	27.6	2.3	..	..
Guinea		..		..	0.9	1.8	..
Guinea-Bissau		..		..	3.0	..	..
Haiti		..		..	3.0	..	..



	Public expenditure on pensions				Public expenditure on health	Public expenditure on education	
	Year	% of GDP	Year	Average pension % of per capita income	% of GDP 2002	% of GDP 2002/03	Per student % of GDP per capita 2002/03
Honduras	1994	0.6	..	..	3.2	..	..
Hungary	1996	9.7	1996	33.6	5.5	5.1	22.1
India	..	..	..	..	1.3	4.1	20.9
Indonesia	..	..	..	..	1.2	1.3	6.0
Iran, Islamic Rep.	1994	1.5	..	..	2.9	4.9	13.9
Iraq	..	..	..	..	0.3	..	..
Ireland	1997	4.6	1993	77.9	5.5	4.3	16.9
Israel	1996	5.9	1992	48.1	6.0	7.3	22.8
Italy	1997	17.6	..	..	6.4	5.0	27.9
Jamaica	1996	..	1989	25.9	3.4	6.1	22.2
Japan	1997	6.9	1989	33.9	6.5	3.6	20.4
Jordan	1995	4.2	1995	144.0	4.3	..	..
Kazakhstan	2001	3.8	2001	23.0	1.9	3.0	10.9
Kenya	1993	0.5	..	..	2.2	7.0	..
Korea, Dem. Rep.	..	..	..	..	3.5	..	..
Korea, Rep.	1997	1.3	..	..	2.6	4.3	13.5
Kuwait	1990	3.5	..	..	2.9	..	..
Kyrgyz Republic	1997	6.4	2001	45.0	2.2	3.1	9.4
Lao PDR	..	..	..	..	1.5	2.8	11.0
Latvia	1995	10.2	1994	47.6	3.3	5.5	22.4
Lebanon	..	..	..	..	3.5	2.7	..
Lesotho	..	..	..	..	5.3	10.4	35.6
Liberia	..	..	..	..	1.4	..	..
Libya	..	..	..	..	1.6	..	..
Lithuania	2002	7.1	1995	21.3	4.3	5.9	..
Macedonia, FYR	1998	8.7	1996	91.6	5.8	..	..
Madagascar	1990	0.2	..	..	1.2	2.9	..
Malawi	..	..	..	..	4.0	6.0	..
Malaysia	1999	6.5	..	..	2.0	7.9	30.4
Mali	1991	0.4	..	..	2.3	..	..
Mauritania	1992	0.2	..	..	2.9	..	..
Mauritius	1999	4.4	..	..	2.2	4.7	13.1
Mexico	2000	0.3 <sup>a</sup>	..	..	2.7	5.2	17.2
Moldova	1996	7.5	..	..	4.1	4.9	23.1
Mongolia	2002	5.8	..	..	4.6	9.0	29.0
Morocco	1994	1.8	1994	118.0	1.5	6.5	31.4
Mozambique	1996	0.0	..	..	4.1	..	..
Myanmar	..	..	..	..	0.4	..	..
Namibia	..	..	..	..	4.7	7.2	24.8
Nepal	..	..	..	..	1.4	3.4	12.6
Netherlands	1997	11.1	1989	48.5	5.8	5.0	23.1
New Zealand	1997	6.5	..	..	6.6	6.7	23.6
Nicaragua	1996	2.5	..	..	3.9	3.1	11.7
Niger	1992	0.1	..	..	2.0	2.3	26.3
Nigeria	1991	0.1	1991	40.5	1.2	..	..
Norway	1997	8.2	1994	49.9	8.0	7.0	26.4
Oman	..	..	..	..	2.8	4.6	17.5
Pakistan	1993	0.9	..	..	1.1	1.8	..
Panama	1996	4.3	..	..	6.4	4.5	15.5
Papua New Guinea	..	..	..	..	3.8	2.3	..
Paraguay	2000	0.8 <sup>b</sup>	..	..	3.2	4.8	15.9
Peru	2000	2.6	..	..	2.2	2.9	9.3
Philippines	1993	1.0	..	..	1.1	3.2	11.3
Poland	1997	15.5	1995	61.2	4.4	5.6	18.5
Portugal	1997	10.0	1989	44.6	6.6	5.9	27.5
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 2002	% of GDP 2002/03	Per student % of GDP per capita 2002/03
Romania	1996	5.1	1994	34.1	4.2	3.3	..
Russian Federation	1996	5.7	1995	18.3	3.5	3.1	..
Rwanda	..	..	..	..	3.1	2.8	12.8
Saudi Arabia	..	..	..	..	3.3	..	..
Senegal	1998	1.5	1997	85.0 <sup>b</sup>	2.3	3.2	..
Serbia and Montenegro	..	..	..	..	5.1	3.3	..
Sierra Leone	..	..	..	..	1.7	3.7	22.3
Singapore	1996	1.4	..	..	1.3	..	..
Slovak Republic	1994	9.1	1994	44.5	5.3	4.0	17.1
Slovenia	1996	13.6	1996	49.3	6.2	..	..
Somalia	..	..	..	..	1.2	..	..
South Africa	..	..	..	..	3.5	5.3	17.5
Spain	1997	10.9	1995	54.1	5.4	4.4	22.0
Sri Lanka	1996	2.4	..	..	1.8	..	..
Sudan	..	..	..	..	1.0	..	..
Swaziland	..	..	..	..	3.6	7.1	18.6
Sweden	1997	11.1	1994	78.0	7.8	7.3	28.7
Switzerland	1997	13.4	1993	44.4	6.5	5.5	29.5
Syrian Arab Republic	1991	0.5	..	..	2.3	..	..
Tajikistan	1996	3.0	..	..	0.9	2.8	8.7
Tanzania	..	..	..	..	2.7	..	..
Thailand	..	..	..	..	3.1	5.2	17.1
Togo	1997	0.6	1993	178.8	5.1	2.6	..
Trinidad and Tobago	1996	0.6	..	..	1.4	4.3	19.0
Tunisia	2000	4.2	1991	89.5	2.9	6.8	23.9
Turkey	1997	4.5	1993	56.0	4.3	3.7	16.4
Turkmenistan	1996	2.3	..	..	3.0	..	..
Uganda	1997	0.8	..	..	2.1	..	..
Ukraine	1996	8.6	1995	30.9	3.3	5.4	21.7
United Arab Emirates	..	..	..	..	2.3	1.6	7.1
United Kingdom	1997	10.3	..	..	6.4	4.7	16.8
United States	1997	7.5	1989	33.0	6.6	5.7	24.7
Uruguay	1996	15.0	1996	64.1	2.9	3.2	12.4
Uzbekistan	1995	5.3	1995	45.8	2.5	..	..
Venezuela, RB	2001	2.7	..	..	2.3	..	..
Vietnam	1998	1.6	..	..	1.5	..	..
West Bank and Gaza	..	..	..	..	..	..	..
Yemen, Rep.	1994	0.1	..	..	1.0	9.5	..
Zambia	1993	0.1	..	..	3.1	2.0	11.0
Zimbabwe	..	..	..	..	4.4	4.7	17.7
<b>World</b>					<b>5.8 w</b>	<b>4.4 m</b>	<b>.. m</b>
Low income					1.5	3.2	..
Middle income					3.0	4.3	..
Lower middle income					2.7	3.5	..
Upper middle income					3.4	4.5	18.2
Low & middle income					2.7	4.0	..
East Asia & Pacific					1.9	3.2	..
Europe & Central Asia					4.2	3.8	..
Latin America & Carib.					3.3	4.3	..
Middle East & N. Africa					2.7	..	..
South Asia					1.3	3.1	..
Sub-Saharan Africa					2.6	3.3	..
High income					6.6	5.5	25.7
Europe EMU					7.0	5.0	25.7

a. Refers only to the scheme for civil servants. b. Refers to system covering private sector workers.

## 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.

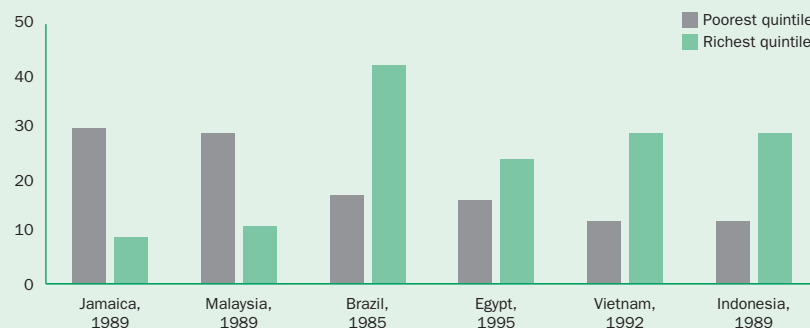
## Definitions

- Public expenditure on pensions includes all government expenditures on cash transfers to the elderly, the disabled, and survivors and the administrative costs of these programs.
- Average pension is estimated by dividing total pension expenditure by the number of pensioners.
- Public expenditure on health 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.
- Public expenditure on education consists of public spending on public education plus subsidies to private education at the primary, secondary, and tertiary levels.

## 2.9a

### Poor people often benefit less than wealthy people from public health spending

Share of public health spending received by poorest and richest quintiles, selected countries (%)



Governments in developing countries support free or subsidized health services to improve health conditions for poor and vulnerable people. Publicly funded primary health care services are often also part of a national strategy to reduce poverty. In many countries, however, poor people are not benefiting as much as better-off groups.

Source: Carr 2004.

## Data sources

The data on pension spending are drawn from Robert Palacios and Montserrat Pallares-Miralles's "International Patterns of Pension Provision" (2000) and updates. For further updates, notes, and sources, go to "Knowledge and information" on the World Bank's Web site on pensions (<http://www.worldbank.org/pensions>). The estimates of health expenditure come from the World Health Organization's World Health Report 2004 and updates, from the Organisation for Economic Co-operation and Development for its member countries, and from countries' national health accounts, supplemented by World Bank country and sector studies. The data on education expenditure are from the UNESCO Institute for Statistics.

	Public expenditure per student <sup>a</sup>						Public expenditure on education	Trained teachers in primary education	Primary pupil-teacher ratio
	Primary		% of GDP per capita Secondary		Tertiary		% of total government expenditure	% of total	pupils per teacher
	1990/91	2002/03	1998/99	2002/03	1998/99	2002/03	2002/03	2002/03	2002/03
Afghanistan	..	..	..	..	..	..	..	..	61
Albania	..	..	..	..	..	..	..	..	22
Algeria	..	11.1	..	16.8	..	..	..	97.9	28
Angola	32.1	..	..	..	..	..	..	..	..
Argentina	..	12.4	13.6	15.8	20.2	17.8	13.7	67.0	18
Armenia	..	9.6	..	11.6	..	35.5	..	..	12
Australia	..	16.6	14.5	15.1	26.9	25.4	13.3	..	..
Austria	18.1	23.8	30.0	28.1	52.8	49.6	11.1	..	13
Azerbaijan	..	7.3	14.9	12.9	16.6	12.6	20.7	99.6	15
Bangladesh	..	8.9	13.2	14.1	49.4	35.5	15.5	66.9	56
Belarus	..	..	..	..	..	..	..	97.7	16
Belgium	15.9	18.7	..	23.6	..	..	..	..	12
Benin	..	9.7	14.0	17.4	126.5	..	..	62.3	62
Bolivia	..	15.5	13.9	12.8	51.4	44.0	19.7	74.1	24
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..
Botswana	..	6.1	..	5.7	..	90.5	25.6	89.5	27
Brazil	..	11.3	..	10.9	84.9	58.6	12.0	91.9	23
Bulgaria	22.1	16.9	16.7	19.1	14.1	19.7	..	..	17
Burkina Faso	..	..	..	..	..	..	..	86.8	45
Burundi	13.6	12.5	..	63.5	..	545.5	13.0	..	50
Cambodia	..	5.9	..	..	..	..	15.3	96.0	56
Cameroon	..	..	18.5	..	70.7	..	17.3	68.1	57
Canada	..	..	..	..	49.0	48.2	12.7	..	17
Central African Republic	10.6	..	..	..	..	..	..	..	..
Chad	..	..	25.6	..	..	..	..	..	68
Chile	..	15.8	14.8	15.6	22.5	17.7	18.7	92.5	33
China	..	..	10.5	..	61.6	..	..	96.8	20
Hong Kong, China	..	13.5	..	19.3	..	70.3	21.9	..	20
Colombia	..	15.9	14.9	17.9	38.1	30.4	15.6	..	27
Congo, Dem. Rep.	..	..	..	..	..	..	..	..	..
Congo, Rep.	..	8.1	..	17.0	..	220.8	12.6	57.1	65
Costa Rica	..	16.2	..	22.9	..	50.6	22.4	88.2	23
Côte d'Ivoire	..	14.6	32.1	..	138.8	..	21.5	100.0	42
Croatia	..	48.7	..	11.3	..	31.4	10.0	100.0	18
Cuba	18.1	32.3	36.7	40.9	78.2	90.0	18.7	100.0	11
Czech Republic	..	11.8	21.3	21.6	..	29.0	9.6	..	17
Denmark	..	24.4	38.2	35.5	60.5	74.2	15.4	..	10
Dominican Republic	..	8.9	..	3.5	..	..	12.4	58.5	39
Ecuador	..	3.0	11.7	6.3	..	..	8.0	69.9	24
Egypt, Arab Rep.	..	..	..	..	..	..	..	99.9	22
El Salvador	..	10.0	8.1	9.4	10.4	10.7	20.0	..	26
Eritrea	..	11.8	..	35.7	..	445.1	..	80.5	47
Estonia	..	20.1	22.5	24.8	30.3	23.9	..	..	14
Ethiopia	29.6	..	..	..	..	..	13.8	69.3	65
Finland	19.9	17.8	..	26.3	..	37.5	12.7	..	16
France	11.8	17.8	..	28.7	..	29.3	11.4	..	19
Gabon	..	4.7	13.9	..	52.4	..	..	95.3	49
Gambia, The	13.2	11.9	..	13.6	..	..	8.9	73.1	38
Georgia	..	..	..	..	..	..	11.8	97.4	14
Germany	..	16.9	20.8	21.8	40.7	41.2	9.5	..	14
Ghana	6.4	..	..	..	..	..	..	62.9	31
Greece	8.0	14.5	15.9	22.4	29.4	24.7	..	..	13
Guatemala	..	6.7	..	3.6	..	..	..	100.0	30
Guinea	..	9.2	..	..	..	..	25.6	..	45
Guinea-Bissau	..	..	..	..	..	..	..	..	..
Haiti	9.9	..	..	..	..	..	..	..	..

	Public expenditure per student <sup>a</sup>						Public expenditure on education	Trained teachers in primary education	Primary pupil-teacher ratio
	Primary		% of GDP per capita Secondary		Tertiary				
	1990/91	2002/03	1998/99	2002/03	1998/99	2002/03	% of total government expenditure 2002/03	% of total 2002/03	pupils per teacher 2002/03
Honduras	..	..	..	..	..	..	..	..	34
Hungary	20.3	20.3	18.5	19.7	32.3	31.3	14.1	..	10
India	..	12.4	..	20.9	..	86.4	12.7	..	41
Indonesia	..	3.7	..	7.2	..	20.8	9.8	93.5	21
Iran, Islamic Rep.	..	11.3	..	12.1	..	33.5	17.7	98.4	24
Iraq	..	..	..	..	..	..	..	..	19
Ireland	11.2	12.0	18.0	17.9	27.9	27.2	13.5	..	19
Israel	11.3	21.7	22.2	22.2	31.7	27.0	..	..	12
Italy	15.1	24.7	28.6	30.9	24.6	25.3	10.3	..	11
Jamaica	9.8	15.1	..	23.5	..	66.9	12.3	79.5	34
Japan	..	21.5	20.5	20.9	14.8	17.1	10.5	..	20
Jordan	..	15.0	15.8	18.0	..	..	..	..	..
Kazakhstan	..	8.1	..	12.7	..	10.2	..	..	19
Kenya	..	..	..	..	..	..	22.1	..	34
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..
Korea, Rep.	11.6	16.6	14.9	21.1	7.0	7.3	13.1	..	31
Kuwait	..	16.1	..	19.9	..	..	..	100.0	13
Kyrgyz Republic	..	6.1	17.0	10.2	34.3	14.0	18.6	52.0	24
Lao PDR	..	7.9	10.3	10.2	..	76.2	11.0	77.5	31
Latvia	..	22.0	24.3	24.1	29.4	18.4	..	..	14
Lebanon	..	..	..	..	..	19.0	12.3	14.0	17
Lesotho	..	23.8	68.2	55.8	1,233.7	692.4	18.4	72.6	47
Liberia	..	..	..	..	..	..	..	..	..
Libya	..	..	..	..	..	..	..	..	..
Lithuania	..	..	..	..	..	31.4	..	..	16
Macedonia, FYR	..	..	..	..	..	..	..	..	21
Madagascar	..	8.2	26.0	..	155.9	181.7	..	..	52
Malawi	..	..	..	..	..	..	..	51.2	62
Malaysia	..	17.0	..	27.6	..	114.0	20.0	..	20
Mali	..	..	61.1	..	262.8	..	..	..	57
Mauritania	..	..	47.2	..	103.8	..	..	..	41
Mauritius	10.1	9.0	..	14.0	..	48.7	13.3	100.0	25
Mexico	3.5	13.8	17.0	18.4	44.3	35.0	24.3	..	27
Moldova	..	18.1	..	26.6	..	19.7	21.4	..	19
Mongolia	..	38.3	..	19.5	43.9	36.4	..	92.9	31
Morocco	..	18.9	49.5	48.3	100.5	94.6	26.4	..	28
Mozambique	10.5	..	..	..	..	..	..	59.6	67
Myanmar	..	..	..	..	..	..	..	65.0	33
Namibia	..	21.0	36.3	25.2	157.2	93.5	..	36.0	22
Nepal	..	12.0	12.7	10.1	..	68.7	14.9	16.2	36
Netherlands	12.2	16.6	21.7	22.7	46.4	40.8	10.7	..	..
New Zealand	16.5	18.9	23.9	21.8	40.9	37.5	..	..	18
Nicaragua	..	8.9	..	5.2	..	62.4	15.0	74.2	35
Niger	..	15.5	..	52.8	..	304.5	..	71.7	42
Nigeria	..	..	..	..	..	..	..	..	42
Norway	32.8	27.1	19.4	17.2	46.6	42.2	16.2	..	..
Oman	11.0	17.7	22.4	18.4	..	50.2	..	99.8	21
Pakistan	..	..	..	..	..	..	7.8	..	40
Panama	11.5	10.4	19.8	15.9	..	32.7	7.7	75.3	24
Papua New Guinea	..	12.4	18.7	19.2	44.6	..	17.5	100.0	35
Paraguay	..	13.0	..	15.4	..	47.1	9.7	..	..
Peru	..	7.0	10.7	9.2	..	21.3	23.5	78.2	29
Philippines	..	11.6	..	9.3	..	13.8	14.0	..	35
Poland	..	34.4	..	11.6	31.5	21.6	12.2	..	11
Portugal	15.3	23.3	..	31.5	..	27.5	12.7	..	11
Puerto Rico	..	..	..	..	..	..	..	..	..

