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**PEOPLE**

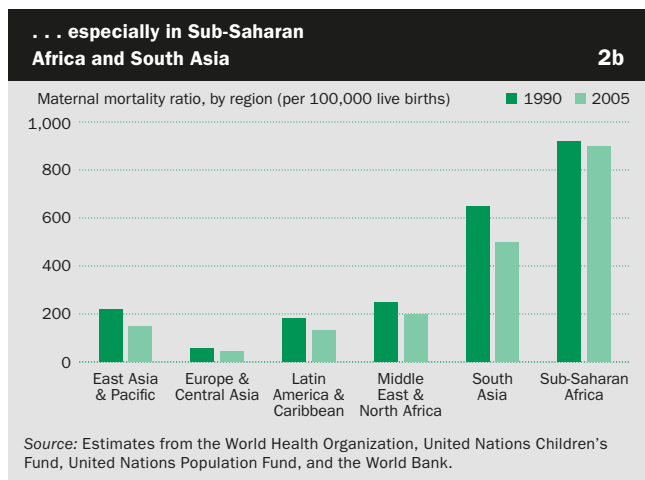
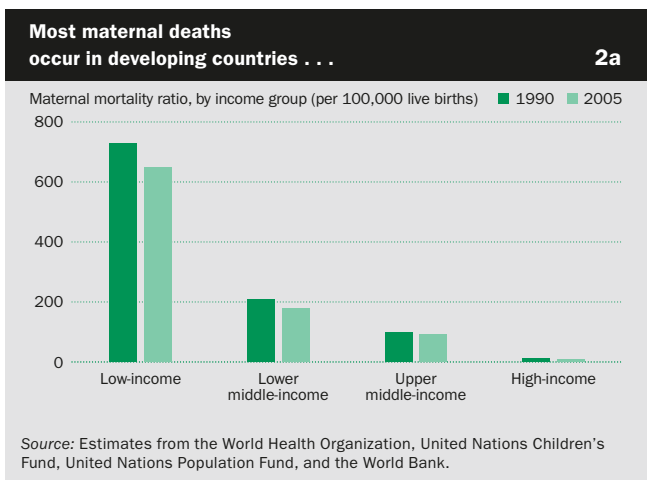
# R

## eproductive health

Keeping mothers alive and healthy is good for women, their families, and society. Prioritizing women's health will help countries meet many of the Millennium Development Goals—first improved maternal and child health, then reduced poverty, universal education, and gender equality. Poor people tend to have large families, suffer disproportionately from illness, and use fewer health services during pregnancy and childbirth. Reproductive health care can enhance poor people's overall health care and help families escape the poverty impact of having many children. When financial resources are divided among fewer family members, more is left for education, health care, and savings, decreasing vulnerability and insecurity (UN Millennium Project 2005a).

This important link between reproductive health and development outcomes was first articulated in 1994 at the International Conference on Population and Development in Cairo. But as fertility declined in many countries and new priorities arose, reproductive health and family planning fell steadily in international priority. Complicating this was the lack of sectoral ownership of reproductive health and the requirement for multisectoral action.

The targets for the Millennium Development Goals, drafted in 2000, ignored the overarching Cairo goal of universal access to sexual and reproductive health services, instead focusing on the target of reducing maternal mortality, a problem of immense magnitude in poor countries (figures 2a and 2b). Millennium Development Goal 5 in 2000 identified two indicators to measure progress: maternal mortality ratios and the proportion of births attended by skilled staff. At an analytical level, however, it is impossible to disentangle maternal health from reproductive health, of which maternal health is just one facet.

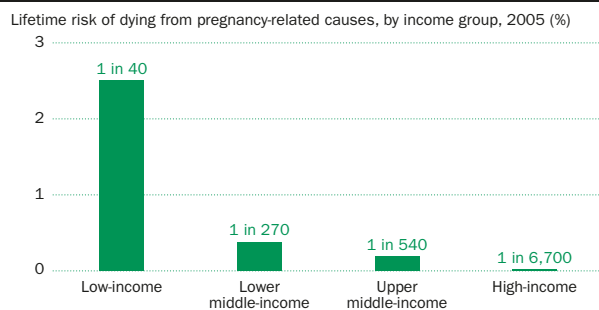


## Why reproductive health now?

Pregnancy and childbirth are leading causes of death and disability for women of reproductive age in developing countries. In 2005 more than half a million women died from pregnancy-related causes, and about 200 million women suffered life-threatening complications and disabilities (Glasier and others 2006). As a result of reproductive health problems an estimated 250 million years of productive life are lost every year (UNFPA 2005). Over 99 percent of all maternal deaths occur in developing countries, the majority in Sub-Saharan Africa and South Asia (Glasier and others 2006).

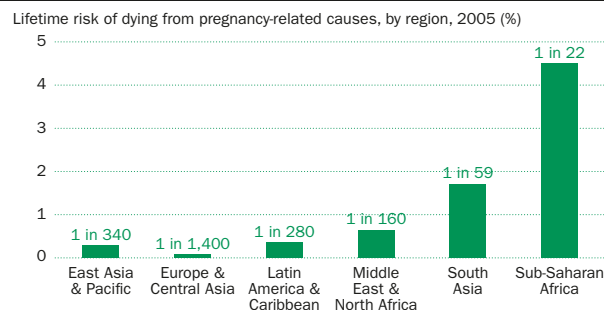
In 2005 Millennium Development Goal 5—improved maternal health—was expanded to include family planning and reproductive health services. Reproductive health care was recognized as important for improving maternal health and preventing maternal deaths, but also as essential for achieving all the Millennium Development Goals. A new target was introduced for universal access to reproductive health by 2015, along with indicators measuring adolescent fertility, prenatal care, unmet need for contraception, and contraceptive prevalence.

### Women in developing countries are more likely to die of pregnancy-related causes than women in high-income countries 2c



Source: Estimates from the World Health Organization, United Nations Children's Fund, United Nations Population Fund, and the World Bank.

### The lifetime risk of dying from pregnancy-related causes is unacceptably high in Sub-Saharan Africa and South Asia 2d

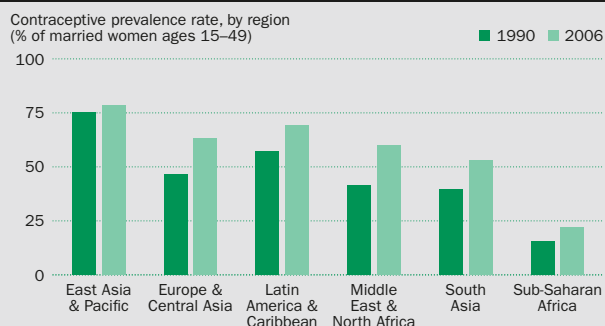


Source: Estimates from the World Health Organization, United Nations Children's Fund, United Nations Population Fund, and the World Bank.

Poor women disproportionately bear the burden of disability and loss of productive life. Women in low-income countries face a 1 in 40 risk of a pregnancy-related death; those in high-income countries, a 1 in 6,700 risk (figure 2c). The contrast is also larger within countries. In Peru the poorest women are about 7 times more likely than the richest to die of pregnancy-related causes (Ronsman and Graham 2006). Even though cheap and easy methods to prevent unintended or unwanted pregnancies are available, 120 million couples hoping to avoid pregnancy did not use contraception. As a result, 80 million women became pregnant against their will, and 45 million sought abortions, about 20 million of them unsafe, performed by untrained providers (Glasier and others 2006).

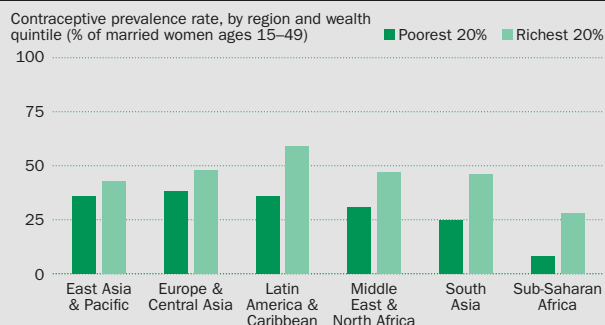
Progress in maternal and reproductive health in recent years has been mixed in developing countries. Several middle-income countries have made rapid progress in reducing maternal deaths, but maternal mortality ratios and the lifetime risk of dying in childbirth remain unacceptably high in Sub-Saharan Africa and South Asia (figure 2d). Within countries, poorer women are more vulnerable than wealthier women.

### East Asia and Pacific leads in contraceptive use among married women ages 15–49 2e



Source: Household surveys.

### Women from the richest households are more likely to use contraception—but contraceptive prevalence rates remain low 2f



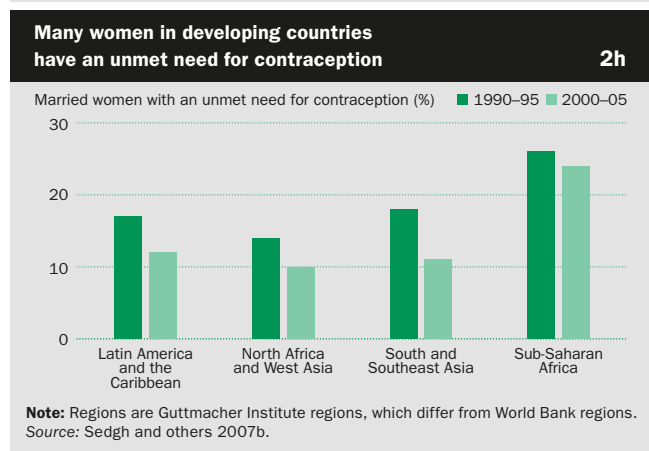
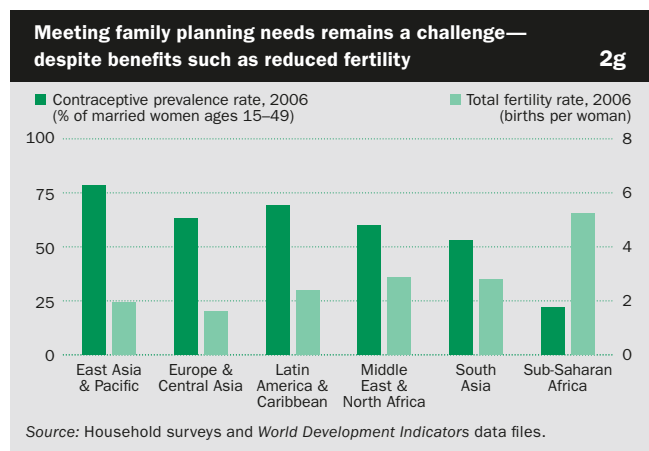
Source: Gwatkin and others 2007.

## Maternal and reproductive health: current status

The vast majority of maternal deaths and disabilities can be prevented through appropriate reproductive health services before, during, and after pregnancy. Key among them is expanding family planning to allow women to space or limit their births.

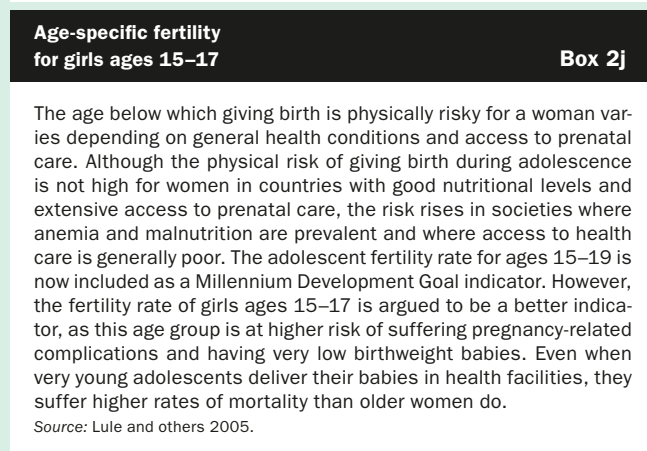
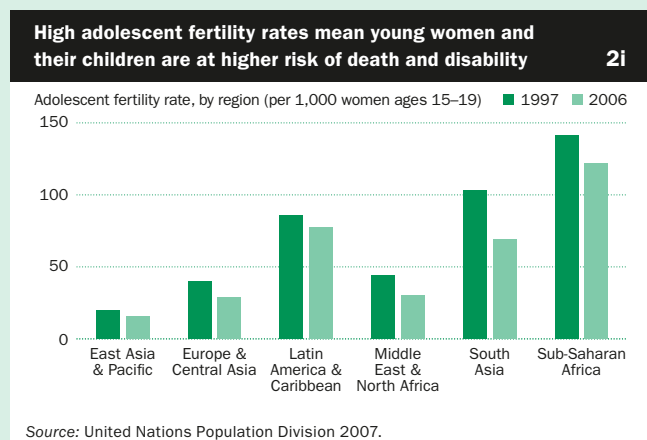
Contraceptive use among women in developing countries has increased steadily, from about 14 percent of married women ages 15–49 in 1965 to 60 percent in 2006. But use is uneven across and within countries. In Sub-Saharan Africa only 22 percent of married women use contraception, compared with 63 percent in Europe and Central Asia, about 70 percent in Latin America and the Caribbean, and about 80 percent in East Asia and the Pacific (figure 2e).

Contraceptive use follows the distribution of wealth, and the poorest women come up short. Differences are especially stark in South Asia and Sub-Saharan Africa (figure 2f). In Sub-Saharan Africa women from richer households are three times more likely to use contraception, but prevalence is still less than 30 percent of eligible women. In South Asia richer women are twice as likely as poorer women to use contraception.



Despite the benefits, many countries continue to face major challenges in meeting their family planning needs (figure 2g), and rates of unmet need for family planning in developing countries remain high (figure 2h). According to surveys, one married woman in seven in these countries has an unmet need for contraception, and in Sub-Saharan Africa nearly one in four does. Regional aggregates mask wide differences: in Asia only 5 percent of women in Vietnam have an unmet need, compared with 28 percent in Nepal (Sedgh and others 2007b). Preventing unplanned pregnancies alone could avert around one-quarter of maternal deaths, including those from unsafe abortions (Sedgh and others 2007b).

Young girls are particularly vulnerable to maternal death. They have limited information, means, and access to contraception and even less access to good quality maternal health care, especially if they are not married. In regions where the adolescent fertility rate is high (figure 2i), many young women and their children, particularly very young women, face higher risks of death and disability (box 2j). Young girls either continue unintended pregnancies, giving up opportunities



for education and employment, or seek unsafe abortions. Forty percent of all the abortions are performed on women under age 25 (Glasier and others 2006).

Prenatal care, long at the core of maternal health services, identifies risks, helps plan for safe delivery, and provides entry into the health care system. All regions but Sub-Saharan Africa have made progress in providing prenatal care to women at least once during pregnancy (figure 2k). In South Asia, with the slowest progress, 66 percent of pregnant women have at least one prenatal care visit. But rich women are three times more likely to get prenatal care than are poor women (figure 2l).

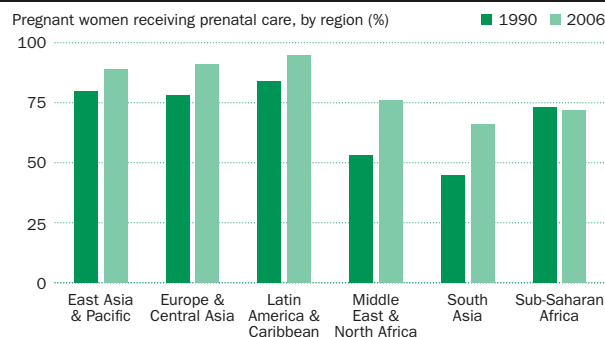
A key factor in lowering maternal mortality is the presence of a skilled attendant during childbirth. Nearly half of maternal deaths in developing countries occur during labor and delivery or just after delivery (Lule and others 2005). The proportion of attended births remains low in South Asia and Sub-Saharan Africa (figure 2m) and is even lower in the poorer segments of these countries (figure 2n). Other regions have made impressive gains, with countries in Europe and Central Asia providing skilled care to nearly all women giving birth.

## An improvement, but is it enough?

Both preventive and strategic interventions are needed to treat the many factors that contribute to maternal mortality. The expanded Millennium Development Goal 5 indicators are mainly process indicators to assess reproductive health and address preventive interventions: preparing for birth, including timing and spacing of births for both adults and adolescents; recognizing danger signs in the prenatal period and responding appropriately; and having skilled health staff at delivery.

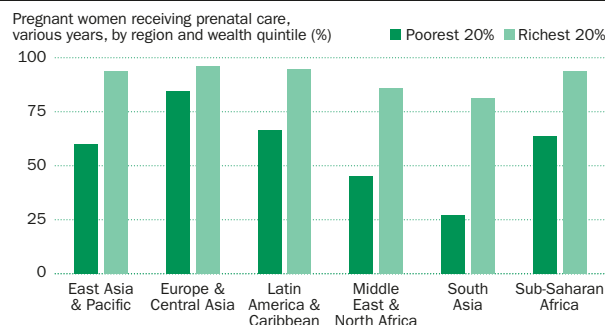
Equally important are the strategic interventions, especially during labor and delivery. Among these are obstetric care, including timely and safe transfers of mothers to a hospital or health care center with the necessary staff, equipment, drugs, and other supplies. The World Health Organization (WHO) has proposed that national public health administrators monitor the availability of essential obstetric care and access to emergency obstetric care at the country level (box 2o). An estimated 15 percent of pregnancies result in complications (Nanda, Switlick, and Lule 2005). But data on complications are collected only by ad hoc studies, usually in limited areas of countries, and no standard definition or methodology is followed.

### All regions have made progress in providing prenatal care to women at least once during their pregnancy 2k



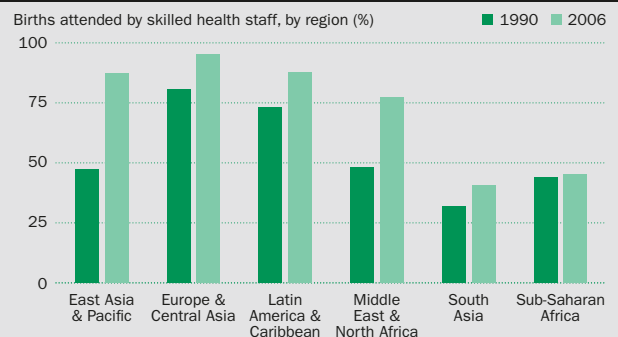
Source: Household surveys.

### In South Asia rich women are three times more likely to receive prenatal care than are poor women 2l



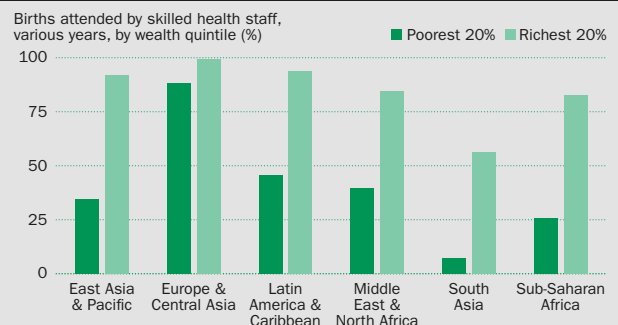
Source: Gwatkin and others 2007.

### The proportion of births attended by skilled health staff remains low in South Asia and Sub-Saharan Africa 2m



Source: Household surveys.

### Nearly all women in Europe and Central Asia have births attended by skilled health staff—but even there poor women lag behind 2n



Source: Gwatkin and others 2007.

Complications from abortion are also now recognized as a major public and reproductive health problem, especially in developing countries. Abortions, especially unsafe ones, account for 13 percent of maternal deaths, and good quality post-abortion services and family planning services to avoid unwanted pregnancies are essential. Of an estimated 20 million unsafe abortions worldwide each year, the majority are in developing countries (Nanda, Switlick, and Lule 2005) (figure 2p). Abortion information is particularly difficult to gather because abortion is restricted and stigmatized in many countries, leading to false reporting by women and service providers. Regional estimates of abortion rates are available from the WHO, UN agencies, national authorities, and nongovernmental organizations. But reliable country data are not routinely collected.

In addition to definitional gaps, data collection for these two indicators faces additional hurdles because the infrastructure for collecting data is weak or because there is political, cultural, or moral hesitation. Obtaining accurate values also requires significant clinical resources and technical skills.

#### The importance of emergency obstetric care

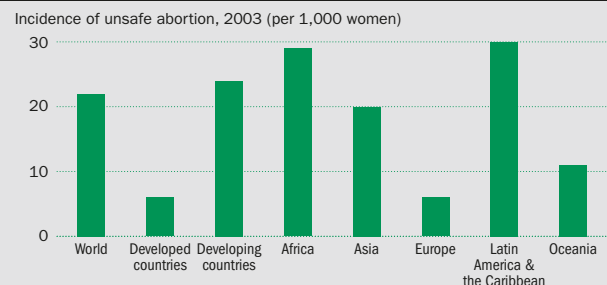
#### Box 2o

Emergency obstetric care encompasses a set of functions performed at health facilities that can prevent the death of women experiencing obstetric complications. Basic emergency obstetric care, usually provided at health centers and small maternity homes, includes administering certain drugs and performing lifesaving procedures, such as for preeclampsia and eclampsia. Comprehensive emergency obstetric care, usually provided at subdistrict or district hospitals, also includes providing Caesarean sections and blood transfusions.

More maternal health programs now recognize that emergency obstetric care is critical to reducing maternal death and disability. Much can be accomplished by upgrading existing facilities. In programming for emergency obstetric care, bottlenecks in accessing services are often assessed using the “three delays” model: delays in the decision to seek care, delays in arrival at a health facility, and delays in the provision of adequate care at the facility.

Source: Nanda, Switlick, and Lule 2005.

#### Most unsafe abortions take place in developing countries, especially in Latin America and the Caribbean and Africa 2p



Note: Regions are World Health Organization regions, which differ from World Bank regions.  
Source: WHO 2007.

## Challenges ahead

The interventions to prevent the vast majority of conditions that kill women of reproductive age—and to enable health systems to protect and promote women’s health—have already been identified. Some are simple, low-tech, and cost-effective, such as the provision and use of contraception. Yet many people in developing countries, especially in South Asia and Sub-Saharan Africa, do not benefit. Behind the failure of these health systems are weak commitments to improving maternal health, poor management systems, inadequate human and medical resources and equipment, and, for most of the poor, the inability to pay for services.

Underlying the failures of the health system is the lack of reliable data for monitoring progress in maternal and reproductive health and in other safe motherhood indicators. And most developing countries have inadequate health information systems or lack them altogether. So, providing timely and reliable information often depends on local, one-off data collection, such as household surveys, which are both costly and unsustainable because they do not establish permanent health information structures. Ideally, there would be vital registration systems, hospital and health service data, and household surveys.

Least available are data on maternal deaths, needed to monitor the Millennium Development Goal target of cutting maternal mortality ratios by 75 percent. While vital registration systems are a rich and valuable source of health data in developed countries, they are incomplete in developing countries. For example, the share of developing countries with at least 90 percent complete vital registration increased from 45 percent in 1988 to 62 percent in 2006. Still, some of the most populous countries—China, India, Indonesia, Brazil, Pakistan, Bangladesh, Nigeria—do not have complete vital registration systems. Hospital or other health service records are sometimes a source of information. But these record only women who have access to health services, and a large number of women, especially in rural areas, do not. Household surveys for estimating maternal mortality ratios are costly and yield unreliable estimates.

The evidence base should be strong enough to provide crucial information on who dies and why—and to generate insights about interventions that are available, accessible, appropriate, and affordable.



# 2.1 Population dynamics

	Population			Average annual population growth		Population age composition			Dependency ratio		Crude death rate	Crude birth rate
	millions			%		%			dependents as proportion of working-age population		per 1,000 people	per 1,000 people
	1990	2006	2015	1990–2006	2006–15	Ages 0–14 2006	Ages 15–64 2006	Ages 65+ 2006	Young 2006	Old 2006	2006	2006
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..
Albania	3.3	3.2	3.3	-0.2	0.4	25.5	65.8	8.7	0.4	0.1	6	16
Algeria	25.3	33.4	38.0	1.7	1.5	28.9	66.5	4.6	0.4	0.1	5	21
Angola	10.5	16.6	21.2	2.8	2.8	46.3	51.3	2.4	0.9	0.0 <sup>a</sup>	21	48
Argentina	32.6	39.1	42.5	1.1	0.9	26.1	63.6	10.3	0.4	0.2	8	18
Armenia	3.5	3.0	3.0	-1.0	-0.2	20.0	67.9	12.1	0.3	0.2	9	12
Australia	17.1	20.7	22.4	1.2	0.9	19.3	67.4	13.3	0.3	0.2	7	13
Austria	7.7	8.3	8.4	0.4	0.2	15.6	68.0	16.4	0.2	0.2	9	9
Azerbaijan	7.2	8.5	9.2	1.1	0.9	24.2	68.5	7.2	0.4	0.1	6	18
Bangladesh	113.0	156.0	180.0	2.0	1.6	34.7	61.7	3.6	0.6	0.1	8	25
Belarus	10.2	9.7	9.2	-0.3	-0.6	15.3	70.4	14.3	0.2	0.2	15	9
Belgium	10.0	10.5	10.7	0.3	0.1	16.9	65.8	17.3	0.3	0.3	10	12
Benin	5.2	8.8	11.3	3.3	2.9	44.0	53.3	2.7	0.8	0.1	11	41
Bolivia	6.7	9.4	10.9	2.1	1.6	37.7	57.7	4.6	0.7	0.1	8	28
Bosnia and Herzegovina	4.3	3.9	3.9	-0.6	-0.2	17.3	68.6	14.1	0.3	0.2	9	9
Botswana	1.4	1.9	2.1	1.9	1.2	35.1	61.5	3.4	0.6	0.1	15	25
Brazil	149.5	189.3	209.4	1.5	1.1	27.6	66.2	6.3	0.4	0.1	6	19
Bulgaria	8.7	7.7	7.1	-0.8	-0.8	13.6	69.2	17.3	0.2	0.2	15	9
Burkina Faso	8.9	14.4	18.6	3.0	2.9	46.0	51.0	3.1	0.9	0.1	15	44
Burundi	5.7	8.2	11.2	2.3	3.5	44.7	52.7	2.6	0.8	0.0 <sup>a</sup>	16	47
Cambodia	9.7	14.2	16.6	2.4	1.8	36.7	60.1	3.2	0.6	0.1	9	27
Cameroon	12.2	18.2	21.5	2.5	1.9	41.5	55.0	3.5	0.8	0.1	15	35
Canada	27.8	32.6	35.1	1.0	0.8	17.3	69.4	13.3	0.2	0.2	7	11
Central African Republic	3.0	4.3	5.0	2.2	1.8	42.5	53.7	3.9	0.8	0.1	18	37
Chad	6.1	10.5	13.4	3.4	2.7	46.2	50.9	2.9	0.9	0.1	16	46
Chile	13.2	16.4	17.8	1.4	0.9	24.3	67.4	8.3	0.4	0.1	5	15
China	1,135.2	1,311.8	1,382.5	0.9	0.6	21.1	71.1	7.8	0.3	0.1	7	12
Hong Kong, China	5.7	6.9	7.4	1.2	0.9	14.8	73.2	12.1	0.2	0.2	5	10
Colombia	34.9	45.6	50.6	1.7	1.2	29.8	65.0	5.2	0.5	0.1	6	19
Congo, Dem. Rep.	37.9	60.6	78.5	2.9	2.9	47.3	50.1	2.6	0.9	0.1	18	44
Congo, Rep.	2.4	3.7	4.5	2.6	2.1	41.9	54.9	3.2	0.8	0.1	12	36
Costa Rica	3.1	4.4	5.0	2.2	1.4	27.8	66.3	5.9	0.4	0.1	4	18
Côte d'Ivoire	12.8	18.9	22.3	2.5	1.9	41.4	55.4	3.2	0.7	0.1	16	36
Croatia	4.8	4.4	4.3	-0.5	-0.3	15.3	67.4	17.3	0.2	0.3	11	9
Cuba	10.6	11.3	11.2	0.4	-0.1	18.9	69.7	11.4	0.3	0.2	8	11
Czech Republic	10.4	10.3	10.2	-0.1	-0.1	14.5	71.2	14.3	0.2	0.2	10	10
Denmark	5.1	5.4	5.5	0.4	0.1	18.7	66.0	15.4	0.3	0.2	10	12
Dominican Republic	7.3	9.6	10.9	1.7	1.4	33.2	61.1	5.7	0.5	0.1	6	24
Ecuador	10.3	13.2	14.6	1.6	1.1	32.2	61.7	6.0	0.5	0.1	5	21
Egypt, Arab Rep.	55.1	74.2	86.2	1.9	1.7	33.0	62.1	4.9	0.5	0.1	6	24
El Salvador	5.1	6.8	7.6	1.8	1.3	33.7	60.7	5.6	0.6	0.1	6	23
Eritrea	3.2	4.7	6.2	2.5	3.0	42.9	54.8	2.3	0.8	0.0 <sup>a</sup>	9	40
Estonia	1.6	1.3	1.3	-1.0	-0.4	14.9	68.4	16.7	0.2	0.2	13	11
Ethiopia	51.2	77.2	96.0	2.6	2.4	44.2	52.9	2.9	0.8	0.1	13	39
Finland	5.0	5.3	5.4	0.3	0.2	17.2	66.7	16.1	0.3	0.2	9	11
France	56.7	61.3	63.1	0.5	0.3	18.3	65.4	16.3	0.3	0.2	9	13
Gabon	0.9	1.3	1.5	2.2	1.5	35.4	60.0	4.6	0.6	0.1	12	26
Gambia, The	1.0	1.7	2.1	3.4	2.5	41.0	55.2	3.8	0.7	0.1	11	36
Georgia	5.5	4.4	4.2	-1.3	-0.7	18.4	67.3	14.4	0.3	0.2	12	11
Germany	79.4	82.4	81.1	0.2	-0.2	14.1	66.6	19.2	0.2	0.3	10	8
Ghana	15.6	23.0	27.3	2.4	1.9	38.6	57.7	3.7	0.7	0.1	9	30
Greece	10.2	11.1	11.2	0.6	0.0 <sup>a</sup>	14.2	67.4	18.4	0.2	0.3	9	10
Guatemala	8.9	13.0	16.2	2.4	2.4	42.9	52.8	4.3	0.8	0.1	6	34
Guinea	6.0	9.2	11.4	2.6	2.4	43.3	53.7	3.1	0.8	0.1	12	40
Guinea-Bissau	1.0	1.6	2.2	3.0	3.0	47.6	49.4	3.0	1.0	0.1	19	50
Haiti	7.1	9.4	11.0	1.8	1.7	37.5	58.3	4.2	0.6	0.1	9	28

# Population dynamics

# 2.1

POPULATION

	Population			Average annual population growth		Population age composition			Dependency ratio		Crude death rate	Crude birth rate
	millions			%		%			dependents as proportion of working-age population		per 1,000 people	per 1,000 people
	1990	2006	2015	1990–2006	2006–15	Ages 0–14 2006	Ages 15–64 2006	Ages 65+ 2006	Young 2006	Old 2006	2006	2006
Honduras	4.9	7.0	8.2	2.2	1.8	39.4	56.4	4.2	0.7	0.1	6	28
Hungary	10.4	10.1	9.7	-0.2	-0.4	15.5	69.1	15.4	0.2	0.2	13	10
India	849.5	1,109.8	1,233.2	1.7	1.2	32.5	62.4	5.0	0.5	0.1	8	24
Indonesia	178.2	223.0	245.1	1.4	1.0	28.0	66.3	5.6	0.4	0.1	7	20
Iran, Islamic Rep.	54.4	70.1	78.9	1.6	1.3	27.8	67.8	4.5	0.4	0.1	5	18
Iraq	18.5	..	..	..	..	..	..	..	..	..	..	..
Ireland	3.5	4.3	4.8	1.2	1.3	20.7	68.2	11.1	0.3	0.2	6	15
Israel	4.7	7.0	8.0	2.6	1.5	27.9	62.0	10.1	0.4	0.2	6	21
Italy	56.7	58.8	58.4	0.2	-0.1	13.9	66.1	19.9	0.2	0.3	9	10
Jamaica	2.4	2.7	2.8	0.7	0.4	31.3	61.2	7.5	0.5	0.1	6	17
Japan	123.5	127.8	124.5	0.2	-0.3	13.8	66.0	20.3	0.2	0.3	9	9
Jordan	3.2	5.5	6.8	3.5	2.2	36.5	60.2	3.3	0.6	0.1	4	29
Kazakhstan	16.3	15.3	16.4	-0.4	0.8	23.9	68.2	8.0	0.4	0.1	10	20
Kenya	23.4	36.6	46.1	2.8	2.6	42.6	54.7	2.7	0.8	0.0 <sup>a</sup>	12	39
Korea, Dem. Rep.	20.1	23.7	24.4	1.0	0.3	23.6	67.5	8.8	0.4	0.1	10	14
Korea, Rep.	42.9	48.4	49.2	0.8	0.2	18.1	72.0	9.8	0.3	0.1	5	9
Kuwait	2.1	2.6	3.2	1.3	2.2	23.6	74.6	1.9	0.3	0.0 <sup>a</sup>	2	21
Kyrgyz Republic	4.4	5.2	5.7	1.0	1.0	30.4	63.8	5.8	0.5	0.1	7	23
Lao PDR	4.1	5.8	6.7	2.2	1.7	38.9	57.5	3.5	0.7	0.1	7	27
Latvia	2.7	2.3	2.2	-1.0	-0.6	14.0	69.2	16.8	0.2	0.2	15	10
Lebanon	3.0	4.1	4.4	1.9	1.0	28.2	64.5	7.3	0.4	0.1	7	18
Lesotho	1.6	2.0	2.1	1.4	0.6	40.1	55.1	4.7	0.7	0.1	19	29
Liberia	2.1	3.6	5.1	3.2	3.9	47.0	50.8	2.2	0.9	0.0 <sup>a</sup>	19	50
Libya	4.4	6.0	7.1	2.0	1.8	30.2	65.9	3.9	0.5	0.1	4	24
Lithuania	3.7	3.4	3.2	-0.5	-0.5	16.2	68.3	15.5	0.2	0.2	13	9
Macedonia, FYR	1.9	2.0	2.0	0.4	-0.0 <sup>b</sup>	19.2	69.5	11.3	0.3	0.2	9	11
Madagascar	12.0	19.2	24.1	2.9	2.5	43.6	53.3	3.2	0.8	0.1	10	37
Malawi	9.4	13.6	17.0	2.3	2.5	47.0	49.9	3.0	0.9	0.1	15	41
Malaysia	18.1	26.1	30.0	2.3	1.5	31.0	64.6	4.4	0.5	0.1	4	21
Mali	7.7	12.0	15.7	2.8	3.0	47.6	48.8	3.6	1.0	0.1	15	48
Mauritania	1.9	3.0	3.8	2.8	2.4	40.1	56.3	3.6	0.7	0.1	8	33
Mauritius	1.1	1.3	1.3	1.1	0.7	24.0	69.3	6.7	0.3	0.1	8	15
Mexico	83.2	104.2	113.7	1.4	1.0	30.2	63.8	6.0	0.5	0.1	5	19
Moldova	4.4	3.8	3.6	-0.8	-0.8	19.4	69.5	11.1	0.3	0.2	12	11
Mongolia	2.1	2.6	2.9	1.3	1.1	28.0	68.1	4.0	0.4	0.1	6	18
Morocco	24.2	30.5	33.9	1.5	1.2	29.7	65.0	5.3	0.5	0.1	6	22
Mozambique	13.5	21.0	24.7	2.7	1.8	44.3	52.5	3.2	0.8	0.1	20	40
Myanmar	40.1	48.4	51.9	1.2	0.8	26.7	67.7	5.6	0.4	0.1	10	18
Namibia	1.4	2.0	2.3	2.3	1.2	38.3	58.2	3.5	0.7	0.1	13	26
Nepal	19.1	27.6	32.2	2.3	1.7	38.5	57.8	3.7	0.7	0.1	8	29
Netherlands	15.0	16.3	16.5	0.6	0.1	18.3	67.4	14.3	0.3	0.2	8	11
New Zealand	3.4	4.2	4.5	1.2	0.8	21.2	66.5	12.3	0.3	0.2	7	14
Nicaragua	4.1	5.5	6.3	1.8	1.4	37.2	58.7	4.0	0.6	0.1	5	25
Niger	7.8	13.7	18.5	3.5	3.3	48.0	48.8	3.2	1.0	0.1	14	49
Nigeria	94.5	144.7	175.6	2.7	2.1	44.1	53.0	2.9	0.8	0.1	17	40
Norway	4.2	4.7	4.9	0.6	0.6	19.4	65.9	14.7	0.3	0.2	9	12
Oman	1.8	2.5	3.0	2.0	2.0	33.1	64.1	2.7	0.5	0.0 <sup>a</sup>	3	22
Pakistan	108.0	159.0	191.9	2.4	2.1	36.4	59.7	3.9	0.6	0.1	7	26
Panama	2.4	3.3	3.8	1.9	1.5	30.1	63.8	6.1	0.5	0.1	5	21
Papua New Guinea	4.1	6.2	7.3	2.5	1.8	40.3	57.3	2.4	0.7	0.0 <sup>a</sup>	10	30
Paraguay	4.2	6.0	7.0	2.2	1.7	35.4	59.8	4.8	0.6	0.1	6	25
Peru	21.8	27.6	30.7	1.5	1.2	31.2	63.1	5.7	0.5	0.1	6	21
Philippines	61.2	86.3	101.0	2.1	1.8	35.8	60.3	3.9	0.6	0.1	5	26
Poland	38.1	38.1	37.4	0.0 <sup>a</sup>	-0.2	15.9	70.8	13.3	0.2	0.2	10	10
Portugal	9.9	10.6	10.8	0.4	0.2	15.6	67.4	17.0	0.2	0.3	10	10
Puerto Rico	3.5	3.9	4.1	0.7	0.5	21.6	65.7	12.7	0.3	0.2	8	13





# 2.1 | Population dynamics

	Population			Average annual population growth		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	2006	2015	1990-2006	2006-15	2006	2006	2006	Young 2006	Old 2006	2006	2006
Romania	23.2	21.6	20.5	-0.5	-0.6	15.4	69.8	14.9	0.2	0.2	12	10
Russian Federation	148.3	142.5	135.2	-0.2	-0.6	14.9	71.4	13.7	0.2	0.2	15	10
Rwanda	7.3	9.5	12.1	1.6	2.8	43.1	54.5	2.5	0.8	0.0 <sup>a</sup>	17	44
Saudi Arabia	16.4	23.7	28.5	2.3	2.1	34.0	63.2	2.8	0.5	0.0 <sup>a</sup>	4	25
Senegal	7.9	12.1	15.4	2.7	2.7	41.9	53.8	4.3	0.8	0.1	9	36
Serbia	7.5 <sup>c</sup>	7.4 <sup>c</sup>	7.3 <sup>c</sup>	-0.1 <sup>c</sup>	-0.2 <sup>c</sup>	18.4 <sup>d</sup>	66.9 <sup>d</sup>	14.7 <sup>d</sup>	0.3 <sup>d</sup>	0.2 <sup>d</sup>	14 <sup>c</sup>	10 <sup>c</sup>
Sierra Leone	4.1	5.7	6.9	2.1	2.1	42.8	53.9	3.3	0.8	0.1	22	46
Singapore	3.0	4.5	4.8	2.4	0.8	18.8	72.4	8.8	0.3	0.1	4	10
Slovak Republic	5.3	5.4	5.4	0.1	-0.0 <sup>b</sup>	16.3	71.8	11.8	0.2	0.2	10	10
Slovenia	2.0	2.0	2.0	0.0 <sup>a</sup>	-0.1	13.9	70.3	15.8	0.2	0.2	9	9
Somalia	6.7	8.4	10.9	1.4	2.8	44.2	53.2	2.6	0.8	0.0 <sup>a</sup>	17	43
South Africa	35.2	47.4	49.1	1.9	0.4	31.9	63.7	4.4	0.5	0.1	21	23
Spain	38.8	44.1	45.7	0.8	0.4	14.5	68.7	16.9	0.2	0.2	9	11
Sri Lanka	17.0	19.9	20.5	1.0	0.3	23.7	69.7	6.6	0.3	0.1	6	19
Sudan	25.9	37.7	45.6	2.3	2.1	40.3	56.1	3.6	0.7	0.1	10	32
Swaziland	0.8	1.1	1.2	2.4	0.5	39.2	57.5	3.3	0.7	0.1	22	33
Sweden	8.6	9.1	9.4	0.4	0.4	17.1	65.5	17.4	0.3	0.3	10	12
Switzerland	6.7	7.5	7.6	0.7	0.2	16.5	67.9	15.7	0.2	0.2	8	10
Syrian Arab Republic	12.7	19.4	23.5	2.6	2.1	36.0	60.8	3.2	0.6	0.1	3	27
Tajikistan	5.3	6.6	7.7	1.4	1.6	38.7	57.4	3.9	0.7	0.1	6	28
Tanzania	25.5	39.5	48.9	2.7	2.4	44.4	52.6	3.0	0.8	0.1	13	40
Thailand	54.3	63.4	66.6	1.0	0.5	21.4	70.6	8.0	0.3	0.1	8	15
Timor-Leste	0.7	1.0	1.4	2.0	3.7	44.7	52.6	2.7	0.8	0.1	15	51
Togo	4.0	6.4	8.0	3.0	2.5	43.0	53.9	3.1	0.8	0.1	10	37
Trinidad and Tobago	1.2	1.3	1.4	0.5	0.4	21.7	71.7	6.6	0.3	0.1	8	15
Tunisia	8.2	10.1	11.2	1.4	1.1	25.4	68.3	6.3	0.4	0.1	6	17
Turkey	56.2	73.0	81.0	1.6	1.2	27.9	66.5	5.7	0.4	0.1	6	19
Turkmenistan	3.7	4.9	5.5	1.8	1.3	30.9	64.5	4.6	0.5	0.1	8	22
Uganda	17.8	29.9	40.7	3.2	3.4	49.3	48.3	2.5	1.0	0.1	14	47
Ukraine	51.9	46.8	43.4	-0.6	-0.8	14.3	69.5	16.2	0.2	0.2	16	10
United Arab Emirates	1.8	4.2	5.3	5.5	2.4	19.6	79.3	1.1	0.2	0.0 <sup>a</sup>	1	15
United Kingdom	57.6	60.6	62.4	0.3	0.3	17.8	66.1	16.1	0.3	0.2	10	12
United States	249.6	299.4	323.9	1.1	0.9	20.7	67.0	12.3	0.3	0.2	8	14
Uruguay	3.1	3.3	3.4	0.4	0.2	23.6	62.8	13.6	0.4	0.2	9	15
Uzbekistan	20.5	26.5	29.6	1.6	1.2	32.4	62.9	4.7	0.5	0.1	6	19
Venezuela, RB	19.8	27.0	31.1	2.0	1.5	30.9	64.0	5.1	0.5	0.1	5	22
Vietnam	66.2	84.1	93.7	1.5	1.2	28.9	65.6	5.6	0.4	0.1	5	17
West Bank and Gaza	2.0	3.8	4.7	4.1	2.5	45.6	51.4	3.0	0.9	0.1	3	32
Yemen, Rep.	12.3	21.7	28.2	3.6	2.9	45.4	52.2	2.3	0.9	0.0 <sup>a</sup>	8	38
Zambia	8.1	11.7	13.8	2.3	1.9	45.6	51.4	2.9	0.9	0.1	19	40
Zimbabwe	10.5	13.2	14.8	1.5	1.3	39.0	57.5	3.5	0.7	0.1	18	28
<b>World</b>	<b>5,263.9 s</b>	<b>6,538.1 s</b>	<b>7,200.7 s</b>	<b>1.4 w</b>	<b>1.1 w</b>	<b>28.0 w</b>	<b>64.6 w</b>	<b>7.4 w</b>	<b>0.4 w</b>	<b>0.1 w</b>	<b>8 w</b>	<b>20 w</b>
<b>Low income</b>	1,747.9	2,419.7	2,815.3	2.0	1.7	36.3	59.4	4.3	0.6	0.1	10	29
<b>Middle income</b>	2,599.1	3,087.7	3,313.9	1.1	0.8	24.7	67.9	7.4	0.4	0.1	8	16
Lower middle income	1,899.6	2,276.5	2,456.3	1.1	0.8	24.7	68.3	7.0	0.4	0.1	7	16
Upper middle income	699.5	811.3	857.7	0.9	0.6	24.6	66.9	8.6	0.4	0.1	9	17
<b>Low &amp; middle income</b>	4,347.0	5,507.4	6,129.2	1.5	1.2	29.8	64.2	6.0	0.5	0.1	8	22
East Asia & Pacific	1,595.9	1,898.9	2,032.7	1.1	0.8	23.5	69.4	7.1	0.3	0.1	7	14
Europe & Central Asia	451.8	460.5	460.7	0.1	0.0 <sup>a</sup>	19.4	68.9	11.6	0.3	0.2	12	13
Latin America & Carib.	436.9	556.1	616.5	1.5	1.1	29.6	64.1	6.3	0.5	0.1	6	20
Middle East & N. Africa	225.6	310.7	361.9	2.0	1.7	32.7	63.0	4.3	0.5	0.1	6	24
South Asia	1,120.1	1,499.4	1,694.9	1.8	1.4	33.4	61.9	4.7	0.5	0.1	8	24
Sub-Saharan Africa	516.7	781.8	962.6	2.6	2.3	43.3	53.6	3.1	0.8	0.1	15	39
<b>High income</b>	916.9	1,030.7	1,071.5	0.7	0.4	17.9	67.1	14.9	0.3	0.2	8	12
Euro area	296.2	316.7	319.7	0.4	0.1	15.5	66.7	17.8	0.2	0.3	9	10

a. Less than 0.05. b. More than -0.05. c. Excludes Kosovo and Metohija. d. Includes Kosovo and Metohija.