	Public expenditure per student <sup>a</sup>						Public expenditure on education	Trained teachers in primary education	Primary pupil-teacher ratio
	Primary		% of GDP per capita Secondary		Tertiary		% of total government expenditure	% of total	pupils per teacher
	1990/91	2002/03	1998/99	2002/03	1998/99	2002/03	2002/03	2002/03	2002/03
Romania	..	..	..	..	..	30.3	..	..	17
Russian Federation	..	..	..	..	..	..	11.5	..	17
Rwanda	..	6.9	..	22.0	..	575.0	..	81.2	60
Saudi Arabia	..	32.6	..	31.4	84.0	..	..	93.3	12
Senegal	..	..	32.8	..	244.3	..	..	100.0	49
Serbia and Montenegro	..	..	10.1	..	36.9	..	..	100.0	20
Sierra Leone	..	16.8	..	8.2	..	615.2	..	78.9	37
Singapore	..	..	..	..	..	..	..	..	..
Slovak Republic	..	11.4	..	16.7	..	29.4	7.5	..	19
Slovenia	..	..	..	..	..	..	..	..	12
Somalia	..	..	..	..	..	..	..	..	..
South Africa	21.1	14.3	20.6	17.7	62.5	53.2	18.5	67.9	35
Spain	12.1	18.9	25.9	24.3	20.2	22.4	11.3	..	14
Sri Lanka	..	..	..	..	..	..	..	..	23
Sudan	..	..	..	..	..	..	..	..	29
Swaziland	..	11.2	26.5	28.9	393.7	245.9	..	90.6	31
Sweden	46.2	22.5	28.1	26.2	53.3	47.4	12.8	..	11
Switzerland	34.4	23.2	28.5	28.1	50.0	53.8	15.1	..	14
Syrian Arab Republic	..	13.8	..	24.2	..	..	..	88.0	24
Tajikistan	..	6.8	..	8.7	..	21.5	17.8	82.0	22
Tanzania	..	..	..	..	..	..	..	100.0	53
Thailand	13.0	16.5	..	11.7	..	33.0	28.3	..	19
Togo	8.3	5.7	21.1	..	247.1	..	13.6	80.5	35
Trinidad and Tobago	9.0	16.1	11.6	18.1	112.8	70.6	13.4	83.3	19
Tunisia	..	15.8	29.2	25.7	96.2	68.0	17.4	94.1	22
Turkey	9.4	11.6	..	13.8	..	48.5	..	..	..
Turkmenistan	..	..	..	..	..	..	..	..	..
Uganda	..	..	..	..	..	..	..	80.5	53
Ukraine	..	11.9	..	17.3	25.7	39.3	20.3	99.7	19
United Arab Emirates	..	6.9	12.0	8.6	..	1.6	22.5	..	15
United Kingdom	14.8	15.1	15.7	16.2	26.1	23.2	11.4	..	17
United States	..	21.2	..	24.5	28.6	31.7	17.1	..	15
Uruguay	8.2	11.0	..	10.9	..	22.5	12.8	..	21
Uzbekistan	..	..	..	..	..	..	..	..	..
Venezuela, RB	..	..	..	..	..	..	..	..	..
Vietnam	..	..	..	..	..	..	..	87.0	25
West Bank and Gaza	..	..	..	..	..	..	..	..	..
Yemen, Rep.	..	..	..	..	..	..	32.8	..	..
Zambia	..	7.1	..	19.3	..	163.8	..	100.0	43
Zimbabwe	20.5	16.2	..	24.2	..	201.3	..	95.3	39
<b>World</b>	<b>.. m</b>	<b>14.4 m</b>	<b>.. m</b>	<b>18.4 m</b>	<b>.. m</b>	<b>36.4 m</b>	<b>.. m</b>	<b>.. m</b>	<b>24 m</b>
Low income	..	10.7	..	19.2	..	163.8	..	..	43
Middle income	..	11.6	..	13.8	..	37.4	..	..	21
Lower middle income	..	13.0	..	16.3	..	32.8	..	..	23
Upper middle income	..	16.0	18.5	18.1	..	31.3	13.3	..	19
Low & middle income	..	11.9	..	17.0	..	39.3	..	..	33
East Asia & Pacific	..	12.0	..	..	..	..	16.1	91.5	32
Europe & Central Asia	..	11.9	17.7	15.3	30.3	26.4	..	..	17
Latin America & Carib.	..	12.4	13.9	15.4	..	39.5	13.4	78.2	25
Middle East & N. Africa	..	15.4	..	21.3	..	50.2	..	95.7	23
South Asia	..	12.0	..	14.1	..	68.7	12.9	..	40
Sub-Saharan Africa	..	11.2	..	20.7	..	220.8	..	..	45
High income	15.1	18.7	21.3	22.4	31.7	30.5	13.1	..	14
Europe EMU	13.6	17.8	21.7	24.3	29.4	28.4	11.1	..	14

a. Medians are computed based on data in the table.

## About the data

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. However, returns on investment to education cannot be understood by simply comparing current education indicators with national income. It takes a long time before currently enrolled children can productively contribute to the national economy (Hanushek 2002).

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)

In 1998, UNESCO introduced new International Standard Classification of Education (ISCED) 1997. 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.

## Definitions

- 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 (pre-service 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).

## Data sources

The data are from the UNESCO Institute for Statistics, which compiles international data on education in cooperation with national commissions and national statistical services.

	Gross enrollment ratio							Net enrollment ratio			
	Preprimary 2002/03	% of relevant age group						% of relevant age group			
		Primary 1990/91	Primary 2002/03	Secondary <sup>a</sup> 1990/91	Secondary <sup>a</sup> 2002/03	Tertiary <sup>a</sup> 1990/91	Tertiary <sup>a</sup> 2002/03	Primary 1990/91	Primary 2002/03	Secondary <sup>a</sup> 1990/91	Secondary <sup>a</sup> 2002/03
Afghanistan	..	29	..	10	..	2	..	27	..	..	..
Albania	44	100	107	78	78	7	15	95	97	..	74
Algeria	4	101	109	61	80	12	21	93	95	54	67
Angola	..	92	101	12	19	1	1	58	..	..	..
Argentina	61	106	120	71	100	..	56	94	..	..	81
Armenia	32	..	99	..	86	..	28	..	94	..	84
Australia	102	108	104	82	154	36	74	99	97	79	88
Austria	84	101	103	102	99	33	48	88	90	..	89
Azerbaijan	25	111	92	88	83	24	16	100	80	..	76
Bangladesh	21	80	96	20	47	4	6	71	85	19	44
Belarus	102	96	102	95	91	51	62	86	94	..	85
Belgium	114	100	105	102	157	38	60	96	100	87	95
Benin	5	59	109	12	28	3	..	45	..	..	20
Bolivia	47	95	115	37	86	22	39	91	95	29	71
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..	..
Botswana	..	103	103	38	73	3	5	85	81	29	54
Brazil	67	105	148	38	108	11	18	86	97	15	72
Bulgaria	70	98	99	75	94	32	38	86	90	63	87
Burkina Faso	1	33	46	7	11	1	1	26	36	..	9
Burundi	1	71	77	5	11	1	2	53	57	..	9
Cambodia	7	83	124	29	25	1	3	67	93	..	18
Cameroon	15	99	108	27	31	3	5	74	..	..	..
Canada	65	104	101	101	105	93	58	98	100	89	98
Central African Republic	3	66	66	11	..	2	..	53	..	..	..
Chad	..	55	78	7	15	..	..	36	63	..	10
Chile	49	100	100	73	89	..	42	88	86	55	79
China	36	125	116	49	67	3	13	97	95	..	..
Hong Kong, China	73	102	108	80	78	..	26	..	98	..	72
Colombia	37	102	110	50	71	13	24	68	87	..	54
Congo, Dem. Rep.	1	71	..	..	..	2	..	54	..	..	..
Congo, Rep.	4	117	80	46	32	5	4	79	54	..	..
Costa Rica	41	102	108	43	56	26	20	87	90	37	50
Côte d'Ivoire	3	65	78	21	..	..	..	46	61	..	21
Croatia	45	80	97	69	90	22	39	74	89	57	87
Cuba	115	98	98	89	93	21	34	92	93	69	86
Czech Republic	96	96	104	91	96	17	34	87	88	..	89
Denmark	90	98	105	109	129	36	63	98	100	87	93
Dominican Republic	34	95	124	..	59	..	34	58	92	..	36
Ecuador	74	116	117	55	59	20	..	98	100	..	50
Egypt, Arab Rep.	13	91	97	71	88	17	..	84	90	..	81
El Salvador	49	81	113	26	59	17	17	73	90	..	49
Eritrea	6	21	63	..	28	..	2	16	45	..	22
Estonia	106	111	101	98	96	27	64	99	96	..	87
Ethiopia	2	32	66	14	19	1	2	23	47	..	15
Finland	55	99	102	116	126	48	86	98	100	93	94
France	114	108	105	98	108	40	54	100	100	..	93
Gabon	14	142	132	..	51	..	..	86	78	..	..
Gambia, The	18	61	85	18	34	..	..	48	79	..	33
Georgia	43	97	90	95	80	37	38	97	89	..	61
Germany	101	101	100	98	100	32	49	84	..	..	88
Ghana	45	72	79	35	39	1	3	52	63	..	33
Greece	68	98	99	94	96	36	68	95	97	83	85
Guatemala	27	78	106	..	43	..	9	64	87	..	30
Guinea	..	34	81	9	24	1	..	25	65	..	21
Guinea-Bissau	..	50	..	..	..	..	..	38	..	..	..
Haiti	..	48	..	21	..	..	..	22	..	..	..



# Participation in education

	Gross enrollment ratio							Net enrollment ratio			
	Preprimary 2002/03	% of relevant age group		% of relevant age group		% of relevant age group		% of relevant age group		% of relevant age group	
		Primary 1990/91	Primary 2002/03	Secondary <sup>a</sup> 1990/91	Secondary <sup>a</sup> 2002/03	Tertiary <sup>a</sup> 1990/91	Tertiary <sup>a</sup> 2002/03	Primary 1990/91	Primary 2002/03	Secondary <sup>a</sup> 1990/91	Secondary <sup>a</sup> 2002/03
Honduras	21	109	106	..	..	9	15	90	87	..	..
Hungary	79	95	101	79	104	14	44	91	91	75	92
India	30	99	99	44	50	6	11	..	83	..	..
Indonesia	20	114	111	45	58	9	15	97	92	39	..
Iran, Islamic Rep.	31	109	92	57	78	10	21	92	87	..	..
Iraq	4	116	110	49	43	..	14	100	..	..	..
Ireland	6	102	105	100	105	31	50	90	95	80	82
Israel	108	98	113	88	94	36	58	92	100	..	89
Italy	98	104	101	83	98	32	53	100	99	..	91
Jamaica	87	101	101	65	84	7	17	96	95	64	75
Japan	84	100	101	97	103	31	49	100	100	97	100
Jordan	31	101	99	63	87	24	31	94	91	..	81
Kazakhstan	29	88	102	97	92	42	45	88	91	..	87
Kenya	48	94	92	24	33	2	3	74	66	..	25
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	83	105	104	90	90	39	85	100	100	86	87
Kuwait	70	60	94	43	89	..	..	49	83	..	77
Kyrgyz Republic	11	..	101	100	92	15	42	..	89	..	..
Lao PDR	8	103	116	24	44	..	5	63	85	..	35
Latvia	60	97	96	91	95	26	69	92	88	..	88
Lebanon	75	113	103	..	79	..	44	78	91	..	..
Lesotho	30	112	126	25	35	1	3	73	86	..	22
Liberia	..	..	..	..	..	..	..	..	..	..	..
Libya	8	105	114	86	105	15	58	96	..	..	..
Lithuania	55	94	101	92	101	34	64	..	94	..	93
Macedonia, FYR	28	99	99	56	84	17	27	94	92	..	81
Madagascar	10	94	120	18	..	3	2	65	79	..	..
Malawi	..	68	140	8	33	1	..	50	..	..	29
Malaysia	89	94	95	56	70	7	27	94	95	..	69
Mali	2	25	58	7	20	1	2	20	44	5	..
Mauritania	2	50	88	13	23	3	3	35	68	..	16
Mauritius	87	109	105	53	81	3	15	95	90	..	71
Mexico	76	114	110	53	76	15	21	99	99	45	60
Moldova	47	93	86	80	73	36	30	89	79	..	69
Mongolia	34	97	101	82	84	14	37	90	79	..	77
Morocco	56	65	110	36	45	11	11	57	90	..	36
Mozambique	..	64	103	7	16	..	..	45	55	..	12
Myanmar	..	109	92	22	39	4	12	98	84	..	35
Namibia	28	124	105	39	62	..	7	83	78	..	44
Nepal	12	114	119	33	61	5	5	81	70	..	..
Netherlands	98	102	108	120	122	39	57	95	99	84	90
New Zealand	88	106	102	89	118	40	74	100	100	85	93
Nicaragua	28	94	108	40	61	8	18	72	85	..	39
Niger	1	28	44	6	7	1	1	24	38	6	6
Nigeria	12	92	119	25	..	..	8	60	..	..	..
Norway	81	100	101	103	113	42	74	100	100	88	95
Oman	5	85	81	45	80	4	7	69	72	..	69
Pakistan	47	..	68	25	23	3	3	..	59	..	..
Panama	56	106	112	61	71	21	43	92	100	50	63
Papua New Guinea	55	66	69	12	26	..	..	66	69	..	24
Paraguay	30	105	112	31	64	8	19	93	92	26	50
Peru	60	119	120	67	89	31	32	88	100	..	69
Philippines	33	109	112	71	82	28	31	96	93	..	56
Poland	49	98	100	81	101	22	60	97	98	76	91
Portugal	70	123	116	67	115	24	53	100	100	..	85
Puerto Rico	..	..	..	..	..	..	..	..	..	..	..

	Gross enrollment ratio							Net enrollment ratio			
	Preprimary 2002/03	% of relevant age group						% of relevant age group			
		Primary 1990/91	Primary 2002/03	Secondary <sup>a</sup> 1990/91	Secondary <sup>a</sup> 2002/03	Tertiary <sup>a</sup> 1990/91	Tertiary <sup>a</sup> 2002/03	Primary 1990/91	Primary 2002/03	Secondary <sup>a</sup> 1990/91	Secondary <sup>a</sup> 2002/03
Romania	76	91	98	92	84	10	30	81	88	..	80
Russian Federation	92	109	114	93	92	53	70	99	..	..	..
Rwanda	3	71	122	8	16	..	3	67	87	7	..
Saudi Arabia	5	73	67	44	67	10	25	59	54	31	53
Senegal	3	58	80	16	19	3	..	47	58	..	..
Serbia and Montenegro	44	72	98	63	89	..	36	69	..	62	83
Sierra Leone	4	50	79	17	26	1	2	41	..	..	..
Singapore	..	104	..	68	..	18	..	96	..	..	..
Slovak Republic	83	..	101	..	89	..	32	..	87	..	87
Slovenia	73	108	103	91	108	25	66	..	93	..	93
Somalia	..	..	..	..	..	..	..	..	..	..	..
South Africa	32	107	106	66	88	12	15	88	89	..	66
Spain	106	109	107	104	116	37	59	100	100	..	94
Sri Lanka	..	113	112	77	86	5	..	90	..	..	..
Sudan	27	52	60	22	35	3	..	43	..	..	..
Swaziland	..	98	98	41	45	4	5	77	75	..	32
Sweden	75	100	110	90	146	32	76	100	100	85	99
Switzerland	97	90	107	99	98	25	44	84	99	80	87
Syrian Arab Republic	11	102	115	49	48	18	..	92	98	43	43
Tajikistan	10	91	110	102	86	23	16	77	..	..	79
Tanzania	14	67	84	5	..	0 <sup>b</sup>	1	50	69	..	..
Thailand	86	98	98	31	83	..	37	76	86	..	..
Togo	3	110	121	23	..	3	..	75	91	18	..
Trinidad and Tobago	66	97	100	80	82	7	9	91	91	..	70
Tunisia	20	114	112	44	79	9	23	94	97	..	68
Turkey	7	99	94	48	76	13	25	89	88	42	..
Turkmenistan	..	..	..	..	..	22	..	..	..	..	..
Uganda	4	69	141	12	17	1	3	53	..	..	14
Ukraine	76	89	93	93	97	48	62	80	84	..	85
United Arab Emirates	75	111	97	65	79	7	35	99	83	58	71
United Kingdom	83	107	100	88	178	30	64	98	100	81	96
United States	61	103	98	92	93	72	81	97	93	85	85
Uruguay	63	109	108	81	101	31	37	92	90	..	72
Uzbekistan	28	81	103	99	95	31	16	78	..	..	..
Venezuela, RB	53	96	104	35	70	29	40	88	91	19	59
Vietnam	45	107	101	32	72	2	12	90	94	..	65
West Bank and Gaza	..	..	..	..	..	..	..	..	..	..	..
Yemen, Rep.	1	65	83	..	47	..	..	52	72	..	..
Zambia	..	94	82	20	28	2	2	79	68	..	23
Zimbabwe	36	104	94	47	40	5	4	86	80	..	38
<b>World</b>	<b>36 w</b>	<b>101 w</b>	<b>103 w</b>	<b>55 w</b>	<b>71 w</b>	<b>16 w</b>	<b>26 w</b>	<b>84 w</b>	<b>87 w</b>	<b>.. w</b>	<b>.. w</b>
Low income	21	87	94	35	46	5	10	..	77	..	..
Middle income	40	112	112	56	74	13	22	92	93	..	..
Lower middle income	38	114	114	55	74	12	21	93	93	..	..
Upper middle income	60	102	103	63	81	17	36	91	91	50	68
Low & middle income	31	100	103	47	63	10	18	82	86	..	..
East Asia & Pacific	36	119	113	47	66	5	15	96	93	..	..
Europe & Central Asia	49	98	101	85	89	36	49	90	..	..	..
Latin America & Carib.	61	104	123	49	87	16	25	86	95	29	64
Middle East & N. Africa	19	95	97	56	65	13	..	83	87	..	..
South Asia	28	95	97	40	49	6	11	..	83	..	..
Sub-Saharan Africa	15	73	95	22	..	3	..	53	..	..	..
High income	79	103	101	94	107	47	66	97	96	87	90
Europe EMU	99	105	104	97	108	35	56	95	99	..	91

a. Break in series between 1997 and 1998 due to change from International Standard Classification of Education (ISCED) 1976 to ISCED97. b. Less than 0.5.

## About the data

School enrollment data are reported to the United Nations Educational, Scientific and Cultural Organization (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.

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.

Also as international indicators, the gross and net primary enrollment ratios have an inherent weakness: the length of primary education differs significantly across countries, although the International Standard Classification of Education (ISCED) tries to eliminate the difference. A short duration for primary education tends to increase the ratio, and a long duration to decrease it (in part because there are more dropouts among older children).

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.

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.

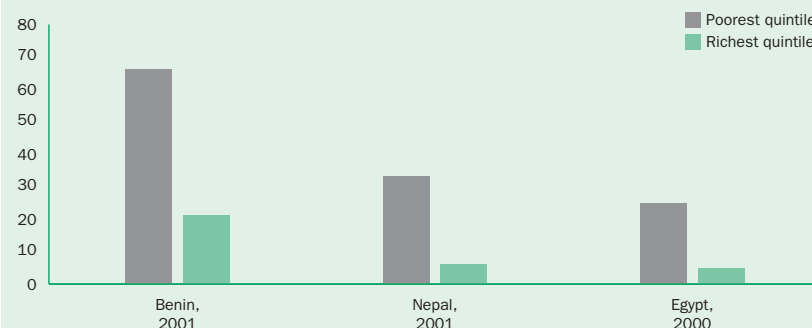
## Definitions

- 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

## Access to education remains elusive, especially for poor children

Out of school children by wealth quintile, ages 6–11 (%)



Universal primary education has proven difficult to achieve. Despite efforts by countries, poor children, especially, continue to lose out on the benefits an education affords.

Source: Demographic and Health Surveys.

## Data sources

The data are from the UNESCO Institute for Statistics.

	Gross intake rate in grade 1		Share of cohort reaching grade 5				Primary completion rate					
	% of relevant age group		% of grade 1 students				Total		% of relevant age group			
	Male	Female	Male		Female		1988/89–1993/94 <sup>a</sup>	2000/01–2003/04 <sup>b</sup>	Male		Female	
	2002/03	2002/03	1990/91	2001/02	1990/91	2001/02	1988/89–1993/94 <sup>a</sup>	2000/01–2003/04 <sup>b</sup>	1988/89–1993/94 <sup>a</sup>	2000/01–2003/04 <sup>b</sup>	1988/89–1993/94 <sup>a</sup>	2000/01–2003/04 <sup>b</sup>
Afghanistan	..	..	..	..	..	..	23	..	34	..	12	..
Albania	103	101	..	..	..	..	..	101	..	102	..	100
Algeria	97	95	95	96	94	97	80	96	87	96	74	95
Angola	82	71	..	..	..	..	39	..	..	..	..	..
Argentina	112	112	..	91	..	95	100	103	103	101	96	105
Armenia	98	97	..	..	..	..	91	110	87	112	96	108
Australia	..	..	99	..	100	..	..	..	..	..	..	..
Austria	108	105	..	..	..	..	..	101	..	101	..	101
Azerbaijan	90	87	..	..	..	..	..	106	..	107	..	104
Bangladesh	115	116	..	49	..	59	46	73	..	71	..	76
Belarus	104	102	..	..	..	..	94	99	94	99	94	98
Belgium	..	..	90	..	92	..	..	..	..	..	..	..
Benin	128	102	54	70	56	66	22	51	30	65	14	37
Bolivia	121	121	..	85	..	84	71	101	78	103	64	99
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..	..	..
Botswana	114	110	93	85	100	90	91	91	82	87	99	96
Brazil	130	119	..	..	..	..	97	112	96	112	97	111
Bulgaria	98	98	91	..	90	..	90	97	89	98	92	96
Burkina Faso	61	45	71	68	68	71	19	29	24	34	14	24
Burundi	93	80	65	66	58	70	47	31	50	36	43	26
Cambodia	138	126	..	60	..	62	..	81	..	85	..	76
Cameroon	107	93	..	65	..	65	56	70	60	76	52	64
Canada	..	..	95	..	98	..	..	..	..	..	..	..
Central African Republic	76	53	24	..	22	..	27	..	36	..	19	..
Chad	105	77	56	67	41	51	19	25	31	34	7	16
Chile	94	93	98	100	100	100	..	104	..	105	..	103
China	98	99	..	100	..	96	105	98	111	100	99	95
Hong Kong, China	105	103	..	..	..	..	102	101	..	..	..	..
Colombia	132	126	..	66	..	73	71	88	60	86	82	90
Congo, Dem. Rep.	..	..	58	..	50	..	47	32	59	35	35	30
Congo, Rep.	57	54	56	65	65	67	54	59	60	62	48	56
Costa Rica	105	105	81	90	84	93	72	94	70	94	73	95
Côte d'Ivoire	82	75	75	73	70	65	46	51	58	61	34	40
Croatia	100	98	..	..	..	..	83	96	84	95	83	96
Cuba	93	92	..	98	..	98	94	94	95	95	93	94
Czech Republic	102	101	..	96	..	97	..	106	..	106	..	106
Denmark	103	103	94	100	94	100	98	107	98	106	97	107
Dominican Republic	146	135	..	65	..	74	62	93	..	90	..	97
Ecuador	138	137	..	74	..	75	92	100	91	99	93	100
Egypt, Arab Rep.	96	94	..	99	..	99	..	91	..	92	..	90
El Salvador	137	132	..	67	..	71	59	89	57	88	61	89
Eritrea	65	55	..	90	..	82	19	40	22	47	17	33
Estonia	94	95	..	98	..	99	95	104	94	105	95	103
Ethiopia	92	74	16	62	23	54	22	39	26	49	17	29
Finland	100	99	100	100	100	100	97	101	98	101	97	101
France	..	..	69	98	95	97	104	98	..	99	..	98
Gabon	96	96	..	..	..	..	67	74	64	72	71	76
Gambia, The	85	89	..	..	..	..	45	68	57	76	34	60
Georgia	96	92	..	..	..	..	81	82	82	82	81	82
Germany	98	97	..	..	..	..	101	101	100	101	101	101
Ghana	89	86	81	62	79	65	61	62	70	64	53	60
Greece	104	97	100	..	100	..	100	..	101	..	100	..
Guatemala	125	124	..	67	..	64	..	66	..	70	..	63
Guinea	86	76	64	85	48	73	17	41	25	51	9	31
Guinea-Bissau	..	..	..	41	..	34	..	28	..	36	..	20
Haiti	..	..	..	..	..	..	29	..	31	..	28	..