### About the data

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

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

Of the 153 economies in the table, 131 (about 86 percent) conducted a census between 1995 and 2006. The currentness of censuses and the availability of complementary data from surveys or registration systems are objective ways to judge demographic data quality. 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 the United Nations Population Division and other agencies. The standard estimation method requires fertility, mortality, and net migration data, often collected from sample surveys, which can be small or limited in coverage. Population estimates are from demographic modeling and so are susceptible to biases and errors from shortcomings in the model as well as in the data. Population projections use the cohort component method. Because of a drastic reduction in estimated mortality due partly to revised lower estimates of HIV prevalence, populations of several countries, notably in Sub-Saharan Africa, have been revised upward from previous estimates.

The growth rate of the total population conceals the fact that different age groups may grow at different rates. In many developing countries the under-15 population was growing rapidly but has begun to shrink. Previously high fertility rates and declining

mortality rates are now reflected in the larger share of the working-age population.

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

The vital rates in the table are based on data from birth and death registration systems, censuses, and sample surveys by national statistical offices and other organizations, or on demographic analysis. The 2006 estimates for many countries are projections based on extrapolations of levels and trends from earlier years or interpolations of population estimates and projections from the United Nations Population Division.

Vital registers are the preferred source for these data, but in many developing countries systems for registering births and deaths are absent or incomplete because of deficiencies in the coverage of events or geographic areas. Many developing countries carry out special household surveys that ask respondents about births and deaths in the recent past. Estimates derived in this way are subject to sampling errors and errors due to inaccurate recall.

The United Nations Statistics Division monitors the completeness of vital registration systems. The share of countries with at least 90 percent complete vital registration rose from 45 percent in 1988 to 62 percent in 2006. Still, some of the most populous developing countries—China, India, Indonesia, Brazil, Pakistan, Bangladesh, Nigeria—lack complete vital registration systems. From 2003 to 2006, 51 percent of births and deaths and 48 percent of infant deaths worldwide were 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 2005 the number of immigrants in high-income countries rose by 40 million. About 190 million people (3 percent of the world's population) currently live outside their home country. 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 for the duration and purpose of international moves that qualify as migration vary, and estimates require information on flows into and out of countries that is difficult to collect.

### Definitions

- **Population** is based on the de facto definition of population, which counts 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 mid-year estimates for 1990 and 2006 and projections for 2015.
- **Average annual population growth** is the exponential change for the period indicated. See *Statistical methods* for more information.
- **Population age composition** is 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 compiled and 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 United Nations Population Division's *World Population Prospects: The 2006 Revision*; census reports and other statistical publications from national statistical offices; household surveys conducted by national agencies, Macro International, and the U.S. Centers for Disease Control and Prevention; Eurostat, *Demographic Statistics* (various years); *Centro Latinoamericano de Demografía, Boletín Demográfico* (various years); and U.S. Bureau of the Census, International Database.



# 2.2

## Labor force structure

	Labor force participation rate				Labor force				
	1990	Male	% ages 15 and older		1990	2006	Ages 15 and older average annual % growth	Female	
		2006	1990	2006				1990	2006
Afghanistan	..	..	..	..	..	..	..	..	..
Albania	83	70	58	49	1.6	1.4	-0.7	40.2	41.8
Algeria	78	80	23	37	7.2	13.9	4.1	22.6	31.0
Angola	90	92	74	74	4.5	7.3	3.0	46.4	45.8
Argentina	78	76	38	54	13.0	18.8	2.3	34.4	43.1
Armenia	87	60	72	48	1.9	1.3	-2.6	47.7	48.9
Australia	75	70	52	56	8.4	10.5	1.4	41.3	44.8
Austria	70	66	43	50	3.5	4.0	0.8	40.8	44.4
Azerbaijan	78	73	64	61	3.3	4.3	1.6	47.4	47.7
Bangladesh	89	86	63	52	51.2	71.0	2.0	40.2	36.7
Belarus	76	64	61	53	5.3	4.8	-0.7	48.8	49.1
Belgium	61	60	37	44	3.9	4.5	0.9	39.1	43.6
Benin	90	86	58	54	2.0	3.4	3.3	40.8	38.3
Bolivia	80	84	49	63	2.5	4.3	3.3	39.2	43.5
Bosnia and Herzegovina	78	68	60	59	2.2	2.0	-0.6	44.4	48.4
Botswana	77	70	57	46	0.5	0.7	2.1	44.5	40.3
Brazil	85	79	45	57	62.5	93.1	2.5	35.0	42.9
Bulgaria	68	52	60	40	4.4	3.1	-2.3	48.0	45.0
Burkina Faso	91	89	77	78	3.9	6.5	3.2	47.5	47.1
Burundi	90	93	91	92	2.8	4.2	2.5	52.5	51.4
Cambodia	85	80	78	75	4.4	6.9	2.9	52.4	50.7
Cameroon	82	80	56	52	4.6	7.0	2.6	41.3	39.6
Canada	76	72	58	61	14.7	17.9	1.2	44.0	46.1
Central African Republic	89	89	71	71	1.4	2.0	2.3	47.0	46.0
Chad	80	78	64	66	2.4	4.0	3.3	45.7	46.8
Chile	77	70	32	37	5.0	6.6	1.7	30.5	35.4
China	85	82	73	69	650.6	780.5	1.1	44.8	44.1
Hong Kong, China	80	70	47	54	2.9	3.6	1.5	36.3	45.5
Colombia	81	81	46	62	14.0	22.8	3.0	37.0	44.8
Congo, Dem. Rep.	91	91	61	61	15.2	24.2	2.9	41.6	41.3
Congo, Rep.	86	88	58	57	1.0	1.5	2.9	41.3	40.1
Costa Rica	84	81	33	46	1.2	2.0	3.5	27.6	35.6
Côte d'Ivoire	90	89	44	39	4.7	7.1	2.6	30.0	29.3
Croatia	71	60	47	45	2.2	1.9	-0.8	42.1	44.8
Cuba	73	73	39	44	4.6	5.3	0.9	34.6	37.3
Czech Republic	73	67	61	52	5.4	5.2	-0.3	47.5	44.9
Denmark	75	69	62	59	2.9	2.8	-0.2	46.1	46.4
Dominican Republic	84	82	36	47	2.7	4.1	2.5	29.6	36.4
Ecuador	85	82	33	61	3.7	6.4	3.5	27.8	42.7
Egypt, Arab Rep.	75	73	27	20	16.5	23.1	2.1	26.3	21.7
El Salvador	80	75	51	48	2.0	2.7	2.1	41.2	40.7
Eritrea	92	90	61	58	1.3	2.0	2.7	41.8	41.0
Estonia	77	65	64	52	0.9	0.7	-1.6	49.8	48.9
Ethiopia	91	89	72	71	22.6	34.4	2.6	44.9	44.9
Finland	70	66	58	57	2.6	2.7	0.2	47.2	47.4
France	65	61	46	48	24.8	27.3	0.6	43.3	45.5
Gabon	84	83	63	62	0.4	0.6	2.7	43.8	42.7
Gambia, The	86	86	63	59	0.4	0.7	3.5	42.6	40.8
Georgia	72	76	69	49	2.9	2.2	-1.6	52.3	42.7
Germany	72	65	44	51	38.3	41.0	0.4	40.4	45.1
Ghana	80	75	76	70	6.7	10.3	2.6	48.8	47.8
Greece	67	65	36	44	4.2	5.2	1.4	36.2	40.7
Guatemala	89	83	29	34	2.9	4.2	2.4	24.7	31.3
Guinea	90	87	80	80	2.8	4.4	2.7	47.3	47.5
Guinea-Bissau	91	93	58	61	0.4	0.7	2.9	40.3	40.8
Haiti	83	84	58	56	2.8	4.1	2.4	42.7	41.3

# Labor force structure

# 2.2

POPULATION

	Labor force participation rate				Labor force				
	Male		% ages 15 and older		Total millions	Ages 15 and older average annual % growth	Female % of labor force		
	1990	2006	1990	2006			1990	2006	
Honduras	87	89	33	55	1.6	3.0	4.0	27.9	39.4
Hungary	64	58	46	42	4.5	4.2	-0.5	44.5	45.0
India	85	82	37	34	325.6	438.0	1.9	28.4	28.1
Indonesia	81	85	50	51	75.3	109.2	2.3	38.4	37.9
Iran, Islamic Rep.	81	74	22	40	15.6	29.1	3.9	20.2	34.3
Iraq	76	..	16	..	4.7	..	..	16.8	..
Ireland	70	72	36	54	1.3	2.1	2.9	34.3	43.0
Israel	62	59	41	51	1.6	2.8	3.3	40.5	47.0
Italy	66	61	36	38	23.9	24.8	0.2	37.1	39.9
Jamaica	80	74	66	54	1.1	1.2	0.2	46.8	43.3
Japan	77	73	50	48	63.9	66.2	0.2	40.6	40.8
Jordan	69	77	18	28	0.8	1.9	5.7	18.8	25.4
Kazakhstan	78	75	61	65	7.7	8.1	0.3	46.3	49.4
Kenya	90	90	75	70	9.8	16.7	3.3	45.9	44.2
Korea, Dem. Rep.	82	78	52	48	9.9	11.4	0.9	40.6	39.3
Korea, Rep.	73	74	47	50	19.1	24.5	1.6	39.3	40.8
Kuwait	82	85	35	50	0.9	1.4	3.2	21.8	25.7
Kyrgyz Republic	74	74	59	55	1.8	2.3	1.5	46.2	44.0
Lao PDR	80	80	53	54	1.5	2.4	2.8	40.6	41.0
Latvia	77	64	63	49	1.5	1.1	-1.8	49.7	48.0
Lebanon	78	80	32	34	1.0	1.6	2.9	31.2	31.0
Lesotho	86	74	57	46	0.6	0.7	0.8	46.5	43.5
Liberia	85	83	55	55	0.8	1.3	3.2	39.4	39.7
Libya	79	82	19	35	1.3	2.5	4.2	16.9	27.8
Lithuania	75	64	59	52	1.9	1.6	-1.0	48.1	49.0
Macedonia, FYR	73	65	48	41	0.9	0.9	0.1	40.0	39.0
Madagascar	83	86	79	79	5.4	8.9	3.2	49.2	48.3
Malawi	91	90	85	86	4.4	6.3	2.2	50.2	50.0
Malaysia	81	81	44	47	7.1	11.6	3.0	34.8	36.0
Mali	89	82	72	72	3.2	4.8	2.5	46.9	49.2
Mauritania	86	84	56	54	0.8	1.3	3.1	40.2	39.2
Mauritius	82	79	42	43	0.5	0.6	1.4	33.9	35.7
Mexico	84	80	34	40	29.9	43.1	2.3	30.0	35.2
Moldova	75	68	61	54	2.1	1.9	-0.8	48.5	46.8
Mongolia	82	82	56	54	0.8	1.3	2.5	41.0	40.1
Morocco	81	80	24	27	7.6	11.3	2.5	23.7	26.1
Mozambique	88	83	88	85	6.4	9.8	2.7	54.0	53.4
Myanmar	88	86	69	68	20.2	27.3	1.9	44.7	44.9
Namibia	65	63	49	47	0.4	0.7	2.7	45.0	43.8
Nepal	80	78	48	50	7.1	10.8	2.6	37.9	40.5
Netherlands	71	73	44	57	6.9	8.6	1.3	39.1	44.4
New Zealand	74	74	53	61	1.7	2.2	1.8	43.1	46.1
Nicaragua	86	86	35	36	1.3	2.1	2.8	29.7	30.0
Niger	95	95	71	71	3.3	5.9	3.6	43.7	42.4
Nigeria	86	85	48	46	33.9	52.7	2.8	36.5	35.3
Norway	73	73	57	64	2.2	2.6	0.9	44.7	46.8
Oman	83	81	15	24	0.6	1.0	3.3	11.1	17.3
Pakistan	86	83	28	33	35.0	59.6	3.3	23.3	27.3
Panama	79	79	39	52	0.9	1.5	3.0	32.5	39.2
Papua New Guinea	75	75	72	72	1.8	2.7	2.7	46.7	48.7
Paraguay	83	84	52	65	1.7	2.9	3.5	38.1	43.3
Peru	80	82	47	60	8.5	13.4	2.8	37.0	42.5
Philippines	83	83	47	56	23.5	38.4	3.1	36.5	40.2
Poland	74	61	57	47	18.6	17.2	-0.5	45.8	45.7
Portugal	73	70	50	56	4.8	5.6	1.0	42.7	46.2
Puerto Rico	61	59	31	38	1.2	1.5	1.5	35.8	41.4



	Labor force participation rate				Labor force				
	1990	% ages 15 and older		1990	1990	2006	Ages 15 and older average annual % growth	Female	
		Male	2006					Female	2006
					Total millions		1990-2006	1990	2006
Romania	71	62	54	50	11.0	10.1	-0.5	44.3	45.9
Russian Federation	77	68	60	55	77.3	73.5	-0.3	48.4	48.8
Rwanda	87	84	86	80	3.1	4.4	2.1	51.8	51.4
Saudi Arabia	80	80	15	18	5.1	8.4	3.2	11.4	14.2
Senegal	87	81	61	56	3.2	4.8	2.5	40.8	41.2
Serbia	72 <sup>a</sup>	70 <sup>a</sup>	50 <sup>a</sup>	51 <sup>a</sup>	3.5 <sup>b</sup>	3.6 <sup>b</sup>	0.2 <sup>b</sup>	41.8 <sup>b</sup>	42.9 <sup>b</sup>
Sierra Leone	90	94	53	56	1.7	2.5	2.3	38.5	38.5
Singapore	80	76	50	50	1.6	2.3	2.4	38.8	39.9
Slovak Republic	75	68	60	52	2.6	2.7	0.1	46.3	44.9
Slovenia	70	67	54	54	1.0	1.0	0.4	45.5	46.0
Somalia	96	95	61	59	2.9	3.6	1.5	39.9	39.2
South Africa	79	79	54	46	14.4	20.0	2.1	41.6	37.9
Spain	69	67	34	45	15.9	21.1	1.8	34.4	40.6
Sri Lanka	79	76	45	35	7.2	8.4	1.0	36.0	32.3
Sudan	79	71	27	24	7.7	10.7	2.0	26.0	24.9
Swaziland	78	75	38	32	0.2	0.4	2.9	38.0	32.3
Sweden	72	67	63	59	4.7	4.7	0.0	47.7	46.6
Switzerland	80	75	52	61	3.7	4.2	0.9	40.4	46.1
Syrian Arab Republic	82	88	29	39	3.6	7.9	4.9	26.0	30.5
Tajikistan	74	62	52	46	1.9	2.2	0.9	42.2	43.7
Tanzania	91	90	88	86	12.4	19.3	2.8	50.2	49.7
Thailand	88	81	75	66	31.4	36.5	0.9	46.9	46.7
Timor-Leste	79	83	50	56	0.3	0.4	1.9	37.5	39.5
Togo	90	90	54	50	1.5	2.5	3.2	38.5	36.7
Trinidad and Tobago	75	77	42	47	0.5	0.6	2.0	37.0	38.9
Tunisia	76	75	21	29	2.4	3.9	3.0	21.6	27.9
Turkey	82	76	34	28	21.0	27.4	1.7	29.4	26.5
Turkmenistan	77	73	64	61	1.5	2.3	2.4	46.9	46.5
Uganda	92	86	80	80	8.0	12.6	2.9	47.2	48.4
Ukraine	73	64	58	50	26.3	22.5	-1.0	49.3	48.1
United Arab Emirates	92	93	25	41	0.9	2.7	6.7	9.8	14.6
United Kingdom	75	69	53	55	29.7	30.8	0.2	43.3	45.4
United States	76	73	57	60	129.3	157.0	1.2	44.3	45.9
Uruguay	76	78	46	57	1.4	1.7	1.3	39.9	44.4
Uzbekistan	76	73	60	57	8.2	11.6	2.2	45.4	44.6
Venezuela, RB	81	84	38	59	7.3	13.3	3.8	31.8	41.3
Vietnam	81	78	74	72	31.3	44.8	2.2	48.4	48.2
West Bank and Gaza	64	66	9	10	0.4	0.8	4.4	11.9	13.2
Yemen, Rep.	74	75	28	30	3.0	6.3	4.6	27.5	28.2
Zambia	90	91	66	66	3.4	5.0	2.3	43.1	42.6
Zimbabwe	80	85	70	64	4.2	6.0	2.2	47.0	43.6
<b>World</b>	<b>81 w</b>	<b>79 w</b>	<b>54 w</b>	<b>53 w</b>	<b>2,386.6 t</b>	<b>3,081.8 t</b>	<b>1.6 w</b>	<b>39.7 w</b>	<b>39.9 w</b>
<b>Low income</b>	85	83	48	46	694.0	995.4	2.3	35.1	35.0
<b>Middle income</b>	82	79	59	57	1,258.0	1,582.6	1.4	41.7	41.9
Lower middle income	83	81	63	60	954.4	1,208.6	1.5	42.4	42.0
Upper middle income	79	74	48	49	303.7	374.0	1.3	39.5	41.5
<b>Low &amp; middle income</b>	83	81	55	53	1,952.1	2,578.0	1.7	39.4	39.2
East Asia & Pacific	85	82	69	66	858.7	1,074.1	1.4	44.1	43.5
Europe & Central Asia	75	68	56	49	216.4	214.6	-0.1	45.7	44.7
Latin America & Carib.	83	80	41	53	171.1	257.4	2.6	33.9	40.8
Middle East & N. Africa	78	77	23	30	64.9	111.8	3.4	22.9	28.0
South Asia	85	82	39	36	430.6	597.1	2.0	29.7	29.3
Sub-Saharan Africa	87	85	63	61	210.3	323.0	2.7	43.0	42.2
<b>High income</b>	73	70	49	52	434.5	503.8	0.9	41.4	43.4
Euro area	68	64	41	47	131.8	148.8	0.8	39.6	43.4

a. Includes Montenegro. b. Excludes Kosovo and Metohija.

### About the data

The labor force is the supply of labor available for producing 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 often omitted, and some countries do not count members of the armed forces. Labor force size tends to vary during the year as seasonal workers enter and leave.

Data on the labor force are collected from labor force surveys, censuses, establishment censuses and surveys, and administrative records such as employment exchange registers and unemployment insurance schemes. For some countries a combination of these sources is used. Labor force surveys are the most comprehensive source for internationally comparable labor force data. They can cover all noninstitutionalized civilians, all branches and sectors of the economy, and all categories of workers, including people holding multiple jobs. By contrast, labor force data 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 often differ from labor force survey data and vary considerably by country, depending on the census scope and coverage. Establishment censuses and surveys provide data only on the employed population, not unemployed workers, workers in small establishments, or workers in the informal sector (International Labour Organization, *Key Indicators of the Labour Market 2001-2002*).

The reference period of a 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 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 irregularly, the estimated labor force may be much smaller than the numbers actually working.

Differing definitions of employment age also affect comparability. For most countries the working age is 15 and older, but in some developing countries children younger than 15 work full- or part-time and are included in the estimates. Similarly, some countries have an upper age limit. As a result, calculations may systematically over- or underestimate actual rates. For further information on source, reference period, or definition, consult the original source.

The labor force participation rates in the table are from *Key Indicators of the Labour Market*, 5th edition. These harmonized estimates use strict data selection criteria and enhanced methods to ensure comparability across countries and over time, including collection and tabulation methodologies and methods applied to such country-specific factors as military service requirements. Estimates are based mainly on labor force surveys, with other sources (population censuses and nationally reported estimates) used only when no survey data are available.

Participation rates indicate the relative size of the labor supply. The indicator in this edition is for the population ages 15 and older, to include people who continue working past age 65. In previous editions the indicator was for the population ages 15–64, so participation rates are not comparable across editions.

The labor force estimates in the table were calculated by applying labor force participation rates from the International Labour Organization (ILO) database to World Bank population estimates to create a series consistent with these population estimates. This procedure sometimes results in labor force estimates that differ slightly from those in the ILO's *Yearbook of Labour Statistics* and its database *Key Indicators of the Labour Market*.

Estimates of women in the labor force and employment are generally lower than those of men and are not comparable internationally, reflecting that demographic, social, legal, and cultural trends and norms determine whether women's activities are regarded as economic. In many countries many women work on farms or in other family enterprises without pay, and others work in or near their homes, mixing work and family activities during the day.

### Definitions

- **Labor force participation rate** is the proportion of the population ages 15 and older 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 ages 15 and older who meet the ILO definition of the economically active population. It includes both the employed and the unemployed.
- **Average annual percentage growth 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

Data on labor force participation rates are from the ILO database *Key Indicators of the Labour Market*, 5th edition. Labor force numbers were calculated by World Bank staff, applying labor force participation rates from the ILO database to population estimates.



# 2.3

## Employment by economic activity

	Agriculture				Industry				Services			
	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>a</sup>	2003-06 <sup>a</sup>	1990-92 <sup>a</sup>	2003-06 <sup>a</sup>	1990-92 <sup>a</sup>	2003-06 <sup>a</sup>	1990-92 <sup>a</sup>	2003-06 <sup>a</sup>	1990-92 <sup>a</sup>	2003-06 <sup>a</sup>	1990-92 <sup>a</sup>	2003-06 <sup>a</sup>
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..
Albania	..	..	..	..	..	..	..	..	..	..	..	..
Algeria	..	23	..	11	..	24	..	25	..	53	..	64
Angola	..	..	..	..	..	..	..	..	..	..	..	..
Argentina	0 <sup>b,c</sup>	2 <sup>c</sup>	0 <sup>b,c</sup>	1 <sup>c</sup>	40 <sup>c</sup>	33 <sup>c</sup>	18 <sup>c</sup>	11 <sup>c</sup>	59 <sup>c</sup>	66 <sup>c</sup>	81 <sup>c</sup>	88 <sup>c</sup>
Armenia	..	..	..	..	..	..	..	..	..	..	..	..
Australia	6	5	4	3	32	31	12	9	61	65	84	88
Austria	6	6 <sup>c</sup>	8	6 <sup>c</sup>	47	40 <sup>c</sup>	20	13 <sup>c</sup>	46	55 <sup>c</sup>	72	81 <sup>c</sup>
Azerbaijan	..	41	..	37	..	15	..	9	..	44	..	54
Bangladesh	54	50	85	59	16	12	9	18	25	38	2	23
Belarus	..	..	..	..	..	..	..	..	..	..	..	..
Belgium	3 <sup>c</sup>	2 <sup>c</sup>	2 <sup>c</sup>	2 <sup>c</sup>	41 <sup>c</sup>	35 <sup>c</sup>	16 <sup>c</sup>	11 <sup>c</sup>	56 <sup>c</sup>	62 <sup>c</sup>	81 <sup>c</sup>	86 <sup>c</sup>
Benin	..	..	..	..	..	..	..	..	..	..	..	..
Bolivia	3 <sup>c</sup>	..	1 <sup>c</sup>	..	42 <sup>c</sup>	..	17 <sup>c</sup>	..	55 <sup>c</sup>	..	82 <sup>c</sup>	..
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..	..	..
Botswana	..	29	..	13	..	28	..	17	..	43	..	71
Brazil	31 <sup>c</sup>	25 <sup>c</sup>	25 <sup>c</sup>	16 <sup>c</sup>	27 <sup>c</sup>	27 <sup>c</sup>	10 <sup>c</sup>	13 <sup>c</sup>	43 <sup>c</sup>	48 <sup>c</sup>	65 <sup>c</sup>	71 <sup>c</sup>
Bulgaria	..	11	..	7	..	39	..	29	..	50	..	64
Burkina Faso	..	..	..	..	..	..	..	..	..	..	..	..
Burundi	..	..	..	..	..	..	..	..	..	..	..	..
Cambodia	..	..	..	..	..	..	..	..	..	..	..	..
Cameroon	53	..	68	..	14	..	4	..	26	..	23	..
Canada	6 <sup>c</sup>	4 <sup>c</sup>	2 <sup>c</sup>	2 <sup>c</sup>	31 <sup>c</sup>	32 <sup>c</sup>	11 <sup>c</sup>	11 <sup>c</sup>	64 <sup>c</sup>	64 <sup>c</sup>	87 <sup>c</sup>	88 <sup>c</sup>
Central African Republic	..	..	..	..	..	..	..	..	..	..	..	..
Chad	..	..	..	..	..	..	..	..	..	..	..	..
Chile	24	17	6	6	32	29	15	12	45	54	79	83
China	..	..	..	..	..	..	..	..	..	..	..	..
Hong Kong, China	1	0 <sup>b</sup>	0 <sup>b</sup>	0 <sup>b</sup>	37	22	27	7	63	77	73	93
Colombia	2	32 <sup>b</sup>	1 <sup>b,c</sup>	8 <sup>b,c</sup>	35	21	25	16	63	48	74	76
Congo, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Congo, Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Costa Rica	32	21	5	5	27	26	25	13	41	52	69	82
Côte d'Ivoire	..	..	..	..	..	..	..	..	..	..	..	..
Croatia	..	16 <sup>c</sup>	..	19 <sup>c</sup>	..	37 <sup>c</sup>	..	18 <sup>c</sup>	..	47 <sup>c</sup>	..	63 <sup>c</sup>
Cuba	..	28	..	10	..	23	..	14	..	50	..	76
Czech Republic	9	5	7	3	55	49	33	27	36	46	61	71
Denmark	7	4	3	2	37	34	16	12	56	62	81	86
Dominican Republic	26	21	3	3	23	26	21	15	52	53	76	82
Ecuador	10 <sup>c</sup>	11 <sup>c</sup>	2 <sup>c</sup>	4 <sup>c</sup>	29 <sup>c</sup>	27 <sup>c</sup>	17 <sup>c</sup>	12 <sup>c</sup>	62 <sup>c</sup>	62 <sup>c</sup>	81 <sup>c</sup>	84 <sup>c</sup>
Egypt, Arab Rep.	35	28	52	39	25	23	10	6	41	49	37	55
El Salvador	48 <sup>c</sup>	28	15 <sup>c</sup>	5	23 <sup>c</sup>	25	23 <sup>c</sup>	22	29 <sup>c</sup>	45	63 <sup>c</sup>	75
Eritrea	..	..	..	..	..	..	..	..	..	..	..	..
Estonia	23	7	13	4	42	44	30	24	36	49	57	72
Ethiopia	..	84 <sup>c</sup>	..	76 <sup>c</sup>	..	5 <sup>c</sup>	..	8 <sup>c</sup>	..	10 <sup>c</sup>	..	16 <sup>c</sup>
Finland	11	7	6	3	38	38	15	12	51	56	78	84
France	..	5	..	2	..	35	..	12	..	60	..	85
Gabon	..	..	..	..	..	..	..	..	..	..	..	..
Gambia, The	..	..	..	..	..	..	..	..	..	..	..	..
Georgia	..	52	..	57	..	14	..	4	..	34	..	38
Germany	4	3	4	2	50	41	24	16	47	56	72	82
Ghana	66	..	59	..	10	..	10	..	23	..	32	..
Greece	20 <sup>c</sup>	12 <sup>c</sup>	26 <sup>c</sup>	14 <sup>c</sup>	32 <sup>c</sup>	30 <sup>c</sup>	17 <sup>c</sup>	10 <sup>c</sup>	48 <sup>c</sup>	58 <sup>c</sup>	56 <sup>c</sup>	76 <sup>c</sup>
Guatemala	..	..	..	..	..	..	..	..	..	..	..	..
Guinea	..	..	..	..	..	..	..	..	..	..	..	..
Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	..	..
Haiti	..	..	..	..	..	..	..	..	..	..	..	..

# Employment by economic activity

# 2.3

POPULATION

	Agriculture				Industry				Services			
	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>a</sup>	2003-06 <sup>a</sup>	1990-92 <sup>a</sup>	2003-06 <sup>a</sup>	1990-92 <sup>a</sup>	2003-06 <sup>a</sup>	1990-92 <sup>a</sup>	2003-06 <sup>a</sup>	1990-92 <sup>a</sup>	2003-06 <sup>a</sup>	1990-92 <sup>a</sup>	2003-06 <sup>a</sup>
Honduras	53	51	6	13	18	20	25	23	29	29	69	63
Hungary	..	7 <sup>c</sup>	..	3 <sup>c</sup>	..	42 <sup>c</sup>	..	21 <sup>c</sup>	..	51 <sup>c</sup>	..	76 <sup>c</sup>
India	..	..	..	..	..	..	..	..	..	..	..	..
Indonesia	54	43	57	41	15	20	13	15	31	37	31	44
Iran, Islamic Rep.	..	23	..	34	..	31	..	28	..	46	..	37
Iraq	..	..	..	..	..	..	..	..	..	..	..	..
Ireland	19	9	3	1	33	39	18	12	48	51	78	86
Israel	5	3	2	1	38	31	15	11	57	65	83	88
Italy	8	5	9	3	37	39	22	18	55	56	70	79
Jamaica	36	25	16	9	25	27	12	5	39	48	72	86
Japan	6	4	7	5	40	35	27	18	54	59	65	77
Jordan	..	4	..	2	..	23	..	12	..	73	..	84
Kazakhstan	..	33	..	30	..	25	..	12	..	42	..	58
Kenya	19 <sup>c</sup>	..	20 <sup>c</sup>	..	23 <sup>c</sup>	..	9 <sup>c</sup>	..	58 <sup>c</sup>	..	71 <sup>c</sup>	..
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	14	7	18	9	40	34	28	17	46	59	54	74
Kuwait	..	..	..	..	..	..	..	..	..	..	..	..
Kyrgyz Republic	..	39	..	39	..	23	..	11	..	38	..	50
Lao PDR	..	..	..	..	..	..	..	..	..	..	..	..
Latvia	..	15 <sup>c</sup>	..	8 <sup>c</sup>	..	35 <sup>c</sup>	..	16 <sup>c</sup>	..	49 <sup>c</sup>	..	75 <sup>c</sup>
Lebanon	..	..	..	..	..	..	..	..	..	..	..	..
Lesotho	..	..	..	..	..	..	..	..	..	..	..	..
Liberia	..	..	..	..	..	..	..	..	..	..	..	..
Libya	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	25	17 <sup>c</sup>	15	11 <sup>c</sup>	46	37 <sup>c</sup>	31	21 <sup>c</sup>	29	46 <sup>c</sup>	54	68 <sup>c</sup>
Macedonia, FYR	..	20	..	19	..	34	..	30	..	46	..	51
Madagascar	..	77	..	79	..	7	..	6	..	16	..	15
Malawi	..	..	..	..	..	..	..	..	..	..	..	..
Malaysia	23	16	20	11	31	35	32	27	46	49	48	62
Mali	..	50	..	30	..	18	..	15	..	32	..	55
Mauritania	..	..	..	..	..	..	..	..	..	..	..	..
Mauritius	15	11	13	9	36	34	48	29	48	55	39	62
Mexico	34	21	11	5	25	30	19	19	41	49	70	76
Moldova	..	41	..	40	..	21	..	12	..	38	..	48
Mongolia	..	43	..	37	..	19	..	15	..	38	..	48
Morocco	..	38	..	63	..	22	..	14	..	40	..	23
Mozambique	..	..	..	..	..	..	..	..	..	..	..	..
Myanmar	..	..	..	..	..	..	..	..	..	..	..	..
Namibia	45	..	52	..	21	..	8	..	34	..	40	..
Nepal	75	..	91	..	4	..	1	..	20	..	8	..
Netherlands	5	4	3	2	33	30	10	8	60	62	82	86
New Zealand	13	9	8	5	31	32	13	11	56	59	80	84
Nicaragua	..	41	..	10	..	19	..	17	..	33	..	52
Niger	..	..	..	..	..	..	..	..	..	..	..	..
Nigeria	..	..	..	..	..	..	..	..	..	..	..	..
Norway	7	5	3	2	34	32	10	8	58	63	86	90
Oman	..	..	..	..	..	..	..	..	..	..	..	..
Pakistan	45	38	69	67	20	21	15	15	35	41	16	18
Panama	35	22	3	4	20	22	11	9	45	56	85	86
Papua New Guinea	..	..	..	..	..	..	..	..	..	..	..	..
Paraguay	3 <sup>c</sup>	39 <sup>c</sup>	0 <sup>b,c</sup>	20 <sup>c</sup>	33 <sup>c</sup>	19 <sup>c</sup>	19 <sup>c</sup>	10 <sup>c</sup>	64 <sup>c</sup>	42 <sup>c</sup>	80 <sup>c</sup>	70 <sup>c</sup>
Peru	1 <sup>c</sup>	1 <sup>c</sup>	0 <sup>b,c</sup>	0 <sup>b,c</sup>	30 <sup>c</sup>	31 <sup>c</sup>	13 <sup>c</sup>	13 <sup>c</sup>	69 <sup>c</sup>	68 <sup>c</sup>	87 <sup>c</sup>	86 <sup>c</sup>
Philippines	53 <sup>c</sup>	45	32 <sup>c</sup>	25	17 <sup>c</sup>	17	14 <sup>c</sup>	12	29 <sup>c</sup>	39	55 <sup>c</sup>	64
Poland	..	18 <sup>c</sup>	..	17 <sup>c</sup>	..	39 <sup>c</sup>	..	17 <sup>c</sup>	..	43 <sup>c</sup>	..	66 <sup>c</sup>
Portugal	10 <sup>c</sup>	11 <sup>c</sup>	13 <sup>c</sup>	13 <sup>c</sup>	39 <sup>c</sup>	41 <sup>c</sup>	24 <sup>c</sup>	19 <sup>c</sup>	51 <sup>c</sup>	48 <sup>c</sup>	63 <sup>c</sup>	68 <sup>c</sup>
Puerto Rico	5	3	0 <sup>b</sup>	0 <sup>b</sup>	27	25	19	11	67	72	80	89





# 2.3

## Employment by economic activity

	Agriculture				Industry				Services			
	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>a</sup>	2003-06 <sup>a</sup>	1990-92 <sup>a</sup>	2003-06 <sup>a</sup>	1990-92 <sup>a</sup>	2003-06 <sup>a</sup>	1990-92 <sup>a</sup>	2003-06 <sup>a</sup>	1990-92 <sup>a</sup>	2003-06 <sup>a</sup>	1990-92 <sup>a</sup>	2003-06 <sup>a</sup>
Romania	29 <sup>c</sup>	31	38 <sup>c</sup>	33	44 <sup>c</sup>	35	30 <sup>c</sup>	25	28 <sup>c</sup>	34	33 <sup>c</sup>	42
Russian Federation	..	12	..	8	..	38	..	21	..	50	..	71
Rwanda	..	..	..	..	..	..	..	..	..	..	..	..
Saudi Arabia	..	5	..	0 <sup>b</sup>	..	11	..	1	..	85	..	99
Senegal	..	..	..	..	..	..	..	..	..	..	..	..
Serbia	..	..	..	..	..	..	..	..	..	..	..	..
Sierra Leone	..	..	..	..	..	..	..	..	..	..	..	..
Singapore	1	0	0 <sup>b</sup>	0	36	36	32	21	63	63	68	79
Slovak Republic	..	6 <sup>c</sup>	..	3 <sup>c</sup>	..	50 <sup>c</sup>	..	25 <sup>c</sup>	..	44 <sup>c</sup>	..	72 <sup>c</sup>
Slovenia	..	9	..	9	..	47	..	25	..	43	..	65
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	..	13	..	7	..	33	..	14	..	54	..	79
Spain	11 <sup>c</sup>	6 <sup>c</sup>	8 <sup>c</sup>	4 <sup>c</sup>	41 <sup>c</sup>	41 <sup>c</sup>	16 <sup>c</sup>	12 <sup>c</sup>	49 <sup>c</sup>	52 <sup>c</sup>	76 <sup>c</sup>	84 <sup>c</sup>
Sri Lanka	..	..	..	..	..	..	..	..	..	..	..	..
Sudan	..	..	..	..	..	..	..	..	..	..	..	..
Swaziland	..	..	..	..	..	..	..	..	..	..	..	..
Sweden	5 <sup>c</sup>	3 <sup>c</sup>	2 <sup>c</sup>	1 <sup>c</sup>	40 <sup>c</sup>	34 <sup>c</sup>	12 <sup>c</sup>	9 <sup>c</sup>	55 <sup>c</sup>	63 <sup>c</sup>	86 <sup>c</sup>	90 <sup>c</sup>
Switzerland	4 <sup>c</sup>	5 <sup>c</sup>	4 <sup>c</sup>	3 <sup>c</sup>	37 <sup>c</sup>	32 <sup>c</sup>	15 <sup>c</sup>	11 <sup>c</sup>	59 <sup>c</sup>	63 <sup>c</sup>	81 <sup>c</sup>	86 <sup>c</sup>
Syrian Arab Republic	23	23	54	49	28	29	8	8	49	48	38	43
Tajikistan	..	..	..	..	..	..	..	..	..	..	..	..
Tanzania	78 <sup>c</sup>	..	90 <sup>c</sup>	..	7 <sup>c</sup>	..	1 <sup>c</sup>	..	15 <sup>c</sup>	..	8 <sup>c</sup>	..
Thailand	60	44	62	41	18	22	13	19	22	34	25	41
Timor-Leste	..	..	..	..	..	..	..	..	..	..	..	..
Togo	..	..	..	..	..	..	..	..	..	..	..	..
Trinidad and Tobago	15	6	6	2	34	41	14	16	51	52	80	82
Tunisia	..	..	..	..	..	..	..	..	..	..	..	..
Turkey	33	22	72	52	26	28	11	15	41	50	17	33
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	91	60 <sup>c</sup>	91	77 <sup>c</sup>	4	11 <sup>c</sup>	6	5 <sup>c</sup>	5	29 <sup>c</sup>	3	18 <sup>c</sup>
Ukraine	..	..	..	..	..	..	..	..	..	..	..	..
United Arab Emirates	..	..	..	..	..	..	..	..	..	..	..	..
United Kingdom	3	2	1	1	41	33	16	9	55	65	82	90
United States	4	2	1	1	34	30	14	10	62	68	85	90
Uruguay	7 <sup>c</sup>	7 <sup>c</sup>	1 <sup>c</sup>	2 <sup>c</sup>	36 <sup>c</sup>	29 <sup>c</sup>	21 <sup>c</sup>	13 <sup>c</sup>	57 <sup>c</sup>	64 <sup>c</sup>	78 <sup>c</sup>	86 <sup>c</sup>
Uzbekistan	..	..	..	..	..	..	..	..	..	..	..	..
Venezuela, RB	17	16 <sup>c</sup>	2	2 <sup>c</sup>	32	25 <sup>c</sup>	16	11 <sup>c</sup>	52	59 <sup>c</sup>	82	86 <sup>c</sup>
Vietnam	..	56	..	60	..	21	..	14	..	23	..	26
West Bank and Gaza	..	12	..	34	..	28	..	8	..	59	..	56
Yemen, Rep.	44	..	83	..	14	..	2	..	38	..	13	..
Zambia	..	..	..	..	..	..	..	..	..	..	..	..
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>
<b>Low income</b>	..	..	..	..	..	..	..	..	..	..	..	..
<b>Middle income</b>	..	..	..	..	..	..	..	..	..	..	..	..
Lower middle income	..	..	..	..	..	..	..	..	..	..	..	..
Upper middle income	..	20	..	14	..	31	..	17	..	49	..	68
<b>Low &amp; middle income</b>	..	..	..	..	..	..	..	..	..	..	..	..
East Asia & Pacific	..	..	..	..	..	..	..	..	..	..	..	..
Europe & Central Asia	..	19	..	18	..	34	..	19	..	47	..	62
Latin America & Carib.	20	21	14	10	30	27	14	15	50	52	72	76
Middle East & N. Africa	..	..	..	..	..	..	..	..	..	..	..	..
South Asia	..	..	..	..	..	..	..	..	..	..	..	..
Sub-Saharan Africa	..	..	..	..	..	..	..	..	..	..	..	..
<b>High income</b>	6	4	5	3	38	34	19	13	56	62	76	85
Euro area	7	5	7	3	42	38	20	14	50	56	72	82

Note: Data across sectors may not sum to 100 percent because of workers not classified by sectors.  
a. Data are for the most recent year available. b. Less than 0.5. c. Limited coverage.

**About the data**

The International Labour Organization (ILO) classifies economic activity using the International Standard Industrial Classification (ISIC) of All Economic Activities, revision 2 (1968) and revision 3 (1990). Because this classification is based on where work is performed (industry) rather than type of work performed (occupation), all of an enterprise's employees are classified under the same industry, regardless of their trade or occupation. The categories should sum to 100 percent. Where they do not, the differences are due to workers who cannot be classified by economic activity.

Data on employment are drawn from labor force surveys, household surveys, official estimates, censuses and administrative records of social insurance schemes, and establishment surveys when no other information is available. 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 many differences in how countries define and measure employment status, particularly, members of the armed forces, self-employed workers, and unpaid family workers. Where members of 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, data cover only employees; thus self-employed and unpaid family workers are excluded. In such cases the employment share of the agricultural sector is severely underreported. Caution should be also used where the data refer only to urban areas, which record little or no agricultural work. Moreover, the age group and area covered could differ by country or change over time within a country. For detailed information on breaks in series, consult the original source.

Countries also take 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 revision 3. In the table the reported divisions or categories are

aggregated into three broad groups: agriculture, industry, and services. Such broad classification may obscure fundamental shifts within countries' industrial patterns. A slight majority of countries report economic activity according to the ISIC revision 2 instead of revision 3. The use of one classification or the other should not have a significant impact on the information for the three broad sectors presented in the table.

The distribution of economic wealth in 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 clear patterns. Men still make up the majority of people employed in all three sectors, but the gender gap is biggest in industry. 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 have better chances, 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 unclear 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**

Data on employment are from the ILO database Key Indicators of the Labour Market, 5th edition.



# 2.4

## Decent work and productive employment

	Employment to population ratio				Vulnerable employment				Labor productivity			
	% ages 15 and older		% ages 15-24		Unpaid family workers and own-account workers				GDP per person employed		Index	
					Male	Female			1990 PPP \$ <sup>a</sup>		1980 = 100	
	1991	2006	1991	2006	% of male employment	% of female employment	1990	2005	1990	2006	1990	2006
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	
Albania	62	51	45	37	..	..	..	..	2,499	3,502	107	149
Algeria	37	50	22	33	..	29	..	32	2,946	3,401	94	108
Angola	74	75	64	66	..	..	..	..	869	1,143	90	119
Argentina	54	60	45	46	..	23 <sup>b</sup>	..	19 <sup>b</sup>	6,436	8,915	78	109
Armenia	68	49	51	19	..	..	..	..	6,066	8,428	..	..
Australia	57	60	56	63	12	12	8	7	17,106	24,603	119	171
Austria	54	55	61	50	..	9	..	8	16,895	22,708	123	165
Azerbaijan	59	61	39	41	..	..	..	..	4,639	5,954	..	..
Bangladesh	73	67	64	57	..	60	..	73	640	1,014	117	185
Belarus	59	52	40	36	..	..	..	..	7,184	9,491	..	..
Belgium	46	48	32	28	..	11	..	10	17,197	22,582	119	156
Benin	67	64	55	49	..	..	..	..	..	..	..	..
Bolivia	61	70	44	51	32 <sup>b</sup>	..	50 <sup>b</sup>	..	2,197	2,764	85	107
Bosnia and Herzegovina	58	55	37	37	..	..	..	..	3,737	6,469	..	..
Botswana	57	44	38	21	..	7	..	17	..	..	..	..
Brazil	60	61	54	49	29 <sup>b</sup>	34 <sup>b</sup>	30 <sup>b</sup>	32 <sup>b</sup>	4,923	5,812	95	112
Bulgaria	50	41	31	20	..	11	..	9	5,597	7,780	93	129
Burkina Faso	81	82	74	73	..	..	..	..	810	1,135	111	155
Burundi	83	84	67	71	..	..	..	..	..	..	..	..
Cambodia	79	76	69	63	..	..	..	..	880	1,827	106	220
Cameroon	63	61	48	44	..	..	..	..	1,222	1,155	102	97
Canada	59	62	57	59	..	..	..	..	18,872	24,633	117	152
Central African Republic	73	72	56	57	..	..	..	..	..	..	..	..
Chad	66	65	44	45	..	..	..	..	..	..	..	..
Chile	51	49	34	22	..	29	..	24	6,402	12,207	113	215
China	76	73	73	65	..	..	..	..	1,871	6,352	176	599
Hong Kong, China	63	58	54	39	..	10	..	5	17,541	27,769	167	264
Colombia	54	63	41	46	30 <sup>b</sup>	44	26 <sup>b</sup>	44	4,840	5,767	114	135
Congo, Dem. Rep.	67	68	56	58	..	..	..	..	510	224	85	38
Congo, Rep.	66	66	49	48	..	..	..	..	..	..	..	..
Costa Rica	55	60	48	44	26	20	20	23	4,747	7,321	97	149
Côte d'Ivoire	62	58	47	45	..	..	..	..	1,363	1,310	65	63
Croatia	52	45	34	27	..	19	..	21	7,351	8,326	..	..
Cuba	54	58	39	37	..	..	..	..	2,948	3,008	112	114
Czech Republic	62	55	51	30	..	15	..	8	8,895	11,688	..	..
Denmark	62	61	65	61	..	..	..	..	18,452	24,816	121	163
Dominican Republic	49	53	32	32	42	49	30	31	2,473	4,344	104	183
Ecuador	55	66	43	48	33 <sup>b</sup>	30 <sup>b</sup>	41 <sup>b</sup>	39 <sup>b</sup>	3,903	4,831	95	117
Egypt, Arab Rep.	43	42	22	20	..	21	..	46	2,522	3,386	122	164
El Salvador	58	57	41	37	..	29	..	45	..	..	..	..
Eritrea	68	66	60	56	..	..	..	..	..	..	..	..
Estonia	68	54	51	29	2	7	3	4	10,820	20,795	..	..
Ethiopia	77	76	74	71	..	89	..	93	578	702	89	108
Finland	59	56	45	43	..	..	..	..	16,866	23,358	130	180
France	50	49	28	23	..	8	..	5	18,093	22,402	120	148
Gabon	60	59	42	39	..	..	..	..	..	..	..	..
Gambia, The	68	66	52	51	..	..	..	..	..	..	..	..
Georgia	60	53	37	24	..	64	..	65	7,616	4,721	..	..
Germany	56	52	58	41	..	7	..	6	16,306	20,018	..	..
Ghana	72	66	51	42	..	..	..	..	1,063	1,485	92	128
Greece	46	50	31	28	..	29	..	28	10,015	15,440	112	172
Guatemala	58	55	52	49	..	..	..	..	3,631	4,554	83	104
Guinea	82	81	72	70	..	..	..	..	..	..	..	..
Guinea-Bissau	67	69	56	60	..	..	..	..	..	..	..	..
Haiti	60	65	39	50	..	..	..	..	..	..	..	..

# Decent work and productive employment

# 2.4

PEOPLE

	Employment to population ratio				Vulnerable employment				Labor productivity			
	% ages 15 and older		% ages 15–24		Unpaid family workers and own-account workers				GDP per person employed		Index	
					Male	Female					1980 = 100	
	1991	2006	1991	2006	% of male employment	% of female employment	1990	2006	1990 PPP \$ <sup>a</sup>	2006	1990	2006
Honduras	57	69	48	60	48 <sup>b</sup>	48 <sup>b</sup>	50 <sup>b</sup>	51 <sup>b</sup>	..	..	..	..
Hungary	49	46	39	24	8	9	7	6	6,459	9,291	102	147
India	59	56	46	40	..	..	..	..	1,309	2,611	140	278
Indonesia	63	61	45	37	..	..	..	..	2,526	4,126	135	220
Iran, Islamic Rep.	46	51	33	34	..	..	..	..	3,503	5,786	89	146
Iraq	33	..	20	..	..	..	..	..	2,458	..	39	..
Ireland	45	60	38	48	25	17	9	5	11,818	27,768	138	325
Israel	46	50	24	25	..	9	..	5	12,968	17,548	118	160
Italy	44	46	30	26	..	15	..	11	16,313	19,653	124	150
Jamaica	61	57	39	30	46	37	37	31	3,786	3,751	121	120
Japan	63	58	43	41	15	11	26	14	18,789	22,461	140	167
Jordan	39	47	26	31	..	..	..	..	3,792	4,591	85	103
Kazakhstan	63	65	45	44	..	33	..	39	7,458	8,954	..	..
Kenya	64	63	44	43	..	..	..	..	1,117	1,060	106	101
Korea, Dem. Rep.	64	60	49	33	..	..	..	..	..	..	..	..
Korea, Rep.	59	60	36	34	..	24	..	29	8,704	18,086	212	440
Kuwait	65	71	34	38	..	..	..	..	6,121	11,806	46	89
Kyrgyz Republic	59	59	41	41	..	50	..	50	3,602	2,464	..	..
Lao PDR	65	66	53	54	..	..	..	..	..	..	..	..
Latvia	61	51	46	31	..	9	..	7	9,916	13,514	..	..
Lebanon	47	51	32	32	..	..	..	..	..	..	..	..
Lesotho	54	37	40	25	..	..	..	..	..	..	..	..
Liberia	63	63	48	47	..	..	..	..	..	..	..	..
Libya	47	54	30	33	..	..	..	..	..	..	..	..
Lithuania	55	53	35	24	..	..	..	..	8,663	10,309	..	..
Macedonia, FYR	40	33	20	13	..	23	..	21	3,972	3,538	..	..
Madagascar	77	78	61	63	..	79	..	86	799	675	76	64
Malawi	80	80	66	66	..	..	..	..	554	620	86	96
Malaysia	61	62	47	44	..	20	..	21	5,132	9,782	140	268
Mali	75	70	67	58	..	..	..	..	747	1,026	102	140
Mauritania	64	64	49	48	..	..	..	..	..	..	..	..
Mauritius	53	55	39	35	..	18	..	15	..	..	..	..
Mexico	57	57	50	40	37	30	36	34	6,085	7,816	96	124
Moldova	58	56	36	36	..	37	..	36	6,165	3,057	..	..
Mongolia	50	59	39	44	..	62	..	57	..	..	..	..
Morocco	46	47	39	36	..	54	..	67	2,596	2,998	114	132
Mozambique	80	77	62	55	..	..	..	..	1,115	1,783	91	146
Myanmar	75	75	63	58	..	..	..	..	778	2,387	95	291
Namibia	46	38	23	18	..	..	..	..	..	..	..	..
Nepal	59	58	48	44	..	..	..	..	..	..	..	..
Netherlands	53	61	55	69	..	..	..	..	17,262	23,385	117	159
New Zealand	57	65	54	58	15	15	10	9	13,909	18,306	113	148
Nicaragua	56	56	45	44	..	..	..	..	..	..	..	..
Niger	78	79	68	71	..	..	..	..	540	514	67	64
Nigeria	60	59	44	43	..	..	..	..	1,214	1,329	85	93
Norway	60	66	49	60	..	..	..	..	18,466	28,044	123	186
Oman	52	52	28	28	..	..	..	..	6,479	7,528	159	185
Pakistan	54	55	44	44	..	60	..	69	1,589	2,278	137	196
Panama	50	59	34	36	44	35	19	26	..	..	..	..
Papua New Guinea	71	71	58	58	..	..	..	..	..	..	..	..
Paraguay	62	69	51	58	17 <sup>b</sup>	50 <sup>b</sup>	31 <sup>b</sup>	52 <sup>b</sup>	..	..	..	..
Peru	56	64	40	43	30 <sup>b</sup>	34 <sup>b</sup>	45 <sup>b</sup>	39 <sup>b</sup>	3,021	4,272	71	100
Philippines	59	64	42	44	..	43	..	48	2,224	2,734	94	115
Poland	55	46	35	22	..	23	..	20	5,113	8,999	89	157
Portugal	59	58	53	38	18 <sup>b</sup>	18	21 <sup>b</sup>	20	10,826	14,174	135	176
Puerto Rico	38	43	21	30	..	..	..	..	10,539	15,026	129	184



	Employment to population ratio				Vulnerable employment				Labor productivity			
	% ages 15 and older		% ages 15–24		Unpaid family workers and own-account workers				GDP per person employed		Index	
					Male	Female				1980 = 100		
	1991	2006	1991	2006	% of male employment	% of female employment		1990	2006	1990	2006	
Romania	58	52	47	22	7 <sup>b</sup>	33	10 <sup>b</sup>	34	3,511	4,305	85	104
Russian Federation	58	56	36	33	1	6	1	6	7,779	7,297	..	..
Rwanda	79	73	63	58	..	..	..	..	..	..	..	..
Saudi Arabia	51	51	26	25	..	..	..	..	8,993	8,691	68	66
Senegal	67	62	55	47	77	..	91	..	1,279	1,433	101	113
Serbia	49 <sup>c</sup>	51 <sup>c</sup>	28 <sup>c</sup>	33 <sup>c</sup>	..	..	..	..	5,160 <sup>c</sup>	2,935 <sup>c</sup>	..	..
Sierra Leone	64	68	51	60	..	..	..	..	..	..	..	..
Singapore	64	60	56	41	10	12	6	6	14,220	24,688	157	273
Slovak Republic	56	52	41	30	..	13 <sup>b</sup>	..	5 <sup>b</sup>	7,763	11,057	..	..
Slovenia	55	57	37	33	..	12	..	10	10,860	16,136	..	..
Somalia	70	69	64	63	..	..	..	..	..	..	..	..
South Africa	48	45	31	27	..	18	..	20	3,842	4,821	88	110
Spain	43	51	37	36	20	14	24	11	12,055	17,110	131	186
Sri Lanka	52	52	32	37	..	39 <sup>b</sup>	..	39 <sup>b</sup>	2,448	4,193	132	227
Sudan	47	43	33	26	..	..	..	..	743	947	80	102
Swaziland	42	39	26	22	..	..	..	..	..	..	..	..
Sweden	65	59	59	44	..	..	..	..	17,609	23,831	118	160
Switzerland	65	65	68	63	8	9	11	10	21,487	23,475	114	125
Syrian Arab Republic	51	56	40	43	..	..	..	..	5,701	7,015	88	108
Tajikistan	54	48	37	28	..	..	..	..	2,979	1,318	..	..
Tanzania	87	84	77	72	..	..	..	..	551	690	92	115
Thailand	77	72	70	46	67	51	74	55	4,633	7,888	181	309
Timor-Leste	62	67	46	57	..	..	..	..	..	..	..	..
Togo	65	63	53	51	..	..	..	..	..	..	..	..
Trinidad and Tobago	48	58	33	46	22	17	21	13	9,272	23,233	75	188
Tunisia	41	45	29	29	..	..	..	..	3,337	5,362	113	182
Turkey	53	47	48	39	..	36	..	55	5,445	8,080	136	201
Turkmenistan	58	60	36	37	..	..	..	..	3,626	2,609	..	..
Uganda	83	81	74	71	..	77 <sup>b</sup>	..	92 <sup>b</sup>	598	889	104	154
Ukraine	60	52	43	34	..	..	..	..	6,027	4,154	..	..
United Arab Emirates	72	76	43	47	..	..	..	..	13,070	22,700	47	82
United Kingdom	58	59	66	59	..	..	..	..	16,430	22,967	127	178
United States	61	63	56	55	..	..	..	..	23,201	31,245	125	168
Uruguay	55	62	49	50	..	27 <sup>b</sup>	..	22 <sup>b</sup>	6,474	8,313	98	126
Uzbekistan	56	58	36	37	..	..	..	..	4,241	4,202	..	..
Venezuela, RB	55	60	38	41	..	33	..	40	8,313	8,815	82	87
Vietnam	75	73	75	66	..	70	..	79	1,025	2,458	135	325
West Bank and Gaza	29	28	18	15	..	37	..	43	..	..	..	..
Yemen, Rep.	44	47	32	32	..	..	..	..	2,272	2,861	99	125
Zambia	63	70	48	61	56	..	81	..	810	719	89	79
Zimbabwe	71	70	50	52	..	..	..	..	1,356	910	105	70
<b>World</b>	<b>63 w</b>	<b>62 w</b>	<b>53 w</b>	<b>47 w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>5,408 w</b>	<b>7,629 w</b>	<b>106 m</b>	<b>146 m</b>
<b>Low income</b>	63	61	51	47	..	..	..	..	1,175	1,937	95	115
<b>Middle income</b>	66	64	57	48	..	..	..	..	3,208	5,775	97	120
Lower middle income	69	67	61	52	..	..	..	..	2,353	5,348	103	120
Upper middle income	57	55	44	38	..	26	..	24	6,099	7,245	96	123
<b>Low &amp; middle income</b>	65	63	54	48	..	..	..	..	2,507	4,356	96	120
East Asia & Pacific	74	71	68	58	..	..	..	..	2,006	6,352	135	279
Europe & Central Asia	57	53	40	33	..	19	..	17	6,359	6,704	..	..
Latin America & Carib.	57	60	47	45	..	33	..	34	5,186	6,452	96	117
Middle East & N. Africa	43	46	29	30	..	..	..	..	3,110	4,253	96	125
South Asia	60	57	47	43	..	..	..	..	1,266	2,611	135	212
Sub-Saharan Africa	67	66	54	52	..	..	..	..	1,061	1,192	90	102
<b>High income</b>	57	57	47	45	..	..	..	..	18,145	24,534	123	167
Euro area	50	51	41	35	..	13	..	10	15,772	20,101	123	169

a. Based on extrapolated PPPs from the 1993 International Comparison Program. b. Limited coverage. c. Includes Montenegro.

### About the data

At the 2005 World Summit four targets were added to the UN Millennium Declaration. One was full and productive employment and decent work for all, which is seen as the main route for people to escape poverty. The four indicators for this target have an economic focus, and three of them are presented in the table.

The employment to population ratio indicates how efficiently an economy provides jobs for people who want to work. A high ratio means that a large proportion of the population is employed. But this indicator has a gender bias because women who do not consider their work employment or who are not perceived as working tend to be undercounted. This bias has different effects across countries.

Comparability of employment ratios across countries is also affected by variations in definitions of employment and population (see *About the data* for table 2.3). The biggest difference results from the age range used to define labor force activity. The population base for employment ratios can also vary (see table 2.1). Most countries use the resident, noninstitutionalized population of working age living in private households, excluding members of the armed forces and individuals residing in mental, penal, or other types of institutions. But some countries include members of the armed forces in the population base of their employment ratio while still excluding them from employment data (International Labour Organization, *Key Indicators of the Labour Market*, 5th edition).

The proportion of unpaid family workers and own-account workers in total employment is derived from information on status in employment. Each status group faces different economic risks, and unpaid family workers and own-account workers are the most vulnerable—and therefore the most likely to fall into poverty. They are the least likely to have formal work arrangements, are the least likely to have social protection and safety nets to guard against economic shocks, and often are incapable of generating sufficient savings to offset these shocks. A high proportion of unpaid family workers in a country indicates weak development, little job growth, and often a large rural economy.

Data on employment by status are drawn from labor force surveys and household surveys, supplemented by official estimates and censuses for a small group of countries. The labor force survey is the most comprehensive source for international comparable employment, but there are still some limitations for comparing data across countries and over time even

within a country. Information from labor force surveys is not always consistent in terms of what is included in employment. For example, information provided by the Organisation for Economic Co-operation and Development relates only to civilian employment, which can result in an underestimation of “employees” and “workers not classified by status,” especially in countries with large armed forces. While the categories of unpaid family workers and self-employed workers, which include own-account workers, would not be affected, their relative shares would be. Geographic coverage is another factor that can limit cross-country comparisons. The employment by status data for most Latin American countries covers urban areas only. Similarly, in some countries in Sub-Saharan Africa, where limited information is available anyway, the members of producer cooperatives are usually excluded from the self-employed category. For detailed information on definitions and coverage, consult the original source.

Labor productivity, measured as output per person employed, can be used to assess a country's economic ability to create and sustain decent employment opportunities with fair and equitable remuneration. For comparability of individual sectors labor productivity is estimated according to national accounts conventions. However, there are still significant limitations on the availability of reliable data, as the information on consistent series of output in both national currencies and purchasing power parity U.S. dollars is not easily available, especially in developing countries, because the definition, coverage, and methodology are not always consistent across countries. For example, countries employ different methodologies for estimating the missing values for the nonmarket service sectors and use different definitions of the informal sector (see *About the data* for tables 4.1 and 4.14).

### Definitions

• **Employment to population ratio** is the proportion of a country's population that is employed. Ages 15 and older are generally considered the working-age population. Ages 15–24 are generally considered the youth population. • **Vulnerable employment** is unpaid family workers and own-account workers as a percentage of total employment • **Labor productivity** is gross domestic product (GDP) divided by total employment in the economy. Purchasing power parity (PPP) GDP is GDP converted to 1990 international dollars using PPP rates. An international dollar has the same purchasing power over GDP that a U.S. dollar has in the United States.

### Data sources

Data on decent work and productive employment are from the International Labour Organization database *Key Indicators of the Labour Market*, 5th edition.



# 2.5

## Unemployment

	Unemployment						Long-term unemployment			Unemployment by educational attainment		
	Total % of total labor force		Male % of male labor force		Female % of female labor force		Total	% of total unemployment		Primary	% of total unemployment	
	1990-92 <sup>a</sup>	2003-05 <sup>a</sup>	1990-92 <sup>a</sup>	2003-05 <sup>a</sup>	1990-92 <sup>a</sup>	2003-05 <sup>a</sup>		2000-05 <sup>a</sup>	2000-05 <sup>a</sup>		2000-05 <sup>a</sup>	2003-05 <sup>a</sup>
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..
Albania	..	14.4	..	12.4	..	17.5	..	..	..	98.3	..	1.7
Algeria	..	15.3	..	14.9	..	17.5	..	..	..	59.3	23.0	11.4
Angola	..	..	..	..	..	..	..	..	..	..	..	..
Argentina	6.6 <sup>b</sup>	10.2 <sup>b</sup>	6.8 <sup>b</sup>	9.2 <sup>b</sup>	6.3 <sup>b</sup>	12.5 <sup>b</sup>	..	..	..	40.3 <sup>b</sup>	39.8 <sup>b</sup>	18.4 <sup>b</sup>
Armenia	..	..	..	..	..	..	71.6 <sup>b</sup>	72.2 <sup>b</sup>	70.8 <sup>b</sup>	6.2	79.8	14.0
Australia	10.8	5.1	11.4	4.9	10.0	5.3	17.7 <sup>b</sup>	20.2 <sup>b</sup>	14.9 <sup>b</sup>	51.4	29.1	19.3
Austria	3.6	5.2	3.5	4.9	3.8	5.5	25.3	25.6	24.9	35.2 <sup>b</sup>	55.0 <sup>b</sup>	9.6 <sup>b</sup>
Azerbaijan	..	8.6	..	7.6	..	9.5	..	..	..	4.4	30.2	65.4
Bangladesh	1.9	4.3	2.0	4.2	1.9	4.9	..	..	..	..	..	..
Belarus	..	..	..	..	..	..	..	..	..	10.2	40.6	49.1
Belgium	6.7	8.1	4.8	7.4	9.5	9.0	51.6	50.4	52.7	42.1	38.4	19.6
Benin	..	..	..	..	..	..	..	..	..	..	..	..
Bolivia	5.5 <sup>b</sup>	..	5.5 <sup>b</sup>	..	5.6 <sup>b</sup>	..	..	..	..	..	..	..
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..	..	..
Botswana	14.2	23.8	12.1	21.4	17.5	26.3	..	..	..	65.5	27.3	..
Brazil	6.4 <sup>b</sup>	8.9 <sup>b</sup>	5.4 <sup>b</sup>	6.8 <sup>b</sup>	7.9 <sup>b</sup>	11.7 <sup>b</sup>	..	..	..	53.4 <sup>b</sup>	30.4 <sup>b</sup>	3.0 <sup>b</sup>
Bulgaria	..	10.1	..	10.3	..	9.9	..	..	..	38.6	51.0	10.3
Burkina Faso	..	..	..	..	..	..	..	..	..	..	..	..
Burundi	..	..	..	..	..	..	..	..	..	..	..	..
Cambodia	..	..	..	..	..	..	..	..	..	..	..	..
Cameroon	..	..	..	..	..	..	..	..	..	..	..	..
Canada	11.2 <sup>b</sup>	6.8 <sup>b</sup>	12.0 <sup>b</sup>	7.0 <sup>b</sup>	10.2 <sup>b</sup>	6.5 <sup>b</sup>	9.6 <sup>b</sup>	10.1 <sup>b</sup>	9.1 <sup>b</sup>	27.1 <sup>b</sup>	31.2 <sup>b</sup>	41.7 <sup>b</sup>
Central African Republic	..	..	..	..	..	..	..	..	..	..	..	..
Chad	..	..	..	..	..	..	..	..	..	..	..	..
Chile	4.4	6.9	3.9	6.1	5.3	8.5	..	..	..	16.1	58.9	24.5
China	2.3 <sup>b</sup>	4.2 <sup>b</sup>	..	..	..	..	..	..	..	..	..	..
Hong Kong, China	2.0	5.6	2.0	6.5	1.9	4.4	..	..	..	46.3 <sup>b</sup>	39.7 <sup>b</sup>	12.6 <sup>b</sup>
Colombia	9.4 <sup>b</sup>	9.5	6.7 <sup>b</sup>	7.4	13.0 <sup>b</sup>	12.3	..	..	..	58.4	..	15.6
Congo, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Congo, Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Costa Rica	4.0	6.6	3.4	5.0	5.4	9.6	10.9	8.9	13.3	64.0	20.5	12.0
Côte d'Ivoire	6.7	..	..	..	..	..	..	..	..	..	..	..
Croatia	..	11.2 <sup>c</sup>	..	10.1 <sup>c</sup>	..	13.2 <sup>c</sup>	53.7 <sup>c</sup>	52.7 <sup>c</sup>	54.5 <sup>c</sup>	22.0 <sup>c</sup>	69.1 <sup>c</sup>	9.8 <sup>c</sup>
Cuba	..	1.9	..	1.7	..	2.2	..	..	..	50.6	44.7	4.7
Czech Republic	..	7.9	..	6.5	..	9.8	53.6	52.9	54.2	24.1	72.0	4.1
Denmark	9.0	4.8	8.3	4.1	9.9	5.6	25.9	29.7	22.7	27.7	44.8	27.5
Dominican Republic	20.7	17.9	12.0	11.3	35.2	28.8	1.6	2.2	1.3	..	..	..
Ecuador	8.9 <sup>b</sup>	7.7 <sup>b</sup>	6.0 <sup>b</sup>	5.6 <sup>b</sup>	13.2 <sup>b</sup>	10.8 <sup>b</sup>	..	..	..	76.0 <sup>b</sup>	..	22.5 <sup>b</sup>
Egypt, Arab Rep.	9.1	10.7	6.5	6.8	17.3	24.4	..	..	..	..	..	..
El Salvador	7.9 <sup>b</sup>	6.6	8.4 <sup>b</sup>	8.5	7.2 <sup>b</sup>	3.9	..	..	..	..	..	..
Eritrea	..	..	..	..	..	..	..	..	..	..	..	..
Estonia	3.7	7.9	3.9	8.8	3.5	7.1	..	..	..	15.7	64.4	19.9
Ethiopia	..	5.4	..	2.7	..	8.2	24.4	24.3	24.4	35.9	13.3	3.2
Finland	11.7	8.4	13.6	8.2	9.7	8.7	24.9	27.9	21.9	35.5	46.8	17.7
France	10.0 <sup>b</sup>	9.8 <sup>b</sup>	7.9 <sup>b</sup>	9.0 <sup>b</sup>	12.7 <sup>b</sup>	10.8 <sup>b</sup>	42.5	41.8	43.2	40.6	39.4	18.7
Gabon	..	..	..	..	..	..	..	..	..	..	..	..
Gambia, The	..	..	..	..	..	..	..	..	..	..	..	..
Georgia	..	13.8	..	14.8	..	12.7	..	..	..	4.8	56.0	38.8
Germany	6.6	11.1	5.3	11.3	8.4	10.9	54.0	53.8	54.4	27.1	60.5	12.4
Ghana	..	..	..	..	..	..	..	..	..	..	..	..
Greece	7.8	9.6	4.9	5.8	12.9	15.2	53.7	43.1	59.6	30.8	49.7	19.1
Guatemala	3.2 <sup>b</sup>	3.4	2.6 <sup>b</sup>	2.5	4.6 <sup>b</sup>	4.9	..	..	..	..	..	..
Guinea	..	..	..	..	..	..	..	..	..	..	..	..
Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	..	..
Haiti	12.2	..	11.2	..	13.6	..	..	..	..	..	..	..

	Unemployment						Long-term unemployment			Unemployment by educational attainment		
	Total % of total labor force		Male % of male labor force		Female % of female labor force		Total	% of total unemployment		Primary	% of total unemployment	
	1990-92 <sup>a</sup>	2003-05 <sup>a</sup>	1990-92 <sup>a</sup>	2003-05 <sup>a</sup>	1990-92 <sup>a</sup>	2003-05 <sup>a</sup>		Male	Female		2003-05 <sup>a</sup>	Secondary
Honduras	3.2 <sup>b</sup>	4.2 <sup>b</sup>	3.3 <sup>b</sup>	3.2 <sup>b</sup>	3.0 <sup>b</sup>	6.2 <sup>b</sup>	..	..	..	..	..	..
Hungary	9.9	7.2	11.0	7.0	8.7	7.5	46.1	47.9	44.2	30.2	62.2	7.6
India	..	5.0 <sup>b</sup>	..	4.9 <sup>b</sup>	..	5.3 <sup>b</sup>	..	..	..	27.0	41.1	31.9
Indonesia	2.8	10.3 <sup>c</sup>	2.7	8.5 <sup>c</sup>	3.0	13.4 <sup>c</sup>	..	..	..	48.7 <sup>c</sup>	38.0 <sup>c</sup>	6.2 <sup>c</sup>
Iran, Islamic Rep.	11.1	11.5	9.5	10.1	24.4	17.1	..	..	..	41.8	34.7	19.6
Iraq	..	..	..	..	..	..	..	..	..	..	..	..
Ireland	15.2	4.3	15.2	4.6	15.2	3.8	34.3	42.4	21.1	45.0	25.6	26.1
Israel	11.2 <sup>b</sup>	9.0 <sup>b</sup>	9.2 <sup>b</sup>	8.5 <sup>b</sup>	13.9 <sup>b</sup>	9.5 <sup>b</sup>	..	..	..	20.6	48.7	25.9
Italy	11.5	7.7	8.1	6.2	17.3	10.1	52.2	50.5	53.8	48.1	39.4	10.7
Jamaica	15.7	10.9	9.5	7.4	22.8	15.3	31.7	24.4	36.2	12.9	4.2	9.2
Japan	2.2	4.4	2.1	4.6	2.2	4.2	33.3	40.3	22.6	67.7	..	29.9
Jordan	..	12.4	..	11.8	..	16.5	..	..	..	..	..	..
Kazakhstan	..	7.8 <sup>c</sup>	..	6.4 <sup>c</sup>	..	9.2 <sup>c</sup>	..	..	..	7.1 <sup>c</sup>	49.0 <sup>c</sup>	43.9 <sup>c</sup>
Kenya	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	2.5	3.7	2.8	4.0	2.1	3.4	0.8	1.0	0.4	17.4	53.2	29.4
Kuwait	..	1.7	..	..	..	..	..	..	..	..	..	..
Kyrgyz Republic	..	8.5	..	8.0	..	9.3	..	..	..	9.9	79.5	10.7
Lao PDR	..	1.4	..	1.3	..	1.4	..	..	..	..	..	..
Latvia	..	8.7	..	9.0	..	8.4	..	..	..	23.6	65.6	10.7
Lebanon	..	..	..	..	..	..	..	..	..	..	..	..
Lesotho	..	..	..	..	..	..	..	..	..	..	..	..
Liberia	..	..	..	..	..	..	..	..	..	..	..	..
Libya	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	..	8.3	..	8.2	..	8.3	57.8	..	..	16.4	69.5	14.1
Macedonia, FYR	..	37.3	..	36.5	..	38.4	..	..	..	..	..	..
Madagascar	..	5.0	..	3.8	..	6.2	..	..	..	61.5	..	6.1
Malawi	..	..	..	..	..	..	..	..	..	..	..	..
Malaysia	3.7	3.5	..	3.6	..	3.6	..	..	..	32.0	48.8	15.6
Mali	..	8.8	..	7.2	..	10.9	..	..	..	..	..	..
Mauritania	..	..	..	..	..	..	..	..	..	..	..	..
Mauritius	3.1	9.6	3.2	5.8	3.1	16.5	..	..	..	48.6	44.9	5.4
Mexico	3.1	3.5	2.7	3.4	4.0	3.6	2.4 <sup>b</sup>	2.3 <sup>b</sup>	2.6 <sup>b</sup>	51.7	24.4	21.5
Moldova	..	7.3	..	8.7	..	6.0	..	..	..	..	..	..
Mongolia	..	14.2	..	14.3	..	14.1	..	..	..	35.1	45.8	18.5
Morocco	16.0 <sup>b</sup>	9.7 <sup>c</sup>	13.0 <sup>b</sup>	9.7 <sup>c</sup>	25.3 <sup>b</sup>	9.7 <sup>c</sup>	..	..	..	51.1 <sup>b</sup>	22.4 <sup>b</sup>	21.6 <sup>b</sup>
Mozambique	..	..	..	..	..	..	..	..	..	..	..	..
Myanmar	6.0	..	4.7	..	8.8	..	..	..	..	..	..	..
Namibia	19.1	..	19.6	..	18.6	..	..	..	..	..	..	..
Nepal	..	..	..	..	..	..	..	..	..	..	..	..
Netherlands	5.5	5.2	4.3	4.9	7.3	5.6	40.1	44.7	35.0	40.7	39.1	17.9
New Zealand	10.4 <sup>b</sup>	3.7 <sup>b</sup>	11.0 <sup>b</sup>	3.4 <sup>b</sup>	9.6 <sup>b</sup>	4.0 <sup>b</sup>	9.4 <sup>b</sup>	12.6 <sup>b</sup>	6.2 <sup>b</sup>	0.0	52.7	14.4
Nicaragua	14.4	8.0	11.3	7.9	19.4	8.1	..	..	..	..	..	..
Niger	..	..	..	..	..	..	..	..	..	..	..	..
Nigeria	..	..	..	..	..	..	..	..	..	..	..	..
Norway	5.9	4.6	6.6	4.8	5.1	4.4	9.5	10.4	8.5	24.3	54.1	18.9
Oman	..	..	..	..	..	..	..	..	..	..	..	..
Pakistan	5.2	7.7	3.8	6.6	14.0	12.8	..	..	..	13.1	12.3	29.1
Panama	14.7	10.3	10.8	8.1	22.3	14.0	29.3	24.0	35.7	31.7	38.4	29.1
Papua New Guinea	7.7	..	9.0	..	5.9	..	..	..	..	..	..	..
Paraguay	5.0 <sup>b</sup>	7.9 <sup>b</sup>	6.0 <sup>b</sup>	6.6 <sup>b</sup>	3.7 <sup>b</sup>	10.0 <sup>b</sup>	..	..	..	..	..	..
Peru	9.4 <sup>b</sup>	11.4 <sup>b</sup>	7.5 <sup>b</sup>	9.7 <sup>b</sup>	12.5 <sup>b</sup>	13.7 <sup>b</sup>	..	..	..	69.6 <sup>b</sup>	..	30.0 <sup>b</sup>
Philippines	8.6	7.4	7.9	7.4	9.9	7.3	..	..	..	15.2	45.2	38.9
Poland	13.3	17.7	12.2	16.6	14.7	19.1	52.2	51.3	53.1	17.7	74.8	7.6
Portugal	4.1 <sup>b</sup>	7.6	3.5 <sup>b</sup>	6.7	5.0 <sup>b</sup>	8.7	48.6	47.1	49.9	70.2	15.3	10.9
Puerto Rico	17.0	11.3	19.3	12.2	13.3	10.2	..	..	..	..	..	..





	Unemployment						Long-term unemployment			Unemployment by educational attainment		
	Total % of total labor force		Male % of male labor force		Female % of female labor force		Total	% of total unemployment		Primary	% of total unemployment	
	1990-92 <sup>a</sup>	2003-05 <sup>a</sup>	1990-92 <sup>a</sup>	2003-05 <sup>a</sup>	1990-92 <sup>a</sup>	2003-05 <sup>a</sup>		2000-05 <sup>a</sup>	Male 2000-05 <sup>a</sup>		Female 2000-05 <sup>a</sup>	2003-05 <sup>a</sup>
Romania	..	7.2	..	7.7	..	6.4	..	..	..	23.1	69.1	6.6
Russian Federation	5.3	7.9	5.4	7.8	5.2	8.0	..	..	..	..	..	..
Rwanda	..	..	..	..	..	..	..	..	..	..	..	..
Saudi Arabia	..	6.2	..	4.7	..	14.7	..	..	..	12.3	43.9	40.0
Senegal	..	..	..	..	..	..	..	..	..	..	..	..
Serbia	..	15.2 <sup>d</sup>	..	14.4 <sup>d</sup>	..	16.4 <sup>d</sup>	..	..	..	..	..	..
Sierra Leone	..	..	..	..	..	..	..	..	..	..	..	..
Singapore	2.7	4.2	2.7	3.7	2.6	5.0	..	..	..	20.2	25.7	59.2
Slovak Republic	..	16.2	..	15.4	..	17.2	68.1	68.7	67.4	27.1 <sup>b</sup>	68.3 <sup>b</sup>	4.5 <sup>b</sup>
Slovenia	..	5.8	..	5.5	..	6.0	..	..	..	22.4	69.0	8.6
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	..	26.7	..	26.8	..	26.6	..	..	..	50.2	41.0	5.1
Spain	18.1	9.2	13.9	7.0	25.8	12.2	32.6	28.2	36.0	53.9	22.1	23.1
Sri Lanka	13.3 <sup>b</sup>	7.6 <sup>b</sup>	10.1 <sup>b</sup>	5.5 <sup>b</sup>	19.9 <sup>b</sup>	11.9 <sup>b</sup>	..	..	..	41.7 <sup>b</sup>	..	58.3 <sup>b</sup>
Sudan	..	..	..	..	..	..	..	..	..	..	..	..
Swaziland	..	..	..	..	..	..	..	..	..	..	..	..
Sweden	5.7	7.7	6.7	7.8	4.6	7.6	18.9	20.9	16.4	25.9	54.4	17.8
Switzerland	2.8	4.4	2.3	3.9	3.5	5.1	38.8	37.1	40.4	28.6	53.5	17.3
Syrian Arab Republic	..	12.3	..	9.0	..	28.3	..	..	..	..	..	..
Tajikistan	..	..	..	..	..	..	..	..	..	..	..	..
Tanzania	3.6 <sup>b</sup>	..	2.8 <sup>b</sup>	..	4.3 <sup>b</sup>	..	..	..	..	..	..	..
Thailand	1.4	1.3	1.3	1.5	1.5	1.2	..	..	..	39.7	46.3	0.2
Timor-Leste	..	..	..	..	..	..	..	..	..	..	..	..
Togo	..	..	..	..	..	..	..	..	..	..	..	..
Trinidad and Tobago	19.6	8.0	17.0	5.8	23.9	11.0	27.6	20.3	34.7	..	..	..
Tunisia	..	14.2	..	13.1	..	17.3	..	..	..	79.1	..	13.6
Turkey	8.5	10.3	8.8	10.3	7.8	10.3	39.6	36.9	47.4	54.3	28.1	11.4
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	..	3.2	..	2.5	..	3.9	..	..	..	..	..	..
Ukraine	..	7.2	..	7.5	..	6.8	..	..	..	10.9	53.2	35.8
United Arab Emirates	..	..	..	..	..	..	..	..	..	..	..	..
United Kingdom	9.7	4.6	11.5	5.0	7.3	4.1	22.4	26.2	16.9	36.7	46.1	16.2
United States	7.5 <sup>b</sup>	5.1 <sup>b</sup>	7.9 <sup>b</sup>	5.1 <sup>b</sup>	7.0 <sup>b</sup>	5.1 <sup>b</sup>	11.8 <sup>b</sup>	12.6 <sup>b</sup>	10.8 <sup>b</sup>	19.1 <sup>b</sup>	35.5 <sup>b</sup>	45.4 <sup>b</sup>
Uruguay	9.0 <sup>b</sup>	12.2 <sup>b</sup>	6.8 <sup>b</sup>	9.5 <sup>b</sup>	11.8 <sup>b</sup>	15.3 <sup>b</sup>	..	..	..	..	..	..
Uzbekistan	..	..	..	..	..	..	..	..	..	..	..	..
Venezuela, RB	7.7	15.0	8.2	13.4	6.8	17.6	..	..	..	..	..	..
Vietnam	..	2.1	..	1.9	..	2.4	..	..	..	..	..	..
West Bank and Gaza	..	26.8	..	28.1	..	20.1	..	..	..	58.5	13.1	18.9
Yemen, Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Zambia	18.9	..	16.3	..	22.4	..	..	..	..	..	..	..
Zimbabwe	..	..	..	..	..	..	..	..	..	..	..	..
<b>World</b>	<b>.. w</b>	<b>6.7 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>Low income</b>	..	..	..	..	..	..	..	..	..	..	..	..
<b>Middle income</b>	3.9	6.4	..	..	..	..	..	..	..	..	..	..
Lower middle income	3.2	5.7	..	..	..	..	..	..	..	..	..	..
Upper middle income	6.3	9.8	6.0	9.0	7.0	11.4	..	..	..	44.0	41.2	8.7
<b>Low &amp; middle income</b>	..	6.8	..	..	..	..	..	..	..	..	..	..
East Asia & Pacific	2.5	4.9	..	..	..	..	..	..	..	..	..	..
Europe & Central Asia	..	10.0	..	10.0	..	9.9	..	..	..	..	..	..
Latin America & Carib.	6.7	8.9	5.5	7.1	8.4	11.5	..	..	..	56.6	31.9	12.7
Middle East & N. Africa	..	13.8	..	12.8	..	18.7	..	..	..	..	..	..
South Asia	..	5.3	..	5.1	..	6.3	..	..	..	..	..	..
Sub-Saharan Africa	..	..	..	..	..	..	..	..	..	..	..	..
<b>High income</b>	7.4	6.2	7.0	6.0	7.9	6.6	26.4	28.0	24.0	36.3	38.1	29.1
Euro area	9.5	9.0	7.5	8.1	12.5	10.3	45.8	44.6	46.5	45.8	35.5	17.2

a. Data are for the most recent year available. b. Limited coverage. c. Data are for 2006. d. Includes Montenegro and excludes Kosovo and Metohija.