# Education efficiency and completion

	Gross intake rate in grade 1		Share of cohort reaching grade 5				Primary completion rate					
	% of relevant age group		% of grade 1 students				Total		% of relevant age group			
	Male	Female	Male		Female		1988/89–1993/94 <sup>a</sup>	2000/01–2003/04 <sup>b</sup>	Male		Female	
	2002/03	2002/03	1990/91	2001/02	1990/91	2001/02	1988/89–1993/94 <sup>a</sup>	2000/01–2003/04 <sup>b</sup>	1988/89–1993/94 <sup>a</sup>	2000/01–2003/04 <sup>b</sup>	1988/89–1993/94 <sup>a</sup>	2000/01–2003/04 <sup>b</sup>
Honduras	139	139	..	..	..	..	65	79	67	74	62	85
Hungary	97	96	77	..	98	..	82	102	81	102	83	101
India	132	110	..	60	..	64	78	81	88	85	67	77
Indonesia	119	113	34	87	78	92	93	95	93	94	93	96
Iran, Islamic Rep.	89	101	91	94	89	94	101	107	107	110	93	104
Iraq	..	..	..	67	..	63	62	56	68	62	56	50
Ireland	105	106	99	98	100	100	..	..	..	..	..	..
Israel	..	..	..	..	..	..	..	..	..	..	..	..
Italy	94	93	..	96	..	97	104	101	104	101	104	101
Jamaica	99	99	..	88	..	93	89	85	86	85	93	85
Japan	..	..	100	..	100	..	101	..	101	..	102	..
Jordan	103	103	..	98	..	97	104	98	103	98	104	99
Kazakhstan	103	102	..	..	..	..	..	110	..	110	..	110
Kenya	97	95	68	61	72	57	86	73	87	76	85	69
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	104	103	99	99	100	99	98	97	98	96	98	97
Kuwait	92	93	..	..	..	..	53	96	54	96	52	96
Kyrgyz Republic	110	105	..	..	..	..	..	93	..	94	..	91
Lao PDR	131	117	..	64	..	65	46	74	51	78	41	69
Latvia	90	90	..	..	..	..	73	101	73	101	73	100
Lebanon	101	101	..	90	..	94	..	68	..	66	..	70
Lesotho	134	124	57	66	82	81	67	67	48	57	87	77
Liberia	..	..	..	..	..	..	..	21	..	33	..	10
Libya	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	93	92	..	..	..	..	89	102	89	103	88	101
Macedonia, FYR	97	98	..	..	..	..	99	100	99	99	99	102
Madagascar	119	116	22	52	21	53	35	47	34	46	35	48
Malawi	..	..	71	50	57	39	36	71	40	73	31	69
Malaysia	93	93	98	..	98	..	88	92	88	93	88	92
Mali	63	53	71	78	67	70	12	40	14	49	9	32
Mauritania	103	103	76	61	75	60	33	43	40	45	26	41
Mauritius	92	94	98	98	98	100	102	105	103	105	102	105
Mexico	109	110	..	90	..	91	88	99	88	99	89	100
Moldova	91	90	..	..	..	..	95	83	95	83	95	82
Mongolia	115	115	..	..	..	..	..	108	..	106	..	111
Morocco	106	101	75	82	76	80	47	75	56	78	38	72
Mozambique	120	110	37	53	28	45	28	52	34	59	22	45
Myanmar	119	121	..	64	..	66	..	73	..	73	..	73
Namibia	98	97	63	92	65	93	77	92	70	90	85	94
Nepal	121	111	..	63	..	67	55	78	71	84	38	72
Netherlands	98	97	..	100	..	100	..	98	..	99	..	98
New Zealand	..	..	91	..	93	..	98	96	99	97	98	95
Nicaragua	142	134	12	62	37	67	44	75	39	70	49	79
Niger	68	50	61	70	65	67	18	26	23	31	13	20
Nigeria	..	..	63	..	67	..	63	82	71	92	54	73
Norway	..	..	99	..	100	..	..	..	..	..	..	..
Oman	72	70	97	98	96	98	73	73	77	76	69	71
Pakistan	108	79	..	..	..	..	..	..	..	..	..	..
Panama	124	120	..	89	..	91	86	98	86	97	87	98
Papua New Guinea	92	83	60	51	58	49	51	53	53	58	49	46
Paraguay	114	112	69	76	72	78	66	93	66	92	66	93
Peru	116	116	..	86	..	86	..	102	..	97	..	98
Philippines	137	127	..	76	..	83	87	95	86	97	89	94
Poland	97	98	89	..	96	..	96	98	94	98	97	99
Portugal	..	..	..	..	..	..	98	..	97	..	98	..
Puerto Rico	..	..	..	..	..	..	..	..	..	..	..	..

	Gross intake rate in grade 1		Share of cohort reaching grade 5				Primary completion rate					
	% of relevant age group		% of grade 1 students				Total		% of relevant age group			
	Male 2002/03	Female 2002/03	Male 1990/91	Female 2001/02	Male 1990/91	Female 2001/02	1988/89– 1993/94 <sup>a</sup>	2000/01– 2003/04 <sup>b</sup>	Male 1988/89– 1993/94 <sup>a</sup>	Female 2000/01– 2003/04 <sup>b</sup>	Male 1988/89– 1993/94 <sup>a</sup>	Female 2000/01– 2003/04 <sup>b</sup>
Romania	108	106	..	..	..	..	96	89	97	90	96	89
Russian Federation	..	..	..	..	..	..	95	93	94	94	95	93
Rwanda	166	167	61	45	59	48	44	37	44	38	44	36
Saudi Arabia	67	66	82	92	84	91	57	61	61	62	52	61
Senegal	95	94	..	70	..	65	45	48	55	53	35	43
Serbia and Montenegro	98	99	..	..	..	..	71	96	..	97	..	96
Sierra Leone	..	..	..	..	..	..	..	56	..	67	..	45
Singapore	..	..	100	..	100	..	..	..	..	..	..	..
Slovak Republic	94	94	..	..	..	..	96	99	96	99	96	98
Slovenia	106	106	..	..	..	..	97	95	..	95	..	94
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	118	114	72	80	79	94	81	99	76	96	85	102
Spain	..	..	..	..	..	..	..	..	..	..	..	..
Sri Lanka	106	106	94	..	95	..	103	113	103	118	103	108
Sudan	69	61	90	81	99	88	44	49	48	53	39	45
Swaziland	97	92	74	77	78	69	69	75	66	73	72	77
Sweden	98	99	100	..	100	..	96	101	96	102	96	101
Switzerland	92	95	80	100	79	99	..	99	..	98	..	100
Syrian Arab Republic	126	123	97	91	95	92	99	88	104	90	93	85
Tajikistan	121	117	..	..	..	..	100	100	101	103	98	98
Tanzania	149	142	77	76	81	80	46	58	47	58	46	57
Thailand	..	..	..	92	..	96	..	86	..	86	..	87
Togo	110	99	52	73	42	64	40	78	55	92	26	63
Trinidad and Tobago	95	96	..	98	..	100	100	91	97	91	102	91
Tunisia	98	99	94	95	77	96	75	101	79	101	70	102
Turkey	..	..	98	..	97	..	..	95	..	103	..	88
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	187	192	..	63	..	64	..	63	..	69	..	58
Ukraine	106	105	..	..	..	..	56	59	56	59	56	59
United Arab Emirates	108	108	80	93	80	93	107	71	104	71	111	72
United Kingdom	..	..	..	..	..	..	..	..	..	..	..	..
United States	..	..	..	..	..	..	..	..	..	..	..	..
Uruguay	104	104	93	87	96	90	95	92	92	90	97	93
Uzbekistan	105	105	..	..	..	..	..	103	..	103	..	102
Venezuela, RB	102	99	82	81	90	87	81	90	76	88	86	92
Vietnam	103	97	..	90	..	88	..	95	..	96	..	95
West Bank and Gaza	..	..	..	..	..	..	..	106	..	106	..	107
Yemen, Rep.	115	90	..	80	..	71	..	66	..	82	..	48
Zambia	86	86	..	79	..	75	..	69	..	74	..	64
Zimbabwe	114	111	..	..	..	..	96	81	99	83	93	78
<b>World</b>	<b>113 w</b>	<b>104 w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>
Low income	119	103	..	63	..	66	65	71	75	76	57	66
Middle income	107	105	..	93	..	92	93	95	93	96	92	94
Lower middle income	108	106	..	94	..	92	94	95	94	97	93	94
Upper middle income	101	101	..	90	..	93	87	93	87	93	88	94
Low & middle income	113	104	..	80	..	81	81	84	86	87	78	81
East Asia & Pacific	106	104	..	94	..	92	97	97	97	98	97	95
Europe & Central Asia	..	..	..	..	..	..	88	90	88	90	89	90
Latin America & Carib.	122	117	..	..	..	..	88	96	87	96	90	97
Middle East & N. Africa	98	94	..	92	..	93	79	84	83	85	73	82
South Asia	129	110	..	61	..	65	74	80	88	85	67	77
Sub-Saharan Africa	..	..	..	..	..	..	50	59	55	65	45	54
High income	..	..	..	..	..	..	..	..	..	..	..	..
Europe EMU	..	..	..	..	..	..	..	..	..	..	..	..

a. Data are for 1990 or closest year. b. Data are for the most recent year available.

## About the data

Indicators of students' progress through school are estimated by the United Nations Educational, Scientific and Cultural Organization (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.

Gross 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 gross 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 gross 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 share of cohort reaching grade 5 (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 (Fredrickson 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 the share of cohort reaching 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 indicator 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 primary completion rate reflects the primary cycle as defined by the International Standard Classification of Education (ISCED), 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 (in a small number of countries).

The World Bank and the UNESCO Institute for Statistics are working jointly on developing the primary completion rate indicator. This indicator 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 data 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 late entrants and over-age children who have repeated one or more grades of primary school but are now graduating 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 school and population surveys at different times of year, and other discrepancies in the numbers used in the calculation.

## Definitions

- Gross 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 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.

## Data sources

Data on gross intake rate and share of cohort reaching grade 5 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	
	Male		% ages 15 and older		Female		Male		% ages 15-24		Female		Male 2002/03 <sup>a</sup>	Female 2002/03 <sup>a</sup>
	1990	2002	1990	2002	1990	2002	1990	2002	1990	2002	1990	2002		
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Albania	87	99 <sup>b</sup>	67	98 <sup>b</sup>	97	99 <sup>b</sup>	92	99 <sup>b</sup>	11	12	..	..	..	..
Algeria	64	78	41	60	86	94	68	86	..	..	..	..	..	..
Angola	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Argentina	96	97	96	97	98	98	98	99	15	17	..	..	..	..
Armenia	99	100 <sup>b</sup>	96	99 <sup>b</sup>	100	100 <sup>b</sup>	99	100 <sup>b</sup>	11	11	..	..	..	..
Australia	..	..	..	..	..	..	..	..	19	20	..	..	..	..
Austria	..	..	..	..	..	..	..	..	14	15	..	..	..	..
Azerbaijan	..	..	..	..	..	..	..	..	11	10	..	..	..	..
Bangladesh	44	50	24	31	51	58	33	41	8	9	..	..	..	..
Belarus	100	100	99	100	100	100	100	100	14	15	..	..	..	..
Belgium	..	..	..	..	..	..	..	..	18	20	..	..	..	..
Benin	38	55	15	26	57	73	25	38	..	..	..	..	..	..
Bolivia	87	93 <sup>b</sup>	70	81 <sup>b</sup>	96	99 <sup>b</sup>	89	96 <sup>b</sup>	..	..	..	..	..	..
Bosnia and Herzegovina	..	98	..	91	..	100	..	100	..	..	..	..	..	..
Botswana	66	76	70	82	79	85	87	93	11	11	..	..	..	..
Brazil	83	86 <sup>b</sup>	81	87 <sup>b</sup>	91	93 <sup>b</sup>	93	96 <sup>b</sup>	14	15	..	..	..	..
Bulgaria	98	99	96	98	100	100	99	100	12	13	..	..	..	..
Burkina Faso	25	..	8	..	36	..	14	..	4	3	..	..	..	..
Burundi	48	58	27	44	58	67	45	65	6	5	..	..	..	..
Cambodia	78	81	49	59	81	85	66	76	10	8	..	..	..	..
Cameroon	69	77 <sup>c</sup>	48	60 <sup>c</sup>	86	92	76	88	10	8	..	..	..	..
Canada	..	..	..	..	..	..	..	..	16	16	..	..	..	..
Central African Republic	47	65 <sup>c</sup>	21	33 <sup>c</sup>	66	70 <sup>c</sup>	39	47 <sup>c</sup>	..	..	..	..	..	..
Chad	37	55	19	38	58	76	38	64	..	..	..	..	..	..
Chile	94	96 <sup>b</sup>	94	96 <sup>b</sup>	98	99 <sup>b</sup>	98	99 <sup>b</sup>	14	13	..	..	..	..
China	87	95 <sup>b</sup>	69	87 <sup>b</sup>	97	99 <sup>b</sup>	93	99 <sup>b</sup>	..	..	..	..	..	..
Hong Kong, China	..	..	..	..	..	..	..	..	14	14	..	..	..	..
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	11	11	..	..	..	..
Côte d'Ivoire	51	..	26	..	65	70 <sup>c</sup>	40	52 <sup>c</sup>	..	..	..	..	..	..
Croatia	99	99 <sup>b</sup>	95	97 <sup>b</sup>	100	100 <sup>b</sup>	100	100 <sup>b</sup>	13	13	..	..	..	..
Cuba	95	97	95	97	99	100	99	100	13	13	..	..	..	..
Czech Republic	..	..	..	..	..	..	..	..	14	15	..	..	..	..
Denmark	..	..	..	..	..	..	..	..	16	17	..	..	..	..
Dominican Republic	80	84	79	84	87	91	88	92	12	14	..	..	..	..
Ecuador	90	92 <sup>b</sup>	85	90 <sup>b</sup>	96	96 <sup>b</sup>	95	96 <sup>b</sup>	..	..	..	..	..	..
Egypt, Arab Rep.	60	..	34	..	71	..	51	..	..	..	..	..	..	..
El Salvador	76	82	69	77	85	90	83	88	11	11	..	..	..	..
Eritrea	..	..	..	..	..	..	..	..	6	4	..	..	..	..
Estonia	100	100 <sup>b</sup>	100	100 <sup>b</sup>	100	100 <sup>b</sup>	100	100 <sup>b</sup>	14	17	..	..	..	..
Ethiopia	37	49	20	34	52	63	34	52	6	4	..	..	..	..
Finland	..	..	..	..	..	..	..	..	17	19	..	..	..	..
France	..	..	..	..	..	..	..	..	15	16	..	..	..	..
Gabon	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gambia, The	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Georgia	..	..	..	..	..	..	..	..	11	11	..	..	..	..
Germany	..	..	..	..	..	..	..	..	16	16	..	..	..	..
Ghana	70	82	47	66	88	94	75	90	8	7	..	..	..	..
Greece	98	99	92	96	99	100	100	100	15	15	..	..	..	..
Guatemala	69	77	53	62	80	86	66	74	9	9	..	..	..	..
Guinea	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Haiti	43	54	37	50	56	66	54	67	..	..	..	..	..	..

	Adult literacy rate					Youth literacy rate					Expected years of schooling	
	1990	% ages 15 and older		1990	2002	1990	% ages 15–24		1990	2002	Male 2002/03 <sup>a</sup>	Female 2002/03 <sup>a</sup>
		Male	Female				Male	Female				
Honduras	69	80 <sup>b</sup>	67	80 <sup>b</sup>	78	87 <sup>b</sup>	81	91 <sup>b</sup>	..	..		
Hungary	99	99	99	99	100	100	100	100	15	16		
India	62	68	36	45	73	80	54	65	10	8		
Indonesia	87	92	73	83	97	99	93	98	11	11		
Iran, Islamic Rep.	72	84 <sup>c</sup>	54	70 <sup>c</sup>	92	96	81	92	12	11		
Iraq	..	..	..	..	..	..	..	..	..	..		
Ireland	..	..	..	..	..	..	..	..	16	17		
Israel	95	97	88	93	99	100	98	99	15	16		
Italy	98	99	97	98	100	100	100	100	15	16		
Jamaica	78	84	86	91	87	91	95	98	11	12		
Japan	..	..	..	..	..	..	..	..	15	14		
Jordan	90	96	72	86	98	99	95	100	13	13		
Kazakhstan	99	100	98	99	100	100	100	100	13	14		
Kenya	81	90	61	79	93	96	87	95	8	8		
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..		
Korea, Rep.	..	..	..	..	..	..	..	..	16	15		
Kuwait	79	85	73	81	88	92	87	94	..	..		
Kyrgyz Republic	..	..	..	..	..	..	..	..	12	13		
Lao PDR	70	77	43	55	79	86	61	73	10	8		
Latvia	100	100 <sup>b</sup>	100	100 <sup>b</sup>	100	100 <sup>b</sup>	100	100 <sup>b</sup>	14	16		
Lebanon	..	..	..	..	..	..	..	..	13	13		
Lesotho	65	74 <sup>c</sup>	89	90 <sup>c</sup>	77	83	97	99	11	11		
Liberia	55	72	23	39	75	86	39	55	..	..		
Libya	83	92	51	71	99	100	83	94	16	17		
Lithuania	100	100 <sup>b</sup>	99	100 <sup>b</sup>	100	100 <sup>b</sup>	100	100 <sup>b</sup>	15	16		
Macedonia, FYR	..	..	..	..	..	..	..	..	12	12		
Madagascar	..	..	..	..	..	..	..	..	..	..		
Malawi	69	76	36	49	76	82	51	63	..	..		
Malaysia	87	92 <sup>b</sup>	74	85 <sup>b</sup>	95	97 <sup>b</sup>	94	97 <sup>b</sup>	12	13		
Mali	28	27 <sup>b</sup>	10	12 <sup>b</sup>	38	32 <sup>b</sup>	17	17 <sup>b</sup>	..	..		
Mauritania	46	51	24	31	56	57	36	42	7	7		
Mauritius	85	88 <sup>b</sup>	75	81 <sup>b</sup>	91	94 <sup>b</sup>	91	95 <sup>b</sup>	13	12		
Mexico	91	93 <sup>b</sup>	84	89 <sup>b</sup>	96	97 <sup>b</sup>	94	96 <sup>b</sup>	12	12		
Moldova	99	100	96	99	100	100	100	100	10	10		
Mongolia	98	98 <sup>b</sup>	97	98 <sup>b</sup>	99	97 <sup>b</sup>	99	98 <sup>b</sup>	10	12		
Morocco	53	63	25	38	68	77	42	61	11	9		
Mozambique	49	62	18	31	66	77	32	49	..	..		
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	11	9		
Netherlands	..	..	..	..	..	..	..	..	16	16		
New Zealand	..	..	..	..	..	..	..	..	17	19		
Nicaragua	63	77 <sup>c</sup>	63	77 <sup>c</sup>	68	84 <sup>c</sup>	69	89 <sup>c</sup>	10	11		
Niger	18	25	5	9	25	34	9	15	3	2		
Nigeria	59	74	38	59	81	91	66	87	..	..		
Norway	..	..	..	..	..	..	..	..	16	18		
Oman	67	82	38	65	95	100	75	97	11	10		
Pakistan	49	..	20	..	63	..	31	..	6	5		
Panama	90	93	88	92	96	97	95	97	13	14		
Papua New Guinea	..	..	..	..	..	..	..	..	..	..		
Paraguay	92	93 <sup>c</sup>	88	90 <sup>c</sup>	96	96 <sup>c</sup>	95	96 <sup>c</sup>	12	12		
Peru	92	91 <sup>c</sup>	79	80 <sup>c</sup>	97	98 <sup>c</sup>	92	96 <sup>c</sup>	14	14		
Philippines	92	93 <sup>b</sup>	91	93 <sup>b</sup>	97	94 <sup>b</sup>	97	96 <sup>b</sup>	12	12		
Poland	..	..	..	..	..	..	..	..	15	16		
Portugal	91	95	84	91	99	100	100	100	16	17		
Puerto Rico	92	94	91	94	95	97	97	98	..	..		