**About the data**

Unemployment and total employment 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 or who have voluntarily left work. Some unemployment is unavoidable. 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; they may also reflect changes in reporting practices. Paradoxically, low unemployment rates can disguise substantial poverty in a country, while high unemployment rates can occur in countries with a high level of economic development and low rates 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 resource allocation.

The ILO definition of unemployment notwithstanding, reference periods, the criteria for people considered to be seeking work, and the treatment of people temporarily laid off or 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 tracked.

Data on unemployment are drawn from labor force sample surveys and general household sample surveys, censuses, and official estimates, which are generally based on information from different sources and can be combined in many ways. Administrative records, such as social insurance statistics and employment office statistics, are not included in the table because of their limitations in coverage. 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. But the age group, geographic coverage, and collection methods could differ by country or change over time within a country. For detailed information, consult the original source.

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 seeking work. Also, women are often responsible for the care of children and the elderly and for household affairs. They may not be available for work during the short reference period, as they need to make arrangements 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 or their active search for more secure employment.

Long-term unemployment is measured by the length of time that an unemployed person has been without work and looking for a job. The data in the table are from labor force surveys. 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 support. The length of time that a person has been unemployed is difficult to measure, because the ability to recall 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.

Unemployment by level of educational attainment provides insights into the relation between the educational attainment of workers and unemployment and may be used to draw inferences about changes in employment demand. Information on educational attainment is the best available indicator of skill levels of the labor force. Besides the limitations to comparability raised for measuring unemployment, the different ways of classifying the education level may also cause inconsistency. Education level is supposed to be classified according to International Standard Classification of Education 1997 (ISCED97). For more information on ISCED97, see *About the data* for table 2.10.

**Definitions**

- **Unemployment** is the share of the labor force without work but available for and seeking employment. Definitions of labor force and unemployment may differ by country (see *About the data*).
- **Long-term unemployment** is 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 educational attainment** is the unemployed by level of educational attainment as a percentage of the total unemployed. The levels of educational attainment accord with the ISCED97 of the United Nations Educational, Scientific, and Cultural Organization.

**Data sources**

Data on unemployment are from the ILO database Key Indicators of the Labour Market, 5th edition.



	Survey year	Economically active children					Employment by economic activity <sup>a</sup>					
		% of children ages 7–14		% of economically active children ages 7–14			Agriculture		% of economically active children ages 7–14		Services	
		Total	Male	Female	Work only	Study and work	Male	Female	Male	Female	Male	Female
Afghanistan		..	..	..	..	..	..	..	..	..	..	..
Albania	2000	36.6	41.1	31.8	43.1	56.9	..	..	..	..	..	..
Algeria		..	..	..	..	..	..	..	..	..	..	..
Angola <sup>b</sup>	2001	30.1	30.0	30.1	26.6	73.4	..	..	..	..	..	..
Argentina	2004	15.1	18.0	12.0	4.1	95.9	..	..	..	..	..	..
Armenia		..	..	..	..	..	..	..	..	..	..	..
Australia		..	..	..	..	..	..	..	..	..	..	..
Austria		..	..	..	..	..	..	..	..	..	..	..
Azerbaijan	2000	9.7	12.0	7.3	4.2	95.8	..	..	..	..	..	..
Bangladesh	2003	17.5	20.9	13.9	63.3	36.7	61.4	64.0	11.6	15.5	25.2	18.3
Belarus		..	..	..	..	..	..	..	..	..	..	..
Belgium		..	..	..	..	..	..	..	..	..	..	..
Benin		..	..	..	..	..	..	..	..	..	..	..
Bolivia	2002	23.2	24.0	22.5	15.2	84.8	78.8	73.4	4.5	3.8	15.5	22.6
Bosnia and Herzegovina	2000	20.2	22.8	17.6	4.0	96.0	..	..	..	..	..	..
Botswana		..	..	..	..	..	..	..	..	..	..	..
Brazil	2004	7.0	9.4	4.6	7.2	92.8	66.2	48.9	5.2	9.7	26.4	40.8
Bulgaria		..	..	..	..	..	..	..	..	..	..	..
Burkina Faso	2004	50.0	49.0	51.0	98.1	1.9	98.4	96.1	0.2	0.5	1.3	3.1
Burundi	2000	37.0	38.4	35.7	48.3	51.7	..	..	..	..	..	..
Cambodia	2001	52.3	52.4	52.1	16.5	83.5	78.5	73.6	4.7	5.4	15.7	20.4
Cameroon <sup>c</sup>	2001	15.9	14.5	17.4	52.5	47.5	90.4	86.3	1.9	2.3	5.1	8.8
Canada		..	..	..	..	..	..	..	..	..	..	..
Central African Republic	2000	67.0	66.5	67.6	54.9	45.1	..	..	..	..	..	..
Chad	2004	60.4	64.4	56.2	59.0	41.0	..	..	..	..	..	..
Chile	2003	4.1	5.1	3.1	3.2	96.8	31.0	12.2	8.2	4.5	57.8	81.5
China		..	..	..	..	..	..	..	..	..	..	..
Hong Kong, China		..	..	..	..	..	..	..	..	..	..	..
Colombia	2005	4.0	6.2	1.8	32.8	67.2	..	..	..	..	..	..
Congo, Dem. Rep.	2000	39.8	39.9	39.8	35.7	64.3	..	..	..	..	..	..
Congo, Rep.		..	..	..	..	..	..	..	..	..	..	..
Costa Rica <sup>c</sup>	2004	5.7	8.1	3.5	44.6	55.4	48.0	19.4	9.5	9.6	40.8	71.1
Côte d'Ivoire	2000	40.7	40.9	40.5	46.4	53.6	..	..	..	..	..	..
Croatia		..	..	..	..	..	..	..	..	..	..	..
Cuba		..	..	..	..	..	..	..	..	..	..	..
Czech Republic		..	..	..	..	..	..	..	..	..	..	..
Denmark		..	..	..	..	..	..	..	..	..	..	..
Dominican Republic <sup>c</sup>	2002	3.5	5.9	0.9	11.4	88.6	..	..	..	..	..	..
Ecuador	2004	12.0	14.6	9.3	27.0	73.0	71.2	68.0	5.0	4.1	21.1	27.8
Egypt, Arab Rep.	2005	7.9	11.5	4.3	21.0	79.0	..	..	..	..	..	..
El Salvador	2003	12.7	17.1	8.1	19.5	80.5	66.4	17.6	10.8	16.1	21.2	66.3
Eritrea		..	..	..	..	..	..	..	..	..	..	..
Estonia		..	..	..	..	..	..	..	..	..	..	..
Ethiopia	2005	56.0	64.3	47.1	69.4	30.6	96.8	91.4	0.6	2.8	2.4	5.6
Finland		..	..	..	..	..	..	..	..	..	..	..
France		..	..	..	..	..	..	..	..	..	..	..
Gabon		..	..	..	..	..	..	..	..	..	..	..
Gambia, The	2000	25.3	25.4	25.3	41.6	58.4	..	..	..	..	..	..
Georgia		..	..	..	..	..	..	..	..	..	..	..
Germany		..	..	..	..	..	..	..	..	..	..	..
Ghana	2003	6.0	6.0	5.9	71.2	28.8	89.0	67.9	1.5	4.1	7.5	23.5
Greece		..	..	..	..	..	..	..	..	..	..	..
Guatemala	2003	21.1	26.2	16.0	33.8	66.2	74.2	43.0	6.0	20.1	16.5	36.9
Guinea	1994	48.3	47.2	49.5	98.6	1.4	..	..	..	..	..	..
Guinea-Bissau	2000	67.5	67.4	67.5	63.7	36.3	..	..	..	..	..	..
Haiti	2005	33.4	37.3	29.6	17.7	82.3	..	..	..	..	..	..

	Survey year	Economically active children					Employment by economic activity <sup>a</sup>					
		Total	% of children ages 7–14		% of economically active children ages 7–14		Agriculture		% of economically active children ages 7–14		Services	
			Male	Female	Work only	Study and work	Male	Female	Male	Female	Male	Female
Honduras	2004	6.8	10.4	3.2	48.6	51.4	76.9	20.2	5.3	17.9	13.9	59.4
Hungary		..	..	..	..	..	..	..	..	..	..	..
India	2000	5.2	5.3	5.1	89.8	10.2	70.5	76.6	10.0	15.4	15.9	6.5
Indonesia	2000	8.9	8.8	9.1	24.9	75.1	..	..	..	..	..	..
Iran, Islamic Rep.		..	..	..	..	..	..	..	..	..	..	..
Iraq		..	..	..	..	..	..	..	..	..	..	..
Ireland		..	..	..	..	..	..	..	..	..	..	..
Israel		..	..	..	..	..	..	..	..	..	..	..
Italy		..	..	..	..	..	..	..	..	..	..	..
Jamaica	2002	1.1	1.5	0.6	17.1	82.9	36.8	17.1	6.2	11.6	43.6	71.3
Japan		..	..	..	..	..	..	..	..	..	..	..
Jordan		..	..	..	..	..	..	..	..	..	..	..
Kazakhstan	1996	29.7	30.3	29.1	4.4	95.6	..	..	..	..	..	..
Kenya	1999	6.7	6.9	6.4	44.8	55.2	87.3	74.4	2.5	0.3	8.8	25.3
Korea, Dem. Rep.		..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.		..	..	..	..	..	..	..	..	..	..	..
Kuwait		..	..	..	..	..	..	..	..	..	..	..
Kyrgyz Republic	1998	8.6	9.7	7.6	7.0	93.0	93.0	96.3	0.0	0.0	7.0	2.7
Lao PDR		..	..	..	..	..	..	..	..	..	..	..
Latvia		..	..	..	..	..	..	..	..	..	..	..
Lebanon		..	..	..	..	..	..	..	..	..	..	..
Lesotho	2000	30.8	34.2	27.5	17.6	82.4	..	..	..	..	..	..
Liberia		..	..	..	..	..	..	..	..	..	..	..
Libya		..	..	..	..	..	..	..	..	..	..	..
Lithuania		..	..	..	..	..	..	..	..	..	..	..
Macedonia, FYR		..	..	..	..	..	..	..	..	..	..	..
Madagascar	2001	25.6	26.1	25.1	85.1	14.9	94.1	93.9	0.6	1.4	2.0	2.9
Malawi	2004	42.6	45.0	40.3	13.9	86.1	..	..	..	..	..	..
Malaysia		..	..	..	..	..	..	..	..	..	..	..
Mali	2005	70.9	71.2	70.7	53.3	46.7	78.4	41.8	1.4	3.2	19.6	54.6
Mauritania		..	..	..	..	..	..	..	..	..	..	..
Mauritius		..	..	..	..	..	..	..	..	..	..	..
Mexico <sup>d</sup>	2004	8.9	12.2	5.6	34.1	65.9	46.4	20.6	12.6	11.5	38.6	68.0
Moldova	2000	33.5	34.1	32.8	3.8	96.2	..	..	..	..	..	..
Mongolia	2000	22.0	23.5	20.6	28.2	71.8	..	..	..	..	..	..
Morocco	1998–99	13.2	13.5	12.8	93.2	6.8	60.8	60.3	8.1	8.5	13.5	6.4
Mozambique		..	..	..	..	..	..	..	..	..	..	..
Myanmar		..	..	..	..	..	..	..	..	..	..	..
Namibia	1999	15.4	16.2	14.7	9.5	90.5	91.5	91.7	0.4	0.4	8.1	8.0
Nepal	1999	47.2	42.2	52.4	35.6	64.4	89.0	86.1	1.2	1.5	9.7	12.3
Netherlands		..	..	..	..	..	..	..	..	..	..	..
New Zealand		..	..	..	..	..	..	..	..	..	..	..
Nicaragua	2001	12.1	17.5	6.5	33.3	66.7	73.2	32.0	3.0	10.2	23.3	57.8
Niger		..	..	..	..	..	..	..	..	..	..	..
Nigeria		..	..	..	..	..	..	..	..	..	..	..
Norway		..	..	..	..	..	..	..	..	..	..	..
Oman		..	..	..	..	..	..	..	..	..	..	..
Pakistan		..	..	..	..	..	..	..	..	..	..	..
Panama <sup>c</sup>	2003	5.1	7.7	2.2	38.4	61.6	62.0	41.3	2.5	5.2	34.0	53.5
Papua New Guinea		..	..	..	..	..	..	..	..	..	..	..
Paraguay <sup>c</sup>	2005	15.3	22.6	7.7	24.2	75.7	69.8	33.9	6.0	6.9	34.0	59.3
Peru	2000	24.1	25.7	22.3	4.8	95.2	75.4	69.1	3.1	2.5	21.2	28.4
Philippines	2001	13.3	16.3	10.0	14.8	85.2	72.6	53.6	3.6	5.3	22.1	41.0
Poland		..	..	..	..	..	..	..	..	..	..	..
Portugal	2001	3.6	4.6	2.6	3.6	96.4	52.7	40.7	11.4	10.7	25.6	47.7
Puerto Rico		..	..	..	..	..	..	..	..	..	..	..



# 2.6

## Children at work

	Survey year	Economically active children					Employment by economic activity <sup>a</sup>					
		% of children ages 7–14		% of economically active children ages 7–14			Agriculture		% of economically active children ages 7–14		Services	
		Total	Male	Female	Work only	Study and work	Male	Female	Male	Female	Male	Female
Romania	2000	1.4	1.7	1.1	20.7	79.3	96.4	98.1	0.0	0.0	2.6	1.9
Russian Federation		..	..	..	..	..	..	..	..	..	..	..
Rwanda	2000	33.1	36.1	30.3	27.5	72.5	..	..	..	..	..	..
Saudi Arabia		..	..	..	..	..	..	..	..	..	..	..
Senegal	2005	18.5	24.4	12.6	61.9	38.1	85.2	67.0	6.5	2.3	6.7	28.5
Serbia		..	..	..	..	..	..	..	..	..	..	..
Sierra Leone	2000	65.0	64.7	65.4	53.8	46.2	..	..	..	..	..	..
Singapore		..	..	..	..	..	..	..	..	..	..	..
Slovak Republic		..	..	..	..	..	..	..	..	..	..	..
Slovenia		..	..	..	..	..	..	..	..	..	..	..
Somalia		..	..	..	..	..	..	..	..	..	..	..
South Africa	1999	27.7	29.0	26.4	5.1	94.9	..	..	..	..	..	..
Spain		..	..	..	..	..	..	..	..	..	..	..
Sri Lanka	1998	17.0	20.4	13.4	5.4	94.6	71.1	71.4	12.0	15.0	15.8	13.5
Sudan <sup>e</sup>	2000	19.1	21.5	16.8	55.9	44.1	..	..	..	..	..	..
Swaziland	2000	11.2	11.4	10.9	14.0	86.0	..	..	..	..	..	..
Sweden		..	..	..	..	..	..	..	..	..	..	..
Switzerland		..	..	..	..	..	..	..	..	..	..	..
Syrian Arab Republic		..	..	..	..	..	..	..	..	..	..	..
Tajikistan <sup>f</sup>	1999	7.3	7.9	6.8	11.2	88.8	23.8	35.3	..	..	76.2	64.7
Tanzania	2001	40.4	41.5	39.2	40.0	60.0	83.5	73.1	0.1	0.2	16.3	26.7
Thailand		..	..	..	..	..	..	..	..	..	..	..
Timor-Leste		..	..	..	..	..	..	..	..	..	..	..
Togo	2006	39.6	40.5	38.5	30.2	69.8	89.7	77.2	0.9	1.5	8.3	20.8
Trinidad and Tobago	2000	3.9	5.2	2.8	12.8	87.2	..	..	..	..	..	..
Tunisia		..	..	..	..	..	..	..	..	..	..	..
Turkey	1999	4.5	5.2	3.8	66.8	33.2	52.7	83.4	19.9	10.2	10.2	1.8
Turkmenistan		..	..	..	..	..	..	..	..	..	..	..
Uganda	2005–06	38.2	39.8	36.5	7.7	92.3	96.0	94.9	1.0	1.7	2.7	3.3
Ukraine		..	..	..	..	..	..	..	..	..	..	..
United Arab Emirates		..	..	..	..	..	..	..	..	..	..	..
United Kingdom		..	..	..	..	..	..	..	..	..	..	..
United States		..	..	..	..	..	..	..	..	..	..	..
Uruguay		..	..	..	..	..	..	..	..	..	..	..
Uzbekistan	2000	18.1	22.0	14.0	4.1	95.9	..	..	..	..	..	..
Venezuela, RB <sup>c</sup>	2003	9.1	11.4	6.6	17.6	82.4	35.2	9.2	7.3	9.5	53.9	81.0
Vietnam		..	..	..	..	..	..	..	..	..	..	..
West Bank and Gaza		..	..	..	..	..	..	..	..	..	..	..
Yemen, Rep.	1999	13.1	12.4	14.0	64.3	35.7	87.2	96.6	1.2	0.8	10.8	1.8
Zambia	2005	47.9	48.9	46.8	25.9	74.1	96.5	95.3	0.7	0.5	2.8	4.2
Zimbabwe	1999	14.3	15.3	13.3	12.0	88.0	..	..	..	..	..	..

a. Shares by major industrial category may not sum to 100 percent because of a residual category not included in the table. b. Covers only Angola-secured territory. c. Covers children ages 10–14. d. Covers children ages 12–14. e. Covers northern Sudan only. f. Covers children ages 11–14.

## About the data

The indicators in the table refer to children's economic activity, a broader concept than child labor. According to a gradually emerging consensus, child labor is a subset of children's economic activity. Based on International Labour Organization (ILO) Conventions 138 and 182, child labor is work that is damaging to the child and therefore targeted for elimination.

In line with the definition of economic activity adopted by the Thirteenth International Conference of Labour Statisticians and set by the 1993 United Nations System of National Accounts, the threshold for classifying a person as employed is spending at least one hour during the reference period in the production of goods and services. Economic activity covers all market production and certain types of nonmarket production, including the production of goods for own use. It excludes household chores performed in one's own household.

The data used to develop the indicators are from household surveys conducted by the ILO, the United Nations Children's Fund (UNICEF), the World Bank, and national statistical offices. These surveys yield data on education, employment, health, expenditure, and consumption that relate to child work.

Household survey data generally include information on work type—for example, whether a child is working for pay in cash or in kind or is involved in unpaid work, whether a child is working for someone who is not a member of the household, whether a child is involved in any type of family work (on the farm or in a business), and the like. The age used in country surveys to define child labor ranges from 5 to 17 years old. The data in the table have been

recalculated to present statistics for children ages 7–14.

Although efforts are made to harmonize the definition of employment and the questions on employment used in survey questionnaires, substantial differences remain among the survey instruments used to collect data on working children and the sampling design underlying these surveys. Differences exist not only among different household surveys in the same country, but also within the same type of survey carried out in different countries.

Because of differences in the underlying survey instruments and survey dates, estimates of working children are not fully comparable across countries. Great caution should be exercised in drawing conclusions concerning relative levels of child economic activity across countries or regions based on the published data.

The table aggregates the distribution of working children by the industrial categories of the International Standard Industrial Classification (ISIC): agriculture, industry, and services. A residual category, which includes mining and quarrying; electricity, gas, and water; construction; extraterritorial organization; and other inadequately defined activities, is not presented in the table, and so the broad groups do not add up to 100 percent. The use of either ISIC revision 2 or revision 3 is strictly related to the codification applied by each country in describing the economic activity. The use of two different classifications does not affect the definition of the groups presented in the table.

## Definitions

- **Survey year** is the year in which the underlying data were collected.
- **Economically active children** are children involved in economic activity for at least one hour in the reference week of the survey.
- **Work only** refers to children involved in economic activity and not attending school.
- **Study and work** refer to children attending school in combination with economic activity.
- **Employment by economic activity** is the distribution of economically active children by the major industrial categories (ISIC revision 2 or revision 3).
- **Agriculture** corresponds to division 1 (ISIC revision 2) or categories A and B (ISIC revision 3) and includes agriculture and hunting, forestry and logging, and fishing.
- **Manufacturing** corresponds to division 3 (ISIC revision 2) or category D (ISIC revision 3).
- **Services** correspond to divisions 6–9 (ISIC revision 2) or categories G–P (ISIC revision 3) and include wholesale and retail trade, hotels and restaurants, transport, financial intermediation, real estate, public administration, education, health and social work, other community services, and private household activity.

### In developing countries the majority of child workers ages 5–14 are involved in unpaid family work

2.6a



The incidence of child work varies substantially by country, as does status in employment for working children. A majority of children are unpaid family workers, with self-employed workers the next largest group.

Source: Understanding Children's Work.

## Data sources

Data on children at work are estimates produced by the Understanding Children's Work project based on household survey data sets made available by the ILO's International Programme on the Elimination of Child Labour under its Statistical Monitoring Programme on Child Labour, UNICEF under its Multiple Indicator Cluster Survey program, the World Bank under its Living Standards Measurement Study program, and national statistical offices. Information on how the data were collected and some indication of their reliability can be found at [www.ilo.org/public/english/standards/ipecc/simpc/](http://www.ilo.org/public/english/standards/ipecc/simpc/), [www.childinfo.org](http://www.childinfo.org), and [www.worldbank.org/lsm](http://www.worldbank.org/lsm). Detailed country statistics can be found at [www.ucw-project.org](http://www.ucw-project.org).



	Population below national poverty line								Poverty gap at national poverty line			
	Survey year	Rural	% Urban	National	Survey year	Rural	% Urban	National	Survey year	Rural	% Urban	National
Afghanistan		..	..	..		..	..	..		..	..	..
Albania	2002	29.6	19.8	25.4		..	..	..	2002	6.6	..	5.7
Algeria	1988	16.6	7.3	12.2	1995	30.3	14.7	22.6	1995	4.5	1.8	3.2
Angola		..	..	..		..	..	..		..	..	..
Argentina	1995	..	28.4	..	1998	..	29.9	..	1998	..	11.6	..
Armenia	1998-99	50.8	58.3	55.1	2001	48.7	51.9	50.9	2001	..	..	15.1
Australia		..	..	..		..	..	..		..	..	..
Austria		..	..	..		..	..	..		..	..	..
Azerbaijan	1995	..	..	68.1	2001	42.0	55.0	49.6	2001	..	..	15.5
Bangladesh	1995-96	55.2	29.4	51.0	2000	53.0	36.6	49.8	2000	13.8	9.5	12.9
Belarus	2000	..	..	41.9	2002	..	..	18.5	2002	..	..	20.0
Belgium		..	..	..		..	..	..		..	..	..
Benin	1995	25.2	28.5	26.5	1999	33.0	23.3	29.0	1999	9.4	6.9	..
Bolivia	1999	84.0	51.4	63.5	2002	83.5	53.9	65.2	2002	43.4	23.8	31.2
Bosnia and Herzegovina	2001-02	19.9	13.8	19.5		..	..	..	2001-02	4.9	2.8	4.6
Botswana		..	..	..		..	..	..		..	..	..
Brazil	1998	51.4	14.7	22.0	2002-03	41.0	17.5	21.5	2002-03	28.4	17.8	19.6
Bulgaria	1997	..	..	36.0	2001	..	..	12.8	2001	..	..	4.2
Burkina Faso	1998	61.1	22.4	54.6	2003	52.4	19.2	46.4	2003	17.6	5.1	15.3
Burundi	1998	64.6	66.5	68.0		..	..	..		..	..	..
Cambodia	1994	..	..	47.0	2004	38.0	18.0	35.0	2004	7.8	1.2	6.7
Cameroon	1996	59.6	41.4	53.3	2001	49.9	22.1	40.2		..	..	..
Canada		..	..	..		..	..	..		..	..	..
Central African Republic		..	..	..		..	..	..		..	..	..
Chad	1995-96	48.6	..	43.4		..	..	..	1995-96	26.3	..	27.5
Chile	1996	..	..	19.9	1998	..	..	17.0	1998	..	..	5.7
China	1998	4.6	..	4.6	2004	..	..	2.8		..	..	..
Hong Kong, China		..	..	..		..	..	..		..	..	..
Colombia	1995	79.0	48.0	60.0	1999	79.0	55.0	64.0	1999	44.0	26.0	34.0
Congo, Dem. Rep.		..	..	..		..	..	..		..	..	..
Congo, Rep.		..	..	..		..	..	..		..	..	..
Costa Rica	1992	25.5	19.2	22.0	2004	28.3	20.8	23.9	2004	10.8	7.0	8.6
Côte d'Ivoire		..	..	..		..	..	..		..	..	..
Croatia		..	..	..		..	..	..		..	..	..
Cuba		..	..	..		..	..	..		..	..	..
Czech Republic		..	..	..		..	..	..		..	..	..
Denmark		..	..	..		..	..	..		..	..	..
Dominican Republic	2000	45.3	18.2	27.7	2004	55.7	34.7	42.2	2004	24.0	12.9	16.8
Ecuador	1995	56.0	19.0	34.0	1998	69.0	30.0	46.0	1998	29.0	9.0	18.0
Egypt, Arab Rep.	1995-96	23.3	22.5	22.9	1999-2000	..	..	16.7	1999-2000	..	..	3.0
El Salvador	1995	64.8	38.9	50.6	2002	49.8	28.5	37.2	2002	24.2	11.1	16.5
Eritrea	1993-94	..	..	53.0		..	..	..		..	..	..
Estonia	1995	14.7	6.8	8.9		..	..	..	1995	6.6	1.8	3.1
Ethiopia	1995-96	47.0	33.3	45.5	1999-2000	45.0	37.0	44.2	1999-2000	12.0	10.0	12.0
Finland		..	..	..		..	..	..		..	..	..
France		..	..	..		..	..	..		..	..	..
Gabon		..	..	..		..	..	..		..	..	..
Gambia, The	1998	61.0	48.0	57.6	2003	63.0	57.0	61.3	2003	..	..	25.9
Georgia	2002	55.4	48.5	52.1	2003	52.7	56.2	54.5		..	..	..
Germany		..	..	..		..	..	..		..	..	..
Ghana	1998-99	49.6	19.4	39.5	2005-06	39.2	10.8	28.5	2005-06	13.5	3.1	9.6
Greece		..	..	..		..	..	..		..	..	..
Guatemala	1989	71.9	33.7	57.9	2000	74.5	27.1	56.2	2000	..	..	22.6
Guinea	1994	..	..	40.0		..	..	..		..	..	..
Guinea-Bissau	2002	..	52.6	65.7		..	..	..	2000	..	17.5	25.7
Haiti	1987	..	..	65.0	1995	66.0	..	..		..	..	..

	Population below national poverty line								Poverty gap at national poverty line			
	Survey year	Rural	% Urban	National	Survey year	Rural	% Urban	National	Survey year	Rural	% Urban	National
Honduras	1998–99	71.2	28.6	52.5	2004	70.4	29.5	50.7	2004	34.5	9.1	22.3
Hungary	1993	..	..	14.5	1997	..	..	17.3	1997	4.1	..	..
India	1993–94	37.3	32.4	36.0	1999–2000	30.2	24.7	28.6	1999–2000	5.6	6.9	..
Indonesia	1996	..	..	17.5	2004	..	..	16.7	2004	..	..	2.9
Iran, Islamic Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Iraq	..	..	..	..	..	..	..	..	..	..	..	..
Ireland	..	..	..	..	..	..	..	..	..	..	..	..
Israel	..	..	..	..	..	..	..	..	..	..	..	..
Italy	..	..	..	..	..	..	..	..	..	..	..	..
Jamaica	1995	37.0	18.7	27.5	2000	25.1	12.8	18.7	..	..	..	..
Japan	..	..	..	..	..	..	..	..	..	..	..	..
Jordan	1997	27.0	19.7	21.3	2002	18.7	12.9	14.2	2002	4.7	2.9	3.3
Kazakhstan	2001	..	..	17.6	2002	..	..	15.4	2002	4.5	2.0	3.1
Kenya	1994	47.0	29.0	40.0	1997	53.0	49.0	52.0	..	..	..	..
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Kuwait	..	..	..	..	..	..	..	..	..	..	..	..
Kyrgyz Republic	2003	57.5	35.7	49.9	2005	50.8	29.8	43.1	2005	12.0	7.0	10.0
Lao PDR	1997–98	41.0	26.9	38.6	2002–03	..	..	33.0	2002–03	..	..	8.0
Latvia	2002	11.6	..	7.5	2004	12.7	..	5.9	2004	..	..	1.2
Lebanon	..	..	..	..	..	..	..	..	..	..	..	..
Lesotho	1993	53.9	27.8	49.2	1999	..	..	68.0	..	..	..	..
Liberia	..	..	..	..	..	..	..	..	..	..	..	..
Libya	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	..	..	..	..	..	..	..	..	..	..	..	..
Macedonia, FYR	2002	25.3	..	21.4	2003	22.3	..	21.7	2003	6.5	..	6.7
Madagascar	1997	76.0	63.2	73.3	1999	76.7	52.1	71.3	1999	36.1	21.4	32.8
Malawi	1990–91	..	..	54.0	1997–98	66.5	54.9	65.3	..	..	..	..
Malaysia	1989	..	..	15.5	..	..	..	..	..	..	..	..
Mali	1998	75.9	30.1	63.8	..	..	..	..	..	..	..	..
Mauritania	1996	65.5	30.1	50.0	2000	61.2	25.4	46.3	..	..	..	..
Mauritius	..	..	..	..	..	..	..	..	..	..	..	..
Mexico	2002	34.8	11.4	20.3	2004	27.9	11.3	17.6	2002	12.2	2.8	6.3
Moldova	2001	64.1	58.0	62.4	2002	67.2	42.6	48.5	2002	..	..	16.5
Mongolia	1998	32.6	39.4	35.6	2002	43.4	30.3	36.1	2002	13.2	9.2	11.0
Morocco	1990–91	18.0	7.6	13.1	1998–99	27.2	12.0	19.0	1998–99	6.7	2.5	4.4
Mozambique	1996–97	71.3	62.0	69.4	2002–03	55.3	51.5	54.1	2002–03	20.9	19.7	20.5
Myanmar	..	..	..	..	..	..	..	..	..	..	..	..
Namibia	..	..	..	..	..	..	..	..	..	..	..	..
Nepal	1995–96	43.3	21.6	41.8	2003–04	34.6	9.6	30.9	2003–04	8.5	2.2	7.5
Netherlands	..	..	..	..	..	..	..	..	..	..	..	..
New Zealand	..	..	..	..	..	..	..	..	..	..	..	..
Nicaragua	1998	68.5	30.5	47.9	2001	64.3	28.7	45.8	2001	25.9	8.7	17.0
Niger	1989–93	66.0	52.0	63.0	..	..	..	..	..	..	..	..
Nigeria	1985	49.5	31.7	43.0	1992–93	36.4	30.4	34.1	..	..	..	..
Norway	..	..	..	..	..	..	..	..	..	..	..	..
Oman	..	..	..	..	..	..	..	..	..	..	..	..
Pakistan	1993	33.4	17.2	28.6	1998–99	35.9	24.2	32.6	1998–99	7.9	5.0	7.0
Panama	1997	64.9	15.3	37.3	..	..	..	..	1997	32.1	3.9	16.4
Papua New Guinea	1996	41.3	16.1	37.5	..	..	..	..	1996	13.8	4.3	12.4
Paraguay <sup>a</sup>	1990	28.5	19.7	20.5	..	..	..	..	1990	10.5	5.6	6.0
Peru	2001	77.1	42.0	54.3	2004	72.1	42.9	53.1	2004	28.3	12.4	18.0
Philippines	1994	45.4	18.6	32.1	1997	36.9	11.9	25.1	1997	10.0	2.6	6.4
Poland	1996	..	..	14.6	2001	..	..	14.8	..	..	..	..
Portugal	..	..	..	..	..	..	..	..	..	..	..	..
Puerto Rico	..	..	..	..	..	..	..	..	..	..	..	..





# 2.7 | Poverty

	Population below national poverty line								Poverty gap at national poverty line			
	Survey year	Rural	% Urban	National	Survey year	Rural	% Urban	National	Survey year	Rural	% Urban	National
Romania	1995	..	..	25.4	2002	..	..	28.9	2002	..	..	7.6
Russian Federation	1998	..	..	31.4	2002	..	..	19.6	2002	..	..	5.1
Rwanda	1993	..	..	51.2	1999–2000	65.7	14.3	60.3	..	..	..	..
Saudi Arabia	..	..	..	..	..	..	..	..	..	..	..	..
Senegal	1992	40.4	23.7	33.4	..	..	..	..	1992	16.4	3.1	13.9
Serbia	..	..	..	..	..	..	..	..	..	..	..	..
Sierra Leone	1989	..	..	82.8	2003–04	79.0	56.4	70.2	2003–04	34.0	..	29.0
Singapore	..	..	..	..	..	..	..	..	..	..	..	..
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	..
Slovenia	..	..	..	..	..	..	..	..	..	..	..	..
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	..	..	..	..	..	..	..	..	..	..	..	..
Spain	..	..	..	..	..	..	..	..	..	..	..	..
Sri Lanka	1995–96	27.0	15.0	25.0	2002	7.9	24.7	22.7	2002	..	..	5.1
Sudan	..	..	..	..	..	..	..	..	..	..	..	..
Swaziland	2000–01	75.0	49.0	69.2	..	..	..	..	2000–01	..	..	32.9
Sweden	..	..	..	..	..	..	..	..	..	..	..	..
Switzerland	..	..	..	..	..	..	..	..	..	..	..	..
Syrian Arab Republic	..	..	..	..	..	..	..	..	..	..	..	..
Tajikistan	1999	..	..	74.9	2003	..	..	44.4	2003	..	..	12.7
Tanzania	1991	40.8	31.2	38.6	2000–01	38.7	29.5	35.7	..	..	..	..
Thailand	1994	..	..	9.8	1998	..	..	13.6	1998	..	..	3.0
Timor-Leste	2001	..	..	39.7	..	..	..	..	2001	..	..	11.9
Togo	1987–89	..	..	32.3	..	..	..	..	1987–89	..	..	10.0
Trinidad and Tobago	1992	20.0	24.0	21.0	..	..	..	..	1992	6.2	7.4	7.3
Tunisia	1990	13.1	3.5	7.4	1995	13.9	3.6	7.6	1990	3.3	0.9	1.7
Turkey	1994	..	..	28.3	2002	34.5	22.0	27.0	2002	..	..	0.3
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	1999–2000	37.4	9.6	33.8	2002–03	41.7	12.2	37.7	2002–03	12.6	3.0	11.3
Ukraine	2000	34.9	..	31.5	2003	28.4	..	19.5	..	..	..	..
United Arab Emirates	..	..	..	..	..	..	..	..	..	..	..	..
United Kingdom	..	..	..	..	..	..	..	..	..	..	..	..
United States	..	..	..	..	..	..	..	..	..	..	..	..
Uruguay	1994	..	20.2	..	1998	..	24.7	..	1998	..	8.6	..
Uzbekistan	2000	30.5	22.5	27.5	..	..	..	..	..	..	..	..
Venezuela, RB	1989	..	..	31.3	..	..	..	..	1989	..	24.0	..
Vietnam	1998	45.5	9.2	37.4	2002	35.6	6.6	28.9	2002	8.7	1.3	6.9
West Bank and Gaza	..	..	..	..	..	..	..	..	..	..	..	..
Yemen, Rep.	1998	45.0	30.8	41.8	..	..	..	..	1998	14.7	8.2	13.2
Zambia	1998	83.1	56.0	72.9	2004	78.0	53.0	68.0	2004	44.0	22.0	36.0
Zimbabwe	1990–91	35.8	3.4	25.8	1995–96	48.0	7.9	34.9	..	..	..	..

a. Covers Asunción metropolitan area only.

## About the data

The World Bank periodically prepares poverty assessments for member countries in which it has an active program in close collaboration with national institutions, other development agencies, and civil society groups, including poor people's organizations. Poverty assessments assess the extent and causes of poverty and propose strategies to reduce it. Since 1992 the World Bank has conducted about 180 poverty assessments, which are the source of all poverty estimates based on national poverty lines presented in the table.

The World Bank published its first systematic review of poverty for developing countries in *World Development Report 1990* using household survey data for 22 countries (Ravallion, Datt, and van de Walle 1991). Since then the number of countries that field such surveys has increased considerably, as have the frequency of the surveys and the quality of the data. Household survey data sets rose dramatically from 10 between 1979 and 1981 to 111 between 2000 and 2002. Fewer surveys are available after 2002, reflecting the lag between data collection and availability for analysis, not a reduction in collection effort. Coverage is improving in all regions, but Sub-Saharan Africa continues to lag, with only 21 of 48 countries having at least one data set available since 2000. Overall more than 550 surveys representing about 100 developing countries are now included in the World Bank's data sets. Some 1.1 million randomly sampled households were interviewed in these surveys, representing 93 percent of the population of developing countries. A complete overview of data availability by year and country is available at <http://iresearch.worldbank.org/povcalnet/>.

These household surveys ask detailed questions on sources of income and how income was spent and on household characteristics such as the number of people sharing that income. Most interviews are conducted by staff of government statistics offices. As data coverage and quality have improved, so has the underlying methodology, resulting in more comprehensive estimates.

Estimating poverty and comparing poverty rates is difficult. In addition to survey data availability are data quality issues that arise in measuring household living standards. One concerns 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 living standards. And income can vary over time even if living standards do not. But consumption data are not always available. Another issue is that household

surveys can differ widely. Even similar surveys may not be strictly comparable because of differences in timing or in the quality and training of 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, but valuation methods vary.

The statistics reported here are based on consumption data or, when unavailable, on income surveys. Analysis of some 20 countries for which income and consumption expenditure data were both available from the same surveys found income to yield a higher mean than consumption but also found higher inequality. When poverty measures based on consumption and income were compared, the two effects roughly cancelled each other out: there was no significant statistical difference.

### International poverty lines and the 2005 International Comparison Project

This year's table does not include poverty estimates using the international poverty lines of \$1 a day and \$2 a day, which were based on 1993 purchasing power parities (PPPs). The International Comparison Program recently released new PPP estimates benchmarked to 2005 (see introduction to *World View*). Poverty estimates using new international poverty lines based on PPPs will be published later as a supplement to *World Development Indicators*.

### Do it yourself: PovcalNet

The World Bank's Development Research Group developed *PovcalNet*, an interactive Web-based tool that allows users to replicate the calculations by the World Bank's researchers in estimating absolute poverty in the world. *PovcalNet* is self-contained and powered by built-in software that performs the calculations from a primary database. The underlying software can also be downloaded from the *PovcalNet* 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 is 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, users can specify different poverty lines and aggregate the estimates using alternative country groupings (for example, UN groupings or groupings based on average incomes) or a selected set of individual countries. *PovcalNet* is available online at <http://iresearch.worldbank.org/povcalnet/>. It will be updated using the 2005 PPP results along with the *World Development Indicators* supplemental publication later this year.