	Adult literacy rate				Youth literacy rate				Expected years of schooling	
	1990	% ages 15 and older		1990	1990	% ages 15–24		1990	2002/03 <sup>a</sup>	Female 2002/03 <sup>a</sup>
		Male	Female			Male	Female			
Romania	99	98 <sup>b</sup>	96	96 <sup>b</sup>	99	98 <sup>b</sup>	99	98 <sup>b</sup>	12	13
Russian Federation	100	100	99	99	100	100	100	100	13	14
Rwanda	63	75	44	63	78	86	67	84	9	8
Saudi Arabia	76	84	50	69	91	95	79	92	10	9
Senegal	38	49	19	30	50	61	30	44	..	..
Serbia and Montenegro	..	..	..	..	..	..	..	..	13	13
Sierra Leone	..	..	..	..	..	..	..	..	8	6
Singapore	94	97 <sup>b</sup>	83	89 <sup>b</sup>	99	99 <sup>b</sup>	99	100 <sup>b</sup>	..	..
Slovak Republic	..	100 <sup>b</sup>	..	100 <sup>b</sup>	..	100 <sup>b</sup>	..	100 <sup>b</sup>	13	14
Slovenia	100	100	100	100	100	100	100	100	15	17
Somalia	..	..	..	..	..	..	..	..	..	..
South Africa	82	87	80	85	89	92	88	92	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	10	10
Sweden	..	..	..	..	..	..	..	..	17	21
Switzerland	..	..	..	..	..	..	..	..	16	15
Syrian Arab Republic	82	91	48	74	92	97	67	93	..	..
Tajikistan	99	100 <sup>b</sup>	97	99 <sup>b</sup>	100	100 <sup>b</sup>	100	100 <sup>b</sup>	12	10
Tanzania	76	85	51	69	89	94	77	89	..	..
Thailand	95	95 <sup>b</sup>	89	91 <sup>b</sup>	99	98 <sup>b</sup>	98	98 <sup>b</sup>	13	12
Togo	60	74	29	45	79	88	48	67	..	..
Trinidad and Tobago	98	99	96	98	100	100	100	100	12	12
Tunisia	72	83	47	63	93	98	75	91	13	13
Turkey	89	94 <sup>b</sup>	66	79 <sup>b</sup>	97	98 <sup>b</sup>	88	93 <sup>b</sup>	12	10
Turkmenistan	..	..	..	..	..	..	..	..	..	..
Uganda	69	79	43	59	80	86	60	74	12	11
Ukraine	100	100	99	100	100	100	100	100	13	14
United Arab Emirates	71	76	71	81	82	88	89	95	11	13
United Kingdom	..	..	..	..	..	..	..	..	20	23
United States	..	..	..	..	..	..	..	..	15	16
Uruguay	96	97	97	98	98	99	99	99	13	15
Uzbekistan	99	100	98	99	100	100	100	100	12	11
Venezuela, RB	90	94	88	93	95	98	97	99	12	12
Vietnam	94	..	87	..	94	..	94	..	11	10
West Bank and Gaza	..	..	..	..	..	..	..	..	..	..
Yemen, Rep.	55	69	13	29	74	84	25	51	..	..
Zambia	79	86	59	74	86	91	76	87	7	7
Zimbabwe	87	94	75	86	97	99	91	96	10	9
<b>World</b>	<b>74 w</b>	<b>80 w</b>	<b>63 w</b>	<b>73 w</b>	<b>87 w</b>	<b>90 w</b>	<b>79 w</b>	<b>86 w</b>	<b>.. w</b>	<b>.. w</b>
Low income	60	68	38	48	73	79	55	66	10	8
Middle income	85	89	75	87	96	97	92	97	..	..
Lower middle income	84	88	74	86	96	97	92	97	..	..
Upper middle income	88	90	86	90	96	97	95	97	13	13
Low & middle income	73	79	62	73	87	89	78	85	..	..
East Asia & Pacific	88	90	72	86	97	98	93	98	..	..
Europe & Central Asia	98	98	94	96	99	99	98	99	12	12
Latin America & Carib.	83	86	83	88	93	94	93	95	13	14
Middle East & N. Africa	71	82	40	61	82	92	64	82	..	..
South Asia	64	73	34	44	70	77	50	62	10	8
Sub-Saharan Africa	59	71	40	58	75	84	60	77	..	..
High income	..	..	..	..	..	..	..	..	16	17
Europe EMU	..	..	..	..	..	..	..	..	16	16

a. Data are provisional for OECD and World Education Indicators countries. 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.

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 compiled by the UNESCO Institute for Statistics based on national censuses and household survey data. The estimation methodology can be reviewed at [www.uis.unesco.org](http://www.uis.unesco.org). The national estimates are received

## 2.13a

In rural areas more children drop out of primary school, and girls are more vulnerable

Primary school dropout rate in Nepal (ages 6–11) in rural and urban areas, 2001 (%)



Source: Demographic and Health Surveys.

from countries and are based on national censuses or household surveys during 1995–2004.

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 literacy 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.

## Data sources

The data on literacy are estimates calculated by the UNESCO Institute for Statistics and projections by the UNESCO Institute for Statistics. The data on expected years of schooling are from the UNESCO Institute for Statistics.

	Health expenditure					Health expenditure per capita	Physicians		Hospital beds	
	Total % of GDP 2002	Public		Out of pocket % of private 2002	External resources % of total 2002		\$ 2002	per 1,000 people		per 1,000 people 1995–2002 <sup>a</sup>
		% of GDP 2002	% of total 2002					1990	2004	
Afghanistan	8.0	3.1	39.2	80.0	42.6	14	0.1	0.2	0.2	..
Albania	3.4	2.4	69.3	98.9	6.8	52	1.4	1.4	4.0	3.3
Algeria	4.3	3.2	74.0	76.6	0.1	77	0.9	0.8	2.5	2.1
Angola	5.0	2.1	41.9	100.0	7.9	38	0.0 <sup>b</sup>	0.1	1.3	..
Argentina	8.9	4.5	50.2	62.4	0.3	238	2.7	3.0	4.6	3.3
Armenia	5.5	1.3	24.1	82.3	19.6	42	3.9	3.5	9.1	4.3
Australia	9.5	6.5	67.9	61.4	0.0	1,995	2.3	2.5	9.2	7.9
Austria	7.7	5.4	69.9	58.0	0.0	1,969	2.2	3.2	10.1	8.6
Azerbaijan	3.7	0.8	22.1	100.0	4.0	27	3.9	3.5	10.1	8.5
Bangladesh	3.1	0.8	25.2	85.9	13.5	11	0.2	0.2	0.3	..
Belarus	6.4	4.7	73.9	79.7	0.1	93	3.6	4.5	13.2	12.6
Belgium	9.1	6.5	71.2	86.3	0.0	2,159	3.3	4.2	8.0	7.3
Benin	4.7	2.1	44.4	90.3	65.9	20	0.1	0.1	0.8	..
Bolivia	7.0	4.2	59.8	81.3	7.0	63	0.4	0.7	1.3	1.7
Bosnia and Herzegovina	9.2	4.6	49.8	100.0	1.8	130	1.6	1.3	4.5	3.2
Botswana	6.0	3.7	61.9	30.8	3.8	171	0.2	0.3	1.6	..
Brazil	7.9	3.6	45.9	64.2	0.5	206	1.4	2.1	3.3	3.1
Bulgaria	7.3	4.4	60.9	98.9	1.4	143	3.2	3.4	9.8	7.2
Burkina Faso	4.3	2.0	45.9	98.9	5.8	11	0.0 <sup>b</sup>	0.0 <sup>b</sup>	0.3	1.4
Burundi	3.0	0.6	21.5	100.0	16.2	3	0.1	0.1	0.7	..
Cambodia	12.0	2.1	17.1	85.2	4.9	32	0.1	0.2	2.1	..
Cameroon	4.6	1.2	26.2	93.7	6.4	31	0.1	0.1	2.6	..
Canada	9.6	6.7	69.9	50.3	0.0	2,222	2.1	2.1	6.3	3.9
Central African Republic	3.9	1.6	41.6	95.4	17.0	11	0.0 <sup>b</sup>	0.0 <sup>b</sup>	0.9	..
Chad	6.5	2.7	41.9	96.5	27.9	14	0.0 <sup>b</sup>	0.0 <sup>b</sup>	0.7	..
Chile	5.8	2.6	45.1	48.7	0.0	246	1.1	1.1	3.2	2.7
China	5.8	2.0	33.7	96.3	0.1	63	1.5	1.6	2.6	2.5
Hong Kong, China	..	..	..	..	..	..	..	..	..	..
Colombia	8.1	6.7	82.9	57.0	0.0	151	1.1	1.4	1.4	1.5
Congo, Dem. Rep.	4.0	1.1	28.7	100.0	28.4	4	0.1	0.1	1.4	..
Congo, Rep.	2.2	1.5	70.3	100.0	2.2	18	0.3	0.3	3.3	..
Costa Rica	9.3	6.1	65.4	99.0	1.3	383	1.3	1.7	2.5	1.7
Côte d'Ivoire	6.2	1.4	22.4	94.6	2.2	44	0.1	0.1	0.8	..
Croatia	7.3	5.9	81.4	100.0	1.1	369	2.1	2.4	7.4	6.0
Cuba	7.5	6.5	86.5	75.2	0.2	197	3.6	5.9	5.4	5.1
Czech Republic	7.0	6.4	91.4	100.0	0.0	504	2.8	3.4	11.3	8.8
Denmark	8.8	7.3	82.9	89.8	0.0	2,835	3.1	3.7	5.6	4.5
Dominican Republic	6.1	2.2	36.4	88.2	1.4	154	1.5	1.9	1.9	1.5
Ecuador	4.8	1.7	36.0	88.4	0.9	91	1.5	1.5	1.6	1.6
Egypt, Arab Rep.	4.9	1.8	36.6	92.0	1.6	59	0.8	2.1	2.1	2.1
El Salvador	8.0	3.6	44.7	93.9	0.7	178	0.8	1.3	1.5	1.6
Eritrea	5.1	3.2	63.7	100.0	49.2	8	..	0.0 <sup>b</sup>	..	..
Estonia	5.1	3.9	76.3	83.9	0.0	263	3.5	3.2	11.6	6.7
Ethiopia	5.7	2.6	44.9	65.9	29.5	5	0.0 <sup>b</sup>	0.0 <sup>b</sup>	0.2	..
Finland	7.3	5.5	75.7	82.2	0.0	1,852	2.4	3.1	12.5	7.5
France	9.7	7.4	76.0	40.9	0.0	2,348	2.6	3.3	9.7	8.2
Gabon	4.3	1.8	41.3	100.0	2.8	159	0.5	0.3	3.2	..
Gambia, The	7.3	3.3	44.6	64.3	40.6	18	..	0.0 <sup>b</sup>	0.6	..
Georgia	3.8	1.0	27.1	98.7	12.6	25	4.9	3.9	9.8	4.3
Germany	10.9	8.6	78.5	48.2	0.0	2,631	3.1	3.6	10.4	9.1
Ghana	5.6	2.3	41.0	100.0	18.5	17	0.0 <sup>b</sup>	0.1	1.5	..
Greece	9.5	5.0	52.9	66.9	..	1,198	3.4	4.4	5.1	4.9
Guatemala	4.8	2.3	47.5	86.2	4.4	93	0.8	0.9	1.1	1.0
Guinea	5.8	0.9	15.5	99.5	9.5	22	0.1	0.1	0.6	..
Guinea-Bissau	6.3	3.0	48.2	100.0	35.9	9	..	0.2	1.5	..
Haiti	7.6	3.0	39.4	69.5	15.6	29	0.1	0.3	0.8	0.7

# Health: expenditure, services, and use

	Health expenditure					Health expenditure per capita	Physicians		Hospital beds	
	Total % of GDP	Public % of GDP		Out of pocket % of private	External resources % of total		per 1,000 people		per 1,000 people	
	2002	2002	% of total 2002	% of private 2002	% of total 2002	\$ 2002	1990	2004	1990	1995–2002 <sup>a</sup>
Honduras	6.2	3.2	51.2	85.4	8.0	60	0.7	0.8	1.0	1.1
Hungary	7.8	5.5	70.2	88.2	0.0	496	2.9	3.2	10.1	8.2
India	6.1	1.3	21.3	98.5	1.0	30	0.5	0.5	0.8	..
Indonesia	3.2	1.2	36.0	76.1	1.8	26	0.1	0.2	0.7	..
Iran, Islamic Rep.	6.0	2.9	47.8	96.4	0.3	104	0.3	1.0	1.4	1.6
Iraq	1.5	0.3	16.9	100.0	0.6	11	0.6	0.5	1.7	1.5
Ireland	7.3	5.5	75.2	53.0	0.0	2,255	1.6	2.4	10.5	9.7
Israel	9.1	6.0	65.7	87.8	3.9	1,496	3.2	3.9	6.2	6.2
Italy	8.5	6.4	75.6	83.3	0.0	1,737	4.7	6.1	7.2	4.9
Jamaica	6.0	3.4	57.4	61.8	4.1	180	0.6	0.9	2.2	2.1
Japan	7.9	6.5	81.7	89.8	0.0	2,476	1.7	2.0	16.0	16.5
Jordan	9.3	4.3	46.1	74.3	5.2	165	1.3	2.0	1.8	1.8
Kazakhstan	3.5	1.9	53.2	100.0	0.6	56	4.0	3.3	13.7	7.0
Kenya	4.9	2.2	44.0	80.0	16.4	19	0.0 <sup>b</sup>	0.1	1.6	..
Korea, Dem. Rep.	4.6	3.5	76.6	100.0	59.0	0 <sup>c</sup>	..	3.0	..	..
Korea, Rep.	5.0	2.6	52.9	82.3	0.0	577	0.8	1.8	3.1	6.1
Kuwait	3.8	2.9	75.2	94.3	0.0	547	0.2	1.5	3.0	2.8
Kyrgyz Republic	4.3	2.2	51.2	100.0	14.0	14	3.4	2.7	12.0	5.5
Lao PDR	2.9	1.5	50.9	80.0	9.6	10	0.2	0.6	2.6	..
Latvia	5.1	3.3	64.1	99.0	0.5	203	4.1	2.9	14.1	8.2
Lebanon	11.5	3.5	30.1	80.0	0.5	568	1.3	3.3	1.7	2.7
Lesotho	6.2	5.3	84.9	7.0	20.8	25	0.0 <sup>b</sup>	0.1	..	..
Liberia	2.1	1.4	68.0	95.7	40.8	4	..	0.0 <sup>b</sup>	..	..
Libya	3.3	1.6	47.2	100.0	0.0	121	1.1	1.3	4.2	4.3
Lithuania	6.3	4.3	68.6	80.9	0.6	255	4.0	4.0	12.5	9.2
Macedonia, FYR	6.8	5.8	84.7	100.0	0.9	124	2.2	2.2	5.9	4.8
Madagascar	2.1	1.2	55.0	88.8	32.2	5	0.1	0.1	0.9	0.4
Malawi	9.8	4.0	41.1	42.6	37.6	14	0.0 <sup>b</sup>	0.0 <sup>b</sup>	1.6	1.3
Malaysia	3.8	2.0	53.8	92.8	0.0	149	0.4	0.7	2.1	2.0
Mali	4.5	2.3	50.8	88.8	18.2	12	0.1	0.0 <sup>b</sup>	..	0.2
Mauritania	3.9	2.9	74.2	100.0	3.3	14	0.1	0.1	0.7	..
Mauritius	2.9	2.2	76.9	100.0	1.8	113	0.8	0.9	2.9	..
Mexico	6.1	2.7	44.9	94.6	0.8	379	1.1	1.7	0.8	1.1
Moldova	7.0	4.1	58.2	100.0	2.8	27	3.6	2.7	13.1	5.9
Mongolia	6.6	4.6	70.4	74.0	0.7	27	2.5	2.7	11.5	..
Morocco	4.6	1.5	32.8	74.0	1.9	55	0.2	0.5	1.3	1.0
Mozambique	5.8	4.1	71.0	36.5	39.3	11	0.0 <sup>b</sup>	0.0 <sup>b</sup>	0.9	..
Myanmar	2.2	0.4	18.5	99.7	1.0	315	0.1	0.3	0.6	..
Namibia	6.7	4.7	70.1	20.5	5.2	99	0.2	0.3	..	..
Nepal	5.2	1.4	27.2	92.2	9.0	12	0.1	0.1	0.2	0.2
Netherlands	8.8	5.8	65.6	24.5	0.0	2,298	2.5	3.3	11.5	10.8
New Zealand	8.5	6.6	77.9	72.6	0.0	1,255	1.9	2.2	8.5	6.2
Nicaragua	7.9	3.9	49.1	96.0	9.3	60	0.7	1.6	1.8	1.5
Niger	4.0	2.0	50.8	94.6	37.7	7	0.0 <sup>b</sup>	0.0 <sup>b</sup>	..	0.1
Nigeria	4.7	1.2	25.6	90.4	6.1	19	0.2	0.3	1.7	..
Norway	9.6	8.0	83.5	97.2	0.0	4,033	2.6	3.6	16.4	14.6
Oman	3.4	2.8	81.6	51.4	0.0	246	0.6	1.3	2.1	2.2
Pakistan	3.2	1.1	34.9	98.3	1.8	13	0.5	0.7	0.6	..
Panama	8.9	6.4	71.7	81.8	0.9	355	1.6	1.7	2.5	2.2
Papua New Guinea	4.3	3.8	88.6	83.3	34.3	22	0.1	0.1	4.0	..
Paraguay	8.4	3.2	38.1	88.6	2.1	82	0.6	1.2	0.9	1.3
Peru	4.4	2.2	49.9	79.4	4.6	93	1.1	1.2	1.4	1.5
Philippines	2.9	1.1	39.0	77.8	2.8	28	0.1	1.2	1.4	..
Poland	6.1	4.4	72.4	100.0	0.0	303	2.1	2.2	5.7	4.9
Portugal	9.3	6.6	70.5	95.7	0.0	1,092	2.8	3.2	4.6	4.0
Puerto Rico	..	..	..	..	..	..	..	..	..	3.3

	Health expenditure					Health expenditure per capita	Physicians		Hospital beds		
	Total % of GDP 2002	Public		Out of pocket % of private 2002	External resources % of total 2002		\$ 2002	per 1,000 people		per 1,000 people	
		% of GDP 2002	% of total 2002					1990	2004	1990	1995–2002 <sup>a</sup>
Romania	6.3	4.2	65.9	88.7	0.8	128	1.8	1.9	8.9	7.5	
Russian Federation	6.2	3.5	55.8	63.6	0.2	150	4.1	4.2	13.1	10.8	
Rwanda	5.5	3.1	57.2	65.2	32.8	11	0.0 <sup>b</sup>	0.0 <sup>b</sup>	1.7	..	
Saudi Arabia	4.3	3.3	77.1	30.1	0.0	345	1.4	1.4	2.5	2.3	
Senegal	5.1	2.3	45.2	96.5	16.9	27	0.1	0.1	0.7	0.4	
Serbia and Montenegro	8.1	5.1	62.8	100.0	0.3	120	2.0	..	5.9	5.3	
Sierra Leone	2.9	1.7	60.3	100.0	16.5	6	..	0.1	..	..	
Singapore	4.3	1.3	30.9	97.3	0.0	898	1.3	1.4	3.6	..	
Slovak Republic	5.9	5.3	89.4	100.0	0.0	265	2.9	3.3	7.4	7.8	
Slovenia	8.3	6.2	74.9	40.9	0.1	922	2.0	2.2	6.0	5.2	
Somalia	2.6	1.2	44.6	100.0	0.0	6	..	0.0 <sup>b</sup>	0.8	..	
South Africa	8.7	3.5	40.6	20.9	0.3	206	0.6	0.7	..	..	
Spain	7.6	5.4	71.3	82.5	0.0	1,192	2.3	3.2	4.3	4.1	
Sri Lanka	3.7	1.8	48.7	95.1	1.9	32	0.1	0.4	2.7	..	
Sudan	4.9	1.0	20.7	99.5	2.6	19	..	0.2	1.1	..	
Swaziland	6.0	3.6	59.5	41.7	3.5	66	0.1	0.2	..	..	
Sweden	9.2	7.8	85.3	100.0	0.0	2,489	2.9	3.0	12.4	3.6	
Switzerland	11.2	6.5	57.9	74.8	0.0	4,219	3.0	3.5	19.9	17.9	
Syrian Arab Republic	5.1	2.3	45.8	100.0	0.2	58	0.8	1.4	1.1	1.4	
Tajikistan	3.3	0.9	27.7	100.0	14.9	6	2.6	2.2	10.7	6.4	
Tanzania	4.9	2.7	54.8	82.5	26.9	13	..	0.0 <sup>b</sup>	1.0	..	
Thailand	4.4	3.1	69.7	75.8	0.2	90	0.2	0.3	1.6	2.0	
Togo	6.9	5.1	73.5	100.0	24.0	91	0.1	0.1	1.5	..	
Trinidad and Tobago	3.7	1.4	37.3	85.8	6.6	264	0.7	0.8	4.0	5.1	
Tunisia	5.8	2.9	49.9	83.0	0.7	126	0.5	0.7	1.9	1.7	
Turkey	6.5	4.3	65.8	88.0	0.0	172	0.9	1.2	2.1	2.6	
Turkmenistan	4.3	3.0	70.7	100.0	0.7	79	3.6	3.2	11.5	7.1	
Uganda	7.4	2.1	27.9	52.3	28.8	18	0.0 <sup>b</sup>	0.0 <sup>b</sup>	0.9	..	
Ukraine	4.7	3.3	71.1	95.5	3.6	40	4.3	3.0	13.0	8.7	
United Arab Emirates	3.1	2.3	73.4	65.2	0.0	802	0.8	2.0	2.6	2.6	
United Kingdom	7.7	6.4	83.4	55.9	0.0	2,031	1.4	1.7	5.9	4.1	
United States	14.6	6.6	44.9	25.4	0.0	5,274	2.4	5.5	4.9	3.6	
Uruguay	10.0	2.9	29.0	25.0	0.6	361	3.7	3.7	4.5	4.4	
Uzbekistan	5.5	2.5	45.5	100.0	5.0	21	3.4	2.9	12.5	5.3	
Venezuela, RB	4.9	2.3	46.9	87.2	0.1	184	1.6	1.9	2.7	1.5	
Vietnam	5.2	1.5	29.2	87.6	1.8	23	0.4	0.5	3.8	1.7	
West Bank and Gaza	..	..	..	..	..	..	..	0.8	..	1.2	
Yemen, Rep.	3.7	1.0	27.2	85.8	3.0	23	0.0 <sup>b</sup>	0.2	0.8	0.6	
Zambia	5.8	3.1	52.9	75.3	18.6	20	0.1	0.1	..	..	
Zimbabwe	8.5	4.4	51.6	47.3	2.5	118	0.1	0.1	0.5	..	
<b>World</b>	<b>10.0 w</b>	<b>5.8 w</b>	<b>60.0 w</b>	<b>44.3 w</b>	<b>0.1 w</b>	<b>524 w</b>	<b>1.6 w</b>	<b>1.5 w</b>	<b>4.0 w</b>	<b>.. w</b>	
Low income	5.5	1.5	27.8	95.8	3.9	29	..	0.4	..	..	
Middle income	6.0	3.0	49.4	82.7	0.5	109	1.6	1.7	3.6	3.7	
Lower middle income	6.0	2.7	45.4	82.1	0.6	84	1.6	1.6	3.5	3.8	
Upper middle income	6.0	3.4	57.6	84.1	0.5	310	1.7	1.8	3.8	3.4	
Low & middle income	5.9	2.7	46.2	85.7	1.1	75	1.3	1.1	3.1	..	
East Asia & Pacific	5.2	1.9	37.8	94.8	0.5	63	1.2	1.3	2.3	2.5	
Europe & Central Asia	6.3	4.2	65.6	82.1	0.4	152	3.2	3.1	10.1	8.9	
Latin America & Carib.	6.8	3.3	47.8	77.3	0.8	218	1.4	1.8	2.4	2.2	
Middle East & N. Africa	5.0	2.7	57.1	80.7	0.7	99	..	1.2	1.8	..	
South Asia	5.5	1.3	24.0	97.7	2.1	26	0.4	0.5	..	..	
Sub-Saharan Africa	6.3	2.6	40.5	56.0	7.2	32	..	0.1	1.2	..	
High income	11.1	6.6	63.3	36.6	0.0	3,039	2.4	3.8	7.9	7.4	
Europe EMU	9.4	7.0	74.6	57.5	0.0	2,043	3.1	4.0	8.5	8.0	

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



## 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. 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. There are a number of potential data sources related to external resources for health, including government expenditure accounts, government records on external assistance, routine surveys of external financing assistance, and special surveys. Survey data are the major source of information about out of pocket expenditure on health. 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.

## 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.
- Out of pocket expenditure is any direct outlay by households, including gratuities and in-kind payments, to health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services whose primary intent is to contribute to the restoration or enhancement of the health status of individuals or population groups. It is a part of private health expenditure.
- External resources for health are funds or services in kind that are provided by entities not part of the country in question. The resources may come from international organizations, other countries through bilateral arrangements, or foreign nongovernmental organizations. These resources are part of total health expenditure.
- 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.

## 2.14a

### A severe maldistribution of health workers

Health worker density by region (health workers per 1,000 people)



Asia, with about 50 percent of the world's population, has about 30 percent of the world's global stock of health workers. North America and Europe have about 20 percent of the population, but over half the doctors and nurses. Average density is about 11 per 1,000 people in Europe and North America and 1 per 1,000 in Africa.

Note: Health workers include physicians, nurses, midwives, dentists, and pharmacists. Data are displayed by WHO regions.

Source: Joint Learning Initiative 2004.

## Data sources

The estimates of health expenditure come mostly from the WHO's World Health Report 2004 and updates and from the OECD for its member countries, supplemented by World Bank poverty assessments and country and sector studies. Data are also drawn from World Bank public expenditure reviews, the International Monetary Fund's Government Finance Statistics database, and other studies. The data on private expenditure in developing countries are drawn largely from household surveys conducted by governments or by statistical or international organizations. The data on physicians and hospital beds are from the WHO, OECD, and TransMONEE, supplemented by country data.

	Access to an improved water source		Access to improved sanitation facilities		Child immunization rate		Children with ARI taken to a health provider	Children with diarrhea	Children with diarrhea who received ORS packet	Children sleeping under treated bednets <sup>b</sup>	Tuberculosis treatment success rate	DOTS detection rate
	% of population 1990	% of population 2002	% of population 1990	% of population 2002	% of children ages 12–23 months <sup>a</sup> Measles 2003	DPT 2003	% of children under age 5 1998–2003 <sup>c</sup>	% of children under age 5 1998–2003 <sup>c</sup>	% of children under age 5 with diarrhea 1998–2003 <sup>c</sup>	% of children under age 5 1999–2003 <sup>c</sup>	% of registered cases 2002	% of estimated cases 2003
Afghanistan	..	13	..	8	50	54	..	..	..	..	87	18
Albania	97	97	..	89	93	97	83	7	35	..	90	29
Algeria	95	87	88	92	84	87	..	20	18	..	89	113
Angola	32	50	30	30	62	46	..	..	..	2.3	74	118
Argentina	94	..	82	..	97	88	..	..	..	..	58	65
Armenia	..	92	..	84	94	94	26	8	33	..	79	43
Australia	100	100	100	100	93	92	..	..	..	..	78	10
Austria	100	100	100	100	79	84	..	..	..	..	64	41
Azerbaijan	66	77	..	55	98	97	36	22	10	1.4	84	28
Bangladesh	71	75	23	48	77	85	27	6	61	..	84	33
Belarus	100	100	..	..	99	86	..	..	..	..	..	44
Belgium	..	..	..	..	75	90	..	..	..	..	69	57
Benin	60	68	11	32	83	88	35	13	23	7.4	80	94
Bolivia	72	85	33	45	64	81	47	25	30	..	84	71
Bosnia and Herzegovina	98	98	..	93	84	87	80	9	13	..	95	48
Botswana	93	95	38	41	90	97	14	7	49	..	71	68
Brazil	83	89	70	75	99	96	..	..	..	..	75	18
Bulgaria	100	100	100	100	96	96	..	..	..	..	86	81
Burkina Faso	39	51	13	12	76	84	22	..	..	..	64	18
Burundi	69	79	44	36	75	74	..	..	..	1.3	79	30
Cambodia	..	34	..	16	65	69	..	19	18	..	92	60
Cameroon	50	63	21	48	61	73	34	19	22	1.3	71	86
Canada	100	100	100	100	95	91	..	..	..	..	81	76
Central African Republic	48	75	23	27	35	40	..	..	..	1.5	61	6
Chad	20	34	6	8	61	47	22	31	16	0.6	72	11
Chile	90	95	85	92	99	99	..	..	..	..	86	114
China	70	77	23	44	84	90	..	..	..	..	93	43
Hong Kong, China	..	..	..	..	..	..	..	..	..	..	79	58
Colombia	92	92	82	86	92	91	51	14	36	0.7	84	7
Congo, Dem. Rep.	43	46	18	29	54	49	..	..	..	0.7	78	63
Congo, Rep.	..	46	..	9	50	50	..	..	..	..	71	57
Costa Rica	..	97	..	92	89	88	..	..	..	..	85	117
Côte d'Ivoire	69	84	31	40	56	54	38	20	16	1.1	67	39
Croatia	..	..	..	..	95	94	..	..	..	..	..	..
Cuba	..	91	98	98	99	71	..	..	..	..	92	93
Czech Republic	..	..	..	..	99	97	..	..	..	..	73	63
Denmark	100	100	..	..	96	96	..	..	..	..	77	75
Dominican Republic	86	93	48	57	79	65	68	20	28	..	78	65
Ecuador	69	86	56	72	99	89	39	20	29	..	84	37
Egypt, Arab Rep.	94	98	54	68	98	98	66	7	34	..	88	56
El Salvador	67	82	51	63	99	88	54	20	47	..	88	53
Eritrea	40	57	8	9	84	83	..	..	..	4.2	82	18
Estonia	..	..	..	..	95	94	..	..	..	..	67	69
Ethiopia	25	22	4	6	52	56	16	24	13	..	76	36
Finland	100	100	100	100	97	98	..	..	..	..	..	..
France	..	..	..	..	86	97	..	..	..	..	..	..
Gabon	..	87	..	36	55	38	48	16	25	..	47	93
Gambia, The	..	82	..	53	90	90	64	22	33	14.7	74	70
Georgia	..	76	..	83	73	76	99	6	25	..	65	52
Germany	100	100	..	..	92	89	..	..	..	..	69	55
Ghana	54	79	43	58	80	80	26	18	29	..	60	40
Greece	..	..	..	..	88	88	..	..	..	..	..	..
Guatemala	77	95	50	61	75	83	37	13	30	1.2	84	44
Guinea	42	51	17	13	52	45	39	21	35	..	72	51
Guinea-Bissau	..	59	..	34	61	77	64	32	39	7.4	48	55
Haiti	53	71	15	34	53	43	51	26	35	..	78	46

# Disease prevention: coverage and quality

	Access to an improved water source		Access to improved sanitation facilities		Child immunization rate		Children with ARI taken to a health provider	Children with diarrhea	Children with diarrhea who received ORS packet	Children sleeping under treated bednets <sup>b</sup>	Tuberculosis treatment success rate	DOTS detection rate						
	% of population		% of population		% of children ages 12–23 months <sup>a</sup>								% of children under age 5 1998–2003 <sup>c</sup>	% of children under age 5 1998–2003 <sup>c</sup>	% of children under age 5 with diarrhea 1998–2003 <sup>c</sup>	% of children under age 5 1999–2003 <sup>c</sup>	% of registered cases 2002	% of estimated cases 2003
	1990	2002	1990	2002	Measles 2003	DPT 2003												
Honduras	83	90	49	68	95	92	..	..	..	..	87	78						
Hungary	99	99	..	95	99	99	..	..	..	..	55	41						
India	68	86	12	30	67	70	64	19	27	..	87	47						
Indonesia	71	78	46	52	72	70	..	..	..	0.1	86	33						
Iran, Islamic Rep.	91	93	83	84	99	99	..	..	..	..	85	59						
Iraq	83	81	81	80	90	81	..	..	..	..	91	20						
Ireland	..	..	..	..	78	85	..	..	..	..	..	..						
Israel	100	100	..	..	95	97	..	..	..	..	79	55						
Italy	..	..	..	..	83	96	..	..	..	..	79	79						
Jamaica	92	93	75	80	78	81	..	..	..	..	49	90						
Japan	100	100	100	100	99	97	..	..	..	..	76	40						
Jordan	98	91	..	93	96	97	..	..	..	..	89	89						
Kazakhstan	86	86	72	72	99	99	48	13	32	..	78	86						
Kenya	45	62	42	48	72	73	57	17	37	4.3	79	46						
Korea, Dem. Rep.	100	100	..	59	95	68	..	..	81	..	88	91						
Korea, Rep.	..	92	..	..	96	97	..	..	..	..	83	23						
Kuwait	..	..	..	..	97	99	..	..	..	..	55	67						
Kyrgyz Republic	..	76	..	60	99	98	..	..	..	..	82	57						
Lao PDR	..	43	..	24	42	50	36	6	34	..	78	47						
Latvia	..	..	..	..	99	98	..	..	..	..	76	83						
Lebanon	100	100	..	98	96	92	74	19	44	..	91	67						
Lesotho	..	76	37	37	70	79	..	..	..	..	71	70						
Liberia	56	62	38	26	53	38	..	..	..	..	..	..						
Libya	71	72	97	97	91	93	..	..	..	..	61	147						
Lithuania	..	..	..	..	98	94	..	..	..	..	72	85						
Macedonia, FYR	..	..	..	..	96	96	..	..	..	..	79	49						
Madagascar	40	45	12	33	55	55	29	13	22	0.2	74	77						
Malawi	41	67	36	46	77	84	27	18	48	2.9	72	35						
Malaysia	..	95	96	..	92	96	..	..	..	..	76	69						
Mali	34	48	36	45	68	69	..	19	12	8.4	50	18						
Mauritania	41	56	28	42	71	76	41	18	23	..	..	..						
Mauritius	100	100	99	99	94	92	..	..	..	..	92	28						
Mexico	80	91	66	77	96	91	..	..	..	..	84	81						
Moldova	..	92	..	68	96	98	78	4	8	..	61	39						
Mongolia	62	62	..	59	98	98	78	8	56	..	87	68						
Morocco	75	80	57	61	90	91	..	..	..	..	89	83						
Mozambique	..	42	..	27	77	72	..	..	..	..	78	45						
Myanmar	48	80	21	73	75	77	..	..	..	..	81	73						
Namibia	58	80	24	30	70	82	..	..	..	3.4	62	86						
Nepal	69	84	12	27	75	78	26	..	..	..	86	60						
Netherlands	100	100	100	100	96	98	..	..	..	..	68	50						
New Zealand	97	..	..	..	85	90	..	..	..	..	60	57						
Nicaragua	69	81	47	66	93	86	58	14	56	..	82	91						
Niger	40	46	7	12	64	52	27	40	14	5.8	..	54						
Nigeria	49	60	39	38	35	25	50	15	34	1.0	79	18						
Norway	100	100	..	..	84	90	..	..	..	..	80	46						
Oman	77	79	83	89	98	99	..	..	..	..	92	81						
Pakistan	83	90	38	54	61	67	..	..	..	..	77	17						
Panama	..	91	..	72	83	86	..	..	..	..	73	92						
Papua New Guinea	39	39	45	45	49	54	..	..	..	..	53	15						
Paraguay	62	83	58	78	91	77	..	..	..	..	92	18						
Peru	74	81	52	62	95	89	58	15	22	..	92	81						
Philippines	87	85	54	73	80	79	64	7	43	..	88	68						
Poland	..	..	..	..	97	99	..	..	..	..	86	56						
Portugal	..	..	..	..	96	99	..	..	..	..	82	87						
Puerto Rico	..	..	..	..	..	..	..	..	..	..	62	59						

	Access to an improved water source		Access to improved sanitation facilities		Child immunization rate		Children with ARI taken to a health provider	Children with diarrhea	Children with diarrhea who received ORS packet	Children sleeping under treated bednets <sup>b</sup>	Tuberculosis treatment success rate	DOTS detection rate
	% of population 1990	% of population 2002	% of population 1990	% of population 2002	% of children ages 12–23 months <sup>a</sup>		% of children under age 5 1998–2003 <sup>c</sup>	% of children under age 5 1998–2003 <sup>c</sup>	% of children under age 5 with diarrhea 1998–2003 <sup>c</sup>	% of children under age 5 1999–2003 <sup>c</sup>	% of registered cases 2002	% of estimated cases 2003
Romania	..	57	..	51	97	97	..	..	..	..	76	38
Russian Federation	94	96	87	87	96	98	..	..	..	..	67	9
Rwanda	58	73	37	41	90	96	16	17	14	5.0	58	27
Saudi Arabia	90	..	..	..	96	95	..	..	..	..	76	38
Senegal	66	72	35	52	60	73	27	..	..	1.7	66	60
Serbia and Montenegro	93	93	87	87	87	89	97	9	23	..	91	37
Sierra Leone	..	57	..	39	73	70	50	25	42	1.5	81	33
Singapore	..	..	..	..	88	92	..	..	..	..	87	44
Slovak Republic	100	100	100	100	99	99	..	..	..	..	85	34
Slovenia	..	..	..	..	94	92	..	..	..	..	85	70
Somalia	..	29	..	25	40	40	..	23	30	0.3	89	29
South Africa	83	87	63	67	83	94	..	13	51	..	68	118
Spain	..	..	..	..	97	98	..	..	..	..	..	..
Sri Lanka	68	78	70	91	99	99	..	..	..	..	81	70
Sudan	64	69	33	34	57	50	..	..	..	0.4	78	34
Swaziland	..	52	..	52	94	95	..	..	..	0.1	47	35
Sweden	100	100	100	100	94	98	..	..	..	..	73	62
Switzerland	100	100	100	100	82	95	..	..	..	..	..	..
Syrian Arab Republic	79	79	76	77	98	99	..	..	..	..	87	45
Tajikistan	..	58	..	53	89	82	51	21	35	1.9	79	2
Tanzania	38	73	47	46	97	95	68	12	55	2.1	80	43
Thailand	81	85	80	99	94	96	..	..	..	..	74	72
Togo	49	51	37	34	58	64	26	31	17	2.0	68	17
Trinidad and Tobago	92	91	100	100	88	91	..	..	..	..	..	..
Tunisia	77	82	75	80	90	95	..	6	32	..	92	91
Turkey	81	93	84	83	75	68	..	30	14	..	..	..
Turkmenistan	..	71	..	62	97	98	51	3	47	..	77	49
Uganda	44	56	43	41	82	81	67	20	34	0.2	60	44
Ukraine	..	98	99	99	99	97	..	..	..	..	..	..
United Arab Emirates	..	..	100	100	94	94	..	..	..	..	79	32
United Kingdom	..	..	..	..	80	91	..	..	..	..	..	..
United States	100	100	100	100	93	96	..	..	..	..	..	89
Uruguay	..	98	..	94	95	91	..	..	..	..	82	80
Uzbekistan	89	89	58	57	99	98	..	5	32	..	80	20
Venezuela, RB	..	83	..	68	82	68	..	..	..	..	82	80
Vietnam	72	73	22	41	93	99	60	11	11	15.8	92	86
West Bank and Gaza	..	..	..	..	..	..	..	..	..	..	100	4
Yemen, Rep.	69	69	21	30	66	66	..	..	..	..	82	43
Zambia	50	55	41	45	84	80	69	21	53	6.5	83	65
Zimbabwe	77	83	49	57	80	80	50	14	..	..	67	42
<b>World</b>	<b>75 w</b>	<b>82 w</b>	<b>43 w</b>	<b>54 w</b>	<b>77 w</b>	<b>78 w</b>						
Low income	64	75	20	36	65	67						
Middle income	77	83	48	61	87	89						
Lower middle income	77	82	46	60	86	88						
Upper middle income	..	..	..	..	94	91						
Low & middle income	72	79	37	50	76	77						
East Asia & Pacific	71	78	30	49	82	86						
Europe & Central Asia	..	91	86	82	92	90						
Latin America & Carib.	82	89	68	74	93	89						
Middle East & N. Africa	87	88	69	75	92	92						
South Asia	70	84	17	35	67	71						
Sub-Saharan Africa	49	58	32	36	61	59						
High income	..	99	..	..	92	95						
Europe EMU	..	..	..	..	89	94						

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

## About the data

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.