## Definitions

- **Survey year** is the year in which the underlying data were collected.
- **Rural population below national poverty line** is the percentage of the rural population living below the national rural poverty line.
- **Urban population below national poverty line** is the percentage of the urban population living below the national urban poverty line.
- **National population below national poverty line** is the percentage of the country's population living below the national poverty line. National estimates are based on population-weighted subgroup estimates from household surveys.
- **Poverty gap at national poverty line** is the mean shortfall from the poverty line (counting the nonpoor as having zero shortfall) 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 World Bank's country poverty assessments. For details on data sources and methods used in deriving the World Bank's latest estimates, see Chen and Ravallion's "How Have the World's Poorest Fared Since the Early 1980s?"



	Survey year	Gini index	Percentage share of income or consumption <sup>a</sup>						
			Lowest 10%	Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%	Highest 10%
Afghanistan		..	..	..	..	..	..	..	..
Albania	2004 <sup>b</sup>	31.1	3.4	8.2	12.6	17.0	22.6	39.5	24.4
Algeria	1995 <sup>b</sup>	35.3	2.8	7.0	11.6	16.1	22.7	42.6	26.8
Angola		..	..	..	..	..	..	..	..
Argentina <sup>c</sup>	2004 <sup>d</sup>	51.3	0.9	3.1	7.6	12.8	21.1	55.4	38.2
Armenia	2003 <sup>b</sup>	33.8	3.6	8.5	12.3	15.7	20.6	42.8	29.0
Australia	1994 <sup>d</sup>	35.2	2.0	5.9	12.0	17.2	23.6	41.3	25.4
Austria	2000 <sup>d</sup>	29.1	3.3	8.6	13.3	17.4	22.9	37.8	23.0
Azerbaijan	2001 <sup>b</sup>	36.5	3.1	7.4	11.5	15.3	21.2	44.5	29.5
Bangladesh	2005 <sup>b</sup>	33.2	3.8	8.8	12.2	15.6	20.9	42.5	28.0
Belarus	2005 <sup>b</sup>	28.0	3.6	8.8	13.7	17.7	23.0	36.8	22.1
Belgium	2000 <sup>d</sup>	33.0	3.4	8.5	13.0	16.3	20.8	41.4	28.1
Benin	2003 <sup>b</sup>	36.5	3.1	7.4	11.3	15.4	21.5	44.5	29.0
Bolivia	2002 <sup>d</sup>	60.1	0.3	1.5	5.9	10.9	18.7	63.0	47.2
Bosnia and Herzegovina	2005 <sup>b</sup>	35.8	2.7	7.0	11.6	15.9	22.3	43.2	27.5
Botswana	1993 <sup>b</sup>	60.5	1.2	3.2	6.0	9.7	16.0	65.1	51.0
Brazil	2005 <sup>d</sup>	56.6	0.9	2.9	6.5	11.1	18.7	60.8	44.9
Bulgaria	2003 <sup>b</sup>	29.2	3.4	8.7	13.7	17.2	22.1	38.3	23.9
Burkina Faso	2003 <sup>b</sup>	39.5	2.8	6.9	10.9	14.5	20.5	47.2	32.2
Burundi	1998 <sup>b</sup>	42.4	1.7	5.1	10.3	15.1	21.5	48.0	32.8
Cambodia	2004 <sup>b</sup>	41.7	2.9	6.8	10.2	13.7	19.6	49.6	34.8
Cameroon	2001 <sup>b</sup>	44.6	2.3	5.6	9.3	13.7	20.4	50.9	35.4
Canada	2000 <sup>d</sup>	32.6	2.6	7.2	12.7	17.2	23.0	39.9	24.8
Central African Republic	1993 <sup>b</sup>	61.3	0.7	2.0	4.9	9.6	18.5	65.0	47.7
Chad		..	..	..	..	..	..	..	..
Chile	2003 <sup>d</sup>	54.9	1.4	3.8	7.3	11.1	17.8	60.0	45.0
China	2004 <sup>d</sup>	46.9	1.6	4.3	8.5	13.7	21.7	51.9	34.9
Hong Kong, China	1996 <sup>d</sup>	43.4	2.0	5.3	9.4	13.9	20.7	50.7	34.9
Colombia	2004 <sup>d</sup>	56.2	0.8	2.9	6.9	11.0	18.3	60.9	45.0
Congo, Dem. Rep.		..	..	..	..	..	..	..	..
Congo, Rep.		..	..	..	..	..	..	..	..
Costa Rica	2004 <sup>d</sup>	48.2	1.4	4.1	8.5	13.2	20.9	53.3	36.7
Côte d'Ivoire	2002 <sup>b</sup>	44.6	2.0	5.2	9.1	13.7	21.3	50.7	34.0
Croatia	2005 <sup>b</sup>	29.0	3.6	8.8	13.3	17.3	22.7	37.9	23.1
Cuba		..	..	..	..	..	..	..	..
Czech Republic	1996 <sup>d</sup>	25.4	4.3	10.3	14.5	17.7	21.7	35.9	22.4
Denmark	1997 <sup>d</sup>	24.7	2.6	8.3	14.7	18.2	22.9	35.8	21.3
Dominican Republic	2005 <sup>d</sup>	49.9	1.5	4.1	8.1	12.6	19.9	55.3	39.0
Ecuador	1998 <sup>b</sup>	53.6	0.9	3.3	7.5	11.7	19.4	58.0	41.6
Egypt, Arab Rep.	2004–05 <sup>b</sup>	34.4	3.8	8.9	12.7	16.0	20.8	41.5	27.6
El Salvador	2002 <sup>d</sup>	52.4	0.7	2.7	7.5	12.8	21.2	55.9	38.8
Eritrea		..	..	..	..	..	..	..	..
Estonia	2004 <sup>b</sup>	36.0	2.6	6.8	11.7	16.2	22.0	43.3	27.8
Ethiopia	1999–2000 <sup>b</sup>	30.0	3.9	9.1	13.2	16.8	21.5	39.4	25.5
Finland	2000 <sup>d</sup>	26.9	4.0	9.6	14.1	17.5	22.1	36.7	22.6
France	1995 <sup>d</sup>	32.7	2.8	7.2	12.6	17.2	22.8	40.2	25.1
Gabon		..	..	..	..	..	..	..	..
Gambia, The	2003–04 <sup>b</sup>	47.4	1.8	4.8	8.7	13.0	20.7	52.9	36.9
Georgia	2005 <sup>b</sup>	40.8	1.9	5.4	10.5	15.3	22.2	46.7	30.6
Germany	2000 <sup>d</sup>	28.3	3.2	8.5	13.7	17.8	23.1	36.9	22.1
Ghana	1998–99 <sup>b</sup>	40.8	2.1	5.6	10.1	14.9	22.9	46.6	30.0
Greece	2000 <sup>d</sup>	34.3	2.5	6.7	11.9	16.8	23.0	41.5	26.0
Guatemala	2004 <sup>d</sup>	49.4	1.3	3.9	8.2	13.1	20.6	54.1	38.0
Guinea	2003 <sup>b</sup>	38.6	2.9	7.0	10.8	14.7	21.4	46.1	30.7
Guinea-Bissau	1993 <sup>b</sup>	47.0	2.1	5.2	8.8	13.1	19.4	53.4	39.3
Haiti	2001 <sup>d</sup>	59.2	0.7	2.4	6.2	10.4	17.7	63.4	47.7

# Distribution of income or consumption

# 2.8

**POP**

	Survey year	Gini index	Percentage share of income or consumption <sup>a</sup>						
			Lowest 10%	Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%	Highest 10%
Honduras	2003 <sup>d</sup>	53.8	1.2	3.4	7.1	11.6	19.6	58.3	42.2
Hungary	2004 <sup>b</sup>	30.1	3.5	8.6	13.1	17.1	22.3	38.9	24.2
India	2004–05 <sup>b</sup>	36.8	3.6	8.1	11.3	14.9	20.4	45.3	31.1
Indonesia	2005 <sup>b</sup>	39.4	3.0	7.1	10.7	14.4	20.5	47.3	32.3
Iran, Islamic Rep.	2005 <sup>b</sup>	38.4	2.5	6.5	10.9	15.4	22.1	45.1	29.6
Iraq		..	..	..	..	..	..	..	..
Ireland	2000 <sup>d</sup>	34.3	2.9	7.4	12.3	16.3	21.9	42.0	27.2
Israel	2001 <sup>d</sup>	39.2	2.1	5.7	10.5	15.9	23.0	44.9	28.8
Italy	2000 <sup>d</sup>	36.0	2.3	6.5	12.0	16.8	22.8	42.0	26.8
Jamaica	2004 <sup>b</sup>	45.5	2.1	5.3	9.2	13.2	20.6	51.6	35.8
Japan	1993 <sup>d</sup>	24.9	4.8	10.6	14.2	17.6	22.0	35.7	21.7
Jordan	2002–03 <sup>b</sup>	38.8	2.7	6.7	10.8	14.9	21.3	46.3	30.6
Kazakhstan	2003 <sup>b</sup>	33.9	3.0	7.4	11.9	16.4	22.8	41.5	25.9
Kenya	1997 <sup>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>d</sup>	31.6	2.9	7.9	13.6	18.0	23.1	37.5	22.5
Kuwait		..	..	..	..	..	..	..	..
Kyrgyz Republic	2003 <sup>b</sup>	30.3	3.8	8.9	12.8	16.4	22.5	39.4	24.3
Lao PDR	2002 <sup>b</sup>	34.6	3.4	8.1	11.9	15.6	21.1	43.3	28.5
Latvia	2004 <sup>b</sup>	35.8	2.6	6.8	11.7	16.2	22.3	42.9	27.5
Lebanon		..	..	..	..	..	..	..	..
Lesotho	1995 <sup>b</sup>	63.2	0.5	1.5	4.3	8.9	18.8	66.5	48.3
Liberia		..	..	..	..	..	..	..	..
Libya		..	..	..	..	..	..	..	..
Lithuania	2004 <sup>b</sup>	35.8	2.6	6.8	11.7	16.1	22.4	43.0	27.5
Macedonia, FYR	2003 <sup>b</sup>	39.0	2.4	6.1	10.8	15.5	22.2	45.5	29.6
Madagascar	2001 <sup>b</sup>	47.5	1.9	4.9	8.5	12.7	20.4	53.5	36.6
Malawi	2004–05 <sup>b</sup>	39.0	2.9	7.0	10.8	14.8	20.7	46.6	31.8
Malaysia	1997 <sup>d</sup>	49.2	1.7	4.4	8.1	12.9	20.3	54.3	38.4
Mali	2001 <sup>b</sup>	40.1	2.4	6.1	10.2	14.7	22.2	46.6	30.2
Mauritania	2000 <sup>b</sup>	39.0	2.5	6.2	10.6	15.2	22.3	45.7	29.5
Mauritius		..	..	..	..	..	..	..	..
Mexico	2004 <sup>b</sup>	46.1	1.6	4.3	8.3	12.6	19.7	55.1	39.4
Moldova	2003 <sup>b</sup>	33.2	3.2	7.8	12.2	16.5	22.1	41.4	26.4
Mongolia	2002 <sup>b</sup>	32.8	3.0	7.5	12.2	16.8	23.1	40.5	24.6
Morocco	1998–99 <sup>b</sup>	39.5	2.6	6.5	10.6	14.8	21.3	46.6	30.9
Mozambique	2002–03 <sup>b</sup>	47.3	2.1	5.4	9.3	13.0	18.7	53.6	39.4
Myanmar		..	..	..	..	..	..	..	..
Namibia	1993 <sup>d</sup>	74.3	0.5	1.4	3.0	5.4	11.5	78.7	64.5
Nepal	2003–04 <sup>b</sup>	47.2	2.6	6.0	9.0	12.4	18.0	54.6	40.6
Netherlands	1999 <sup>d</sup>	30.9	2.5	7.6	13.2	17.2	23.3	38.7	22.9
New Zealand	1997 <sup>d</sup>	36.2	2.2	6.4	11.4	15.8	22.6	43.8	27.8
Nicaragua	2001 <sup>b</sup>	43.1	2.2	5.6	9.8	14.2	21.1	49.3	33.8
Niger	1995 <sup>b</sup>	50.5	0.8	2.6	7.1	13.9	23.1	53.3	35.4
Nigeria	2003 <sup>b</sup>	43.7	1.9	5.0	9.6	14.5	21.7	49.2	33.2
Norway	2000 <sup>d</sup>	25.8	3.9	9.6	14.0	17.2	22.0	37.2	23.4
Oman		..	..	..	..	..	..	..	..
Pakistan	2005 <sup>b</sup>	31.2	3.9	9.1	12.9	16.1	21.1	40.8	26.5
Panama	2003 <sup>d</sup>	56.1	0.7	2.5	6.6	11.4	19.6	59.9	43.0
Papua New Guinea	1996 <sup>b</sup>	50.9	1.7	4.5	7.9	11.9	19.2	56.5	40.5
Paraguay	2003 <sup>d</sup>	58.4	0.7	2.4	6.3	10.8	18.6	61.9	46.1
Peru	2003 <sup>d</sup>	52.0	1.3	3.7	7.7	12.2	19.7	56.7	40.9
Philippines	2003 <sup>b</sup>	44.5	2.2	5.4	9.1	13.6	21.3	50.6	34.2
Poland	2005 <sup>b</sup>	34.9	3.0	7.4	11.7	16.1	22.3	42.5	27.2
Portugal	1997 <sup>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 <sup>a</sup>						
			Lowest 10%	Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%	Highest 10%
Romania	2005 <sup>b</sup>	31.5	3.3	8.2	12.8	16.9	22.1	40.0	25.4
Russian Federation	2002 <sup>b</sup>	39.9	2.4	6.1	10.5	14.9	21.8	46.6	30.6
Rwanda	2000 <sup>b</sup>	46.8	2.1	5.3	9.1	13.2	19.4	53.0	38.2
Saudi Arabia		..	..	..	..	..	..	..	..
Senegal	2001 <sup>b</sup>	41.3	2.7	6.6	10.3	14.2	20.6	48.4	33.4
Serbia <sup>e</sup>	2003 <sup>b</sup>	30.0	3.4	8.3	13.0	17.3	23.0	38.4	23.4
Sierra Leone	2003 <sup>b</sup>	40.0	2.6	6.5	10.5	14.5	21.2	47.3	31.2
Singapore	1998 <sup>d</sup>	42.5	1.9	5.0	9.4	14.6	22.0	49.0	32.8
Slovak Republic	1996 <sup>d</sup>	25.8	3.1	8.8	14.9	18.7	22.8	34.8	20.9
Slovenia	2004 <sup>b</sup>	30.9	3.4	8.3	12.8	16.7	22.6	39.6	24.6
Somalia		..	..	..	..	..	..	..	..
South Africa	2000 <sup>b</sup>	57.8	1.4	3.5	6.3	10.0	18.0	62.2	44.7
Spain	2000 <sup>d</sup>	34.7	2.6	7.0	12.1	16.4	22.5	42.0	26.6
Sri Lanka	2002 <sup>b</sup>	40.2	3.0	7.0	10.5	14.2	20.4	48.0	32.7
Sudan		..	..	..	..	..	..	..	..
Swaziland	2000–01 <sup>d</sup>	50.4	1.6	4.3	8.2	12.3	18.9	56.3	40.7
Sweden	2000 <sup>d</sup>	25.0	3.6	9.1	14.0	17.6	22.7	36.6	22.2
Switzerland	2000 <sup>d</sup>	33.7	2.9	7.6	12.2	16.3	22.6	41.3	25.9
Syrian Arab Republic		..	..	..	..	..	..	..	..
Tajikistan	2004 <sup>b</sup>	33.6	3.2	7.8	12.0	16.4	21.9	41.9	26.6
Tanzania	2000–01 <sup>b</sup>	34.6	2.9	7.3	12.0	16.1	22.3	42.4	26.9
Thailand	2002 <sup>b</sup>	42.0	2.7	6.3	9.9	14.0	20.8	49.0	33.4
Timor-Leste		..	..	..	..	..	..	..	..
Togo		..	..	..	..	..	..	..	..
Trinidad and Tobago	1992 <sup>d</sup>	38.9	2.2	5.9	10.8	15.3	23.1	44.9	28.8
Tunisia	2000 <sup>b</sup>	39.8	2.3	6.0	10.3	14.8	21.7	47.3	31.5
Turkey	2003 <sup>b</sup>	43.6	2.0	5.3	9.7	14.2	21.0	49.7	34.1
Turkmenistan	1998 <sup>b</sup>	40.8	2.6	6.1	10.2	14.7	21.5	47.5	31.7
Uganda	2002 <sup>b</sup>	45.7	2.3	5.7	9.4	13.2	19.1	52.5	37.7
Ukraine	2005 <sup>b</sup>	28.2	3.8	9.0	13.5	17.4	22.7	37.4	22.6
United Arab Emirates		..	..	..	..	..	..	..	..
United Kingdom	1999 <sup>d</sup>	36.0	2.1	6.1	11.4	16.0	22.5	44.0	28.5
United States	2000 <sup>d</sup>	40.8	1.9	5.4	10.7	15.7	22.4	45.8	29.9
Uruguay <sup>c</sup>	2003 <sup>d</sup>	44.9	1.9	5.0	9.1	14.0	21.5	50.5	34.0
Uzbekistan	2003 <sup>b</sup>	36.8	2.8	7.2	11.7	15.4	21.0	44.7	29.6
Venezuela, RB	2003 <sup>d</sup>	48.2	0.7	3.3	8.7	13.9	22.0	52.1	35.2
Vietnam	2004 <sup>b</sup>	37.0	2.9	7.1	11.1	15.1	21.8	44.8	28.9
West Bank and Gaza		..	..	..	..	..	..	..	..
Yemen, Rep.	2005 <sup>b</sup>	37.7	2.9	7.2	11.4	15.3	20.8	45.3	30.9
Zambia	2004 <sup>b</sup>	50.8	1.2	3.6	7.9	12.6	20.8	55.1	38.8
Zimbabwe	1995 <sup>b</sup>	50.1	1.8	4.6	8.1	12.2	19.3	55.7	40.3

a. Percentage shares by quintile may not sum to 100 percent because of rounding. b. Refers to expenditure shares by percentiles of population, ranked by per capita expenditure. c. Urban data. d. Refers to income shares by percentiles of population, ranked by per capita income. e. Includes Montenegro.

## About the data

Inequality in the distribution of income is reflected in the percentage shares of income or consumption accruing to portions of the population ranked by income or consumption levels. The portions 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 the distribution of income or consumption come from nationally representative household surveys. 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 2.7).

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 differ more often 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.

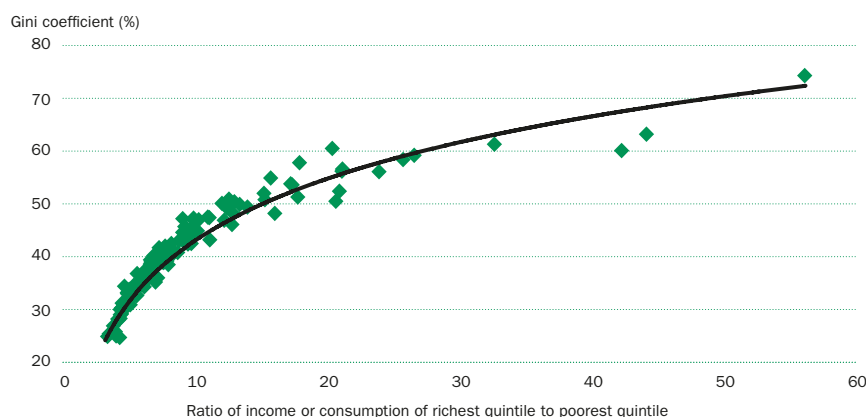
World Bank staff have made an effort to ensure that the data are as comparable as possible. Wherever possible, consumption has been used rather than income. Income distribution and Gini indexes for high-income economies are calculated directly from the Luxembourg Income Study database, using an estimation 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 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. 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 of total income or consumption that accrues to subgroups of population indicated by deciles or quintiles.

### The Gini coefficient and ratio of income or consumption of the richest quintile to the poorest quintiles are closely correlated

2.8a



There are many ways to measure income or consumption inequality. The Gini coefficient shows inequality over the entire population; the ratio of income or consumption of the richest quintile to the poorest quintiles shows differences only at the tails of the population distribution. Both measures are closely correlated and provide similar information. At low levels of inequality the Gini coefficient is a more sensitive measure, but above a Gini value of 45–55 percent the inequality ratio rises faster.

Source: World Development Indicators data files.

## Data sources

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. Data for high-income economies are from the Luxembourg Income Study database.



	Urban informal sector employment		Youth unemployment		Female-headed households	Pension contributors			Public expenditure on pensions			
	% of urban employment		Male % of male labor force ages 15–24	Female % of female labor force ages 15–24	% of total	Year	% of labor force	% of working-age population	Year	% of GDP	Year	Average pension % of per capita income
	1998–2005 <sup>a</sup>	1998–2005 <sup>a</sup>	2003–05 <sup>a</sup>	2003–05 <sup>a</sup>	2003–05 <sup>a</sup>							
Afghanistan	..	..	..	..	..	..	..	..	2005	0.5	..	..
Albania	..	..	..	..	..	2004	48.9	33.0	2004	4.6	..	..
Algeria	..	..	43	46	..	2002	36.7	22.1	2002	3.2	2002	89.1
Angola	..	..	..	..	..	..	..	..	..	..	..	..
Argentina	..	..	22 <sup>b</sup>	28 <sup>b</sup>	..	2004	35.0	25.9	1994	6.2	2002	73.7
Armenia	..	..	..	..	36	2002	64.4	48.3	2004	3.4	..	..
Australia	..	..	11 <sup>b</sup>	11 <sup>b</sup>	..	2005	92.6	69.6	2003	5.4	2002	52.4
Austria	..	..	11	10	..	2005	96.4	68.7	2003	14.6	2002	93.2
Azerbaijan	..	..	..	..	..	1996	52.0	46.0	1996	2.5	..	..
Bangladesh	..	..	7	6	10	2004	2.8	2.1	1992	0.0	..	..
Belarus	..	..	..	..	54	1992	97.0	94.0	1997	7.7	..	..
Belgium	..	..	21	19	..	2005	94.2	61.6	2003	11.3	2002	62.8
Benin	50 <sup>b</sup>	41 <sup>b</sup>	..	..	23	1996	4.8	..	1993	0.4	..	..
Bolivia	..	..	..	..	20	2002	10.1	7.8	2000	4.5	..	..
Bosnia and Herzegovina	..	..	..	..	..	2004	36.0	27.0	2004	8.8	..	..
Botswana	..	..	..	..	..	..	..	..	..	..	..	..
Brazil	..	..	14 <sup>b</sup>	23 <sup>b</sup>	..	2004	52.6	39.1	2004	12.6	..	..
Bulgaria	..	..	23	21	..	1994	64.0	63.0	2005	8.9	2002	75.2
Burkina Faso	..	..	..	..	9	1993	3.1	3.0	1992	0.3	..	..
Burundi	..	..	..	..	..	1993	3.3	3.0	1991	0.2	..	..
Cambodia	..	..	..	..	24	..	..	..	..	..	..	..
Cameroon	..	..	..	..	24	1993	13.7	11.5	2001	0.8	..	..
Canada	..	..	14 <sup>b</sup>	11 <sup>b</sup>	..	2005	90.5	71.4	2003	5.4	2002	57.1
Central African Republic	..	..	..	..	..	..	..	..	1990	0.3	..	..
Chad	..	..	..	..	20	1990	1.1	1.0	1997	0.1	..	..
Chile	..	..	15	21	..	2003	58.0	35.2	2001	2.9	2002	53.5
China	..	..	..	..	..	2005	20.5	17.2	1996	2.7	..	..
Hong Kong, China	..	..	14	8	..	..	..	..	..	..	..	..
Colombia	..	..	12	19	30	2000	19.0	14.0	1994	1.1	2002	54.4
Congo, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Congo, Rep.	..	..	..	..	23	1992	5.8	5.6	1992	0.9	..	..
Costa Rica	..	..	11	22	..	2004	55.3	37.6	1997	4.2	2002	103.1
Côte d'Ivoire	..	..	..	..	..	1997	9.3	9.1	1997	0.3	..	..
Croatia	..	..	27 <sup>c</sup>	31 <sup>c</sup>	..	2005	77.0	50.0	2005	12.3	2002	61.6
Cuba	..	..	..	..	46	..	..	..	1992	12.6	..	..
Czech Republic	..	..	19	19	..	2003	86.3	61.5	2003	8.7	2002	58.2
Denmark	..	..	6	10	..	2005	94.6	75.0	2003	11.0	2002	54.1
Dominican Republic	..	..	..	..	28	2005	27.2	18.6	2000	0.8	2002	55.9
Ecuador	32 <sup>b</sup>	42 <sup>b</sup>	12 <sup>b</sup>	21 <sup>b</sup>	..	2004	27.0	20.8	2002	2.5	..	..
Egypt, Arab Rep.	..	..	..	..	12	2004	55.5	27.7	2004	4.1	2002	119.8
El Salvador	43 <sup>c</sup>	55 <sup>c</sup>	13 <sup>c</sup>	10 <sup>c</sup>	..	2005	29.8	19.7	1997	1.3	2002	39.3
Eritrea	..	..	..	..	47	..	..	..	2001	0.3	..	..
Estonia	..	..	16	15	..	2004	95.2	68.6	2003	6.0	2002	60.9
Ethiopia	33 <sup>b</sup>	46 <sup>b</sup>	4	11	23	..	..	..	1993	0.9	..	..
Finland	..	..	21	19	..	2005	88.7	67.2	2003	11.2	2002	78.8
France	..	..	21	25 <sup>b</sup>	..	2005	89.9	61.4	2003	13.1	2002	65.0
Gabon	..	..	..	..	26	1995	15.0	14.0	..	..	..	..
Gambia, The	..	..	..	..	..	2003	3.8	2.9	..	..	..	..
Georgia	21 <sup>b</sup>	7 <sup>b</sup>	27	31	..	2004	29.9	22.7	2004	3.0	..	..
Germany	..	..	16	14	..	2005	88.2	65.5	2003	13.3	2002	71.8
Ghana	..	..	..	..	34	2003	9.1	7.1	2002	1.3	..	..
Greece	..	..	18	35	..	2005	85.2	58.5	2003	12.8	2002	99.9
Guatemala	..	..	..	..	..	2000	19.0	11.7	1995	0.7	..	..
Guinea	..	..	..	..	17	1993	1.5	1.8	..	..	..	..
Guinea-Bissau	..	..	..	..	..	2004	1.9	1.5	2005	2.1	..	..
Haiti	..	..	..	..	44	..	..	..	..	..	..	..

# Assessing vulnerability and security

# 2.9

PEOPLE

	Urban informal sector employment		Youth unemployment		Female-headed households	Pension contributors			Public expenditure on pensions			
	% of urban employment		Male % of male labor force ages 15–24	Female % of female labor force ages 15–24	% of total	Year	% of labor force	% of working-age population	Year	% of GDP	Year	Average pension % of per capita income
	1998–2005 <sup>a</sup>	1998–2005 <sup>a</sup>	2003–05 <sup>a</sup>	2003–05 <sup>a</sup>	2003–05 <sup>a</sup>							
Honduras	..	..	5 <sup>b</sup>	11 <sup>b</sup>	26	1999	20.6	17.7	1994	0.6	..	..
Hungary	..	..	20	19	..	2002	56.3	34.0	2003	9.1	2002	90.5
India	54 <sup>b</sup>	41 <sup>b</sup>	10 <sup>b</sup>	11 <sup>b</sup>	..	2004	9.0	5.7	..	..	..	..
Indonesia	..	..	25	34	12	2002	15.5	11.3	..	..	..	..
Iran, Islamic Rep.	..	..	20	32	..	2001	35.0	20.0	2000	1.1	2002	124.2
Iraq	..	..	..	..	11	..	..	..	..	..	..	..
Ireland	..	..	9	7	..	2005	88.0	63.9	2003	4.1	2002	36.6
Israel	..	..	17	19	..	1992	82.0	63.0	1996	5.9	..	..
Italy	..	..	22	27	..	2005	92.4	58.4	2003	14.7	2002	88.8
Jamaica	..	..	22	36	..	2004	17.4	12.6	..	..	..	..
Japan	..	..	10 <sup>b</sup>	7 <sup>b</sup>	..	2005	95.3	75.0	2003	8.9	2002	59.1
Jordan	..	..	..	..	12	2003	30.3	17.4	2001	2.2	2002	76.1
Kazakhstan	..	..	10 <sup>c</sup>	15 <sup>c</sup>	..	2004	33.8	26.4	2004	4.9	..	..
Kenya	..	..	..	..	32	2005	8.0	6.7	1993	0.5	..	..
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	..	..	12	9	..	2005	74.3	52.0	2003	1.3	2002	43.3
Kuwait	..	..	..	..	..	..	..	..	1990	3.5	..	..
Kyrgyz Republic	33 <sup>b</sup>	25 <sup>b</sup>	14	18	..	2006	42.2	28.9	2006	4.8	..	..
Lao PDR	..	..	..	..	..	..	..	..	..	..	..	..
Latvia	..	..	12	14	..	2003	92.4	66.5	2002	7.5	2002	81.8
Lebanon	..	..	..	..	..	2003	33.1	19.9	2003	2.1	..	..
Lesotho	..	..	..	..	37	2005	5.7	3.6	..	..	..	..
Liberia	..	..	..	..	..	..	..	..	..	..	..	..
Libya	..	..	..	..	..	2003	65.5	38.1	2001	2.1	2002	91.2
Lithuania	50 <sup>b</sup>	27 <sup>b</sup>	16	15	..	2004	79.7	56.0	2003	6.2	2002	71.3
Macedonia, FYR	..	..	63	62	8	2000	63.8	38.9	1998	8.7	..	..
Madagascar	..	..	7	7	22	1993	5.4	4.8	1990	0.2	..	..
Malawi	..	..	..	..	25	..	..	..	..	..	..	..
Malaysia	..	..	..	..	..	1993	48.7	37.8	1999	6.5	..	..
Mali	..	..	..	..	11	1990	2.5	2.0	1991	0.4	..	..
Mauritania	..	..	..	..	29	1995	5.0	4.0	1992	0.2	..	..
Mauritius	..	..	21	34	..	2000	51.4	33.6	1999	4.4	..	..
Mexico	18 <sup>b</sup>	22 <sup>b</sup>	6	7	..	2002	34.5	22.7	2003	1.3	2002	45.1
Moldova	..	..	19	18	..	2000	60.6	43.1	2003	8.0	..	..
Mongolia	..	..	20	21	..	2002	61.4	49.1	2002	5.8	..	..
Morocco	..	..	18 <sup>c</sup>	14 <sup>c</sup>	17	2003	22.4	12.8	2003	1.9	2002	74.1
Mozambique	..	..	..	..	26	1995	2.0	2.1	1996	0.0	..	..
Myanmar	..	..	..	..	..	..	..	..	..	..	..	..
Namibia	..	..	..	..	42	..	..	..	..	..	..	..
Nepal	60 <sup>b</sup>	76 <sup>b</sup>	..	..	23	2003	2.1	1.4	2003	0.3	..	..
Netherlands	..	..	10	10	..	2005	90.3	70.4	2003	12.8	2002	84.1
New Zealand	..	..	9 <sup>b</sup>	10 <sup>b</sup>	..	..	..	..	2003	7.4	2002	39.5
Nicaragua	..	..	11	16	31	2005	17.9	11.5	1996	2.5	..	..
Niger	..	..	..	..	19	1992	1.3	1.5	2005	0.2	..	..
Nigeria	..	..	..	..	17	2005	1.7	1.2	1991	0.1	..	..
Norway	..	..	13	12	..	2005	90.8	75.7	2003	10.7	2002	65.1
Oman	..	..	..	..	..	..	..	..	..	..	..	..
Pakistan	44 <sup>b</sup>	22 <sup>b</sup>	11	15	..	2004	6.4	4.0	1993	0.9	..	..
Panama	..	..	19	30	..	1998	51.6	40.7	1996	4.3	..	..
Papua New Guinea	..	..	..	..	..	..	..	..	..	..	..	..
Paraguay	..	..	12 <sup>b</sup>	21 <sup>b</sup>	..	2004	11.6	9.1	2001	1.2	..	..
Peru	56 <sup>b</sup>	55 <sup>b</sup>	21 <sup>b</sup>	21 <sup>b</sup>	22	2003	16.3	12.3	2000	2.6	2002	43.9
Philippines	..	..	15	19	15	2000	27.1	18.7	1993	1.0	..	..
Poland	..	..	37	39	..	2005	84.9	54.5	2003	13.9	2002	69.7
Portugal	..	..	14	19	..	2005	91.4	71.9	2003	11.9	2002	79.8
Puerto Rico	..	..	25 <sup>b</sup>	21 <sup>b</sup>	..	..	..	..	..	..	..	..





	Urban informal sector employment		Youth unemployment		Female-headed households	Pension contributors			Public expenditure on pensions			Average pension % of per capita income
	% of urban employment		Male % of male labor force ages 15–24	Female % of female labor force ages 15–24		% of total	Year	% of labor force	% of working-age population	Year	% of GDP	
	1998–2005 <sup>a</sup>	1998–2005 <sup>a</sup>	2003–05 <sup>a</sup>	2003–05 <sup>a</sup>	2003–05 <sup>a</sup>							
Romania	..	..	21	18	..	2005	57.6	39.1	2003	6.9	..	..
Russian Federation	..	..	..	..	..	..	..	2004	5.8	..	..	..
Rwanda	..	..	..	..	34	2004	4.8	4.1	..	..	..	..
Saudi Arabia	..	..	..	..	..	..	..	..	..	..	..	..
Senegal	..	..	..	..	23	2003	5.3	3.9	2003	1.3	..	..
Serbia	..	..	..	..	26	2003	46.0 <sup>d</sup>	32.2 <sup>d</sup>	2003	12.4 <sup>d</sup>	..	..
Sierra Leone	..	..	..	..	..	2004	4.6	3.6	..	..	..	..
Singapore	..	..	4	6	..	1995	73.0	56.0	1996	1.4	..	..
Slovak Republic	..	..	31	29	..	2003	78.5	55.3	2003	8.5	2002	60.2
Slovenia	..	..	11	12	..	1995	86.0	68.7	2003	10.1	..	..
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	16	28	56	65	..	..	..	..	..	..	..	..
Spain	..	..	17	24	..	2005	91.0	63.2	2003	9.2	2002	88.3
Sri Lanka	..	..	20 <sup>b</sup>	37 <sup>b</sup>	..	2004	35.6	22.2	1996	2.4	..	..
Sudan	..	..	..	..	19	1995	12.1	12.0	..	..	..	..
Swaziland	..	..	..	..	..	..	..	..	..	..	..	..
Sweden	..	..	23	22	..	2005	91.0	72.3	2003	12.7	2002	68.2
Switzerland	..	..	9	9	..	2005	100.0	79.1	2003	12.1	2002	67.3
Syrian Arab Republic	..	..	..	..	..	2004	17.4	11.4	2004	1.3	..	..
Tajikistan	..	..	..	..	..	..	..	..	1996	3.0	..	..
Tanzania	..	..	..	..	25	1996	2.0	2.0	..	..	..	..
Thailand	..	..	5	5	30	2003	22.5	18.0	..	..	..	..
Timor-Leste	..	..	..	..	..	..	..	..	..	..	..	..
Togo	..	..	..	..	..	1997	15.9	15.0	1997	0.6	..	..
Trinidad and Tobago	..	..	..	..	..	2004	55.6	..	1996	0.6	..	..
Tunisia	..	..	31	29	..	2004	45.3	25.4	2003	4.3	2002	72.7
Turkey	10 <sup>b</sup>	6 <sup>b</sup>	19	19	..	2002	45.0	24.3	2002	7.1	2002	103.3
Turkmenistan	..	..	..	..	27	..	..	..	1996	2.3	..	..
Uganda	..	..	..	..	30	2004	10.7	9.3	2003	0.3	..	..
Ukraine	3 <sup>b</sup>	3 <sup>b</sup>	15	14	..	2005	76.0	52.3	2005	15.4	..	..
United Arab Emirates	..	..	..	..	..	..	..	..	..	..	..	..
United Kingdom	..	..	13	10	..	2005	92.7	71.4	2003	10.9	2002	47.6
United States	..	..	12 <sup>b</sup>	10 <sup>b</sup>	..	2005	92.5	72.5	2003	7.5	2002	51.0
Uruguay	..	..	25	35	..	2004	55.0	44.3	1996	15.0	2002	125.4
Uzbekistan	..	..	..	..	..	..	..	..	1995	5.3	..	..
Venezuela, RB	..	..	24	35	..	2004	31.8	23.8	2001	2.7	..	..
Vietnam	..	..	4	5	27	2005	13.2	10.8	1998	1.6	..	..
West Bank and Gaza	..	..	39	45	..	2000	18.8	7.8	2001	0.8	..	..
Yemen, Rep.	..	..	..	..	..	2005	10.0	5.5	1994	0.1	2002	106.3
Zambia	..	..	..	..	23	2000	5.9	4.9	1993	0.1	..	..
Zimbabwe	..	..	..	..	38	1995	12.0	10.0	2002	2.3	..	..
<b>World</b>	..	..	.. W	.. W	..	..	..	..	..	..	..	..
<b>Low income</b>	..	..	..	..	..	..	..	..	..	..	..	..
<b>Middle income</b>	..	..	..	..	..	..	..	..	..	..	..	..
Lower middle income	..	..	..	..	..	..	..	..	..	..	..	..
Upper middle income	..	..	21	26	..	..	..	..	..	..	..	..
<b>Low &amp; middle income</b>	..	..	..	..	..	..	..	..	..	..	..	..
East Asia & Pacific	..	..	..	..	..	..	..	..	..	..	..	..
Europe & Central Asia	..	..	..	..	..	..	..	..	..	..	..	..
Latin America & Carib.	..	..	14	20	..	..	..	..	..	..	..	..
Middle East & N. Africa	..	..	..	..	..	..	..	..	..	..	..	..
South Asia	..	..	11	12	..	..	..	..	..	..	..	..
Sub-Saharan Africa	..	..	..	..	..	..	..	..	..	..	..	..
<b>High income</b>	..	..	14	13	..	..	..	..	..	..	..	..
Euro area	..	..	18	20	..	..	..	..	..	..	..	..

a. Data are for the most recent year available. b. Limited coverage. c. Data are for 2006. d. Includes Montenegro.

**About the data**

As traditionally 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 assets and insurance mechanisms. Because poor people have fewer assets and less diversified sources of income than do the better-off, fluctuations in income affect them more.

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. Tools include microfinance programs, public provision of education and basic health care, and old age assistance (see tables 2.10 and 2.15).

Poor households face many risks, and vulnerability is thus multidimensional. The indicators in the table focus on individual risks—informal sector employment, youth unemployment, female-headed households, income insecurity in old age—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 by sending their children to work (see table 2.6). Income security is a prime concern for the elderly.

Data on informal sector employment are from a variety of sources, including labor force and special informal sector surveys, household surveys, surveys of household industries or economic activities, surveys of small enterprises and microenterprises, and official estimates. In most countries data on the informal economy are collected on an ad hoc basis or less frequently than annually. The international comparability of the data is affected by differences among countries in definitions and coverage and in treatment of domestic workers. The data in the table are based on national definitions of informal sector and urban areas established by countries, and therefore data may not be comparable across countries. For details on these definitions, consult the original source.

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. The table presents unemployment among youth ages 15–24, 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 considerably over the year as a result of different school opening and closing dates. The youth unemployment rate shares similar limitations on comparability as the general unemployment rate. For further information, see *About the data* for table 2.5 and the original source.

The definition of female-headed household differs greatly across countries, making cross-country comparison difficult. In some cases it is assumed that a woman cannot be the head of any household with an adult male, because of sex-biased stereotype. Caution should be exercised in interpreting the data.

Pension scheme coverage 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 contributed 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). The share of the labor force covered by a pension scheme may be overstated in countries that do not try to count informal sector workers as part of the labor force.

Public interventions and institutions can provide services directly to poor people, although whether these interventions and institutions 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 cover non-contributory pensions or social assistance targeted to the elderly and disabled and spending by social insurance schemes for which contributions had previously been made. A country's pattern of spending is correlated with its demographic structure—spending increases as the population ages.

**Definitions**

- **Urban informal sector employment** is all people who, during a given reference period, were employed in at least one informal enterprise, irrespective of their status in employment and whether it was their main or secondary job.
- **Youth unemployment** is the share of the labor force ages 15–24 without work but available for and seeking employment.
- **Female-headed households** are the percentage of households with a female head.
- **Pension contributors** are the share of the labor force or working-age population (here defined as ages 15–64) covered by a pension scheme.
- **Public expenditure on pensions** is 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.

**Data sources**

Data on urban informal sector employment and youth unemployment are from the ILO database Key Indicators of the Labour Market, 5th edition. Data on female-headed household are from Demographic and Health Surveys by Macro International. Data on pension contributors and pension spending are from the World Bank Pensions Database (available June 2008).