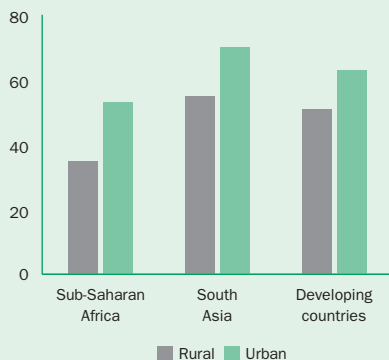
People's health is influenced by the environment in which they live. Lack of clean water and basic sanitation is the main reason diseases transmitted by feces are so common in developing countries. The data on access to an improved water source measure the share of the population with ready access to 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.

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, lack of precise information on the size of the cohort of one-year-old children makes immunization coverage difficult to estimate from program statistics. The data shown here are based on an assessment of national immunization coverage

## 2.15a

### Children with acute respiratory infection have better access to health care in urban areas

Share of children with acute respiratory infection consulting a health provider, by urban and rural residence, 1990–2000 (%)



Children with acute respiratory infection have a better chance of receiving health care in urban areas than in rural areas because of greater access to health care providers and facilities.

Source: Childinfo.

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.

Acute respiratory infection (ARI) continues to be a leading cause of mortality among young children, killing about 2 million children under age five in developing countries in 2000. An estimated 60 percent of these deaths can be prevented by the selective use of antibiotics by appropriate health care providers. Data are drawn mostly from household health surveys in which mothers report on number of episodes and treatment for ARI.

Since 1990 diarrhea-related deaths among children have declined tremendously. Most diarrhea-related deaths are due to dehydration, and many of these deaths can be prevented with the use of oral rehydration salts (ORS) at home. However, recommendations for the use of oral rehydration therapy (ORT) have changed over time based on scientific progress in the management of diarrhea, together with considerations of treatment feasibility. Because definitions of ORT adopted and promoted by countries have changed over time, it is difficult to accurately compare use rates among countries. Until the current recommended method for home management of diarrhea is adopted and applied in all countries, the data should be used with caution. Also, the prevalence of diarrhea may vary by season. Since country surveys are administered at different times, that contributes to further problems in comparability of the data between countries.

Insecticide-treated bednets, if properly used and maintained, are 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.

## Definitions

- 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 rain-water 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 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.
- 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 with acute respiratory infection (ARI) who are taken to a health provider refer to the percentage of children under age five with ARI in the last two weeks who were taken to an appropriate health provider, including hospital, health center, dispensary, village health worker, clinic, and private physician.
- Children with diarrhea refer to the percentage of children under age five who had diarrhea in the two weeks prior to the survey.
- Children with diarrhea who received oral rehydration salts (ORS) packet refer to the percentage of children under age five with diarrhea in the two weeks prior to the survey who received an ORS packet.
- 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.

## Data sources

Data are drawn from a variety of sources, including WHO and UNICEF estimates of national immunization coverage, the WHO's Global Tuberculosis Control Report 2004; UNICEF's State of the World's Children 2005 and Childinfo; Demographic and Health Surveys by Macro International; and the WHO and UNICEF's Meeting the MDG Drinking Water and Sanitation Target ([www.unicef.org/wes/mdgreport](http://www.unicef.org/wes/mdgreport)).

	Total fertility rate		Adolescent fertility rate	Women at risk of unintended pregnancy	Contraceptive prevalence rate	Tetanus vaccinations	Births attended by skilled health staff		Maternal mortality ratio	
	births per woman						per 100,000 live births	National estimates 1985–2003 <sup>a</sup>	Modeled estimates 2000	
	1990	2003	births per 1,000 women ages 15–19 2003	% of married women ages 15–49 1990–2003 <sup>a</sup>	% of women ages 15–49 1995–2003 <sup>a</sup>	% of pregnant women 2003				1990–92 <sup>a</sup>
Afghanistan	6.9	..	..	..	10	40	..	14	1,600	1,900
Albania	3.0	2.2	15	..	75	..	..	94	20	55
Algeria	4.5	2.7	18	..	57	..	77	92	140	140
Angola	7.2	7.0	220	..	6	72	..	45	..	1,700
Argentina	2.9	2.4	54	..	..	..	96	99	46	82
Armenia	2.6	1.1	35	12	61	..	..	97	22	55
Australia	1.9	1.8	18	..	..	..	100	..	..	8
Austria	1.5	1.4	22	..	51	..	..	..	..	4
Azerbaijan	2.7	2.1	44	..	55	..	..	84	25	94
Bangladesh	4.1	2.9	119	15	54	89	..	14	380	380
Belarus	1.9	1.3	21	..	50	..	..	100	18	35
Belgium	1.6	1.6	11	..	..	..	..	..	..	10
Benin	6.6	5.2	101	27	19	56	..	66	500	850
Bolivia	4.8	3.7	70	26	58	..	..	65	390	420
Bosnia and Herzegovina	1.7	1.3	23	..	48	..	97	100	10	31
Botswana	5.1	3.7	66	..	48	..	..	99	330	100
Brazil	2.7	2.1	68	7	77	..	72	..	75	260
Bulgaria	1.8	1.2	49	..	42	..	..	..	15	32
Burkina Faso	7.0	6.2	132	26	14	50	..	..	480	1,000
Burundi	6.8	5.7	50	..	16	46	..	25	..	1,000
Cambodia	5.6	3.9	57	30	24	43	..	32	440	450
Cameroon	6.0	4.6	123	20	26	65	58	60	430	730
Canada	1.8	1.5	20	..	..	..	..	..	..	6
Central African Republic	5.5	4.6	122	16	28	63	..	44	1,100	1,100
Chad	7.1	6.2	178	10	8	43	..	16	830	1,100
Chile	2.6	2.2	43	..	..	..	..	100	17	31
China	2.1	1.9	15	..	87	..	..	97	50	56
Hong Kong, China	1.3	1.0	6	..	..	..	..	..	..	..
Colombia	3.1	2.5	70	6	77	..	82	86	78	130
Congo, Dem. Rep.	6.7	6.7	222	..	31	48	..	61	950	990
Congo, Rep.	6.3	6.3	143	..	..	59	..	..	..	510
Costa Rica	3.2	2.3	62	..	..	..	98	98	29	43
Côte d'Ivoire	6.2	4.5	116	28	15	80	..	63	600	690
Croatia	1.6	1.4	18	..	..	..	..	..	2	8
Cuba	1.7	1.6	67	..	73	..	..	100	34	33
Czech Republic	1.9	1.2	23	..	72	..	..	..	3	9
Denmark	1.7	1.8	8	..	..	..	..	..	10	5
Dominican Republic	3.4	2.6	81	12	70	..	93	98	180	150
Ecuador	3.7	2.7	62	..	66	..	..	..	80	130
Egypt, Arab Rep.	4.0	3.1	45	11	60	71	41	69	84	84
El Salvador	3.8	2.8	82	..	67	..	..	69	170	150
Eritrea	6.5	4.8	98	28	8	55	..	28	1,000	630
Estonia	2.0	1.4	28	..	..	..	..	..	46	63
Ethiopia	6.9	5.6	133	36	8	24	..	6	870	850
Finland	1.8	1.8	10	..	..	..	..	..	6	6
France	1.8	1.9	10	..	..	..	..	..	10	17
Gabon	5.1	4.0	154	28	33	54	..	86	520	420
Gambia, The	5.9	4.8	136	..	18	..	44	55	730	540
Georgia	2.2	1.1	27	..	41	..	..	..	67	32
Germany	1.5	1.3	14	..	..	..	..	..	8	8
Ghana	5.5	4.4	73	23	25	70	..	..	210 <sup>b</sup>	540
Greece	1.4	1.3	17	..	..	..	..	..	1	9
Guatemala	5.3	4.3	97	23	40	..	..	41	150	240
Guinea	5.9	5.0	149	24	6	74	31	..	530	740
Guinea-Bissau	7.1	6.6	210	..	8	66	..	35	910	1,100
Haiti	5.4	4.2	69	40	28	52	..	24	520	680



# Reproductive health

216 PEOPLE

	Total fertility rate		Adolescent fertility rate	Women at risk of unintended pregnancy	Contraceptive prevalence rate	Tetanus vaccinations	Births attended by skilled health staff		Maternal mortality ratio	
	births per woman						per 100,000 live births	National estimates 1985–2003 <sup>a</sup>	Modeled estimates 2000	
	1990	2003	births per 1,000 women ages 15–19 2003	% of married women ages 15–49 1990–2003 <sup>a</sup>	% of women ages 15–49 1995–2003 <sup>a</sup>	% of pregnant women 2003				% of total 1990–92 <sup>a</sup>
Honduras	5.2	4.0	103	..	62	..	45	56	110	110
Hungary	1.8	1.3	27	..	..	..	..	..	5	16
India	3.8	2.9	98	16	47	78	..	43	540	540
Indonesia	3.1	2.4	48	9	60	51	32	68	310	230
Iran, Islamic Rep.	4.7	2.0	25	..	74	..	..	90	37	76
Iraq	5.9	4.0	35	..	44	70	..	72	290	250
Ireland	2.1	2.0	15	..	..	..	..	..	6	5
Israel	2.8	2.7	23	..	..	..	..	..	5	17
Italy	1.3	1.3	8	..	60	..	..	..	7	5
Jamaica	2.9	2.3	81	..	65	..	..	..	110	87
Japan	1.5	1.3	4	..	..	..	100	..	8	10
Jordan	5.4	3.5	31	14	56	..	87	100	41	41
Kazakhstan	2.7	1.8	35	9	66	..	..	..	50	210
Kenya	5.6	4.8	94	24	38	66	..	41	590	1,000
Korea, Dem. Rep.	2.4	2.1	2	..	..	..	..	97	110	67
Korea, Rep.	1.8	1.5	4	..	81	..	98	..	20	20
Kuwait	3.4	2.5	30	..	50	..	..	..	5	5
Kyrgyz Republic	3.7	2.4	30	12	60	..	..	..	44	110
Lao PDR	6.0	4.8	89	..	32	36	..	19	530	650
Latvia	2.0	1.3	32	..	48	..	..	..	25	42
Lebanon	3.2	2.2	25	..	63	..	..	..	100 <sup>b</sup>	150
Lesotho	5.1	4.3	76	..	30	..	..	60	..	550
Liberia	6.8	5.8	192	..	10	56	..	51	580	760
Libya	4.7	3.3	32	..	45	..	..	..	77	97
Lithuania	2.0	1.3	33	..	47	..	..	..	13	13
Macedonia, FYR	2.1	1.8	31	..	..	..	..	98	11	23
Madagascar	6.2	5.2	153	26	17	55	57	46	490	550
Malawi	7.0	6.0	136	30	31	70	55	61	1,100	1,800
Malaysia	3.8	2.8	26	..	..	..	..	97	50	41
Mali	..	6.4	173	29	8	32	..	41	580	1,200
Mauritania	6.0	4.6	110	32	8	41	40	57	750	1,000
Mauritius	2.3	2.0	39	..	26	..	..	..	21	24
Mexico	3.3	2.2	57	..	70	..	..	..	63	83
Moldova	2.4	1.4	44	..	62	..	..	..	44	36
Mongolia	4.0	2.4	43	..	67	..	..	99	110	110
Morocco	4.0	2.7	42	20	63	..	31	..	230	220
Mozambique	6.3	5.0	150	23	17	57	..	48	1,100	1,000
Myanmar	3.8	2.8	30	..	33	77	..	..	230	360
Namibia	5.4	4.8	100	22	44	85	68	78	270	300
Nepal	5.3	4.1	109	28	39	69	7	11	540	740
Netherlands	1.6	1.8	5	..	75	..	..	..	7	16
New Zealand	2.2	1.9	30	..	75	..	..	..	15	7
Nicaragua	4.8	3.4	114	15	69	..	..	67	97	230
Niger	7.6	7.1	201	17	14	36	15	16	590	1,600
Nigeria	6.5	5.6	122	17	13	51	31	35	..	800
Norway	1.9	1.8	10	..	..	..	..	..	6	16
Oman	7.4	4.0	53	..	32	..	..	95	23	87
Pakistan	5.8	4.5	60	32	28	57	19	23	530	500
Panama	3.0	2.4	67	..	..	..	..	..	70	160
Papua New Guinea	5.6	4.3	66	..	26	34	..	..	370 <sup>b</sup>	300
Paraguay	4.6	3.8	71	15	57	..	67	..	180	170
Peru	3.7	2.7	58	10	69	..	..	59	190	410
Philippines	4.1	3.2	33	19	49	70	..	60	170	200
Poland	2.0	1.2	16	..	..	..	..	..	4	13
Portugal	1.4	1.4	23	..	..	..	..	..	8	5
Puerto Rico	2.2	1.9	64	..	78	..	..	..	..	25



	Total fertility rate		Adolescent fertility rate	Women at risk of unintended pregnancy	Contraceptive prevalence rate	Tetanus vaccinations	Births attended by skilled health staff		Maternal mortality ratio	
	births per woman 1990	2003					births per 1,000 women ages 15–19 2003	% of married women ages 15–49 1990–2003 <sup>a</sup>	% of women ages 15–49 1995–2003 <sup>a</sup>	% of pregnant women 2003
			1990–92 <sup>a</sup>	2000–03 <sup>a</sup>	National estimates 1985–2003 <sup>a</sup>	Modeled estimates 2000				
Romania	1.8	1.3	40	..	64	..	..	..	34	49
Russian Federation	1.9	1.3	46	..	..	..	..	99	37	67
Rwanda	7.1	5.7	52	36	13	76	26	31	1,100	1,400
Saudi Arabia	6.6	5.3	89	..	21	..	..	..	..	23
Senegal	6.2	4.9	87	35	11	75	..	41	560	690
Serbia and Montenegro	2.1	1.7	32	..	58	..	..	99	7	11
Sierra Leone	6.5	5.6	178	..	..	62	..	42	1,800	2,000
Singapore	1.9	1.4	8	..	..	..	..	..	6	30
Slovak Republic	2.1	1.2	23	..	..	..	..	..	16	3
Slovenia	1.5	1.2	9	..	..	..	100	..	17	17
Somalia	7.3	6.9	201	..	..	60	..	..	..	1,100
South Africa	3.3	2.8	42	15	62	52	..	..	150	230
Spain	1.3	1.3	9	..	81	..	..	..	6	4
Sri Lanka	2.5	2.0	29	..	70	..	..	87	92	92
Sudan	5.4	4.4	55	..	7	35	69	..	550	590
Swaziland	5.3	4.2	97	..	28	..	..	70	230	370
Sweden	2.1	1.7	9	..	..	..	..	100	5	2
Switzerland	1.6	1.4	5	..	82	..	..	..	5	7
Syrian Arab Republic	5.3	3.4	39	..	48	..	..	..	65	160
Tajikistan	5.1	2.9	25	..	34	..	..	71	45	100
Tanzania	6.3	5.0	112	22	25	83	44	..	530	1,500
Thailand	2.3	1.8	72	..	72	..	..	69	36	44
Togo	6.6	4.9	80	32	26	47	..	49	480	570
Trinidad and Tobago	2.4	1.8	42	..	38	..	..	96	45	160
Tunisia	3.5	2.0	15	..	66	..	..	90	69	120
Turkey	3.0	2.4	51	10	64	37	..	..	130 <sup>b</sup>	70
Turkmenistan	4.2	2.7	18	10	62	..	..	97	9	31
Uganda	7.0	6.0	201	35	23	48	..	39	510	880
Ukraine	1.8	1.2	31	..	72	..	..	..	22	35
United Arab Emirates	4.1	3.0	61	..	28	..	..	..	3	54
United Kingdom	1.8	1.6	28	..	..	..	..	..	7	13
United States	2.1	2.0	46	..	64	..	..	..	8	17
Uruguay	2.5	2.2	63	..	..	..	..	..	26	27
Uzbekistan	4.1	2.3	36	14	68	..	..	96	34	24
Venezuela, RB	3.4	2.7	85	..	77	..	..	94	60	96
Vietnam	3.6	1.9	28	7	79	79	..	85	95	130
West Bank and Gaza	6.3	4.9	80	..	42	..	..	..	..	..
Yemen, Rep.	7.5	6.0	95	39	23	31	16	..	350	570
Zambia	6.3	5.0	156	27	34	60	51	43	730	750
Zimbabwe	4.8	3.6	81	13	54	60	..	..	700	1,100
<b>World</b>	<b>3.1 w</b>	<b>2.6 w</b>	<b>63 w</b>		<b>60 w</b>		<b>.. w</b>	<b>57 w</b>		<b>407 w</b>
Low income	4.7	3.7	102		39		..	38		689
Middle income	2.6	2.1	36		75		..	87		115
Lower middle income	2.6	2.1	34		76		..	86		121
Upper middle income	3.1	2.3	51		..		..	..		67
Low & middle income	3.4	2.8	67		59		..	57		444
East Asia & Pacific	2.4	2.1	24		79		..	87		116
Europe & Central Asia	2.3	1.6	38		..		97	..		58
Latin America & Carib.	3.1	2.4	67		71		..	..		193
Middle East & N. Africa	4.8	3.1	41		56		..	80		162
South Asia	4.1	3.1	97		45		..	36		567
Sub-Saharan Africa	6.1	5.2	127		22		..	39		916
High income	1.8	1.6	24		..		..	..		13
Europe EMU	1.5	1.5	11		..		..	..		9

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. 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 500 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 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.

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 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.

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. For countries with national data reported maternal mortality was adjusted by a factor of under- or over-estimation. For countries with no national data modeled estimates are used, based on an exercise 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 GDP. Neither set of ratios can be assumed to provide an accurate estimate of maternal mortality for 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.
- 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.
- 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.

## Data sources

The data on reproductive health come from Demographic and Health Surveys by Macro International, the WHO's Coverage of Maternity Care (1997) and other WHO sources, UNICEF's State of the World's Children 2005 and Childinfo; 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).