	Public expenditure per student <sup>a</sup>						Public expenditure on education		Trained teachers in primary education	Primary school pupil-teacher ratio
	Primary		% of GDP per capita Secondary		Tertiary		% of GDP	% of total government expenditure	% of total	pupils per teacher
	1991	2006 <sup>b</sup>	1999	2006 <sup>b</sup>	1999	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>
Afghanistan	..	..	..	..	..	..	..	..	36.5	83
Albania	..	..	..	..	..	..	..	..	..	21
Algeria	26.5	..	..	..	..	..	..	..	99.3	24
Angola	..	..	..	..	..	65.5	2.4	..	..	..
Argentina	..	11.3	16.4	15.7	17.7	11.8	3.8	13.1	..	17
Armenia	..	..	12.4	..	29.1	..	..	..	77.5	21
Australia	..	15.9	14.5	14.5	25.7	22.5	4.6	..	..	..
Austria	18.2	22.5	29.9	27.2	51.6	48.5	5.4	10.8	..	12
Azerbaijan	..	5.5	17.0	8.5	19.1	9.4	2.1	17.4	100.0	13
Bangladesh	..	7.6	12.4	14.6	46.3	49.4	2.5	14.2	48.3	51
Belarus	..	14.3	..	27.0	..	29.0	6.1	12.9	99.6	16
Belgium	15.8	20.0	23.7	33.5	38.3	35.1	6.0	12.2	..	11
Benin	..	11.5	26.1	..	202.9	..	4.4	17.1	72.2	47
Bolivia	..	..	11.7	..	44.1	..	..	..	..	24
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..
Botswana	..	15.7	..	40.2	..	438.4	8.7 <sup>c</sup>	21.0 <sup>c</sup>	96.7	25
Brazil	..	12.8	9.5	11.5	57.0	32.6	4.0	..	..	21
Bulgaria	..	11.9	18.8	10.8	17.9	17.8	2.5	..	..	16
Burkina Faso	..	27.4	..	20.5	..	208.1	4.2	15.4	86.9	46
Burundi	13.4	19.1	..	74.5	1,051.9	348.8	5.1	17.7	87.5	54
Cambodia	..	5.6	11.4	..	43.8	..	1.7	..	98.3	50
Cameroon	..	6.3	16.5	22.8	63.0	94.1	3.3	16.8	61.8	44
Canada	..	..	..	..	47.9	..	..	..	..	..
Central African Republic	11.9	10.5	..	..	..	291.3	1.4	..	49.7	..
Chad	8.0	6.8	27.5	28.0	..	333.9	1.9	10.1	26.8	63
Chile	..	11.9	14.8	13.1	19.4	11.6	3.4	18.5	..	26
China	..	..	11.5	..	90.1	..	..	..	..	18
Hong Kong, China	..	14.1	17.7	18.2	..	58.3	3.9	23.9	94.8	18
Colombia	..	19.2	16.9	18.0	39.6	23.6	4.7	11.1	..	28
Congo, Dem. Rep.	..	..	..	..	..	..	..	..	..	..
Congo, Rep.	..	3.4	..	..	404.9	..	1.9	8.1	89.0	55
Costa Rica	7.8	17.0	23.2	17.1	55.0	35.9	4.7	29.8	88.0	20
Côte d'Ivoire	..	..	54.5	..	212.8	..	..	..	..	46
Croatia	..	23.7	..	22.5	41.5	27.9	4.4	9.1	100.0	15
Cuba	21.6	33.8	41.3	43.0	86.4	34.5	9.1	14.2	100.0	10
Czech Republic	..	12.8	21.7	23.3	33.7	30.4	4.4	10.0	..	16
Denmark	..	24.8	38.1	35.3	65.9	62.5	8.4	15.3	..	..
Dominican Republic	..	8.2	..	5.9	..	..	3.6	16.8	88.3	23
Ecuador	..	..	9.7	..	..	..	..	..	71.1	23
Egypt, Arab Rep.	..	..	..	..	..	..	..	..	..	26
El Salvador	..	10.0	7.9	9.3	9.4	16.6	3.1	20.0	94.0	40
Eritrea	..	9.3	37.3	9.3	429.4	1,082.5	5.3	..	87.5	47
Estonia	..	19.2	27.9	25.5	32.6	18.2	5.1	14.9	..	..
Ethiopia	22.1	14.1	..	13.7	..	747.7	6.0	17.5	..	59
Finland	21.7	18.8	26.2	32.9	40.9	36.7	6.5	12.8	..	16
France	11.8	17.8	28.6	29.0	29.7	34.0	5.8	10.9	..	19
Gabon	..	..	..	..	..	..	..	..	..	36
Gambia, The	13.2	7.4	..	9.1	..	238.0	2.0	..	76.3	35
Georgia	..	..	..	..	..	..	3.1	9.3	..	15
Germany	..	16.3	20.5	21.7	..	..	4.6	9.8	..	14
Ghana	..	17.8	..	28.0	..	209.4	5.4	..	53.0 <sup>c</sup>	32 <sup>c</sup>
Greece	7.5	16.5	17.0	22.6	28.7	27.1	4.2	8.5	..	11
Guatemala	..	9.2	4.2	4.1	..	34.9	2.6	..	..	31
Guinea	..	..	..	..	..	188.8	1.6	..	67.7	44
Guinea-Bissau	..	..	..	..	..	..	..	..	..	..
Haiti	9.1	..	..	..	..	..	..	..	..	..

	Public expenditure per student <sup>a</sup>						Public expenditure on education		Trained teachers in primary education	Primary school pupil-teacher ratio
	Primary		% of GDP per capita Secondary		Tertiary		% of GDP	% of total government expenditure	% of total	pupils per teacher
	1991	2006 <sup>b</sup>	1999	2006 <sup>b</sup>	1999	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>
Honduras	..	..	..	..	..	..	..	..	87.2	28
Hungary	21.2	23.3	19.1	23.5	34.2	24.3	5.4	11.1	..	10
India	..	9.2	24.9	27.0	90.8	61.0	3.8	..	..	40
Indonesia	..	..	7.3	..	21.3	..	..	..	..	20
Iran, Islamic Rep.	..	13.6	9.8	11.1	34.6	30.0	5.1	18.6	70.4	19
Iraq	..	..	..	..	..	..	..	..	100.0	17
Ireland	11.5	14.3	16.8	21.1	28.5	23.9	4.7	14.0	..	18
Israel	12.6	22.3	23.3	22.7	32.9	25.6	6.9	..	..	13
Italy	14.9	24.9	27.7	27.2	27.6	22.7	4.6	9.6	..	10
Jamaica	9.9	14.6	23.6	21.5	79.0	..	5.3	8.8	..	28
Japan	..	22.7	21.0	22.7	15.2	20.8	3.7	9.8	..	19
Jordan	..	14.6	15.8	17.6	..	..	..	..	..	20
Kazakhstan	..	9.8	..	7.7	..	5.6	3.2	15.8	..	17 <sup>c</sup>
Kenya	12.9	21.0	14.8	20.7	204.8	284.5	6.9	17.9	98.8	40
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	11.8	19.2	15.7	25.0	8.4	8.9	4.6	16.5	..	28
Kuwait	35.4	9.6	..	13.9	..	80.5	3.8	12.9	100.0	10
Kyrgyz Republic	..	..	11.9	..	27.7	21.8	4.9	..	61.3	24
Lao PDR	..	9.1	4.3	4.7	66.5	25.2	3.0	14.0	85.8	31
Latvia	..	20.7	23.7	24.0	27.9	12.4	5.1	14.2	..	12
Lebanon	..	8.3	..	8.8	14.2	17.2	2.7	11.0	12.6	14
Lesotho	..	22.2	69.0	44.2	1,247.8	1,012.0	13.0	29.8	66.1	40
Liberia	..	..	..	..	..	..	..	..	..	19
Libya	..	..	..	..	23.8	..	..	..	..	..
Lithuania	..	15.0	..	21.2	34.2	20.0	5.2	15.6	..	14
Macedonia, FYR	..	..	..	..	..	..	..	..	..	19
Madagascar	..	8.1	39.9	15.3	180.9	187.8	3.1	25.3	36.5	48
Malawi	7.2	..	..	..	..	..	..	..	..	..
Malaysia	10.1	14.5	22.3	21.1	83.3	71.0	6.2	25.2	..	17
Mali	..	24.5	61.6	36.4	265.0	..	4.5	16.8	..	56
Mauritania	..	10.0	36.4	25.1	80.1	40.6	2.9	10.1	100.0	41
Mauritius	10.1	10.3	15.3	17.4	40.4	29.8	3.9	12.7	100.0	22
Mexico	4.8	14.9	14.2	15.7	47.8	41.3	5.4	25.6	..	28
Moldova	..	..	..	..	..	43.8	7.6	20.2	..	17
Mongolia	..	14.0	..	13.0	..	22.4	5.2	..	..	33
Morocco	15.4	22.9	50.1	39.7	107.0	84.3	6.8	27.2	100.0	27
Mozambique	..	15.0	..	94.8	..	361.2	5.0	19.5	64.6	67
Myanmar	..	..	7.0	..	28.6	..	..	..	98.3	30
Namibia	..	20.0	36.4	19.9	157.6	..	..	..	92.4	31
Nepal	..	..	13.1	..	141.7	..	..	..	30.5	40
Netherlands	12.1	17.9	20.9	24.0	42.3	40.6	5.2	11.2	..	..
New Zealand	17.2	19.3	24.3	22.5	41.6	25.2	6.5	..	..	16
Nicaragua	..	9.2	..	4.2	..	..	..	..	73.6	33
Niger	..	32.4	64.4	49.1	..	384.9	3.6	15.0	91.9	40
Nigeria	..	..	..	..	..	..	..	..	49.8	37
Norway	32.7	20.3	27.0	30.5	46.1	52.2	7.6	16.6	..	11
Oman	10.5	15.4	22.2	12.9	..	14.2	4.7	31.1	100.0	14
Pakistan	..	..	..	..	..	..	2.6	12.2	84.6	39
Panama	11.3	9.7	19.1	12.3	33.6	26.5	3.8	8.9	91.1	25
Papua New Guinea	..	..	..	..	..	..	..	..	..	36
Paraguay	..	..	18.4	..	58.9	..	..	..	..	28
Peru	..	6.6	10.8	8.9	21.2	9.0	2.7	17.0	..	23
Philippines	..	9.2	10.7	9.0	15.0	12.4	2.7	16.4	..	35
Poland	12.9	22.8	16.5	21.6	21.1	21.5	5.4	12.7	..	12
Portugal	16.3	23.2	27.5	34.9	28.1	23.5	5.4	11.5	..	11
Puerto Rico	..	..	..	..	..	..	..	..	..	..



	Public expenditure per student <sup>a</sup>						Public expenditure on education		Trained teachers in primary education	Primary school pupil-teacher ratio
	Primary		% of GDP per capita Secondary		Tertiary		% of GDP	% of total government expenditure	% of total	pupils per teacher
	1991	2006 <sup>b</sup>	1999	2006 <sup>b</sup>	1999	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>
Romania	..	9.9	16.0	14.7	32.6	22.1	3.3	8.6	..	17
Russian Federation	..	..	..	..	..	10.8	3.5	12.9	..	17
Rwanda	..	10.4	28.4	18.4	657.6	404.5	3.8	19.0 <sup>c</sup>	98.3	66
Saudi Arabia	..	..	..	..	..	..	6.8	27.6	..	15
Senegal	18.9	18.3	..	35.0	..	235.3	5.0	26.3	100.0	39
Serbia	..	..	..	..	..	..	..	..	..	..
Sierra Leone	..	..	..	..	..	..	3.8	..	50.1 <sup>c</sup>	44 <sup>c</sup>
Singapore	..	..	17.9	..	..	..	..	..	..	24
Slovak Republic	..	11.9	18.3	16.7	32.6	32.2	4.2	10.8	..	18
Slovenia	17.4	25.9	26.5	30.6	28.8	25.8	6.0	..	..	15
Somalia	..	..	..	..	..	..	..	..	..	..
South Africa	20.2	14.3	20.0	17.6	60.7	50.1	5.4	17.6	..	36
Spain	11.3	19.0	24.4	23.8	19.6	22.7	4.3	11.0	..	14
Sri Lanka	..	..	..	..	..	..	..	..	..	22
Sudan	..	..	..	..	..	..	..	..	58.7	34
Swaziland	6.7	14.2	26.1	38.8	388.4	320.6	7.0	..	90.8	33
Sweden	45.8	25.7	26.1	34.5	52.7	43.7	7.3	12.9	..	10
Switzerland	36.1	25.0	27.7	28.0	54.5	63.1	6.0	..	..	13
Syrian Arab Republic	..	..	22.1	..	..	..	..	..	..	..
Tajikistan	..	8.8	..	11.4	..	11.2	3.4	19.0	93.0	22
Tanzania	..	..	..	..	..	..	..	..	100.0 <sup>c</sup>	53 <sup>c</sup>
Thailand	11.6	14.1	15.7	15.5	35.5	25.0	4.2	25.0	..	18
Timor-Leste	..	..	..	..	..	..	..	..	..	34
Togo	..	..	30.9	..	317.9	..	..	..	36.8	38
Trinidad and Tobago	..	..	12.2	..	147.6	..	..	..	81.0	17
Tunisia	..	21.1	27.1	24.4	89.4	56.4	7.3	20.8	..	20
Turkey	10.7	14.1	14.3	17.8	45.5	40.7	4.0	..	..	..
Turkmenistan	..	..	..	..	..	..	..	..	..	..
Uganda	..	11.3	..	34.0	..	188.9	5.2	18.3	84.8	49
Ukraine	..	16.0	11.2	24.5	36.5	31.5	6.3	19.3	99.6	17
United Arab Emirates	..	7.1	11.5	9.2	41.5	..	1.3	27.4	60.0	15
United Kingdom	15.0	18.0	24.4	27.0	26.2	27.6	5.4	11.7	..	17
United States	..	22.0	22.5	24.7	27.0	23.5	5.6	14.4	..	14
Uruguay	7.8	7.6	11.3	8.7	19.1	20.1	2.6	14.1	..	21
Uzbekistan	..	..	..	..	..	..	..	..	100.0 <sup>c</sup>	18 <sup>c</sup>
Venezuela, RB	..	8.0	..	8.3	..	34.3	3.7	..	83.1	17
Vietnam	..	..	..	..	..	..	..	..	95.6	21
West Bank and Gaza	..	..	..	..	..	..	..	..	100.0	32
Yemen, Rep.	..	..	..	..	..	..	..	..	..	..
Zambia	..	5.4	19.9	8.2	168.2	..	2.0	14.8	..	51
Zimbabwe	20.7	..	19.5	..	195.2	..	..	..	..	..
<b>World</b>	<b>.. m</b>	<b>14.5 m</b>	<b>.. m</b>	<b>21.1 m</b>	<b>.. m</b>	<b>.. m</b>	<b>4.6 m</b>	<b>.. m</b>	<b>..</b>	<b>30 w</b>
<b>Low income</b>	..	..	..	..	..	..	..	..	..	41
<b>Middle income</b>	..	13.0	16.6	17.1	37.2	25.9	4.3	..	..	..
Lower middle income	..	..	..	..	..	..	..	..	..	19
Upper middle income	..	13.2	17.1	16.7	31.8	23.3	4.1	14.1	..	21
<b>Low &amp; middle income</b>	..	..	..	..	..	..	4.1	..	..	33
East Asia & Pacific	..	..	7.0	..	32.2	..	3.5	..	..	19
Europe & Central Asia	..	13.6	..	18.2	..	21.8	4.2	13.1	..	16
Latin America & Carib.	..	11.4	14.8	14.1	37.1	..	4.0	..	..	24
Middle East & N. Africa	..	..	..	..	..	..	..	..	..	23
South Asia	..	..	13.1	..	90.8	..	2.2	..	..	41
Sub-Saharan Africa	..	11.8	..	..	..	..	4.2	..	..	47
<b>High income</b>	15.8	19.2	24.3	24.8	32.8	29.0	5.4	12.5	..	16
Euro area	14.9	18.9	25.3	27.2	28.7	27.1	5.3	11.0	..	14

a. Because of the change from International Standard Classification of Education 1976 (ISCED76) to ISCED97 in 1998, data for 1991 are not fully comparable with data from 1999 onward. b. Provisional data. c. Data are for 2007.

### About the data

Data on education are compiled by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics from official responses to surveys and from reports provided by education authorities in each country. The 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 one to two years, though efforts have been made to shorten the delay. Moreover, coverage and data collection methods vary across countries and over time within countries, so comparisons should be interpreted with caution.

For most countries the data on education spending in the table refer to public spending—government spending on public education plus subsidies for private education—and 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 some years refer to ministry of education spending only and exclude education expenditures by other ministries and local authorities.

Many developing countries seek to supplement public funds for education, some with tuition fees to recover part of the cost of providing education services or to encourage development of private schools. Fees raise difficult questions of equity, efficiency, access, and taxation, however, and some governments have used scholarships, vouchers, and other public finance methods to counter criticism. For most countries the data reflect only public spending. Data for a few countries include private spending, although countries vary on whether parents or schools pay for books, uniforms, and other supplies. For greater detail, consult the country- and indicator-specific notes in the original 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, as well as a government's commitment to investing in human capital development. It also reflects the development status of a country's education system relative to that of others. However, returns on investment to education, especially primary and lower secondary education, cannot be understood simply by 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 general quality of the data on education finance is poor. This is partly because ministries of education, from which the UNESCO Institute for Statistics collects data, are not necessarily the best source for education finance data. Other agencies, particularly ministries of finance, need to be consulted, but coordination is not easy. It is also difficult to track actual spending from the central government to local institutions. And private spending adds to the complexity of collecting accurate data on public spending.

The share of trained teachers in primary education 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, which may affect the quality of teaching. Since the training teachers receive varies greatly (pre-service or in-service), care should be taken in making comparisons across countries.

The primary school pupil-teacher ratio reflects the average number of pupils per teacher. It differs from the average class size because of the different practices countries employ, such as part-time teachers, school shifts, and multigrade classes. 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, as well as the different practices mentioned above. 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.

In 1998 UNESCO introduced the new International Standard Classification of Education 1997. Thus the time-series data for the years through 1997 are not comparable with those for 1999 onward. Any time-series analysis should therefore be undertaken with extreme caution.

In 2006 the UNESCO Institute for Statistics also changed its convention for citing the reference year of education data and indicators to the calendar year in which the academic or financial year ends. Data that used to be listed for 2005/06, for example, are now listed for 2006. This change was implemented to present the most recent data available and to align the data reporting with that of other international organizations (in particular the Organisation for Economic Co-operation and Development and Eurostat).

### Definitions

- **Public expenditure per student** is public current and capital 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 as a percentage of GDP and 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 in their country.
- **Primary school 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

Data on education inputs 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 <sup>a</sup>				Total net enrollment ratio, primary		Children out of school	
	Preprimary	% of relevant age group			% of relevant age group				% of primary-school-age children		thousand primary-school-age children	
		Primary	Secondary	Tertiary	Primary		Secondary		Male	Female	Male	Female
		2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	1991	2006 <sup>b</sup>	1991	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..
Albania	49	105	77	19	95	94	..	73	94	93	8	8
Algeria	14	110	83	22	89	95	53	66	100	98	26	62
Angola	..	..	..	3	50	..	..	..	..	..	..	..
Argentina	64	113	86	65	..	99	..	79	..	..	..	..
Armenia	36	98	90	32	..	82	..	86	84	88	7	4
Australia	104	104	149	73	99	96	80	86	96	97	35	27
Austria	88	102	102	49	88	97	..	..	96	98	8	4
Azerbaijan	32	96	83	15	89	85	..	78	87	84	38	43
Bangladesh	10	103	44	6	..	89	..	41	91	94	842	529
Belarus	103	96	96	66	85	89	..	88	91	88	18	21
Belgium	120	102	109	62	96	98	86	97	98	98	9	7
Benin	5	96	32	..	41	78	..	..	89	71	79	198
Bolivia	50	109	82	41	..	95	..	71	96	97	30	22
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..	..	..
Botswana	..	108	75	5	88	86	39	61	88	89	19	17
Brazil	63	140	106	24	85	95	17	78	95	97	336	224
Bulgaria	80	102	105	44	85	93	63	89	95	94	8	8
Burkina Faso	2	60	15	2	27	47	..	12	49	39	562	653
Burundi	2	103	14	2	53	75	..	..	61	56	154	170
Cambodia	11	122	38	5	72	90	..	24	97	96	98	114
Cameroon	22	106	41	7	69	..	..	..	..	..	..	..
Canada	68	100	117	62	98	..	89	..	..	..	0	..
Central African Republic	2	61	..	1	52	45	..	..	..	..	160	212
Chad	1	76	15	1	34	..	..	..	..	..	..	..
Chile	55	104	91	48	89	..	55	..	95	94	44	53
China	39	111	76	22	98	..	..	..	..	..	..	..
Hong Kong, China	..	..	85	33	..	..	..	78	97	93	..	..
Colombia	40	116	82	31	68	88	34	65	92	92	193	174
Congo, Dem. Rep.	..	..	..	..	54	..	..	..	..	..	..	..
Congo, Rep.	9	108	43	..	82	55	..	..	49	60	116	133
Costa Rica	70	111	86	25	87	..	38	..	..	..	..	..
Côte d'Ivoire	3	71	..	..	45	..	..	..	..	..	..	..
Croatia	53	93	89	46	79	..	63	..	..	..	..	..
Cuba	113	101	94	88	94	97	73	87	97	97	15	12
Czech Republic	114	102	96	48	87	93	..	..	91	94	22	15
Denmark	94	99	124	81	98	96	87	91	96	97	9	6
Dominican Republic	32	98	69	35	56	77	..	52	78	81	139	116
Ecuador	80	117	65	..	98	97	..	55	99	100	12	0
Egypt, Arab Rep.	17	102	86	35	86	94	..	83	100	94	10	256
El Salvador	51	114	64	21	..	94	..	54	96	97	21	18
Eritrea	14	62	31	1	15	47	..	25	53	45	145	163
Estonia	116	100	100	66	100	95	..	91	97	97	1	1
Ethiopia	2	83	27	2	22	65	..	24	70	65	2,047	2,426
Finland	59	100	111	92	98	99	93	95	99	99	3	2
France	117	110	114	56	100	99	..	99	99	99	19	9
Gabon	..	152	..	..	94	..	..	..	..	..	..	..
Gambia, The	17	74	45	1	46	62	..	38	..	..	49	41
Georgia	55	96	85	38	97	89	..	79	87	88	19	14
Germany	97	101	100	..	84	..	..	..	..	..	..	..
Ghana	55	98 <sup>c</sup>	47 <sup>c</sup>	5	54	66 <sup>c</sup>	..	38	64	65	572 <sup>c</sup>	569 <sup>c</sup>
Greece	68	102	102	90	95	100	83	91	100	100	0	1
Guatemala	29	114	53	9	..	94	..	38	97	93	21	62
Guinea	7	88	35	3	27	72	..	28	76	64	159	230
Guinea-Bissau	..	..	..	..	38	..	..	..	..	..	..	..
Haiti	..	..	..	..	21	..	..	..	..	..	..	..

# Participation in education

# 2.11

**POPULATION**

	Gross enrollment ratio				Net enrollment ratio <sup>a</sup>				Total net enrollment ratio, primary		Children out of school	
	Preprimary 2006 <sup>b</sup>	% of relevant age group			% of relevant age group				% of primary-school-age children		thousand primary-school-age children	
		Primary 2006 <sup>b</sup>	Secondary 2006 <sup>b</sup>	Tertiary 2006 <sup>b</sup>	Primary		Secondary		Male 2006 <sup>b</sup>	Female 2006 <sup>b</sup>	Male 2006 <sup>b</sup>	Female 2006 <sup>b</sup>
		2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	1991	2006 <sup>b</sup>	1991	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>
Honduras	38	118	76	17	88	96	21	..	96	97	21	11
Hungary	84	98	96	65	91	89	75	90	96	96	10	9
India	39	115	54	11	..	88	..	..	96	92	2,780	4,713
Indonesia	33	115	62	17	96	95	39	57	99	96	142	544
Iran, Islamic Rep.	53	118	81	27	92	94	..	77	91	100	305	0
Iraq	..	..	..	..	94	..	..	..	..	..	..	..
Ireland	..	104	112	58	90	95	80	87	94	95	13	11
Israel	93	110	93	58	92	97	..	89	97	98	11	7
Italy	104	102	99	65	100	99	..	92	100	99	4	12
Jamaica	92	95	87	..	96	90	64	78	91	91	16	15
Japan	85	100	102	55	100	100	97	100	100	100	12	0
Jordan	32	97	89	40	94	91	..	79	95	96	23	17
Kazakhstan	36	105 <sup>c</sup>	93 <sup>c</sup>	51 <sup>c</sup>	88	90 <sup>c</sup>	..	86 <sup>c</sup>	98	99	6 <sup>c</sup>	3 <sup>c</sup>
Kenya	50	108	48	3	..	76	..	42	76	77	670	649
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	96	105	96	91	100	98	86	94	..	..	..	..
Kuwait	75	96	89	18	49	83	..	..	89	88	12	12
Kyrgyz Republic	14	97	86	43	92	86	..	80	94	93	14	14
Lao PDR	11	116	43	9	62	84	..	35	85	80	54	71
Latvia	87	95	99	75	94	90	..	..	90	94	4	3
Lebanon	64	94	81	48	66	82	..	73	83	83	40	40
Lesotho	18	114	37	4	72	72	15	24	73	78	55	48
Liberia	100	91	..	..	..	39	..	..	..	..	177	179
Libya	9	110	111	..	93	..	..	..	..	..	..	..
Lithuania	65	94	100	76	..	88	..	94	90	91	8	7
Macedonia, FYR	33	98	84	30	94	92	..	81	97	97	2	1
Madagascar	8	139	24	3	64	96	..	..	93	93	54	52
Malawi	..	119	29	0 <sup>d</sup>	49	91	..	24	91	96	136	66
Malaysia	122	100	72	31	..	99	..	72	99	99	11	15
Mali	3	80	28	3	25	61	6	..	67	52	328	466
Mauritania	2	102	22	4	36	79	..	16	75	79	52	40
Mauritius	101	102	86	17	91	95	..	79	94	96	3	2
Mexico	96	112	85	25	98	98	45	69	100	99	15	52
Moldova	68	91	82	36	88	83	..	75	85	85	14	13
Mongolia	54	101	89	47	90	91	..	82	95	99	6	1
Morocco	59	106	52	12	56	88	..	..	90	85	168	261
Mozambique	..	105	16	1	42	69	..	4	80	73	568	662
Myanmar	6	114	49	..	99	100	..	46	98	100	16	0
Namibia	31	107	57	6	..	76	..	35	74	79	49	40
Nepal	27	126	43	6	..	79	..	..	85	75	267	436
Netherlands	90	107	118	59	95	98	84	87	99	97	8	15
New Zealand	93	102	121	82	98	99	85	..	99	99	1	1
Nicaragua	52	116	66	..	70	90	..	43	93	94	38	34
Niger	2	51	11	1	24	43	6	9	49	36	565	680
Nigeria	14	96	32	10	55	63	..	26	70	60	3,550	4,547
Norway	88	98	113	78	100	98	88	96	98	98	5	4
Oman	8	82	89	25	69	74	..	77	76	77	44	38
Pakistan	52	84	30	5	33	66	..	30	76	58	2,705	4,116
Panama	67	112	70	45	..	98	..	64	99	99	1	2
Papua New Guinea	..	55	..	..	..	..	..	..	..	..	..	..
Paraguay	34	112	67	25	94	94	26	..	94	95	24	21
Peru	66	116	92	34	..	96	..	70	98	100	30	2
Philippines	40	111	85	28	96	93	..	60	92	95	463	315
Poland	55	98	100	64	97	97	76	93	97	97	50	38
Portugal	79	116	97	55	98	98	..	82	100	99	1	3
Puerto Rico	..	..	..	..	..	..	..	..	..	..	..	..





	Gross enrollment ratio				Net enrollment ratio <sup>a</sup>				Total net enrollment ratio, primary		Children out of school	
	Preprimary	% of relevant age group			% of relevant age group				% of primary-school-age children		thousand primary-school-age children	
		Primary	Secondary	Tertiary	Primary		Secondary		Male	Female	Male	Female
		2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	1991	2006 <sup>b</sup>	1991	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>
Romania	74	105	86	45	81	91	..	81	95	95	24	24
Russian Federation	88	129	91	70	98	92	..	..	92	93	170	140
Rwanda	..	140	13	3	67	91	8	..	72	75	78	45
Saudi Arabia	12	108	96	27	87	93	39	60	87	87	110	108
Senegal	9	80	22	6	45	71	..	17	75	71	250	262
Serbia	..	..	..	..	..	..	..	..	..	..	..	..
Sierra Leone	..	145 <sup>c</sup>	32 <sup>c</sup>	..	43	..	..	23 <sup>c</sup>	..	..	..	..
Singapore	..	78	63	..	..	..	..	..	..	..	..	..
Slovak Republic	95	99	96	41	..	92	..	..	92	92	10	9
Slovenia	78	98	96	79	96	96	..	91	97	97	1	1
Somalia	..	..	..	..	9	19	..	..	..	..	..	..
South Africa	38	106	95	15	90	88	45	..	93	94	262	207
Spain	119	105	118	66	100	100	..	94	100	99	3	6
Sri Lanka	..	108	87	..	..	97	..	..	..	..	..	..
Sudan	24	66	34	..	40	54	..	19	..	..	..	..
Swaziland	17	106	47	4	75	78	30	32	76	77	23	22
Sweden	93	98	103	82	100	97	85	99	97	97	10	10
Switzerland	96	98	93	45	84	90	80	82	94	94	16	14
Syrian Arab Republic	11	126	70	..	91	..	43	63	..	..	..	..
Tajikistan	9	100	83	19	77	97	..	80	99	95	2	17
Tanzania	28	112 <sup>c</sup>	..	1	51	100 <sup>c</sup>	..	..	99	97	0 <sup>c</sup>	10 <sup>c</sup>
Thailand	92	108	78	46	88	94	..	71	100	100	0	1
Timor-Leste	10	99	53	..	..	68	..	..	70	67	28	29
Togo	2	102	40	..	64	80	15	..	87	74	58	120
Trinidad and Tobago	85	95	76	11	89	85	..	65	89	90	8	7
Tunisia	..	110	83	30	93	97	..	..	98	99	12	6
Turkey	10	94	74	31	89	90	42	66	92	88	329	499
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	3	117	18	3	..	..	..	16	..	..	..	..
Ukraine	90	102	93	73	81	90	..	84	91	91	81	79
United Arab Emirates	78	104	90	..	99	88	60	79	93	92	7	6
United Kingdom	71	107	105	59	98	99	80	95	100	100	3	0 <sup>d</sup>
United States	61	98	94	82	97	92	84	88	93	94	954	750
Uruguay	67	113	107	42	91	94	..	..	97	98	5	4
Uzbekistan	27	95 <sup>c</sup>	102 <sup>c</sup>	10 <sup>c</sup>	78	..	..	..	..	..	..	..
Venezuela, RB	60	104	78	52	87	91	18	67	91	91	123	103
Vietnam	60	90	76	16	90	84	..	69	..	..	..	..
West Bank and Gaza	30	83	94	41	..	76	..	90	80	80	48	45
Yemen, Rep.	1	87	46	9	50	75	..	37	86	62	275	632
Zambia	..	117	36	..	..	92	..	28	92	94	96	54
Zimbabwe	..	..	..	..	..	..	..	..	..	..	..	..
<b>World</b>	<b>40 w</b>	<b>106 w</b>	<b>65 w</b>	<b>24 w</b>	<b>84 w</b>	<b>86 w</b>	<b>.. w</b>	<b>58 w</b>	<b>90 w</b>	<b>87 w</b>		
<b>Low income</b>	34	102	45	9	..	78	..	39	84	78		
<b>Middle income</b>	..	112	78	27	93	93	..	70	95	94		
Lower middle income	41	112	73	23	93	93	..	68	94	94		
Upper middle income	63	113	92	40	91	94	..	76	96	95		
<b>Low &amp; middle income</b>	34	107	61	19	82	85	..	54	89	86		
East Asia & Pacific	41	111	72	20	96	93	..	68	94	94		
Europe & Central Asia	54	103	89	51	90	91	..	81	93	91		
Latin America & Carib.	62	119	89	30	85	94	31	69	96	96		
Middle East & N. Africa	23	104	74	24	82	91	..	67	94	90		
South Asia	41	110	49	9	..	85	..	..	92	87		
Sub-Saharan Africa	16	93	31	5	49	68	..	25	72	66		
<b>High income</b>	78	101	101	67	95	95	85	91	96	96		
Euro area	103	..	..	..	95	..	..	..	..	..		

a. Because of the change from International Standard Classification of Education 1976 (ISCED76) to ISCED97 in 1998, data for 1991 are not fully comparable with data from 1999 onward. b. Provisional data. c. Data are for 2007. d. Less than 0.5.

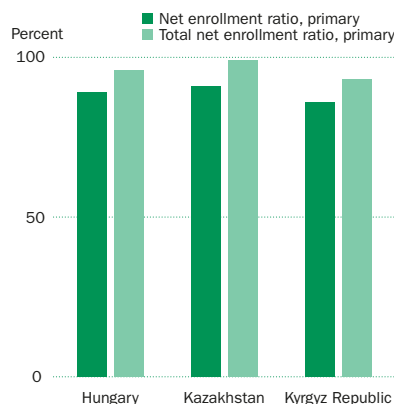
## About the data

School enrollment data are reported to the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics by national education authorities and statistical offices. Enrollment ratios help monitor whether a country is on track to achieve the Millennium Development Goal of universal primary education by 2015, which implies achieving a net primary enrollment ratio of 100 percent, and whether an education system has the 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, have limitations. They are based on data from annual school surveys, which are typically conducted at the beginning of the school year. They do not reflect actual attendance or dropout rates during the year. And school administrators may exaggerate enrollments, especially if there is a financial incentive to do so.

Also, as international indicators, the gross and net primary enrollment ratios have an inherent weakness: the length of primary education differs across countries, although the International Standard Classification of Education tries to minimize the difference. A relatively short duration for primary education tends to increase the ratio; a relatively long one to decrease it (in part because more older children drop out).

**In some countries close to 10 percent of primary-school-age children are enrolled in secondary school** 2.11a



The difference between net enrollment and total primary net enrollment is small in most countries. But it is larger in some countries because many children start primary school earlier than the official entrance age and are younger than the official age when they reach secondary school.

Source: United Nations Educational, Scientific, and Cultural Organization Institute for Statistics.

Overage or underage enrollments are frequent, particularly when, for cultural or economic reasons, parents prefer children to start school at other than the official age. Age at enrollment may be inaccurately estimated or misstated, especially in communities where registration of births is not strictly enforced.

Other problems of cross-country comparison of enrollment data stem from errors in school-age population estimates. Age-sex structures drawn from censuses or vital registrations, the primary data sources on school-age population, commonly underenumerate (especially young children) to circumvent laws or regulations. Errors are also introduced when parents round 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 postcensus estimates of school-age children are model interpolations or projections that may miss important demographic events (see discussion of demographic data in *About the data* for table 2.1).

Gross enrollment ratios indicate the capacity of each level of the education system, but a high ratio may reflect a substantial number of overage children enrolled in each grade because of repetition rather than a successful education system. The net enrollment ratio excludes overage and underage students to capture more accurately the system's coverage and internal efficiency but does not account for children who fall outside the official school age because of late or early entry rather than grade repetition. Differences between gross and net enrollment ratios show the incidence of overage and underage enrollments.

Total net primary enrollment was recently added as a Millennium Development Goal indicator. It captures the children of primary-school age who have progressed to secondary education, which the traditional net enrollment ratio excludes.

Children out of school are primary-school-age children not enrolled in primary or secondary education. The data are calculated by the UNESCO Institute for Statistics using administrative data. Children out of school include dropouts, children never enrolled, and children of primary age enrolled in preprimary education. Large numbers of children out of school create pressure to enroll children and provide classrooms, teachers, and educational materials, a task made difficult in many developing countries by limited education budgets. However, getting children into school is a high priority for countries and crucial for achieving the Millennium Development Goal of universal primary education.

In 2006 the UNESCO Institute for Statistics changed its convention for citing the reference year. For more information, see *About the data* for table 2.10.

## 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.
- **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** refers to a wide range of post-secondary education institutions, including technical and vocational education, colleges, and universities, whether or not leading to an advanced research qualification, that normally require as a minimum condition of admission the successful completion of education at the secondary level.
- **Net enrollment ratio** is the ratio of total enrollment of children of official school age based on the International Standard Classification of Education 1997 to the population of the age group that officially corresponds to the level of education shown.
- **Total net enrollment ratio, primary**, is the ratio of total enrollment of children of official school age for primary education who are enrolled in primary or secondary education to the total primary-school-age population.
- **Children out of school** are the number of primary-school-age children not enrolled in primary or secondary school.

## Data sources

Data on gross and net enrollment ratios and out of school children are from the UNESCO Institute for Statistics.



	Gross intake rate in grade 1		Cohort survival rate						Repeaters in primary school		Transition to secondary school	
	% of relevant age group		% of grade 1 students						% of enrollment		%	
	Male	Female	Reaching grade 5 <sup>a</sup>		Reaching last grade of primary education		Male	Female	Male	Female		
	2006 <sup>b</sup>	2006 <sup>b</sup>	1991	2005 <sup>b</sup>	1991	2005 <sup>b</sup>	2005 <sup>b</sup>	2005 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	2005 <sup>b</sup>	2005 <sup>b</sup>
Afghanistan	..	..	..	..	..	..	..	..	18	14	..	..
Albania	100	99	..	..	..	..	89	91	3	2	100	99
Algeria	99	97	95	95	94	96	90	92	14	9	74	79
Angola	..	..	..	..	..	..	..	..	..	..	..	..
Argentina	110	109	..	96	..	98	94	97	8	5	93	96
Armenia	102	106	..	..	..	..	100	99	0 <sup>c</sup>	0 <sup>c</sup>	100	99
Australia	106	105	98	..	99	..	..	..	..	..	..	..
Austria	102	100	..	..	..	..	97	100	1	1	..	..
Azerbaijan	99	97	..	..	..	..	100	94	0 <sup>c</sup>	0 <sup>c</sup>	100	98
Bangladesh	122	124	..	63	..	67	63	67	7	7	86	92
Belarus	102	100	..	..	..	..	99	100	0 <sup>c</sup>	0 <sup>c</sup>	99	100
Belgium	97	99	90	..	92	..	..	..	3	3	..	..
Benin	109	96	54	53	56	50	48	44	17	17	..	..
Bolivia	122	122	..	85	..	85	83	81	1	1	90	90
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..	..	..
Botswana	111	104	81	89	87	92	83	88	5	4	95	95
Brazil	106	97	..	..	..	..	..	..	20	20	..	..
Bulgaria	97	94	91	..	90	..	91	93	3	2	95	96
Burkina Faso	79	67	71	71	68	74	63	66	12	12	45	43
Burundi	164	164	65	66	58	68	57	61	29	28	37	31
Cambodia	135	127	..	61	..	64	54	57	14	11	83	80
Cameroon	111	97	..	..	..	..	..	..	28	23	43	47
Canada	97	95	95	..	98	..	..	..	..	..	..	..
Central African Republic	73	55	24	..	22	..	..	..	29	30	46	52
Chad	109	79	56	34	41	32	27	23	22	24	56	42
Chile	101	99	94	100	91	99	98	98	3	2	96	98
China	88	87	58	..	78	..	..	..	0 <sup>c</sup>	0 <sup>c</sup>	..	..
Hong Kong, China	..	..	..	99	..	100	99	100	1	1	100	100
Colombia	127	123	..	78	..	86	78	86	4	3	99	100
Congo, Dem. Rep.	..	..	58	..	50	..	..	..	..	..	..	..
Congo, Rep.	78	78	56	..	65	..	..	..	21	21	58	58
Costa Rica	108	108	83	93	85	95	89	92	8	6	100	97
Côte d'Ivoire	73	61	75	..	70	..	..	..	23	24	..	..
Croatia	..	..	..	..	..	..	..	..	0 <sup>c</sup>	1	100 <sup>d</sup>	100 <sup>d</sup>
Cuba	102	104	..	96	..	98	96	98	1	0 <sup>c</sup>	98	99
Czech Republic	102	103	..	98	..	99	98	99	1	1	99	100
Denmark	98	97	94	93	94	93	92	92	..	..	100	99
Dominican Republic	102	100	..	66	..	71	58	65	10	6	81	87
Ecuador	133	131	..	75	..	77	75	77	2	1	81	76
Egypt, Arab Rep.	106	102	..	98	..	99	98	99	3	2	72	82
El Salvador	121	116	56	70	60	74	65	70	9	6	91	92
Eritrea	53	45	..	77	..	69	77	69	15	15	86	79
Estonia	100	97	..	98	..	99	99	99	2	1	96	99
Ethiopia	125	113	16	57 <sup>d</sup>	23	59 <sup>d</sup>	62	63	6	5	91	91
Finland	98	98	100	99	100	100	99	100	1	0 <sup>c</sup>	100	100
France	..	..	69	..	95	..	..	..	..	..	..	..
Gabon	..	..	..	..	..	..	..	..	..	..	..	..
Gambia, The	65	71	..	..	..	..	..	..	6	6	..	..
Georgia	97	103	..	86	..	90	83	89	0 <sup>c</sup>	0 <sup>c</sup>	98	100
Germany	104	103	..	..	..	..	99	100	1	1	99	99
Ghana	105	110	81	..	79	..	..	..	6	6	..	..
Greece	100	100	100	98	100	100	98	100	1	0 <sup>c</sup>	99	100
Guatemala	125	122	..	70	..	68	65	62	13	11	92	90
Guinea	94	87	64	83	48	78	79	72	8	9	75	66
Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	..	..
Haiti	..	..	..	..	..	..	..	..	..	..	..	..

# Education efficiency

# 2.12

**POP**

	Gross intake rate in grade 1		Cohort survival rate						Repeaters in primary school		Transition to secondary school	
	% of relevant age group		% of grade 1 students						% of enrollment		%	
	Male	Female	Reaching grade 5 <sup>a</sup>		Reaching last grade of primary education		Male	Female	Male	Female		
	2006 <sup>b</sup>	2006 <sup>b</sup>	1991	2005 <sup>b</sup>	1991	2005 <sup>b</sup>	2005 <sup>b</sup>	2005 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	2005 <sup>b</sup>	2005 <sup>b</sup>
Honduras	139	134	..	80	..	87	77	85	8	6	68	74
Hungary	97	95	77	..	98	..	98	98	3	2	99	99
India	132	125	..	73	..	73	73	73	3	3	87	83
Indonesia	120	116	34	92	78	87	88	83	6	4	79	78
Iran, Islamic Rep.	112	150	91	..	89	..	..	..	3	1	93	83
Iraq	..	..	..	87	..	73	78	61	9	7	73	66
Ireland	99	99	99	100	100	100	..	..	1	1	..	..
Israel	96	99	..	100	..	100	100	100	2	1	74	73
Italy	104	102	..	100	..	100	100	100	0 <sup>c</sup>	0 <sup>c</sup>	100	99
Jamaica	94	92	..	..	..	..	..	..	3	2	100	97
Japan	98	99	100	..	100	..	..	..	..	..	..	..
Jordan	92	92	..	97	..	96	96	95	1	1	96	97
Kazakhstan	107	107	..	..	..	..	100 <sup>d</sup>	100 <sup>d</sup>	0 <sup>c,e</sup>	0 <sup>c,e</sup>	100 <sup>d</sup>	100 <sup>d</sup>
Kenya	112	108	75	81	78	85	74	71	6	6	..	..
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	105	106	99	99	100	99	99	99	0 <sup>c</sup>	0 <sup>c</sup>	99	99
Kuwait	96	93	..	95	..	97	95	97	2	2	95	100
Kyrgyz Republic	98	97	..	..	..	..	97	100	0 <sup>c</sup>	0 <sup>c</sup>	100	100
Lao PDR	129	120	..	62	..	62	62	62	19	17	79	75
Latvia	94	93	..	..	..	..	99	98	4	2	97	98
Lebanon	86	86	..	88	..	94	83	91	11	8	83	88
Lesotho	105	99	58	68	73	80	53	71	21	16	67	65
Liberia	109	106	..	..	..	..	..	..	6	6	..	..
Libya	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	94	93	..	..	..	..	98	98	1	0 <sup>c</sup>	98	99
Macedonia, FYR	99	99	..	..	..	..	98	99	0 <sup>c</sup>	0 <sup>c</sup>	100	99
Madagascar	181	176	22	35	21	37	35	37	20	19	56	54
Malawi	145	156	71	44	57	44	36	36	21	20	74	71
Malaysia	102	101	97	..	97	..	..	..	..	..	..	..
Mali	89	76	71	83	67	79	75	70	17	17	63	48
Mauritania	124	129	76	59	75	56	46	43	10	10	51	45
Mauritius	104	104	97	98	98	100	97	100	5	4	61	72
Mexico	111	109	35	93	71	94	91	92	6	4	95	93
Moldova	90	87	..	..	..	..	96	98	0 <sup>c</sup>	0 <sup>c</sup>	98	99
Mongolia	117	119	..	..	..	..	91	91	0 <sup>c</sup>	0 <sup>c</sup>	95	99
Morocco	104	100	75	82	76	79	76	72	15	10	78	77
Mozambique	153	143	36	60	32	55	41	39	5	5	52	56
Myanmar	139	136	..	71	..	72	71	72	1	0 <sup>c</sup>	76	72
Namibia	104	105	60	84	65	90	73	80	19	14	72	77
Nepal	160	160	51	75	51	83	75	83	21	20	79	74
Netherlands	101	100	..	99	..	100	..	..	..	..	96	100
New Zealand	105	104	..	..	..	..	..	..	..	..	..	..
Nicaragua	173	163	11	50	37	57	46	55	11	8	..	..
Niger	76	59	61	58	65	54	55	50	5	5	61	58
Nigeria	116	99	..	71	..	75	61	64	3	3	..	..
Norway	97	97	99	100	100	100	100	100	..	..	100	100
Oman	76	76	97	100	96	100	100	99	0 <sup>c</sup>	1	99	98
Pakistan	125	100	..	68	..	72	68	72	2	2	69	75
Panama	116	114	..	87	..	89	84	86	7	5	92	95
Papua New Guinea	..	..	70	..	68	..	..	..	..	..	..	..
Paraguay	117	114	73	79	75	83	74	79	8	5	90	90
Peru	110	112	..	91	..	90	86	85	9	9	96	94
Philippines	137	128	..	71	..	80	66	77	3	2	91	92
Poland	97	98	89	..	96	..	..	..	1	0 <sup>c</sup>	..	..
Portugal	106	106	..	..	..	..	..	..	13	7	..	..
Puerto Rico	..	..	..	..	..	..	..	..	..	..	..	..



	Gross intake rate in grade 1		Cohort survival rate						Repeaters in primary school		Transition to secondary school	
	% of relevant age group		% of grade 1 students						% of enrollment		%	
	Male	Female	Reaching grade 5 <sup>a</sup>		Reaching last grade of primary education		Male	Female	Male	Female		
	2006 <sup>b</sup>	2006 <sup>b</sup>	1991	2005 <sup>b</sup>	1991	2005 <sup>b</sup>	2005 <sup>b</sup>	2005 <sup>b</sup>	2006 <sup>b</sup>	2006 <sup>b</sup>	2005 <sup>b</sup>	2005 <sup>b</sup>
Romania	97	96	..	..	..	..	94	95	3	2	98	98
Russian Federation	..	..	..	..	..	..	..	..	..	..	..	..
Rwanda	209	206	61	43	59	49	30	32	15	15	..	..
Saudi Arabia	102	105	82	100	84	93	100	94	6	4	93	97
Senegal	95	98	..	65	..	65	54	53	11	10	52	48
Serbia	..	..	..	..	..	..	..	..	..	..	..	..
Sierra Leone	..	..	..	..	..	..	..	..	10 <sup>e</sup>	10 <sup>e</sup>	..	..
Singapore	..	..	..	..	..	..	..	..	..	..	..	..
Slovak Republic	100	98	..	..	..	..	97	98	3	2	98	99
Slovenia	98	96	..	..	..	..	..	..	1	0 <sup>c</sup>	..	..
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	118	112	..	82	..	83	75	79	8	8	89	91
Spain	103	101	..	100	..	100	100	100	3	2	..	..
Sri Lanka	109	109	92	..	93	..	..	..	1	1	..	..
Sudan	67	58	90	78	99	79	73	75	1	2	94	100
Swaziland	111	103	74	81	80	87	66	75	19	15	88	89
Sweden	96	95	100	..	100	..	..	..	..	..	..	..
Switzerland	86	91	..	..	..	..	..	..	2	1	99	100
Syrian Arab Republic	125	122	97	..	95	..	92	93	7	5	95	97
Tajikistan	103	99	..	..	..	..	100	97	0 <sup>c</sup>	0 <sup>c</sup>	98	97
Tanzania	105	104	81	85 <sup>d</sup>	82	89 <sup>d</sup>	81 <sup>d</sup>	85 <sup>d</sup>	4 <sup>e</sup>	4 <sup>e</sup>	47	45
Thailand	..	..	..	..	..	..	..	..	..	..	..	..
Timor-Leste	118	105	..	..	..	..	..	..	..	..	..	..
Togo	101	95	52	79	42	70	74	62	23	23	68	61
Trinidad and Tobago	96	92	..	90	..	92	80	87	6	4	94	92
Tunisia	100	101	94	97	77	97	93	95	10	7	86	90
Turkey	97	93	98	97	97	97	95	93	3	3	93	90
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	145	147	..	49	..	49	26	25	30	29	42	43
Ukraine	99	99	..	..	..	..	..	..	0 <sup>c</sup>	0 <sup>c</sup>	100	100
United Arab Emirates	103	101	80	98	80	100	98	100	2	2	99	100
United Kingdom	..	..	..	..	..	..	..	..	0	0	..	..
United States	102	100	..	..	..	..	..	..	..	..	..	..
Uruguay	107	105	96	90	98	93	88	91	9	6	75	87
Uzbekistan	97	94	..	..	..	..	..	..	0 <sup>e</sup>	0 <sup>e</sup>	..	..
Venezuela, RB	102	99	82	90	90	94	87	93	8	5	99	99
Vietnam	99	94	..	..	..	..	..	..	..	..	..	..
West Bank and Gaza	78	78	..	..	..	..	97	100	1	1	98	99
Yemen, Rep.	122	102	..	67	..	65	61	57	5	4	83	82
Zambia	119	125	..	92	..	87	79	73	7	6	49	60
Zimbabwe	..	..	72	..	81	..	..	..	..	..	..	..
<b>World</b>	<b>116 w</b>	<b>111 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>Low income</b>	126	116	..	71	..	71	69	69	6	6	79	77
<b>Middle income</b>	..	..	61	..	80	..	..	..	..	..	..	..
Lower middle income	94	95	59	..	79	..	..	..	3	2	..	..
Upper middle income	105	101	..	..	..	..	..	..	10	9	..	..
<b>Low &amp; middle income</b>	..	..	..	..	..	..	..	..	..	..	..	..
East Asia & Pacific	91	90	55	..	78	..	..	..	1	1	..	..
Europe & Central Asia	..	..	..	..	..	..	..	..	..	..	..	..
Latin America & Carib.	112	108	..	..	..	..	..	..	10	9	..	..
Middle East & N. Africa	108	110	..	90	..	87	87	84	7	4	82	83
South Asia	130	120	..	72	..	73	72	73	4	4	84	82
Sub-Saharan Africa	117	108	..	..	..	..	..	..	9	9	..	..
<b>High income</b>	101	101	..	..	..	..	..	..	..	..	..	..
Euro area	103	102	..	..	..	..	..	..	1	1	..	..

a. Because of the change from International Standard Classification of Education 1976 (ISCED76) to ISCED97 in 1998, data for 1991 are not fully comparable with data from 1999 onward. b. Provisional data. c. Less than 0.5. d. Data are for 2006. e. Data are for 2007.

## About the data

The United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics estimates indicators of students' progress through school. These indicators measure an education system's success in reaching all students, efficiently moving students from one grade to the next, and imparting a particular level of education.

The gross intake rate indicates the level of access to primary education and the education system's capacity 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 exceed 100 percent. Once enrolled, students drop out for a variety of reasons, including low quality schooling, relevance of curriculum (real or perceived by parents or students), repetition, discouragement over poor performance, and direct and indirect schooling costs. Students' progress to higher grades may also be limited by the availability of teachers, classrooms, and materials.

The cohort survival rate is the estimated proportion of an entering cohort of grade 1 students that eventually reaches grade 5 or the last grade of primary education. It measures an education system's holding

power and internal efficiency. Rates approaching 100 percent indicate high retention and low dropout levels. Cohort survival rates are typically estimated from data on enrollment and repetition by grade for two consecutive years. This procedure, called the reconstructed cohort method, makes three simplifying assumptions: dropouts never return to school; promotion, repetition, and dropout rates remain constant over the period in which the cohort is enrolled in school; and the same rates apply to all pupils enrolled in a grade, regardless of whether they previously repeated a grade (Fredricksen 1993). Cross-country comparisons should thus be made with caution, because other flows—caused by new entrants, reentrants, grade skipping, migration, or transfers during the school year—are not considered.

Research suggests that five to six years of schooling, which is how long primary education lasts in most countries, is a critical threshold for achieving 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, actions that many countries do not systematically undertake.

Data on repeaters are often used to indicate an education system's internal efficiency. Repeaters not only increase the cost of education for the family and the school system, but also use limited school resources. Country policies on repetition and promotion differ; in some cases the number of repeaters is controlled because of limited capacity. Care should be taken in interpreting this indicator.

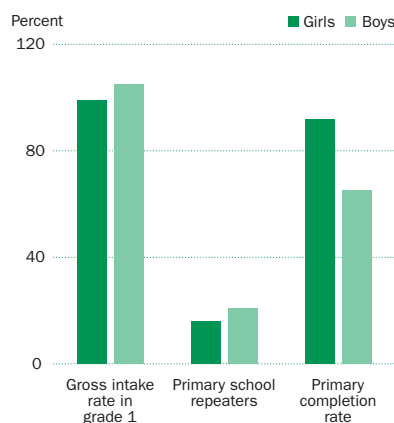
The transition rate from primary to secondary school conveys the degree of access or transition between the two levels. As completing primary education is a prerequisite for participating in lower secondary school, growing numbers of primary completers will inevitably create pressure for more available places at the secondary level. A low transition rate can signal such problems as an inadequate examination and promotion system or insufficient secondary school capacity. The quality of data on the transition rate is affected when new entrants and repeaters are not correctly distinguished in the first grade of secondary school. Students who interrupt their studies after completing primary school could also affect data quality.

In 2006 the UNESCO Institute for Statistics changed its convention for citing the reference year. For more information, see *About the data* for table 2.10.

## Definitions

- **Gross intake rate in grade 1** is the number of new entrants in the first grade of primary education regardless of age as a percentage of the population of the official primary school entrance age.
- **Cohort survival rate** is the percentage of children enrolled in the first grade of primary school who eventually reach grade 5 or the last grade of primary education. The estimate is based on the reconstructed cohort method (see *About the data*).
- **Repeaters in primary school** are the number of students enrolled in the same grade as in the previous year as a percentage of all students enrolled in primary school.
- **Transition to secondary school** is the number of new entrants to the first grade of secondary school in a given year as a percentage of the number of students enrolled in the final grade of primary school in the previous year.

### In Lesotho more girls who enroll in primary school stay in and complete school than boys do 2.12a



In many developing countries, especially in Sub-Saharan Africa, fewer girls than boys enroll and stay in school. But in Lesotho more girls complete primary school because they repeat grades less often and are less likely to drop out.

Source: United Nations Educational, Scientific, and Cultural Organization Institute for Statistics.

## Data sources

Data on education efficiency are from the UNESCO Institute for Statistics.



	Primary completion rate <sup>a</sup>						Youth literacy rate					Adult literacy rate				
	Total		% of relevant age group				% ages 15–24					% ages 15 and older				
	1991	2006 <sup>b</sup>	1991	Male	2006 <sup>b</sup>	1991	Female	2006 <sup>b</sup>	1990	Male	2005	1990	Female	2005	2005	Female
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Albania	..	96	..	97	..	96	..	96	..	99	..	99	..	99	99	98
Algeria	80	85	86	86	73	84	86	84	86	94	62	86	86	80	60	60
Angola	35	..	..	..	..	..	..	..	..	84	..	63	63	83	54	54
Argentina	..	99	..	97	..	102	98	99	99	99	99	99	99	97	97	97
Armenia	90	91	..	90	..	93	100	100	100	100	100	100	100	100	99	99
Australia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Austria	..	103	..	103	..	102	..	..	..	..	..	..	..	..	..	..
Azerbaijan	..	92	..	94	..	90	..	..	..	..	..	..	..	..	..	..
Bangladesh	49	72	..	70	..	74	52	67	67	38	60	60	54	41	41	41
Belarus	94	95	95	96	96	93	100	..	100	..	..	..	..	..	..	..
Belgium	79	..	76	..	82	..	..	..	..	..	..	..	..	..	..	..
Benin	21	65	28	78	13	51	55	59	59	27	33	33	48	23	23	23
Bolivia	..	101	..	102	..	100	96	99	99	92	96	96	93	81	81	81
Bosnia and Herzegovina	..	..	..	..	..	..	..	100	..	..	100	..	99	94	94	94
Botswana	89	95	82	75	97	115	86	92	92	92	96	96	80	82	82	82
Brazil	93	105	..	..	..	..	..	96	..	..	98	98	88	89	89	89
Bulgaria	84	99	86	98	83	99	..	98	..	98	..	98	99	98	98	98
Burkina Faso	20	31	24	35	15	28	27	40	40	14	26	26	31	17	17	17
Burundi	46	36	49	40	43	32	59	77	77	48	70	70	67	52	52	52
Cambodia	..	87	..	87	..	86	..	88	..	..	79	79	85	64	64	64
Cameroon	53	58	57	65	49	51	..	..	..	..	..	..	77	60	60	60
Canada	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Central African Republic	27	24	35	31	18	18	63	70	70	35	47	47	65	33	33	33
Chad	18	31	29	41	7	21	..	56	..	..	23	23	41	13	13	13
Chile	..	123	..	130	..	116	98	99	99	99	99	99	96	96	96	96
China	105	..	..	..	..	..	97	99	99	91	99	99	95	87	87	87
Hong Kong, China	102	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Colombia	70	105	67	103	73	107	89	98	92	98	98	98	93	93	93	93
Congo, Dem. Rep.	46	38	58	46	34	31	..	78	..	63	63	63	81	54	54	54
Congo, Rep.	54	73	59	77	49	69	..	98	..	97	97	97	91	79	79	79
Costa Rica	79	89	77	87	81	91	..	97	..	98	95	95	95	95	95	95
Côte d'Ivoire	43	43	55	53	32	33	60	71	38	52	61	61	39	39	39	39
Croatia	85	92	..	93	..	92	100	100	100	100	99	99	99	97	97	97
Cuba	99	92	..	92	..	91	..	100	..	100	100	100	100	100	100	100
Czech Republic	..	102	..	102	..	102	..	..	..	..	..	..	..	..	..	..
Denmark	98	99	98	99	98	99	..	..	..	..	..	..	..	..	..	..
Dominican Republic	61	83	..	80	..	87	..	93	..	95	87	87	87	87	87	87
Ecuador	91	106	91	105	92	106	97	96	96	96	96	96	92	90	90	90
Egypt, Arab Rep.	..	98	..	102	..	94	..	90	..	79	83	83	59	59	59	59
El Salvador	41	88	38	88	43	88	85	87	85	90	82	82	79	79	79	79
Eritrea	19	48	22	56	17	41	..	..	..	..	..	..	..	..	..	..
Estonia	93	106	93	107	94	104	100	100	100	100	100	100	100	100	100	100
Ethiopia	26	49	32	55	19	42	..	62	..	39	50	50	23	23	23	23
Finland	97	100	98	101	97	99	..	..	..	..	..	..	..	..	..	..
France	104	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gabon	58	75	55	73	61	76	94	97	92	95	88	88	80	80	80	80
Gambia, The	44	63	55	62	33	64	..	..	..	..	..	..	..	..	..	..
Georgia	..	85	..	83	..	86	..	..	..	..	..	..	..	..	..	..
Germany	100	95	99	94	100	95	..	..	..	..	..	..	..	..	..	..
Ghana	61	71	69	73	54	68	..	76	..	65	66	66	50	50	50	50
Greece	99	100	99	100	98	100	99	99	99	99	98	98	94	94	94	94
Guatemala	..	77	..	80	..	73	..	86	..	78	75	75	63	63	63	63
Guinea	17	64	25	74	9	53	..	59	..	34	43	43	18	18	18	18
Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Haiti	27	..	29	..	26	..	..	..	..	..	..	..	..	..	..	..

# Education completion and outcomes

# 2.13

**POP**

	Primary completion rate <sup>a</sup>						Youth literacy rate					Adult literacy rate	
	1991	Total	% of relevant age group				1990	% ages 15–24				% ages 15 and older	
		2006 <sup>b</sup>	1991	Male	2006 <sup>b</sup>	Female		1990	Male	2005	Female	2005	Male
Honduras	64	89	67	86	61	91	..	87	..	91	80	80	
Hungary	93	94	88	94	90	94	..	..	..	..	..	..	
India	64	85	75	87	52	82	74	84 <sup>c</sup>	49	68 <sup>c</sup>	73 <sup>c</sup>	48 <sup>c</sup>	
Indonesia	91	99	..	99	..	100	97	99	95	99	94	87	
Iran, Islamic Rep.	91	101	97	95	85	108	92	98	81	97	88	77	
Iraq	59	..	64	..	53	..	..	..	..	..	..	..	
Ireland	..	97	..	96	..	97	..	..	..	..	..	..	
Israel	..	101	..	101	..	101	..	..	..	..	..	..	
Italy	104	100	104	100	104	99	..	100	..	100	99	98	
Jamaica	90	82	86	81	94	84	..	..	..	..	..	..	
Japan	101	..	101	..	102	..	..	..	..	..	..	..	
Jordan	72	100	69	100	77	101	..	99	..	99	95	87	
Kazakhstan	..	101 <sup>d</sup>	..	100 <sup>d</sup>	..	101 <sup>d</sup>	100	..	100	..	..	..	
Kenya	..	93	..	94	..	92	..	80	..	81	78	70	
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..	
Korea, Rep.	98	101	98	107	98	95	..	..	..	..	..	..	
Kuwait	..	91	..	90	..	92	..	100	..	100	94	91	
Kyrgyz Republic	..	99	..	99	..	100	..	..	..	..	..	..	
Lao PDR	43	75	48	80	38	70	..	83	..	75	77	61	
Latvia	..	92	..	93	..	92	100	100	100	100	100	100	
Lebanon	..	80	..	79	..	82	..	..	..	..	..	..	
Lesotho	59	78	42	65	76	92	..	..	..	..	74	90	
Liberia	..	63	..	69	..	58	..	65	..	69	58	46	
Libya	..	..	..	..	..	..	..	100	..	96	93	75	
Lithuania	89	91	..	91	..	91	100	100	100	100	100	100	
Macedonia, FYR	98	97	..	96	..	98	..	99	..	98	98	94	
Madagascar	33	57	33	57	34	57	..	73	..	68	77	65	
Malawi	29	55	36	55	21	55	70	..	49	..	..	..	
Malaysia	91	95	91	95	91	95	96	97	95	97	92	85	
Mali	13	49	15	59	10	40	..	..	..	..	33	16	
Mauritania	34	47	41	47	27	47	..	68	..	55	60	43	
Mauritius	107	92	107	91	107	94	91	94	92	95	88	81	
Mexico	88	103	89	102	90	103	96	98	95	98	93	90	
Moldova	..	90	..	90	..	91	100	100	100	100	100	99	
Mongolia	..	109	..	108	..	110	..	97	..	98	98	98	
Morocco	48	84	57	88	39	80	..	81	..	60	66	40	
Mozambique	26	42	32	49	21	35	..	..	..	..	..	..	
Myanmar	..	95	..	93	..	98	..	96	..	93	94	86	
Namibia	78	76	70	73	86	80	86	91	90	93	87	83	
Nepal	51	76	68	80	40	72	68	81	33	60	63	35	
Netherlands	..	100	..	101	..	99	..	..	..	..	..	..	
New Zealand	100	..	101	..	99	..	..	..	..	..	..	..	
Nicaragua	42	73	43	70	59	77	..	84	..	89	77	77	
Niger	18	33	22	39	13	26	..	52	..	23	43	15	
Nigeria	..	76	..	83	..	68	81	87	62	81	78	60	
Norway	100	99	100	99	100	98	..	..	..	..	..	..	
Oman	74	94	78	95	70	92	..	98	..	97	87	74	
Pakistan	..	62	..	70	..	53	..	77	..	53	64	35	
Panama	86	94	86	94	86	95	95	97	95	96	93	91	
Papua New Guinea	46	..	51	..	42	..	..	69	..	64	63	51	
Paraguay	68	94	68	94	69	95	96	96	95	96	94	93	
Peru	..	100	..	100	..	100	97	98	94	96	94	82	
Philippines	86	96	84	92	84	100	96	94	97	97	92	94	
Poland	98	97	..	..	..	..	..	..	..	..	..	..	
Portugal	95	104	94	102	95	107	99	100	99	100	96	92	
Puerto Rico	..	..	..	..	..	..	92	86	94	86	90	90	





	Primary completion rate <sup>a</sup>						Youth literacy rate				Adult literacy rate	
	Total		% of relevant age group		Female		% ages 15–24		Female		% ages 15 and older	
	1991	2006 <sup>b</sup>	1991	2006 <sup>b</sup>	1991	2006 <sup>b</sup>	1990	2005	1990	2005	2005	2005
Romania	96	99	96	99	96	98	99	98	99	98	98	96
Russian Federation	93	94	92	..	93	..	100	100	100	100	100	99
Rwanda	35	35	40	36	31	35	..	79	..	77	71	60
Saudi Arabia	55	85	60	..	51	..	94	97	81	95	88	78
Senegal	39	49	47	51	30	47	49	58	28	41	51	29
Serbia	..	..	..	..	..	..	..	99 <sup>e</sup>	..	99 <sup>e</sup>	99 <sup>e</sup>	94 <sup>e</sup>
Sierra Leone	..	81 <sup>d</sup>	..	92 <sup>d</sup>	..	70 <sup>d</sup>	..	60	..	37	47	24
Singapore	..	..	..	..	..	..	99	99	99	100	97	89
Slovak Republic	96	94	95	95	96	94	..	..	..	..	..	..
Slovenia	95	99	..	100	..	99	100	100	100	100	100	100
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	76	100	71	100	80	100	..	..	..	..	..	..
Spain	..	103	..	103	..	103	100	..	100	..	..	..
Sri Lanka	102	108	103	107	102	108	..	95 <sup>f</sup>	..	96 <sup>f</sup>	92 <sup>f</sup>	89 <sup>f</sup>
Sudan	42	47	47	50	37	43	..	85 <sup>g</sup>	..	71 <sup>g</sup>	71 <sup>g</sup>	52 <sup>g</sup>
Swaziland	60	67	57	64	63	69	..	87	..	90	81	78
Sweden	96	..	96	..	96	..	..	..	..	..	..	..
Switzerland	53	91	53	91	54	92	..	..	..	..	..	..
Syrian Arab Republic	89	115	94	116	84	113	..	95	..	90	88	74
Tajikistan	..	106	..	108	..	104	100	100	100	100	100	99
Tanzania	62	85 <sup>d</sup>	62	87 <sup>d</sup>	63	83 <sup>d</sup>	86	81	78	76	78	62
Thailand	..	..	..	..	..	..	..	98	..	98	95	91
Timor-Leste	..	..	..	..	..	..	..	..	..	..	..	..
Togo	35	67	48	78	22	56	..	84	..	64	69	38
Trinidad and Tobago	101	88	98	86	104	90	..	99	..	99	99	98
Tunisia	74	99	79	98	70	100	..	96	..	92	83	65
Turkey	90	86	93	90	86	82	97	98	88	93	95	80
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	..	54	..	57	..	51	77	83	63	71	77	58
Ukraine	94	105	98	105	97	105	..	100	..	100	100	99
United Arab Emirates	103	100	104	101	103	100	..	98	..	95	89	88
United Kingdom	..	..	..	..	..	..	..	..	..	..	..	..
United States	..	..	..	..	..	..	..	..	..	..	..	..
Uruguay	94	93	91	92	96	93	..	..	..	..	..	..
Uzbekistan	..	98	..	98	..	98	..	..	..	..	..	..
Venezuela, RB	43	96	37	93	49	98	95	96	96	98	93	93
Vietnam	..	92	..	103	..	97	94	..	93	..	..	..
West Bank and Gaza	..	89	..	89	..	89	..	99	..	99	97	88
Yemen, Rep.	..	60	..	74	..	46	..	91	..	59	73	35
Zambia	..	84	..	89	..	79	67	..	66	..	..	..
Zimbabwe	97	81	99	83	96	79	97	97	94	98	93	86
<b>World</b>	<b>79 w</b>	<b>86 w</b>	<b>85 w</b>	<b>88 w</b>	<b>74 w</b>	<b>84 w</b>	<b>88 w</b>	<b>91 w</b>	<b>79 w</b>	<b>84 w</b>	<b>87 w</b>	<b>77 w</b>
<b>Low income</b>	57	73	68	77	48	69	72	80	54	66	72	50
<b>Middle income</b>	93	97	96	98	90	97	95	97	91	96	93	87
Lower middle income	95	97	98	97	90	96	95	97	90	95	93	85
Upper middle income	88	99	88	99	88	99	97	98	96	98	94	92
<b>Low &amp; middle income</b>	78	85	84	87	72	83	86	90	76	82	85	73
East Asia & Pacific	101	98	103	98	95	98	97	98	92	98	95	87
Europe & Central Asia	93	95	94	96	91	94	99	99	98	98	99	96
Latin America & Carib.	82	99	82	98	83	100	93	96	94	96	91	89
Middle East & N. Africa	77	91	83	93	71	88	84	93	68	84	83	63
South Asia	62	80	75	83	52	76	71	81	48	65	70	46
Sub-Saharan Africa	51	60	56	65	46	55	71	76	58	64	69	50
<b>High income</b>	..	97	..	99	..	96	99	99	99	99	99	98
Euro area	100	..	..	..	..	..	..	..	..	..	..	..

a. Because of the change from International Standard Classification of Education 1976 (ISCED76) to ISCED97 in 1998, data for 1991 are not fully comparable with data from 1999 onward. b. Provisional data. c. Excludes Mao Maram, Paomata, and Purul of Senapati district of Manipur. d. Data are for 2007. e. Includes Montenegro and excludes Kosovo and Metohija. f. Covers 18 of 25 districts. g. Covers northern Sudan only.

## About the data

Many governments publish statistics that indicate how their education systems are working and developing—statistics on enrollment and such efficiency indicators as repetition rates, pupil-teacher ratios, and cohort progression. The World Bank and the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics jointly developed the primary completion rate indicator. Increasingly used as a core indicator of an education system's performance, it reflects an education system's coverage and the educational attainment of students. The indicator is 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 primary completion rate does not necessarily mean high levels of student learning.

The primary completion rate reflects the primary cycle as defined by the International Standard Classification of Education, 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 table shows the proxy primary completion rate, calculated by subtracting the number of repeaters in the last grade of primary school from the total number of students in that grade and dividing by the total number of children of official graduation age. Data limitations preclude adjusting for students who drop out during the final year of primary school. Thus

proxy rates should be taken as an upper estimate of the actual primary completion rate.

There are many reasons why the primary completion rate can exceed 100 percent. The numerator may include late entrants and overage children who have repeated one or more grades of primary school as well as children who entered school early, while the denominator is the number of children of official completing age. Other data limitations contribute to completion rates exceeding 100 percent, such as the use of estimates for the population of varying reliability, the conduct of school and population surveys at different times of year, and other discrepancies in the numbers used in the calculation.

Basic student outcomes include achievements in reading and mathematics judged against established standards. National assessments are enabling many countries' ministries of education to monitor progress in these outcomes. International comparable assessments are not yet available, although a few exist for some countries. The UNESCO Institute for Statistics has established literacy as an outcome indicator based on an internationally agreed definition.

The literacy rate is 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 levels of completion. Because definitions and methodologies of data collection differ across countries, data should be used cautiously.

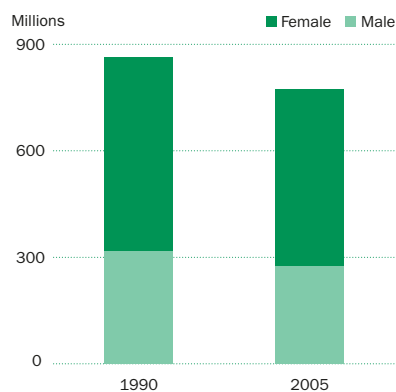
The reported literacy data are compiled by the UNESCO Institute for Statistics based on national censuses and household surveys during 1985–2005. For detailed information on sources and definitions, consult the original source.

Literacy statistics for most countries cover the population ages 15 and older, but some include younger ages or are confined to age ranges that tend to inflate literacy rates. The literacy data in the narrower age range of 15–24 captures the ability of participants in the formal education system better and reflects recent progress in education. 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 and acquired basic literacy and numeracy skills.

## Definitions

• **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 completing age. • **Youth literacy rate** is the percentage of people ages 15–24 that can, with understanding, both read and write a short, simple statement about their everyday life. • **Adult literacy rate** is the literacy rate among people ages 15 and older.

**In 2005 more than 770 million people were illiterate—64 percent of them women, a share unchanged since 1990** **2.13a**



Source: United Nations Educational, Scientific, and Cultural Organization Institute for Statistics.

## Data sources

Data on primary completion rates and literacy rates are from the UNESCO Institute for Statistics.



	Survey year	Gross intake rate in grade 1		Gross primary participation rate		Average years of schooling		Primary completion rate				Children out of school	
		% of relevant age group		% of relevant age group		Ages 15–24		% of relevant age group				% of children ages 6–11	
		Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Male	Female	Poorest quintile	Richest quintile
Armenia	2000	105	93	177	181	9	11	96	98	96	98	14	13
Bangladesh	2004	193	156	107	120	3	8	26	70	47	58	25	10
Benin	2001	74	112	51	115	1	6	7	45	23	15	66	21
Bolivia	2003	98	95	92	98	6	11	48	90	75	75	24	5
Burkina Faso	2003	24	97	20	98	1	6	8	52	24	20	87	32
Cambodia	2000	146	187	78	134	2	7	4	45	18	17	50	12
Cameroon	2004	115	100	94	122	3	9	12	69	36	37	42	4
Central African Republic	1994–95	103	118	57	130	2	6	0 <sup>a</sup>	18	8	6	65	21
Chad	2004	3	14	15	98	0 <sup>a</sup>	5	1	36	15	8	91	36
Colombia	2005	157	85	126	99	6	11	50	90	70	77	8	1
Comoros	1996	84	119	56	147	2	6	4	29	12	12	72	26
Côte d'Ivoire	1994	26	39	41	103	2	6	6	41	25	17	70	23
Dominican Republic	2002	170	103	149	156	6	11	38	87	57	69	14	4
Egypt, Arab Rep.	2003	87	120	96	103	6	11	58	87	77	71	24	5
Eritrea	1995	55	117	42	154	1	7	3	65	21	24	84	10
Ethiopia	2000	87	257	61	186	1	5	4	44	15	12	87	42
Gabon	2000	..	..	155	140	5	8	12	60	35	40	8	3
Ghana	2003	90	90	71	108	4	9	15	66	38	41	57	20
Guatemala	1995	114	124	62	122	2	9	9	76	41	40	58	8
Guinea	1999	13	39	10	38	1	5	3	27	18	9	95	77
Haiti	2000	141	200	94	152	3	8	1	40	13	18	64	21
India	1999	99	72	87	122	3	10	31	87	64	55	35	2
Indonesia	2002–03	85	92	103	104	7	11	75	97	86	89	19	6
Jordan	2002	..	..	101	99	10	12	93	98	97	97	11	9
Kazakhstan	1999	..	..	125	130	10	11	98	100	98	99	24	18
Kenya	2003	128	123	104	118	5	9	14	57	30	36	24	4
Kyrgyz Republic	1997	..	..	133	138	10	10	86	88	85	87	21	18
Madagascar	1997	84	87	59	134	2	7	1	47	13	16	60	6
Malawi	2002	180	226	103	126	4	8	10	52	32	14	29	9
Mali	2001	45	89	36	101	1	5	3	37	16	11	75	29
Morocco	2003–04	109	85	98	116	2	9	17	78	47	46	26	2
Mozambique	2003	104	134	79	150	2	5	2	17	8	7	59	13
Namibia	1992	..	..	138	116	5	8	15	65	25	34	22	9
Nepal	2001	240	249	116	160	3	7	18	59	37	28	33	6
Nicaragua	2001	127	108	79	104	3	10	14	88	47	59	46	5
Niger	1998	11	69	15	77	1	4	8	46	22	13	90	44
Nigeria	2003	77	106	67	111	4	10	16	70	39	37	56	5
Pakistan	1990–91	68	173	45	127	2	8	11	55	32	22	72	13
Paraguay	1990	137	106	103	114	5	10	29	77	49	54	21	10
Peru	2000	114	94	112	109	6	11	41	93	72	72	9	1
Philippines	2003	131	102	103	102	6	11	46	88	67	79	17	2
Rwanda	2000	216	197	100	126	3	6	7	28	14	14	43	23
Tanzania	1999	95	231	63	119	4	7	27	55	34	34	74	27
Uganda	2000–01	145	127	106	120	4	8	7	43	19	21	28	6
Uzbekistan	1996	..	..	102	114	10	10	84	87	84	86	29	23
Vietnam	2002	121	105	139	127	5	10	58	97	84	84	8	2
Zambia	2001–02	83	119	74	112	4	9	16	79	38	43	61	18
Zimbabwe	1994	138	114	104	109	7	10	36	80	51	57	22	8

a. Less than 0.5.

## About the data

The data in the table describe basic information on school participation and attainment 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.

Typically, Demographic and Health Surveys collect basic information on educational attainment and enrollment levels from every household member ages 5 or 6 and older as background characteristics. As the surveys are intended for the collection of demographic and health information, the education section of the survey is not as robust and detailed as the health section; however, it still provides useful micro-level information on education that cannot be explained by aggregate national-level data.

Socioeconomic status as displayed in the table is based on 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.

The choice of the asset index for defining socioeconomic status was based on pragmatic rather than conceptual considerations: Demographic and Health Surveys do not collect 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 primarily in 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 education status. 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 was carried out for 48 countries. The table shows the estimates for the poorest and richest quintiles only; the full set of estimates for 32 indicators is available in the country reports (see *Data sources*). The data in the table differ from data for similar indicators in preceding tables either because the indicator refers to a period a few years preceding the survey date or because the indicator definition or methodology is different. Findings should be interpreted with caution because of measurement error inherent in the use of survey data.

## Definitions

- **Survey year** is the year in which the underlying data were collected.
- **Gross intake rate in grade 1** is the number of students in the first grade of primary education regardless of age as a percentage of the population of the official primary school entrance age. These data may differ from those in table 2.12.
- **Gross primary participation rate** is the ratio of total students attending primary school regardless of age to the population of the age group that officially corresponds to primary education.
- **Average years of schooling** are the years of formal schooling received, on average, by youths and adults ages 15–24.
- **Primary completion rate** is the percentage of children of the official primary school completing age to the official primary school completing age plus four who have completed the last year of primary school or higher. These data differ from those in table 2.13 because the definition and methodology are different.
- **Children out of school** are the percentage of children ages 6–11 who are not in school. These data differ from those in table 2.11 because the definition and methodology are different.

## Data sources

Data on education gaps by income and gender are from an analysis of Demographic and Health Surveys by Macro International and the World Bank. Country reports are available at [www.worldbank.org/education/edstats/](http://www.worldbank.org/education/edstats/).