	Prevalence of undernourishment		Prevalence of child malnutrition		Prevalence of overweight	Low-birthweight babies	Exclusive breastfeeding	Consumption of iodized salt	Vitamin A supplementation
	% of population 1990-92	2000-02	% of children under age 5		% of children under age 5 1995-2003 <sup>a</sup>	% of births 1995-2003 <sup>a</sup>	% of children under 6 months 1995-2003 <sup>a</sup>	% of households 1997-2003 <sup>a</sup>	% of children 6-59 months 2002
Afghanistan	..	..	49.3	47.6	4.0	..	..	1	84
Albania	5 <sup>b</sup>	6	13.6	35.1	22.4	3	6	62	..
Algeria	5	5	6.0	18.0	10.1	7	13	69	..
Angola	58	40	30.5	45.2	0.5	12	11	35	88
Argentina	<3	<3	5.4	12.4	9.2	7	..	..	..
Armenia	52 <sup>b</sup>	34	2.6	12.9	10.4	7	30	84	..
Australia	..	..	0.0	0.0	5.2	7	..	..	..
Austria	..	..	..	..	..	7	..	..	..
Azerbaijan	34 <sup>b</sup>	15	6.8	13.3	2.6	11	7	26	..
Bangladesh	35	30	52.2	48.5	0.6	30	46	70	84
Belarus	<3 <sup>b</sup>	<3	..	..	..	5	..	..	..
Belgium	..	..	..	..	..	8	..	..	..
Benin	20	15	22.9	30.7	1.8	16	38	72	85
Bolivia	28	21	7.6	26.8	6.5	9	54	90	50
Bosnia and Herzegovina	9 <sup>b</sup>	8	4.1	9.7	13.2	4	6	77	..
Botswana	23	32	12.5	23.1	6.9	10	34	66	85
Brazil	12	9	5.7	10.5	4.9	10	..	88	..
Bulgaria	8 <sup>b</sup>	11	..	..	..	10	..	..	..
Burkina Faso	21	19	37.7	38.7	1.0	19	6	..	97
Burundi	48	68	45.1	56.8	0.7	16	62	96	89
Cambodia	43	33	45.2	44.6	2.0	11	12	14	34
Cameroon	33	25	22.2	29.3	5.0	11	12	61	86
Canada	..	..	..	..	..	6	..	..	..
Central African Republic	50	43	23.2	28.4	0.8	14	17	86	90
Chad	58	34	28.0	29.1	1.5	17	10	58	85
Chile	8	4	0.8	1.5	8.0	5	63	100	..
China	16	11	10.0	14.2	2.6	6	67 <sup>c</sup>	93	..
Hong Kong, China	..	..	..	..	..	5	..	..	..
Colombia	17	13	6.7	13.5	3.7	9	26	92	..
Congo, Dem. Rep.	32	71	31.0	38.1	3.9	12	24	72	62
Congo, Rep.	54	37	..	..	..	..	4 <sup>c</sup>	..	86
Costa Rica	6	4	5.1	6.1	6.2	7	..	..	..
Côte d'Ivoire	18	14	21.2	25.1	2.5	17	10	31	97
Croatia	16 <sup>b</sup>	7	0.6	0.8	5.9	6	23	90	..
Cuba	8	3	3.9	4.6	..	6	41	83	..
Czech Republic	<3 <sup>b</sup>	<3	..	..	..	7	..	..	..
Denmark	..	..	..	..	..	5	..	..	..
Dominican Republic	27	25	5.3	8.9	6.5	11	10	18	31
Ecuador	8	4	14.3	26.4	..	16	35	99	50
Egypt, Arab Rep.	4	3	8.6	15.6	8.6	12	30	56	..
El Salvador	12	11	10.3	18.9	2.6	13	16	..	..
Eritrea	..	73	39.6	37.6	0.7	21	52	68	51
Estonia	9 <sup>b</sup>	5	..	..	..	4	..	..	..
Ethiopia	..	46	47.2	51.5	1.2	15	55	28	16
Finland	..	..	..	..	..	4	..	..	..
France	..	..	..	..	..	7	..	..	..
Gabon	10	6	11.9	20.7	3.7	14	6	15	87
Gambia, The	22	27	17.2	19.2	1.5	17	26	8	91
Georgia	39 <sup>b</sup>	27	3.1	11.7	12.7	6	18 <sup>c</sup>	68	..
Germany	..	..	..	..	..	7	..	..	..
Ghana	37	13	22.1	29.9	2.9	11	31	50	99
Greece	..	..	..	..	..	8	..	..	..
Guatemala	16	24	22.7	49.3	5.4	13	51	67	33
Guinea	39	26	23.2	26.1	2.7	12	11	68	95
Guinea-Bissau	..	..	25.0	30.5	3.3	22	37	2	80
Haiti	65	47	17.2	22.7	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 supplementation
	% 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
	1990-92	2000-02	Underweight 1995-2003 <sup>a</sup>	Stunting 1995-2003 <sup>a</sup>	1995-2003 <sup>a</sup>	1995-2003 <sup>a</sup>	1995-2003 <sup>a</sup>	1997-2003 <sup>a</sup>	2002
Honduras	23	22	16.6	29.2	2.2	14	35	80	61
Hungary	<3 <sup>b</sup>	<3	..	..	..	9	..	..	..
India	25	21	46.7	44.9	2.2	30	37 <sup>c</sup>	50	27
Indonesia	9	6	27.3	42.2	4.0	9	40	73	82
Iran, Islamic Rep.	4	4	10.9	15.4	4.3	10	44	94	..
Iraq	..	..	15.9	22.1	..	15	12	40	..
Ireland	..	..	..	..	..	6	..	..	..
Israel	..	..	..	..	..	8	..	..	..
Italy	..	..	..	..	..	6	..	..	..
Jamaica	14	10	3.8	4.4	3.8	9	..	100	..
Japan	..	..	..	..	..	8	..	..	..
Jordan	4	7	4.4	8.5	2.8	10	27	88	..
Kazakhstan	<3 <sup>b</sup>	13	4.2	9.7	3.0	8	36	20	..
Kenya	44	33	19.9	30.3	3.7	11	13	91	91
Korea, Dem. Rep.	18	36	27.9	45.2	..	7	70	..	99
Korea, Rep.	<3	<3	..	..	..	4	..	..	..
Kuwait	23	5	1.7	3.2	5.7	7	12 <sup>c</sup>	..	..
Kyrgyz Republic	21 <sup>b</sup>	6	5.8	24.8	6.3	7	24	27	..
Lao PDR	29	22	40.0	40.7	..	14	23	75	58
Latvia	3 <sup>b</sup>	4	..	..	..	5	..	..	..
Lebanon	<3	3	3.0	12.2	..	6	27 <sup>c</sup>	87	..
Lesotho	17	12	17.9	45.5	..	14	15	69	..
Liberia	34	46	26.5	39.5	2.3	..	35	..	40
Libya	<3	<3	4.7	15.1	..	7	..	..	..
Lithuania	4 <sup>b</sup>	..	..	..	..	4	..	..	..
Macedonia, FYR	15 <sup>b</sup>	11	5.9	6.9	4.9	5	37	80	..
Madagascar	35	37	33.1	48.6	2.0	14	41	52	95
Malawi	50	33	25.4	49.0	4.3	16	44	49	86
Malaysia	3	<3	19.0	15.6	3.3	10	29 <sup>c</sup>	..	..
Mali	29	29	33.2	38.2	1.5	23	25	74	68
Mauritania	15	10	31.8	34.5	..	9	20	2	89
Mauritius	6	6	14.9	9.7	4.0	13	..	..	..
Mexico	5	5	7.5	17.7	5.3	9	..	90	..
Moldova	5 <sup>b</sup>	11	..	..	..	5	..	33	..
Mongolia	34	28	12.7	24.6	4.8	11	51	45	84
Morocco	6	7	9.0	23.1	..	4	66 <sup>c</sup>	41	..
Mozambique	66	47	26.1	35.9	3.4	14	30	..	71
Myanmar	10	6	28.2	41.6	7.7	15	11	48	92
Namibia	35	22	24.0	23.6	2.2	14	19	63	96
Nepal	20	17	48.3	50.5	0.2	21	68	63	83
Netherlands	..	..	..	..	..	..	..	..	..
New Zealand	..	..	..	..	..	6	..	83	..
Nicaragua	30	27	9.6	20.2	4.7	12	31	97	..
Niger	41	34	40.1	39.7	0.8	17	1	15	77
Nigeria	13	9	28.7	38.3	3.6	14	17	97	79
Norway	..	..	..	..	..	5	..	..	..
Oman	..	..	17.8	10.4	1.0	8	..	61	97
Pakistan	24	20	35.0	36.8	2.1	25	16 <sup>c</sup>	17	95
Panama	21	26	8.1	18.2	4.2	10	25 <sup>c</sup>	95	..
Papua New Guinea	..	..	..	..	..	11	59 <sup>c</sup>	..	..
Paraguay	18	14	..	..	..	9	7 <sup>c</sup>	83	..
Peru	42	13	7.1	25.4	7.6	11	71	93	6
Philippines	26	22	31.8	32.1	1.0	20	34	24	86
Poland	<3 <sup>b</sup>	<3	..	..	..	6	..	..	..
Portugal	..	..	..	..	..	8	..	..	..
Puerto Rico	..	..	..	..	..	14	..	..	..

	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		% of children under age 5	% of births	% of children under 6 months	% of households	% of children 6-59 months
	1990-92	2000-02	Underweight 1995-2003 <sup>a</sup>	Stunting 1995-2003 <sup>a</sup>	1995-2003 <sup>a</sup>	1995-2003 <sup>a</sup>	1995-2003 <sup>a</sup>	1997-2003 <sup>a</sup>	2002
Romania	<3 <sup>b</sup>	<3	3.2	10.1	5.5	9	..	53	..
Russian Federation	4 <sup>b</sup>	4	5.5	10.6	..	6	..	35	..
Rwanda	44	37	24.3	42.6	4.0	9	84	90	36
Saudi Arabia	4	3	..	..	..	11	31 <sup>c</sup>	..	..
Senegal	23	24	22.7	25.4	2.2	18	24 <sup>c</sup>	16	83
Serbia and Montenegro	5 <sup>b</sup>	11	1.9	5.1	12.9	4	11 <sup>c</sup>	73	..
Sierra Leone	46	50	27.2	33.8	..	..	4	23	87
Singapore	..	..	3.4	2.2	2.2	8	..	..	..
Slovak Republic	4 <sup>b</sup>	5	..	..	..	7	..	..	..
Slovenia	3 <sup>b</sup>	<3	..	..	..	6	..	..	..
Somalia	..	..	25.8	23.3	..	..	9	..	60
South Africa	..	..	11.5	24.9	6.2	15	7	62	..
Spain	..	..	..	..	..	6	..	..	..
Sri Lanka	28	22	32.9	20.4	..	22	84	88	..
Sudan	32	27	40.7	43.3	3.4	31	16	1	93
Swaziland	14	19	10.3	30.2	..	9	24	59	68
Sweden	..	..	..	..	..	4	..	..	..
Switzerland	..	..	..	..	..	6	..	..	..
Syrian Arab Republic	5	4	6.9	18.8	..	6	81 <sup>c</sup>	40	..
Tajikistan	21 <sup>b</sup>	61	..	36.2	..	15	14	28	..
Tanzania	37	44	29.4	43.8	1.7	13	32	67	94
Thailand	28	20	17.6	13.4	2.8	9	4 <sup>c</sup>	67	..
Togo	33	26	25.1	21.7	1.5	15	18	67	95
Trinidad and Tobago	13	12	5.9	3.6	..	23	2	1	..
Tunisia	<3	<3	4.0	12.3	4.5	7	46	97	..
Turkey	<3	3	8.3	16.0	2.2	16	7	64	..
Turkmenistan	13 <sup>b</sup>	9	12.0	22.3	..	6	13	75	..
Uganda	24	19	22.9	39.1	2.6	12	63	95	46
Ukraine	<3 <sup>b</sup>	3	3.2	15.9	20.1	5	22	32	..
United Arab Emirates	4	<3	7.0	..	..	15	34 <sup>c</sup>	..	..
United Kingdom	..	..	..	..	..	8	..	..	..
United States	..	..	..	..	..	8	..	..	..
Uruguay	6	4	..	..	..	8	..	..	..
Uzbekistan	8 <sup>b</sup>	26	7.9	21.1	14.4	7	19	19	79
Venezuela, RB	11	17	4.4	12.8	3.2	7	7 <sup>c</sup>	90	..
Vietnam	31	19	33.8	36.5	2.7	9	15	83	55
West Bank and Gaza	..	..	4.1	7.3	2.3	6	..	..	..
Yemen, Rep.	34	36	46.1	51.7	4.3	32	18	39	49
Zambia	48	49	28.1	46.8	3.0	12	40	77	80
Zimbabwe	45	44	13.0	26.5	7.0	11	33	93	78
<b>World</b>	<b>20 w</b>	<b>16 w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>16 w</b>	<b>.. w</b>	<b>67 w</b>	<b>.. w</b>
Low income	27	25	43.7	43.1	22	22	53	56	..
Middle income	14	10	11.1	27.1	9	9	79	..	..
Lower middle income	15	10	11.2	14.8	9	9	78	..	..
Upper middle income	..	..	..	..	..	8	..	..	..
Low & middle income	20	17	..	..	..	17	67	..	..
East Asia & Pacific	17	12	14.7	17.0	..	8	84	..	..
Europe & Central Asia	..	8	..	..	..	9	43	..	..
Latin America & Carib.	14	11	9.1	19.1	..	10	86	..	..
Middle East & N. Africa	6	6	14.5	..	..	13	64	..	..
South Asia	26	22	48.4	46.1	..	29	48	44	..
Sub-Saharan Africa	31	32	..	..	..	15	64	72	..
High income	..	..	..	..	..	7	..	..	..
Europe EMU	..	..	..	..	..	7	..	..	..

a. Data are for the most recent year available. b. Data are for 1993-95. c. 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 improved breastfeeding practice 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 25 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. Food fortification with vitamin A is being introduced in many developing countries.

## Definitions

- Prevalence of undernourishment is the percentage of the population that is undernourished.
- Prevalence of child malnutrition is the percentage of children under age five whose weight for age (underweight) or height for age (stunting) is more than two standard deviations below the median for the international reference population ages 0–59 months. For children up to two years old 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 age 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 old who received at least one high-dose vitamin A capsule in the previous six months.

## Data sources

Data are drawn from a variety of sources, including the FAO's State of Food Insecurity in the World 2004; the WHO's World Health Report 2004; and the United Nations Children's Fund's (UNICEF) State of the World's Children 2005.

	Prevalence of smoking		Incidence of tuberculosis	Prevalence of diabetes	Mortality caused by road traffic injury	Prevalence of HIV			
	% of adults					per 100,000 people 2003	% of population ages 20–79 2001	per 100,000 people 1994–2001 <sup>a</sup>	Total % of population ages 15–49
	Male 1998–2002 <sup>a</sup>	Female 1998–2002 <sup>a</sup>	2001	2003	2001				2003
Afghanistan	..	..	333	..	..	..	..	..	..
Albania	60	18	23	5.0	11.1	..	..	..	..
Algeria	44	7	53	..	..	<0.1	0.1	11.8	15.6
Angola	..	..	259	..	..	3.7	3.9	55.0	59.1
Argentina	..	..	44	5.5	9.9	0.7	0.7	19.2	20.0
Armenia	68	3	70	..	5.6	0.1	0.1	35.0	36.0
Australia	21	18	6	6.1	9.3	0.1	0.1	6.7	7.1
Austria	..	..	14	3.8	10.1	0.2	0.3	22.2	22.0
Azerbaijan	30	1	76	7.1	6.9	..	<0.1	..	..
Bangladesh	48	21	246	4.1	..	..	..	..	..
Belarus	53	9	53	..	14.3	..	..	..	..
Belgium	28	20	14	4.1	13.9	0.2	0.2	35.8	35.0
Benin	..	..	87	..	..	1.9	1.9	57.6	56.5
Bolivia	..	..	225	4.4	..	0.1	0.1	27.5	27.1
Bosnia and Herzegovina	..	..	55	..	..	..	<0.1	..	..
Botswana	..	..	633	..	..	38.0	37.3	57.6	57.6
Brazil	35	27	62	4.5	25.6	0.6	0.7	37.1	36.9
Bulgaria	..	..	43	4.1	10.2	..	0.1	..	..
Burkina Faso	..	..	163	..	..	4.2	1.8 <sup>b</sup>	56.0	55.6
Burundi	..	..	346	..	..	6.2	6.0	54.5	59.1
Cambodia	67	10	508	1.8	..	2.7	2.6	30.0	30.0
Cameroon	..	..	180	0.8	..	7.0	5.5 <sup>c</sup>	56.0	55.8
Canada	24	20	6	5.0	9.3	0.3	0.3	25.0	23.6
Central African Republic	..	..	325	0.9	..	13.5	13.5	56.5	54.2
Chad	..	..	225	3.4	..	4.9	4.8	57.1	55.6
Chile	44	34	16	5.2	10.7	0.3	0.3	32.0	33.5
China	53	4	102	3.0	19.0	0.1	0.1	20.0	22.9
Hong Kong, China	25	4	77	12.1	..	0.1	0.1	30.8	34.6
Colombia	27	11	52	4.2	24.2	0.5	0.7	33.3	34.4
Congo, Dem. Rep.	..	6	369	1.6	..	4.2	4.2	56.8	57.0
Congo, Rep.	..	..	380	0.9	..	5.3	4.9	56.3	56.3
Costa Rica	29	10	15	3.8	20.1	0.6	0.6	31.8	33.3
Côte d'Ivoire	..	..	396	0.8	..	6.7	7.0	56.3	56.6
Croatia	34	27	43	5.6	11.4	..	<0.1	..	..
Cuba	..	..	11	11.5	13.9	0.1	0.1	31.3	33.3
Czech Republic	36	22	12	7.3	8.7	<0.1	0.1	35.7	32.0
Denmark	32	29	8	6.1	9.5	0.2	0.2	17.4	18.0
Dominican Republic	..	..	96	6.6	41.1	1.8	1.7	26.4	27.1
Ecuador	..	..	138	4.0	16.9	0.3	0.3	32.6	34.0
Egypt, Arab Rep.	40	18	28	6.1	7.5	<0.1	<0.1	10.9	13.3
El Salvador	42	15	57	3.6	41.7	0.6	0.7	32.1	34.3
Eritrea	..	..	271	1.0	..	2.8	2.7	56.4	56.4
Estonia	44	20	50	6.0	14.8	0.7	1.1	32.0	33.8
Ethiopia	..	..	356	1.0	..	4.1	4.4	55.8	55.0
Finland	27	20	9	5.5	7.7	0.1	0.1	..	..
France	33	21	12	4.0	12.1	0.4	0.4	27.3	26.7
Gabon	..	..	233	1.1	..	6.9	8.1	56.8	57.8
Gambia, The	..	..	233	0.3	..	1.2	1.2	55.6	57.1
Georgia	60	15	83	7.3	6.2	<0.1	0.1	..	33.3
Germany	39	31	8	4.2	8.8	0.1	0.1	19.8	22.1
Ghana	..	..	210	0.4	..	3.1	3.1	54.8	56.3
Greece	47	29	20	5.9	19.0	0.2	0.2	20.5	20.0
Guatemala	..	..	74	3.2	..	1.1	1.1	41.5	41.9
Guinea	59	47	236	1.0	..	2.8	3.2	59.0	55.4
Guinea-Bissau	..	..	198	..	..	..	..	..	..
Haiti	..	..	323	5.4	..	5.5	5.6	58.3	57.7



	Prevalence of smoking		Incidence of tuberculosis per 100,000 people 2003	Prevalence of diabetes % of population ages 20–79 2001	Mortality caused by road traffic injury per 100,000 people 1994–2001 <sup>a</sup>	Prevalence of HIV			
	% of adults					Total % of population ages 15–49		Female % of population with HIV	
	Male 1998–2002 <sup>a</sup>	Female 1998–2002 <sup>a</sup>				2001	2003	2001	2003
Honduras	..	..	81	3.1	..	1.6	1.8	56.3	55.9
Hungary	53	30	29	5.6	11.5	..	0.1	..	..
India	29	3	168	8.0	..	0.8	0.9	39.5	38.0
Indonesia	69	3	285	4.5	..	0.1	0.1	12.1	13.6
Iran, Islamic Rep.	22	2	28	3.5	..	0.1	0.1	10.6	12.3
Iraq	..	..	157	3.9	..	..	<0.1	..	..
Ireland	32	31	12	3.2	10.1	0.1	0.1	31.8	30.8
Israel	39	22	9	7.2	5.9	..	0.1	..	..
Italy	31	22	7	7.1	12.1	0.5	0.5	32.3	32.1
Jamaica	..	..	8	11.1	..	0.8	1.2	51.4	47.6
Japan	47	12	31	7.4	7.4	<0.1	<0.1	22.5	24.2
Jordan	48	10	5	7.0	..	<0.1	<0.1	..	..
Kazakhstan	..	..	145	1.4	..	0.1	0.2	34.0	33.5
Kenya	67	32	610	1.0	..	8.0	6.7 <sup>b</sup>	62.5	65.5
Korea, Dem. Rep.	..	..	178	..	..	..	..	..	..
Korea, Rep.	..	..	87	6.1	21.9	<0.1	<0.1	10.7	10.8
Kuwait	..	..	27	7.0	23.7	..	..	..	..
Kyrgyz Republic	60	16	124	3.1	12.9	<0.1	0.1	..	..
Lao PDR	..	..	157	..	..	<0.1	0.1	..	..
Latvia	49	13	75	..	22.7	0.5	0.6	32.2	33.3
Lebanon	46	35	12	6.9	..	0.1	0.1	..	..
Lesotho	..	..	733	..	..	29.6	28.9	56.7	56.7
Liberia	..	..	250	..	..	5.1	5.9	56.3	56.3
Libya	..	..	21	3.1	..	..	0.3	..	..
Lithuania	51	16	70	3.2	19.3	0.1	0.1	..	..
Macedonia, FYR	..	..	31	5.1	5.1	<0.1	<0.1	..	..
Madagascar	..	..	216	1.0	..	1.3	1.7	56.1	58.5
Malawi	..	..	442	..	..	14.3	14.2	57.1	56.8
Malaysia	..	..	106	6.3	..	0.4	0.4	15.4	16.7
Mali	..	..	288	0.3	..	1.9	1.7 <sup>d</sup>	54.2	59.2
Mauritania	..	..	287	..	..	0.5	0.6	55.9	57.3
Mauritius	42	3	64	12.1	14.7	..	..	..	..
Mexico	51	18	33	14.2	11.8	0.3	0.3	32.7	33.1
Moldova	46	18	139	..	14.1	..	0.2	..	..
Mongolia	68	26	194	..	..	<0.1	<0.1	..	..
Morocco	35	2	112	2.4	..	..	0.1	..	..
Mozambique	..	..	457	1.2	..	12.1	12.2	58.2	55.8
Myanmar	43	22	171	..	..	1.0	1.2	28.9	30.3
Namibia	..	..	722	..	..	21.3	21.3	52.6	55.0
Nepal	40	24	211	6.8	..	0.4	0.5	20.7	26.7
Netherlands	32	25	8	3.6	6.7	0.2	0.2	19.4	20.0
New Zealand	25	25	11	4.0	13.7	0.1	0.1	..	..
Nicaragua	..	..	63	3.6	20.1	0.2	0.2	32.7	33.9
Niger	..	..	157	..	..	1.1	1.2	56.9	56.3
Nigeria	..	..	293	0.4	..	5.5	5.4	58.1	57.6
Norway	31	32	6	3.8	7.7	0.1	0.1	..	..
Oman	..	..	11	..	..	0.1	0.1	..	..
Pakistan	..	..	181	9.2	..	0.1	0.1	6.9	12.2
Panama	20	6	48	4.1	16.4	0.7	0.9	37.3	41.3
Papua New Guinea	..	..	235	11.7	..	0.4	0.6	29.0	30.0
Paraguay	..	..	70	3.7	..	0.4	0.5	27.0	26.0
Peru	53	18	188	4.3	17.6	0.4	0.5	31.4	33.8
Philippines	51	8	296	3.1	..	<0.1	<0.1	20.9	22.5
Poland	42	23	31	7.3	13.3	..	0.1	..	..
Portugal	..	..	45	5.4	12.1	0.4	0.4	20.0	19.5
Puerto Rico	17	10	6	11.3	..	..	..	..	..

	Prevalence of smoking		Incidence of tuberculosis per 100,000 people 2003	Prevalence of diabetes % of population ages 20–79 2001	Mortality caused by road traffic injury per 100,000 people 1994–2001 <sup>a</sup>	Prevalence of HIV			
	% of adults					Total % of population ages 15–49		Female % of population with HIV	
	Male 1998–2002 <sup>a</sup>	Female 1998–2002 <sup>a</sup>				2001	2003	2001	2003
Romania	..	..	149	2.1	16.8	..	<0.1	..	..
Russian Federation	64	9	112	7.4	19.4	0.7	1.1	32.1	33.7
Rwanda	..	..	374	..	..	5.1	5.1	54.5	56.5
Saudi Arabia	19	8	40	12.3	..	..	..	..	..
Senegal	..	..	245	0.8	..	0.8	0.8	55.3	56.1
Serbia and Montenegro	..	..	35	5.5	..	0.2	0.2	20.0	20.0
Sierra Leone	..	..	427	..	..	..	..	..	..
Singapore	24	4	41	11.3	5.2	0.2	0.2	23.5	24.4
Slovak Republic	41	15	24	8.6	12.9	..	<0.1	..	..
Slovenia	28	20	18	8.0	13.4	<0.1	<0.1	..	..
Somalia	..	..	411	..	..	..	..	..	..
South Africa	44	12	536	3.4	..	20.9	15.6 <sup>e</sup>	56.3	56.9
Spain	39	25	27	5.6	13.7	0.6	0.7	20.0	20.8
Sri Lanka	26	2	60	2.0	..	<0.1	<0.1	..	17.1
Sudan	24	2	220	3.4	..	1.9	2.3	56.7	57.9
Swaziland	..	..	1,083	..	..	38.2	38.8	57.9	55.0
Sweden	17	20	4	6.4	5.7	0.1	0.1	27.3	25.7
Switzerland	27	24	7	3.7	..	0.4	0.4	30.0	30.0
Syrian Arab Republic	51	10	42	6.3	..	..	<0.1	..	..
Tajikistan	..	..	168	..	5.6	..	<0.1	..	..
Tanzania	23	1	371	1.0	..	9.0	8.8	58.6	56.0
Thailand	39	2	142	2.0	21.0	1.7	1.5	32.3	35.7
Togo	..	..	351	0.3	..	4.3	4.1	56.4	56.3
Trinidad and Tobago	..	..	9	14.1	11.1	3.0	3.2	50.0	50.0
Tunisia	..	..	22	2.8	..	<0.1	<0.1	..	..
Turkey	51	11	26	7.4	..	..	..	..	..
Turkmenistan	..	..	67	..	10.3	..	<0.1	..	..
Uganda	..	..	411	0.8	..	5.1	4.1	59.6	60.0
Ukraine	57	10	92	3.5	10.8	1.2	1.4	32.0	33.3
United Arab Emirates	..	..	18	8.7	..	..	..	..	..
United Kingdom	28	26	12	3.5	5.6	0.2	0.2	28.2	29.8
United States	26	21	5	8.0	15.0	0.6	0.6	20.2	25.5
Uruguay	62	39	28	6.7	10.0	0.3	0.3	32.7	32.8
Uzbekistan	..	..	115	..	9.8	<0.1	0.1	33.3	33.6
Venezuela, RB	..	..	42	4.5	23.1	0.6	0.7	32.4	32.0
Vietnam	51	4	178	..	..	0.3	0.4	27.3	32.5
West Bank and Gaza	..	..	24	..	..	..	..	..	..
Yemen, Rep.	77	29	93	..	..	..	0.1	..	..
Zambia	..	..	656	1.0	..	16.7	15.6 <sup>f</sup>	56.3	56.6
Zimbabwe	..	..	659	1.0	..	24.9	24.6	56.3	58.1
<b>World</b>	<b>.. w</b>	<b>.. w</b>	<b>140 w</b>	<b>5.2 w</b>	<b>.. w</b>	<b>1.1 w</b>	<b>1.1 w</b>	<b>29.1 w</b>	<b>30.5 w</b>
Low income	..	..	225	6.0	..	2.1	2.1	41.2	41.1
Middle income	..	..	114	4.4	18.3	0.7	0.7	23.6	25.6
Lower middle income	..	..	122	3.8	19.1	0.7	0.7	23.1	25.2
Upper middle income	..	..	43	8.9	13.0	0.7	0.6	29.3	29.8
Low & middle income	..	..	162	5.0	..	1.2	1.2	30.7	31.8
East Asia & Pacific	53	4	143	3.2	19.1	0.2	0.2	20.1	22.9
Europe & Central Asia	..	..	82	6.2	14.6	..	0.7	..	..
Latin America & Carib.	..	..	66	6.6	20.0	0.6	0.7	34.0	34.4
Middle East & N. Africa	..	..	55	5.1	..	..	0.1	..	..
South Asia	29	3	179	7.6	..	0.7	0.8	35.7	34.7
Sub-Saharan Africa	..	..	353	1.3	..	7.3	7.2	57.1	57.3
High income	..	..	17	6.4	11.9	0.3	0.4	22.0	24.2
Europe EMU	..	..	13	5.0	11.3	0.3	0.3	24.5	25.0

a. Data are for the most recent year available. b. Survey data, 2003. c. Survey data, 2004. d. Survey data, 2001. e. Survey data, 2002. f. Survey data, 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, and because the definition of adult varies across countries, the data 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.

Diabetes, an important cause of ill health and a risk factor for other diseases in developed countries, is spreading rapidly in developing countries. While diabetes is most common among the elderly, prevalence rates are rising among younger and productive populations in developing countries. Economic development has led to the greater adoption of Western lifestyles and diet in developing countries, resulting in a substantial increase in diabetes. In 2001 some 177 million people worldwide had diabetes, an increase from 135 million in 1995. Without effective prevention and control programs, diabetes will likely continue to increase. Data are based on sample surveys.

Data for mortality caused by road traffic injury are collected by the WHO based on vital registries. There is considerable difference in completeness of the vital registry data. In some countries the vital registry system covers only part of the country. In some, not all deaths are registered. In addition, mortality from different causes is difficult to measure. For countries with incomplete vital registry systems, the WHO has used demographic techniques to estimate deaths.

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 from 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 the 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 the WHO estimates are generally based on surveillance systems that focus on pregnant women who attend sentinel antenatal clinics. UNAIDS and the 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.

## 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 diabetes refers to the percentage of people ages 20–79 who have type 1 or type 2 diabetes.
- Mortality caused by road traffic injury refers to the number of deaths per 100,000 people caused by road traffic injury.
- 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 2004, Tobacco Control Country Profiles 2003, Global Tuberculosis Control Report 2004, and World Report on Road Traffic Injury Prevention; the International Diabetes Federation's e-Atlas; and UNAIDS and the WHO's 2004 Report on the Global AIDS Epidemic.

	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		per 1,000		% of cohort	
	1990	2003	1990	2003	1990	2003	Male 1997-2003 <sup>a</sup>	Female 1997-2003 <sup>a</sup>	Male 2000-03 <sup>a</sup>	Female 2000-03 <sup>a</sup>	Male 2003	Female 2003
Afghanistan	42	..	168	..	260	..	..	..	..	..	..	..
Albania	72	74	37	18	45	21	..	..	209	95	77	85
Algeria	67	71	54	35	69	41	..	..	155	119	74	79
Angola	45	47	154	154	260	260	..	..	492	386	34	39
Argentina	72	74	25	17	28	20	..	..	184	92	75	87
Armenia	72	75	52	30	60	33	5	3	223	106	71	84
Australia	77	80	8	5	10	6	..	..	100	52	85	92
Austria	76	79	8	5	10	6	..	..	122	58	83	92
Azerbaijan	71	65	84	75	105	91	..	..	261	150	59	72
Bangladesh	55	62	96	46	144	69	28	38	262	252	59	62
Belarus	71	68	14	13	17	17	..	..	381	133	55	81
Belgium	76	78	8	4	9	5	..	..	126	65	82	91
Benin	52	53	111	91	185	154	72	79	384	328	43	50
Bolivia	58	64	85	53	120	66	26	29	264	219	61	69
Bosnia and Herzegovina	71	74	18	14	22	17	..	..	200	93	75	86
Botswana	57	38	45	82	58	112	..	..	703	669	13	18
Brazil	66	69	50	33	60	35	..	..	259	136	62	79
Bulgaria	72	72	15	12	19	17	..	..	239	103	69	84
Burkina Faso	45	43	118	107	210	207	131	128	559	507	28	32
Burundi	44	42	114	114	190	190	..	..	648	603	25	28
Cambodia	50	54	80	97	115	140	34	30	373	264	42	49
Cameroon	54	48	85	95	139	166	69	75	488	440	35	40
Canada	77	79	7	5	8	7	..	..	101	57	84	92
Central African Republic	48	42	115	115	180	180	..	..	620	573	24	29
Chad	46	48	117	117	203	200	106	99	449	361	39	44
Chile	74	76	17	8	19	9	..	..	151	67	79	89
China	69	71	38	30	49	37	..	..	161	110	73	79
Hong Kong, China	78	80	6	4	..	5	..	..	97	50	85	92
Colombia	68	72	30	18	36	21	4	3	238	115	71	84
Congo, Dem. Rep.	52	45	129	129	205	205	..	..	571	493	32	36
Congo, Rep.	51	52	83	81	110	108	..	..	475	406	36	45
Costa Rica	77	79	15	8	17	10	..	..	131	78	82	90
Côte d'Ivoire	50	45	103	117	157	192	83	58	553	494	31	34
Croatia	72	74	12	6	13	7	..	..	150	110	71	87
Cuba	75	77	11	7	13	8	..	..	143	94	81	88
Czech Republic	71	75	11	4	13	5	..	..	160	75	76	88
Denmark	75	77	8	4	9	6	..	..	125	78	80	88
Dominican Republic	66	67	50	29	65	35	13	8	234	146	63	76
Ecuador	68	71	43	24	57	27	..	..	199	120	70	81
Egypt, Arab Rep.	63	69	76	33	104	39	15	16	210	147	70	76
El Salvador	66	70	46	32	60	36	..	..	250	148	69	81
Eritrea	49	51	85	45	147	85	55	50	493	441	37	43
Estonia	69	71	12	8	17	9	..	..	316	114	60	85
Ethiopia	45	42	131	112	204	169	83	86	594	535	26	31
Finland	75	78	6	3	7	4	..	..	133	61	80	91
France	77	79	7	4	9	6	..	..	136	59	83	92
Gabon	52	53	60	60	92	91	32	33	380	330	46	51
Gambia, The	49	53	103	90	154	123	..	..	373	320	41	47
Georgia	72	73	43	41	47	45	..	..	250	133	72	87
Germany	75	78	7	4	9	5	..	..	122	59	82	91
Ghana	57	54	78	59	125	95	53	51	379	326	48	52
Greece	77	78	10	4	11	5	..	..	114	47	83	91
Guatemala	61	66	60	35	82	47	15	18	286	182	59	72
Guinea	44	46	145	104	240	160	101	98	432	366	32	33
Guinea-Bissau	42	46	153	126	253	204	..	..	495	427	34	39
Haiti	53	52	102	76	150	118	52	54	524	373	38	48

	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		per 1,000		% of cohort	
	1990	2003	1990	2003	1990	2003	Male 1997-2003 <sup>a</sup>	Female 1997-2003 <sup>a</sup>	Male 2000-03 <sup>a</sup>	Female 2000-03 <sup>a</sup>	Male 2003	Female 2003
Honduras	65	66	44	32	59	41	..	..	221	157	59	73
Hungary	69	73	15	8	17	7	..	..	295	123	67	85
India	59	63	84	63	123	87	25	37	250	191	62	65
Indonesia	62	67	60	31	91	41	19	20	227	175	64	72
Iran, Islamic Rep.	65	69	54	33	72	39	..	..	170	139	72	76
Iraq	61	63	40	102	50	125	..	..	258	208	64	68
Ireland	75	78	8	5	9	7	..	..	108	62	80	89
Israel	76	79	10	5	12	6	..	..	99	56	84	90
Italy	77	80	8	4	9	6	..	..	100	50	82	91
Jamaica	73	76	17	17	20	20	..	..	169	127	81	87
Japan	79	82	5	3	6	5	..	..	98	44	86	94
Jordan	68	72	33	23	40	28	5	5	199	144	75	81
Kazakhstan	68	61	53	63	63	73	11	6	366	201	48	71
Kenya	57	45	63	79	97	123	36	38	578	529	28	32
Korea, Dem. Rep.	66	63	42	42	55	55	..	..	238	192	55	63
Korea, Rep.	70	74	8	5	9	5	..	..	186	71	73	87
Kuwait	75	77	14	8	16	9	..	..	100	68	82	88
Kyrgyz Republic	68	65	68	59	80	68	10	11	335	299	57	76
Lao PDR	50	55	120	82	163	91	..	..	355	299	45	51
Latvia	69	71	14	10	18	12	..	..	326	119	61	85
Lebanon	68	71	32	27	37	31	..	..	192	136	71	79
Lesotho	58	37	74	79	104	110	..	..	667	630	15	19
Liberia	45	47	157	157	235	235	..	..	448	385	33	37
Libya	68	73	34	13	42	16	..	..	210	157	73	83
Lithuania	71	72	12	8	14	11	..	..	311	109	67	87
Macedonia, FYR	72	74	32	10	33	11	..	..	160	89	75	85
Madagascar	53	56	103	78	168	126	75	68	385	322	49	55
Malawi	45	38	146	112	241	178	101	102	701	653	19	23
Malaysia	71	73	16	7	21	7	..	..	202	113	72	83
Mali	45	41	140	122	250	220	132	125	518	446	25	29
Mauritania	49	51	112	77	162	107	38	38	357	302	43	49
Mauritius	69	72	21	16	25	18	..	..	228	109	71	85
Mexico	71	74	37	23	46	28	..	..	180	101	75	86
Moldova	68	67	30	26	37	32	..	..	325	165	59	76
Mongolia	63	66	74	56	104	68	..	..	280	199	66	72
Morocco	63	69	66	36	85	39	..	..	174	113	68	76
Mozambique	43	41	146	101	242	147	85	82	674	612	25	30
Myanmar	55	57	91	76	130	107	..	..	343	245	47	58
Namibia	58	40	60	48	86	65	..	..	695	661	21	25
Nepal	54	60	100	61	145	82	28	40	314	314	58	57
Netherlands	77	78	7	5	9	6	..	..	94	66	84	90
New Zealand	75	79	10	5	11	6	..	..	99	65	83	90
Nicaragua	64	69	52	30	68	38	12	11	225	161	67	77
Niger	42	46	191	154	320	262	184	202	473	308	30	37
Nigeria	49	45	115	98	235	198	66	69	443	393	32	36
Norway	77	79	7	3	9	5	..	..	99	59	84	91
Oman	69	74	25	10	30	12	..	..	187	135	79	85
Pakistan	59	64	96	74	138	98	..	..	221	198	65	71
Panama	72	75	27	18	34	24	..	..	145	93	79	86
Papua New Guinea	55	57	74	69	101	93	..	..	359	329	49	53
Paraguay	68	71	30	25	37	29	..	..	173	129	70	80
Peru	66	70	60	26	80	34	19	17	190	139	69	79
Philippines	66	70	45	27	63	36	21	19	249	142	70	78
Poland	71	75	16	6	19	7	..	..	207	81	72	87
Portugal	74	76	13	4	15	5	..	..	164	66	78	89
Puerto Rico	75	77	14	9	..	11	..	..	148	55	77	91

	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		per 1,000		% of cohort	
	1990	2003	1990	2003	1990	2003	Male 1997-2003 <sup>a</sup>	Female 1997-2003 <sup>a</sup>	Male 2000-03 <sup>a</sup>	Female 2000-03 <sup>a</sup>	Male 2003	Female 2003
Romania	70	70	27	18	32	20	..	..	260	117	65	81
Russian Federation	69	66	21	16	21	21	..	..	420	149	49	77
Rwanda	40	40	103	118	173	203	105	97	667	599	23	25
Saudi Arabia	69	73	34	22	44	26	..	..	181	116	76	83
Senegal	50	52	90	78	148	137	76	74	355	303	38	47
Serbia and Montenegro	72	73	23	12	26	14	..	..	180	100	73	83
Sierra Leone	35	37	175	166	302	284	..	..	587	531	25	29
Singapore	74	78	7	3	8	5	..	..	114	61	83	90
Slovak Republic	71	73	14	7	15	8	..	..	204	82	70	86
Slovenia	73	76	8	4	9	4	..	..	170	76	77	89
Somalia	42	47	133	133	225	225	..	..	516	452	38	45
South Africa	62	46	45	53	60	66	18	13	621	583	26	33
Spain	77	80	8	4	9	4	..	..	119	48	83	93
Sri Lanka	70	74	26	13	32	15	..	..	244	124	77	85
Sudan	52	59	74	63	120	93	..	..	341	291	53	58
Swaziland	57	43	78	105	110	153	..	..	642	602	25	29
Sweden	78	80	6	3	7	4	..	..	87	55	86	92
Switzerland	77	80	7	4	9	6	..	..	92	52	85	93
Syrian Arab Republic	66	70	35	16	44	18	..	..	170	132	69	79
Tajikistan	69	66	92	76	119	95	..	..	293	204	62	75
Tanzania	50	43	102	104	163	165	61	58	569	520	27	30
Thailand	69	69	34	23	40	26	..	..	245	150	67	78
Togo	50	50	88	78	152	140	73	65	460	406	38	43
Trinidad and Tobago	71	72	21	17	24	20	..	..	209	133	74	82
Tunisia	70	73	41	19	52	24	..	..	169	99	76	83
Turkey	66	69	64	33	78	39	10	13	218	120	69	79
Turkmenistan	66	64	80	79	97	102	19	17	280	156	57	73
Uganda	47	43	93	81	160	140	78	70	617	567	25	28
Ukraine	70	68	18	15	22	20	..	..	365	135	57	81
United Arab Emirates	74	75	12	7	14	8	..	..	143	93	80	86
United Kingdom	76	78	8	5	10	7	..	..	106	65	82	90
United States	75	77	9	7	11	8	..	..	140	82	81	90
Uruguay	73	75	20	12	24	14	..	..	185	89	74	88
Uzbekistan	69	67	65	57	79	69	..	..	282	176	63	77
Venezuela, RB	71	74	23	18	27	21	..	..	178	99	75	86
Vietnam	65	70	38	19	53	23	10	13	203	139	68	78
West Bank and Gaza	69	73	42	20	53	24	..	..	154	97	74	84
Yemen, Rep.	52	58	98	82	142	113	33	36	278	226	50	53
Zambia	49	36	101	102	180	182	89	74	725	687	16	21
Zimbabwe	56	39	53	78	80	126	35	31	650	612	18	20
<b>World</b>	<b>65 w</b>	<b>67 w</b>	<b>64 w</b>	<b>57 w</b>	<b>95 w</b>	<b>86 w</b>	<b>.. w</b>	<b>.. w</b>	<b>235 w</b>	<b>166 w</b>	<b>66 w</b>	<b>73 w</b>
Low income	56	58	95	80	149	123	..	..	319	268	54	58
Middle income	68	70	42	30	55	37	..	..	211	128	69	78
Lower middle income	67	69	44	31	57	39	..	..	213	131	68	78
Upper middle income	71	74	27	18	34	22	..	..	196	103	74	85
Low & middle income	63	65	69	59	103	87	..	..	256	186	62	70
East Asia & Pacific	67	70	44	32	59	41	..	..	179	122	70	77
Europe & Central Asia	69	68	39	29	46	36	..	..	317	136	60	80
Latin America & Carib.	68	71	43	28	53	33	..	..	222	125	69	82
Middle East & N. Africa	64	69	58	43	77	53	..	..	193	144	70	76
South Asia	58	63	89	66	130	92	25	37	252	202	61	65
Sub-Saharan Africa	50	46	110	101	187	171	..	..	519	461	32	36
High income	76	78	8	5	10	7	..	..	127	65	82	91
Europe EMU	76	79	8	4	9	6	..	..	122	58	82	91

a. Data are for the most recent year available.

## About the data

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.)

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.

## Definitions

- 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

### Inequalities in health and use of health services in Burkina Faso, 1998

	Urban	Rural
Under-five mortality (per 1,000)	129.1	234.7
Severe underweight (% of children under age 5)	4.5	12.8
Medical treatment for fever (% of relevant population)	35.0	11.9

Note: Inequality in health outcomes extends to rural populations. Most rural areas lack infrastructure, services, and trained personnel. Services are often difficult to reach, and travel costs may be prohibitive.

Source: Demographic and Health Survey.

## Data sources

The data are from the United Nations Statistics Division’s Population and Vital Statistics Report, publications and other releases from national statistical offices, Demographic and Health Surveys from national sources and Macro International, and UNICEF’s State of the World’s Children 2005.