	Health expenditure							Health workers			Hospital beds
	Total % of GDP 2005	% of GDP 2005	Public		Out of pocket % of private 2005	External resources <sup>a</sup> % of total 2005	Per capita \$ 2005	per 1,000 people			per 1,000 people 2000-06 <sup>b</sup>
			% of total 2005	% of government expenditure 2005				Physicians 2000-06 <sup>b</sup>	Nurses and midwives 2000-06 <sup>b</sup>	Community health workers 2000-06 <sup>b</sup>	
Afghanistan	5.2	1.0	20.0	3.3	97.4	13.1	..	..	..	..	..
Albania	6.5	2.6	40.3	8.6	97.0	1.9	169	1.2	4.7	..	3.0
Algeria	3.5	2.6	75.3	9.5	94.6	0.1	108	1.1	2.2	0.0 <sup>c</sup>	1.7
Angola	1.8	1.5	81.5	4.7	100.0	7.3	36	0.1	1.4	..	..
Argentina	10.2	4.5	43.9	14.2	43.4	0.0	484	..	..	..	4.1
Armenia	5.4	1.8	32.9	8.2	89.2	12.7	88	3.7	4.9	..	4.5
Australia	8.8	5.9	67.0	17.0	55.2	0.0	3,181	2.5	9.7	0.2	4.0
Austria	10.2	7.7	75.7	15.5	67.4	0.0	3,788	3.7	6.6	..	7.7
Azerbaijan	3.9	1.0	24.8	3.8	84.6	0.4	62	3.6	8.4	..	8.2
Bangladesh	2.8	0.8	29.1	5.5	88.3	12.2	12	0.3	0.3	0.2	0.3
Belarus	6.6	5.0	75.8	10.5	69.0	..	204	4.8	12.5	..	11.1
Belgium	9.6	6.9	71.4	13.9	78.7	0.0	3,451	4.2	14.2	..	5.3
Benin	5.4	3.0	55.6	13.5	99.9	19.7	28	0.0 <sup>c</sup>	0.8	0.0 <sup>c</sup>	0.5
Bolivia	6.9	4.3	61.6	12.4	81.4	6.8	71	1.2	2.1	0.1	1.0
Bosnia and Herzegovina	8.8	5.2	58.7	14.0	100.0	0.6	243	1.4	4.7	..	3.0
Botswana	7.0	4.5	63.6	12.4	26.2	4.7	362	0.4	2.7	..	2.2
Brazil	7.9	3.5	44.1	6.7	54.6	0.0	371	1.2	3.8	..	2.6
Bulgaria	7.7	4.7	60.6	12.1	96.3	1.1	272	0.3	4.6	..	6.4
Burkina Faso	6.7	4.0	59.5	18.4	94.2	29.5	27	0.1	0.5	0.1	..
Burundi	3.4	1.0	28.6	2.3	100.0	50.9	3	0.0 <sup>c</sup>	0.2	0.1	0.7
Cambodia	6.4	1.5	24.2	12.0	79.3	25.7	29	0.2	0.9	..	0.6
Cameroon	5.2	1.5	28.0	11.0	94.6	5.3	49	0.2	1.6	..	..
Canada	9.7	6.8	70.3	17.5	48.7	0.0	3,430	1.9	10.1	..	3.6
Central African Republic	4.0	1.5	37.5	10.9	95.3	38.5	13	0.1	0.4	0.1	..
Chad	3.7	1.5	39.8	9.5	96.2	12.5	22	0.0 <sup>c</sup>	0.3	0.0 <sup>c</sup>	0.4
Chile	5.4	2.8	51.4	13.2	54.3	0.1	397	1.1	0.6	..	2.4
China	4.7	1.8	38.8	1.0	85.3	0.1	81	1.5	1.0	0.1	2.5
Hong Kong, China	..	..	..	..	..	..	..	..	..	..	..
Colombia	7.3	6.2	84.8	17.7	45.1	0.0	201	1.4	0.6	..	1.2
Congo, Dem. Rep.	4.2	1.5	34.6	7.2	100.0	23.6	5	0.1	0.5	..	..
Congo, Rep.	1.9	0.9	47.1	4.0	100.0	4.7	31	0.2	1.0	0.0 <sup>c</sup>	..
Costa Rica	7.1	5.4	76.0	21.0	79.4	0.2	327	1.3	0.9	1.3	1.4
Cote d'Ivoire	3.9	0.8	21.5	4.2	87.8	6.6	34	0.1	0.6	..	..
Croatia	8.4 <sup>d</sup>	6.3 <sup>d</sup>	75.5 <sup>d</sup>	13.1 <sup>d</sup>	93.6	0.0	812 <sup>d</sup>	2.5	5.5	..	5.5
Cuba	7.6	6.9	90.8	11.7	93.2	0.3	310	5.9	7.4	..	4.9
Czech Republic	7.1	6.3	88.6	14.4	95.3	0.0	868	3.6	8.9	..	8.4
Denmark	9.1	7.7	84.1	14.4	90.1	0.0	4,350	3.6	10.1	..	3.8
Dominican Republic	5.4	1.7	31.1	9.3	86.4	2.5	197	1.9	1.8	..	2.2
Ecuador	5.3	2.1	40.0	8.0	85.0	0.4	147	1.5	1.7	..	1.4
Egypt, Arab Rep.	6.1	2.3	38.0	7.3	94.9	0.9	78	2.4	3.4	..	2.2
El Salvador	8.1 <sup>d</sup>	4.0 <sup>d</sup>	50.0 <sup>d</sup>	22.0 <sup>d</sup>	94.0 <sup>d</sup>	2.7 <sup>d</sup>	220 <sup>d</sup>	1.5	0.8	..	0.9
Eritrea	3.7	1.7	44.9	4.2	100.0	50.5	8	0.1	0.6	..	..
Estonia	5.0	3.8	76.9	11.5	88.7	0.3	516	3.3	7.0	0.0 <sup>c</sup>	5.8
Ethiopia	4.9	3.0	61.0	10.8	80.6	37.9	6	0.0 <sup>c</sup>	0.2	0.3	0.2
Finland	7.5	5.8	77.8	11.6	80.0	0.0	2,824	3.3	8.9	..	7.0
France	11.1	8.9	79.8	16.5	34.2	0.0	3,807	3.4	8.0	..	7.5
Gabon	4.1	3.0	74.0	13.9	100.0	1.5	276	0.3	5.0	..	..
Gambia, The	5.2	3.4	65.4	11.2	70.3	29.3	15	0.1	1.3	0.7	0.8
Georgia	8.6	1.7	19.5	6.7	95.7	5.1	123	4.7	4.0	..	3.8
Germany	10.7	8.2	76.9	17.6	56.8	0.0	3,628	3.4	8.0	..	8.4
Ghana	6.2	2.1	34.1	6.9	79.1	26.0	30	0.2	0.9	..	0.9
Greece	10.1	4.3	42.8	11.5	62.0	..	2,580	5.0	3.6	..	4.7
Guatemala	5.2	2.0	37.9	15.7	92.2	1.1	132	..	..	..	0.7
Guinea	5.6	0.7	11.9	4.7	99.5	12.2	21	0.1	0.5	0.0 <sup>c</sup>	..
Guinea-Bissau	5.2	1.7	31.9	4.0	85.7	31.8	10	0.1	0.7	2.9	..
Haiti	6.2	3.2	51.3	27.7	90.1	18.9	28	..	..	..	0.8

# Health expenditure, services, and use

# 2.15

**POP**

	Health expenditure							Health workers			Hospital beds
	Total % of GDP	% of GDP	Public % of total	% of government expenditure	Out of pocket % of private	External resources <sup>a</sup> % of total	Per capita \$	per 1,000 people			
	2005	2005	2005	2005	2005	2005	2005	Physicians 2000-06 <sup>b</sup>	Nurses and midwives 2000-06 <sup>b</sup>	Community health workers 2000-06 <sup>b</sup>	per 1,000 people 2000-06 <sup>b</sup>
Honduras	7.5	3.8	50.6	16.1	87.0	6.8	91	0.6	1.3	..	1.0
Hungary	7.8	5.5	70.8	11.1	86.8	..	855	3.0	9.2	..	7.9
India	5.0	1.0	19.0	3.5	94.0	0.4	36	0.6	1.3	0.1	0.9
Indonesia	2.1	1.0	46.6	5.1	66.4	4.6	26	0.1	0.8	0.0	..
Iran, Islamic Rep.	7.8	4.4	55.8	9.2	94.8	0.1	212	0.9	1.6	0.4	1.7
Iraq	4.1 <sup>e</sup>	3.1 <sup>e</sup>	74.4 <sup>e</sup>	3.4 <sup>e</sup>	100.0 <sup>e</sup>	4.9 <sup>e</sup>	..	..	..	..	..
Ireland	8.2	6.5	79.5	19.0	59.3	0.0	3,993	2.9	19.5	..	5.7
Israel	7.9	4.8	61.3	10.4	61.0	0.0	1,533	3.7	6.2	..	6.3
Italy	8.9	6.8	76.6	14.1	86.6	0.0	2,692	3.7	7.2	..	4.0
Jamaica	4.7	2.3	48.8	3.5	63.6	1.8	170	0.9	1.7	..	1.7
Japan	8.2	6.7	82.2	17.8	83.5	0.0	2,936	2.1	9.5	..	14.3
Jordan	10.5 <sup>f</sup>	4.8 <sup>f</sup>	45.3 <sup>f</sup>	9.5 <sup>f</sup>	76.1	4.5	241	2.4	3.2	0.2	1.7
Kazakhstan	4.1 <sup>d</sup>	2.2 <sup>d</sup>	67.4 <sup>d</sup>	10.8 <sup>d</sup>	100.0 <sup>d</sup>	0.3 <sup>d</sup>	204 <sup>d</sup>	3.9	7.6	..	7.7
Kenya	4.5	2.1	46.6	6.1	80.0	18.1	24	0.1	1.2	..	1.9
Korea, Dem. Rep.	3.5	3.0	85.6	6.0	100.0	36.6	0 <sup>g</sup>	3.3	4.1	..	13.2
Korea, Rep.	5.9	3.1	53.0	10.9	80.1	0.0	973	1.6	1.9	..	7.1
Kuwait	2.2	1.7	77.2	6.2	91.6	0.0	687	1.8	3.7	..	1.9
Kyrgyz Republic	6.1	2.5	40.3	8.6	95.0	7.5	29	2.4	5.8	..	5.1
Lao PDR	3.6	0.7	20.6	4.1	92.7	11.3	18	0.4	1.0	..	0.9
Latvia	6.4	3.9	60.5	10.8	97.7	0.3	443	3.1	5.6	..	7.7
Lebanon	8.7	3.8	43.5	11.9	74.7	2.3	460	2.4	1.3	..	3.6
Lesotho	9.4	8.5	90.1	18.2	18.3	10.7	69	0.1	0.6	..	..
Liberia	6.4	4.4	68.2	36.3	98.7	41.2	10	0.0 <sup>c</sup>	0.3	0.0 <sup>c</sup>	..
Libya	3.2	2.2	69.5	6.5	100.0	0.0	223	1.3	4.8	..	3.4
Lithuania	5.9	4.0	67.3	11.9	98.6	0.0	448	4.0	7.7	..	8.1
Macedonia, FYR	7.8	5.5	70.4	15.8	100.0	1.0	224	2.6	4.3	..	4.7
Madagascar	3.2	2.0	62.5	9.6	52.6	46.1	9	0.3	0.3	0.0 <sup>c</sup>	0.4
Malawi	12.2	8.7	71.3	16.6	30.6	61.2	19	0.0 <sup>c</sup>	0.6	..	..
Malaysia	4.2	1.9	44.8	7.0	75.7	0.0	222	0.7	1.8	..	1.8
Mali	5.8	2.9	50.6	12.0	99.5	15.6	28	0.1	0.6	0.0 <sup>c</sup>	..
Mauritania	2.7	1.7	63.2	5.0	100.0	26.1	17	0.1	0.6	0.1	0.6
Mauritius	4.3	2.2	51.5	9.2	81.4	1.1	218	1.1	3.7	0.2	3.0
Mexico	6.4	2.9	45.5	12.5	93.9	0.0	474	1.5	0.9	..	1.0
Moldova	7.5	4.2	55.5	11.3	96.4	2.6	58	2.7	6.2	..	6.4
Mongolia	4.3	3.3	77.5	11.0	86.5	1.5	35	2.6	3.5	1.5	7.5
Morocco	5.3	1.9	36.6	5.5	76.0	1.0	89	0.5	0.8	..	0.9
Mozambique	4.3	2.7	63.6	12.6	40.5	66.5	14	0.0 <sup>c</sup>	0.3	..	..
Myanmar	2.2	0.3	11.6	1.2	99.4	12.7	4	0.4	1.0	1.0	0.6
Namibia	5.3	3.5	65.2	10.1	15.5	13.5	165	0.3	3.1	..	..
Nepal	5.8	1.6	28.1	8.4	87.0	16.4	16	0.2	0.5	0.6	0.2
Netherlands	9.2	6.0	64.9	13.2	21.9	0.0	3,560	3.7	14.6	..	5.0
New Zealand	8.9	6.9	77.4	18.0	74.4	0.0	2,403	2.2	8.9	1.4	6.0
Nicaragua	8.3	4.1	49.6	13.7	96.2	9.2	75	0.4	1.1	..	0.9
Niger	3.8	1.9	50.5	10.2	85.2	17.0	9	0.0 <sup>c</sup>	0.2	..	..
Nigeria	3.9	1.2	30.9	3.5	90.4	4.8	27	0.3	1.7	0.9	1.2
Norway	9.0	7.5	83.6	17.9	95.3	0.0	5,910	3.8	16.2	..	4.2
Oman	2.5	2.1	85.0	6.1	64.4	0.0	312	1.7	3.7	..	2.1
Pakistan	2.1	0.4	17.5	1.5	98.0	3.6	15	0.8	0.5	0.4	0.7
Panama	7.3	5.0	68.9	12.3	80.8	0.2	351	1.5	2.8	0.5	2.4
Papua New Guinea	4.2	3.6	86.2	9.6	42.5	37.0	34	0.1	0.5	..	..
Paraguay	7.3	2.7	36.5	15.3	87.7	0.6	92	1.1	1.8	1.2	1.2
Peru	4.3	2.1	49.0	8.4	80.0	1.7	125	..	..	..	1.1
Philippines	3.2	1.2	36.6	5.5	80.3	5.1	37	1.2	6.1	..	1.2
Poland	6.2	4.3	69.3	9.9	85.1	0.1	495	2.0	5.2	..	5.3
Portugal	10.2	7.4	72.3	15.5	79.8	0.0	1,800	3.4	4.7	..	3.7
Puerto Rico	..	..	..	..	..	..	..	..	..	..	..



	Health expenditure							Health workers			Hospital beds
	Total % of GDP	% of GDP	Public		Out of pocket % of private	External resources <sup>a</sup> % of total	Per capita \$	per 1,000 people			per 1,000 people
			% of total	% of government expenditure				Physicians 2000-06 <sup>b</sup>	Nurses and midwives 2000-06 <sup>b</sup>	Community health workers 2000-06 <sup>b</sup>	
2005	2005	2005	2005	2005	2005	2005	2000-06 <sup>b</sup>	2000-06 <sup>b</sup>	2000-06 <sup>b</sup>	2000-06 <sup>b</sup>	
Romania	5.5	3.9	70.3	12.4	85.0	0.8	250	1.9	4.2	..	6.6
Russian Federation	5.2	3.2	62.0	10.1	82.4	0.0	277	4.3	8.5	3.0	9.7
Rwanda	7.2	4.1	56.9	16.9	36.9	43.9	19	0.1	0.4	1.4	1.7
Saudi Arabia	3.4	2.6	76.2	8.7	16.5	0.0	448	1.7	3.0	..	2.3
Senegal	5.4	1.7	31.7	6.7	90.3	13.0	38	0.1	0.3	..	..
Serbia	8.0 <sup>h</sup>	5.8 <sup>h</sup>	71.9 <sup>h</sup>	15.1 <sup>h</sup>	86.7 <sup>h</sup>	0.5 <sup>h</sup>	212 <sup>h</sup>	2.0	4.3	..	5.9
Sierra Leone	3.7	1.9	51.5	7.8	100.0	41.0	8	0.0 <sup>c</sup>	0.5	0.1	0.4
Singapore	3.5	1.1	31.9	5.6	93.8	0.0	944	1.5	4.5	..	2.8
Slovak Republic	7.0	5.2	74.4	13.9	88.1	0.0	626	3.1	6.6	..	6.9
Slovenia	8.5	6.2	72.4	13.4	45.0	0.1	1,495	2.4	8.0	..	4.8
Somalia	..	..	..	..	..	..	..	..	..	..	..
South Africa	8.7	3.6	41.7	9.9	17.4	0.5	437	0.8	4.1	0.2	..
Spain	8.2	5.9	71.4	15.4	73.1	0.0	2,152	3.3	7.6	..	3.5
Sri Lanka	4.1	1.9	46.2	7.8	86.0	1.2	51	0.6	1.7	..	3.1
Sudan	3.8	1.4	37.6	7.0	98.3	6.8	29	0.3	0.9	0.2	0.7
Swaziland	6.3	4.0	64.1	10.9	41.7	5.6	146	0.2	6.3	4.3	..
Sweden	8.9	7.5	84.6	13.6	89.6	0.0	3,598	3.3	10.9	..	3.6
Switzerland	11.4	6.8	59.7	18.7	75.7	0.0	5,694	4.0	11.0	..	5.7
Syrian Arab Republic	4.2	2.1	50.5	6.8	100.0	0.5	61	0.5	1.4	..	1.3
Tajikistan	5.0	1.1	22.8	5.0	96.6	11.8	18	2.0	5.0	..	6.2
Tanzania	5.1	2.9	56.9	12.6	83.4	27.8	17	0.0 <sup>c</sup>	0.4	..	..
Thailand	3.5	2.2	63.9	11.3	76.6	0.2	98	0.4	2.8	0.1	2.2
Timor-Leste	13.7	11.9	86.6	19.1	37.2	57.2	45	0.1	2.2	2.0	..
Togo	5.3	1.4	25.5	6.9	84.7	13.3	18	0.0 <sup>c</sup>	0.4	0.1	0.9
Trinidad and Tobago	4.5	2.4	53.7	8.3	87.8	2.4	513	..	..	..	3.3
Tunisia	5.5	2.4	44.3	6.5	82.2	0.8	158	1.3	2.9	..	1.8
Turkey	7.6	5.4	71.4	13.9	69.5	0.0	383	1.6	2.9	..	2.6
Turkmenistan	4.8	3.2	66.7	14.9	100.0	0.3	156	2.5	4.7	..	4.9
Uganda	7.0	2.0	28.6	10.0	51.8	33.1	22	0.1	0.7	..	0.7
Ukraine	7.0	3.7	52.8	8.4	84.8	0.6	128	3.1	8.5	..	8.7
United Arab Emirates	2.6	1.9	71.6	8.6	77.9	0.0	833	1.7	3.5	..	2.2
United Kingdom	8.2	7.1	87.1	16.2	92.1	0.0	3,064	2.2	..	..	3.9
United States	15.9	7.2	45.4	0.7	23.9	0.0	6,657	2.3	9.4	..	3.3
Uruguay	8.1	3.4	42.5	10.1	31.1	0.6	404	3.7	0.9	..	2.4
Uzbekistan	5.0	2.4	47.7	7.4	97.1	3.5	26	2.7	10.9	..	5.2
Venezuela, RB	4.7	2.1	45.3	7.9	88.2	0.1	247	1.9	1.1	..	0.9
Vietnam	6.0	1.5	25.7	5.1	86.1	2.0	37	0.6	0.8	..	1.4
West Bank and Gaza	..	..	..	..	..	..	..	0.8	..	..	..
Yemen, Rep.	5.1	2.1	41.8	5.6	95.2	15.0	39	0.3	0.7	0.3	0.6
Zambia	5.6	2.7	49.0	10.7	71.5	40.5	36	0.1	2.0	..	2.0
Zimbabwe	8.1	3.6	44.8	8.9	52.0	20.6	21	0.2	0.7	0.0 <sup>e</sup>	..
<b>World</b>	<b>10.1 w</b>	<b>6.0 w</b>	<b>59.3 w</b>	<b>10.4 w</b>	<b>43.5 w</b>	<b>0.1 w</b>	<b>703 w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>	<b>.. w</b>
<b>Low income</b>	4.6	1.2	24.9	6.9	92.0	5.6	27	0.5	..	0.2	..
<b>Middle income</b>	5.8	2.9	51.1	8.2	74.5	0.4	162	1.6	..	..	3.1
Lower middle income	4.8	2.2	46.9	5.9	84.9	0.8	86	1.3	1.0	..	2.7
Upper middle income	6.7	3.6	53.8	..	66.8	0.1	374	2.3	..	..	..
<b>Low &amp; middle income</b>	5.6	2.7	48.1	7.3	77.4	1.0	104	..	..	..	..
East Asia & Pacific	4.3	1.8	40.3	2.1	83.8	0.7	70	1.5	1.0	0.1	2.5
Europe & Central Asia	6.2	4.1	66.2	10.5	82.8	0.2	279	3.1	6.8	..	7.2
Latin America & Carib.	7.1	3.3	47.9	..	68.0	0.2	329	..	..	..	..
Middle East & N. Africa	5.8	3.0	53.4	8.2	90.5	1.1	123	..	..	..	..
South Asia	4.5	0.9	20.2	3.5	93.9	1.3	31	0.6	1.3	0.1	0.9
Sub-Saharan Africa	6.1	2.6	42.9	..	45.7	7.4	49	..	..	..	..
<b>High income</b>	11.4	7.0	60.9	10.9	36.8	0.0	3,979	2.6	..	..	6.2
Euro area	9.9	7.4	75.1	15.6	58.2	0.0	3,155	3.5	..	..	6.6

a. 0.0 is not applicable or less than 0.05. b. Data are for the most recent year available. c. Less than 0.05. d. Data are for 2006. e. Excludes northern Iraq. f. Includes contributions from the United Nations Relief and Works Agency for Palestine Refugees. g. Less than 0.5. h. Excludes Kosovo and Metohija.

**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. Efforts are needed to standardize and harmonize the various competing national health account methodologies. 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, often because the data on public spending 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, nurses and midwives, community health workers, and hospital beds) are compiled by the WHO based on household and labor force surveys, censuses, and professional and administrative records. Data 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 physicians working outside the health sector. Caution must be exercised in using

the data for nurses and midwives, because for some countries the available information does not clearly distinguish between the two groups. 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.

Meeting the minimum of 2.5 physicians, nurses, and midwives per 1,000 people is critical for countries to provide the adequate primary health care interventions needed to achieve the health-related Millennium Development Goals (WHO, World Health Report 2006).

**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 and nutrition activities, and emergency aid for health but excludes provision of water and sanitation.
- **Public health expenditure** is recurrent and capital spending from central and local governments, external borrowing and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds.
- **Out of pocket health expenditure**, part of private health expenditure, is direct household outlays including gratuities and in-kind payments to health practitioners and pharmaceutical suppliers, therapeutic appliances, and other goods and services whose primary intent is to contribute to health restoration or enhancement.
- **External resources for health**, part of total health expenditure, are funds or services in kind provided by entities not part of the country. Resources may come from international organizations, other countries, or foreign nongovernmental organizations.
- **Health expenditure per capita** is total health expenditure divided by population.
- **Physicians** are graduates of any faculty or school of medicine working in the country in any medical field (practice, teaching, or research).
- **Nurses and midwives** are professional nurses, auxiliary nurses, enrolled nurses, and other nurses, such as dental nurses and primary care nurses, and professional midwives, auxiliary midwives, and enrolled midwives.
- **Community health workers** are traditional medicine practitioners, faith healers, assistant and community health education workers, community health officers, family health workers, lady health visitors, health extension package workers, community midwives, and traditional birth attendants.
- **Hospital beds** are inpatient beds for both acute and chronic care available in public, private, general, and specialized hospitals and rehabilitation centers.

**Data sources**

Data on health expenditure come mostly from the WHO's National Health Account database ([www.who.int/nha/en](http://www.who.int/nha/en)) and from the OECD for its member countries, supplemented by country data. Data on physicians, nurses and midwives, community health workers, 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 acute respiratory infection taken to health provider	Children with diarrhea who received oral rehydration and continuous feeding	Children sleeping under treated bednets <sup>a</sup>	Children with fever receiving antimalarial drugs	Tuberculosis treatment success rate	DOTS detection rate
	% of population		% of population		% of children ages 12–23 months <sup>b</sup>		% of children under age 5 with ARI	% of children under age 5 with diarrhea	% of children under age 5	% of children under age 5 with fever	% of new registered cases	% of new estimated cases
	1990	2004	1990	2004	2006	2006	2000–06 <sup>c</sup>	2000–06 <sup>c</sup>	2000–06 <sup>c</sup>	2000–06 <sup>c</sup>	2005	2006
Afghanistan	..	..	..	..	..	..	..	..	..	..	90	66
Albania	96	96	..	91	97	98	45	50	..	..	77	37
Algeria	94	85	88	92	91	95	53	24	..	..	87	102
Angola	36	53	29	31	48	44	58	32	2.3	63.0	72	76
Argentina	94	96	81	91	97	91	..	..	..	..	53	71
Armenia	..	92	..	83	92	87	36	59	..	..	72	59
Australia	100	100	100	100	94	92	..	..	..	..	80	40
Austria	100	100	100	100	80	83	..	..	..	..	75	46
Azerbaijan	68	77	..	54	96	95	36	40	1.4	0.8	59	50
Bangladesh	72	74	20	39	81	88	30	49	..	..	91	65
Belarus	100	100	..	84	97	99	90	54	..	..	73	40
Belgium	..	..	..	..	88	97	..	42	..	..	66	55
Benin	63	67	12	33	89	93	36	42	20.1	54.0	87	86
Bolivia	72	85	33	46	81	81	52	54	..	..	78	69
Bosnia and Herzegovina	97	97	..	95	90	87	91	53	..	..	97	62
Botswana	93	95	38	42	90	97	14	7	..	..	70	80
Brazil	83	90	71	75	99	99	..	..	..	..	77	55
Bulgaria	99	99	99	99	96	95	..	..	..	..	86	94
Burkina Faso	38	61	7	13	88	95	39	42	9.6	48.0	71	17
Burundi	69	79	44	36	75	74	38	23	8.3	30.0	79	24
Cambodia	..	41	..	17	78	80	48	59	4.2	0.2	93	62
Cameroon	50	66	48	51	73	81	35	22	13.1	57.8	74	91
Canada	100	100	100	100	94	94	..	..	..	..	68	55
Central African Republic	52	75	23	27	35	40	32	47	15.1	57.0	65	69
Chad	19	42	7	9	23	20	7	27	0.6	44.0	69	19
Chile	90	95	84	91	91	94	..	..	..	..	78	141
China	70	77	23	44	93	93	..	..	..	..	94	79
Hong Kong, China	..	..	..	..	..	..	..	..	..	..	77	56
Colombia	92	93	82	86	88	86	62	39	0.7	..	71	83
Congo, Dem. Rep.	43	46	16	30	73	77	36	17	5.8 <sup>d</sup>	29.8 <sup>d</sup>	85	61
Congo, Rep.	..	58	..	27	66	79	48	39	6.1	48.0	28	51
Costa Rica	..	97	..	92	89	91	..	..	..	..	89	102
Côte d'Ivoire	69	84	21	37	73	77	35	45	5.9	36.0	75	37
Croatia	100	100	100	100	96	96	..	..	..	..	..	..
Cuba	..	91	98	98	96	89	..	..	..	..	91	94
Czech Republic	100	100	99	98	97	98	..	..	..	..	72	57
Denmark	100	100	..	..	99	93	..	..	..	..	83	62
Dominican Republic	84	95	52	78	99	81	64	42	..	..	85	66
Ecuador	73	94	63	89	97	98	..	..	..	..	83	34
Egypt, Arab Rep.	94	98	54	70	98	98	63	27	..	..	79	59
El Salvador	67	84	51	62	98	96	62	..	..	..	91	61
Eritrea	43	60	7	9	95	97	44	54	4.2	3.6	88	35
Estonia	100	100	97	97	96	95	..	..	..	..	72	66
Ethiopia	23	22	3	13	63	72	19	15	1.5	3.0	78	27
Finland	100	100	100	100	97	97	..	..	..	..	..	..
France	100	100	..	..	87	98	..	..	..	..	..	..
Gabon	..	88	..	36	55	38	48	44	..	..	46	58
Gambia, The	..	82	..	53	95	95	69	38	49.0	62.6	87	64
Georgia	80	82	97	94	95	87	99	..	..	..	73	109
Germany	100	100	100	100	94	90	..	..	..	..	71	54
Ghana	55	75	15	18	85	84	59	29	21.8	60.8	73	38
Greece	..	..	..	..	88	88	..	..	..	..	..	..
Guatemala	79	95	58	86	95	80	64	..	..	..	85	56
Guinea	44	50	14	18	67	71	42	38	0.3	43.5	72	55
Guinea-Bissau	..	59	..	35	60	77	57	25	39.0	45.7	69	64
Haiti	47	54	24	30	58	53	35	43	..	5.1	81	55

# Disease prevention coverage and quality

**2.16** PEOPLE

	Access to an improved water source		Access to improved sanitation facilities		Child immunization rate		Children with acute respiratory infection taken to health provider	Children with diarrhea who received oral rehydration and continuous feeding	Children sleeping under treated bednets <sup>a</sup>	Children with fever receiving antimalarial drugs	Tuberculosis treatment success rate	DOTS detection rate
	% of population 1990	% of population 2004	% of population 1990	% of population 2004	Measles 2006	DTP3 2006	% of children under age 5 with ARI 2000-06 <sup>c</sup>	% of children under age 5 with diarrhea 2000-06 <sup>c</sup>	% of children under age 5 2000-06 <sup>c</sup>	% of children under age 5 with fever 2000-06 <sup>c</sup>	% of new registered cases 2005	% of new estimated cases 2006
Honduras	84	87	50	69	91	87	56	49	..	0.5	88	85
Hungary	99	99	..	95	99	99	..	..	..	..	45	49
India	70	86	14	33	59	55	69	32	..	12.0	86	64
Indonesia	72	77	46	55	72	70	61	56	0.1	0.7	91	73
Iran, Islamic Rep.	92	94	83	..	99	99	93	..	..	..	83	69
Iraq	83	..	81	..	..	..	..	..	..	..	86	40
Ireland	..	..	..	..	86	91	..	..	..	..	..	..
Israel	100	100	..	..	95	95	..	..	..	..	78	31
Italy	..	..	..	..	87	96	..	..	..	..	74	71
Jamaica	92	93	75	80	87	85	75	39	..	..	57	73
Japan	100	100	100	100	99	99	..	..	..	..	60	79
Jordan	97	97	93	93	99	98	72	44	..	..	83	76
Kazakhstan	87	86	72	72	99	99	71	48	..	..	74 <sup>e</sup>	69
Kenya	45	61	40	43	77	80	49	33	4.6	26.5	82	70
Korea, Dem. Rep.	100	100	..	59	96	89	93	..	..	..	89	97
Korea, Rep.	..	92	..	..	99	98	..	..	..	..	83	18
Kuwait	..	..	..	..	99	99	..	..	..	..	63	95
Kyrgyz Republic	78	77	60	59	97	92	62	22	..	..	85	63
Lao PDR	..	51	..	30	48	57	36	37	17.7	8.7	90	77
Latvia	99	99	..	78	95	98	..	..	..	..	74	85
Lebanon	100	100	..	98	96	92	74	..	..	..	92	55
Lesotho	..	79	37	37	85	83	59	53	..	..	73	79
Liberia	55	61	39	27	94	88	70	..	2.6	..	76	55
Libya	71	..	97	97	98	98	..	..	..	..	69	156
Lithuania	..	..	..	..	97	94	..	..	..	..	70	109
Macedonia, FYR	..	..	..	..	94	93	93	45	..	..	84	66
Madagascar	40	46	14	32	59	61	48	47	0.2	34.2	74	73
Malawi	40	73	47	61	85	99	51	26	23.0	23.9	73	42
Malaysia	98	99	..	94	90	96	..	..	..	..	70	80
Mali	34	50	36	46	86	85	43	45	8.4	38.0	75	26
Mauritania	38	53	31	34	62	68	41	9	2.1	33.4	55	34
Mauritius	100	100	..	94	99	97	..	..	..	..	86	67
Mexico	82	97	58	79	96	98	..	..	..	..	77	118
Moldova	..	92	..	68	96	97	60	48	..	..	62	69
Mongolia	63	62	..	59	99	99	63	47	..	..	88	97
Morocco	75	81	56	73	95	97	38	46	..	..	81	95
Mozambique	36	43	20	32	77	72	55	47	..	15.0	79	47
Myanmar	57	78	24	77	78	82	66	65	..	..	85	109
Namibia	57	87	24	25	63	74	53	39	3.4	14.4	75	83
Nepal	70	90	11	35	85	89	43	43	..	..	88	64
Netherlands	100	100	100	100	96	98	..	..	..	..	84	36
New Zealand	97	..	..	..	82	89	..	..	..	..	60	61
Nicaragua	70	79	45	47	99	87	57	49	..	1.8	85	89
Niger	39	46	7	13	47	39	47	43	7.4	33.0	74	49
Nigeria	49	48	39	44	62	54	33	28	1.2	33.9	75	20
Norway	100	100	..	..	91	93	..	..	..	..	91	39
Oman	80	..	83	..	96	98	..	..	..	..	90	122
Pakistan	83	91	37	59	80	83	..	..	..	..	83	50
Panama	90	90	71	73	94	99	..	..	..	..	80	134
Papua New Guinea	39	39	44	44	65	75	..	..	..	..	71	21
Paraguay	62	86	58	80	88	73	..	..	..	..	91	48
Peru	74	83	52	63	99	94	68	71	..	..	91	96
Philippines	87	85	57	72	92	88	55	76	..	..	89	77
Poland	..	..	..	..	99	99	..	..	..	..	77	67
Portugal	..	..	..	..	93	93	..	..	..	..	89	88
Puerto Rico	..	..	..	..	..	..	..	..	..	..	75	82



	Access to an improved water source		Access to improved sanitation facilities		Child immunization rate		Children with acute respiratory infection taken to health provider	Children with diarrhea who received oral rehydration and continuous feeding	Children sleeping under treated bednets <sup>a</sup>	Children with fever receiving antimalarial drugs	Tuberculosis treatment success rate	DOTS detection rate
	% of population 1990	% of population 2004	% of population 1990	% of population 2004	% of children ages 12–23 months <sup>b</sup> Measles 2006	% of children ages 12–23 months <sup>b</sup> DTP3 2006						
Romania	..	57	..	..	95	97	..	..	..	..	82	79
Russian Federation	94	97	87	87	99	99	..	..	13.0	..	58	44
Rwanda	59	74	37	42	95	99	28	24	5.0	12.3	83	27
Saudi Arabia	94	96	91	99	95	96	..	..	..	..	65	40
Senegal	65	76	33	57	80	89	47	43	7.1	26.8	74	48
Serbia	93 <sup>f</sup>	93 <sup>f</sup>	87 <sup>f</sup>	87 <sup>f</sup>	88	92	93	31	..	..	85	79
Sierra Leone	..	57	..	39	67	64	48	31	5.3	51.9	86	35
Singapore	100	100	100	100	93	95	..	..	..	..	83	107
Slovak Republic	100	100	99	99	98	99	..	..	..	..	92	43
Slovenia	..	..	..	..	96	97	..	..	..	..	84	71
Somalia	..	29	..	26	35	35	13	7	9.2	7.9	89	83
South Africa	83	88	69	65	85	99	..	..	..	..	71	71
Spain	100	100	100	100	97	98	..	..	..	..	..	..
Sri Lanka	68	79	69	91	99	99	..	..	..	..	86	85
Sudan	64	70	33	34	73	78	57	56	27.6	54.2	82	30
Swaziland	..	62	..	48	57	68	60	24	0.1	25.5	42	49
Sweden	100	100	100	100	95	99	..	..	..	..	64	58
Switzerland	100	100	100	100	86	95	..	..	..	..	..	..
Syrian Arab Republic	80	93	73	90	98	99	77	34	..	..	89	48
Tajikistan	..	59	..	51	87	86	64	22	1.3	1.2	86	33
Tanzania	46	62	47	47	93	90	57	53	16.0	58.2	82	46
Thailand	95	99	80	99	96	98	84	46	..	..	75	73
Timor-Leste	..	58	..	36	64	67	24	..	8.0	47.4	82	33
Togo	50	52	37	35	83	87	23	22	38.4	47.7	71	19
Trinidad and Tobago	92	91	100	100	89	92	74	32	..	..	..	..
Tunisia	81	93	75	85	98	99	43	..	..	..	90	81
Turkey	85	96	85	88	98	90	41	..	..	..	89	80
Turkmenistan	..	72	..	62	99	98	83	25	..	..	81	58
Uganda	44	60	42	43	89	80	74	28	9.7	61.8	73	44
Ukraine	..	96	..	96	98	98	..	..	..	..	..	65
United Arab Emirates	100	100	97	98	92	94	..	..	..	..	73	17
United Kingdom	100	100	..	..	85	92	..	..	..	..	..	..
United States	100	100	100	100	93	96	..	..	..	..	64	88
Uruguay	100	100	100	100	94	95	..	..	..	..	84	77
Uzbekistan	94	82	51	67	95	95	68	28	..	..	81	48
Venezuela, RB	..	83	..	68	55	71	72	51	..	..	83	71
Vietnam	65	85	36	61	93	94	71	65	5.1	2.6	92	85
West Bank and Gaza	..	92	..	73	..	..	65	..	..	..	100	5
Yemen, Rep.	71	67	32	43	80	85	47	18	..	..	80	43
Zambia	50	58	44	55	84	80	69	48	22.8	57.9	84	53
Zimbabwe	78	81	50	53	90	90	26	..	2.9	4.7	68	42
<b>World</b>	<b>76 w</b>	<b>83 w</b>	<b>45 w</b>	<b>57 w</b>	<b>80 w</b>	<b>80 w</b>				<b>.. w</b>	<b>85 w</b>	<b>62 w</b>
<b>Low income</b>	64	75	21	38	69	68				21.1	84	54
<b>Middle income</b>	78	84	47	62	91	91				..	86	74
Lower middle income	74	81	37	55	90	89				..	90	77
Upper middle income	88	93	77	81	94	95				..	71	66
<b>Low &amp; middle income</b>	72	80	36	51	79	79				..	85	62
East Asia & Pacific	72	79	30	51	89	89				..	91	78
Europe & Central Asia	92	92	84	85	97	95				..	70	56
Latin America & Carib.	83	91	67	77	93	92				..	79	69
Middle East & N. Africa	88	89	70	76	92	93				..	83	69
South Asia	71	84	17	37	65	64				12.0	86	63
Sub-Saharan Africa	49	56	31	37	71	72				34.5	76	46
<b>High income</b>	100	99	100	100	93	96				..	68	52
Euro area	100	100	100	100	91	95				..	..	33

a. For malaria prevention only. b. Refers to children who were immunized before age 12 months or in some cases at any time before the survey (12–23 months). c. Data are for the most recent year available. d. Data are for 2007. e. Data are for 2006. f. Includes Montenegro.

### About the data

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. Access to drinking water from an improved source and access to improved sanitation do not ensure safety or adequacy, as these characteristics are not tested at the time of the surveys. But improved drinking water technologies and improved sanitation facilities are more likely than those characterized as unimproved to provide safe drinking water and to prevent contact with human excreta. The data are derived by the Joint Monitoring Programme (JMP) of the World Health Organization (WHO) and United Nations Children's Fund (UNICEF) based on national censuses and nationally representative household surveys. 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, which may include nonfunctioning systems. While the estimates are based on use, the JMP reports use as access, because access is the term used in the Millennium Development Goal target for drinking water and sanitation.

Governments in developing countries usually finance immunization against measles and diphtheria, pertussis (whooping cough), and tetanus (DTP) 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 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 continues to be a leading cause of death among young children, killing about 2 million children under age 5 in developing countries each year. 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 acute respiratory infection.

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 at home. However, recommendations for the use of oral rehydration therapy have changed over time based on scientific progress, so it is difficult to accurately compare use rates across 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, data comparability is further affected.

Malaria is endemic to the poorest countries in the world, mainly in tropical and subtropical regions of Africa, Asia, and the Americas. An estimated 300–500 million clinical malaria cases and more than 1 million malaria deaths occur each year—the vast majority in Sub-Saharan Africa and among children under age 5. 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 age 5 in malaria-risk areas such as Africa slept under a treated bednet every night.

Prompt and effective treatment of malaria is a critical element of malaria control. It is vital that sufferers, especially children under age 5, start treatment within 24 hours of the onset of symptoms, to prevent progression—often rapid—to severe malaria and death.

Data on the success rate of tuberculosis treatment are provided for countries that have implemented DOTS, the internationally recommended tuberculosis control strategy. 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.

For indicators that are from household surveys, the year in the table refers to the survey year. For more information, consult the original sources.

### Definitions

• **Access to an improved water source** is the percentage of people with reasonable access to water from an improved source, such as piped water into a dwelling; public tap; tubewell; protected dug well; and rainwater collection. Reasonable access is 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** is the percentage of people with at least adequate access to excreta disposal facilities that can effectively prevent human, animal, and insect contact with excreta. Improved facilities range from protected pit latrines to flush toilets. • **Child immunization rate** is the percentage of children ages 12–23 months who, before 12 months or at any time before the survey, had received measles vaccine and three doses of diphtheria, pertussis (whooping cough), and tetanus (DTP3) vaccine. One dose of measles vaccine and three doses of DTP vaccine are considered adequate. • **Children with acute respiratory infection taken to a health provider** are the percentage of children under age 5 with acute respiratory infection in the two weeks before the survey who were taken to an appropriate health provider. • **Children with diarrhea who received oral rehydration and continuous feeding** are the percentage of children under age 5 with diarrhea in the two weeks before the survey who received either oral rehydration therapy or increased fluids, with continuous feeding. • **Children sleeping under treated bednets** are the percentage of children under age 5 who slept under an insecticide-treated bednet to prevent malaria in the two weeks before the survey. • **Children with fever receiving antimalarial drugs** are the percentage of children under age 5 who were ill with fever in the two weeks before the survey and received any appropriate (locally defined) antimalarial drugs. • **Tuberculosis treatment success rate** is the percentage of new registered infectious tuberculosis cases that were cured or completed a full course of treatment. • **DOTS detection rate** is the percentage of estimated new infectious tuberculosis cases detected under the internationally recommended tuberculosis detection and treatment strategy.

### Data sources

Data on access to water and sanitation are from the WHO and UNICEF's *Meeting the MDG Drinking Water and Sanitation Target* ([www.who.int/water\\_sanitation\\_health/monitoring](http://www.who.int/water_sanitation_health/monitoring)). Data on immunization are from WHO and UNICEF estimates ([www.who.int/immunization\\_monitoring](http://www.who.int/immunization_monitoring)). Data on children with acute respiratory infection, with diarrhea, sleeping under treated bednets, and receiving antimalarial drugs are from UNICEF's *State of the World's Children 2008*, Childinfo, and Demographic and Health Surveys by Macro International. Data on tuberculosis are from the WHO's *Global Tuberculosis Control Report 2008: Surveillance, Planning, Financing*.



	Total fertility rate		Adolescent fertility rate	Unmet need for contraception	Contraceptive prevalence rate	Newborns protected against tetanus	Pregnant women receiving prenatal care	Births attended by skilled health staff		Maternal mortality ratio	
	births per woman		births per 1,000 women ages 15–19	% of married women ages 15–49	% of married women ages 15–49	% of births	%	% of total		per 100,000 live births	
	1990	2006	2006	2000–06 <sup>a</sup>	2000–06 <sup>a</sup>	2006	2000–06 <sup>a</sup>	1990	2000–06 <sup>a</sup>	1990–2006 <sup>a</sup>	Modeled estimates 2005
Afghanistan	..	..	..	..	..	..	16	..	14	..	..
Albania	2.9	1.4	16	..	60	87	97	..	100	16	92
Algeria	4.6	2.4	8	..	61	70	89	77	95	117	180
Angola	7.1	6.5	139	..	6	80	66	..	45	..	1,400
Argentina	3.0	2.3	58	..	..	..	99	96	99	39	77
Armenia	2.5	1.3	30	13	53	..	93	..	98	16	76
Australia	1.9	1.8	15	..	..	..	..	100	100	..	4
Austria	1.5	1.4	12	..	..	..	..	..	..	..	4
Azerbaijan	2.7	2.3	29	..	55	..	70	..	100	26	82
Bangladesh	4.3	2.9	129	11	58	92	48	..	20	322	570
Belarus	1.9	1.3	22	..	73	..	99	..	100	10	18
Belgium	1.6	1.7	7	..	..	94	..	..	..	..	8
Benin	6.7	5.5	123	30	17	84	84	..	79	498	840
Bolivia	4.9	3.6	79	23	58	..	79	43	67	230	290
Bosnia and Herzegovina	1.7	1.2	21	23	36	85	99	97	100	3	3
Botswana	4.6	3.0	54	..	44	71	97	77	94	326	380
Brazil	2.8	2.3	89	..	..	84	97	72	97	76	110
Bulgaria	1.8	1.4	41	..	..	65	..	..	99	10	11
Burkina Faso	7.3	6.1	129	29	17	..	85	..	54	484	700
Burundi	6.8	6.8	55	..	9	84	92	..	34	615	1,100
Cambodia	5.7	3.3	43	25	40	80	69	..	44	472	540
Cameroon	5.9	4.4	122	20	29	52	82	58	63	669	1,000
Canada	1.8	1.5	14	..	..	82	..	..	100	..	7
Central African Republic	5.6	4.7	119	..	19	74	69	..	53	543	980
Chad	6.7	6.3	169	21	3	60	39	..	14	1,099	1,500
Chile	2.6	2.0	60	..	..	..	..	..	100	17	16
China	2.1	1.8	7	..	87	..	90	50	98	48	45
Hong Kong, China	1.3	1.0	5	..	..	..	..	..	100	..	..
Colombia	3.0	2.3	67	6	78	88	94	82	96	78	130
Congo, Dem. Rep.	6.7	6.3	224	..	21 <sup>b</sup>	77	85 <sup>b</sup>	..	74 <sup>b</sup>	1,289	1,100
Congo, Rep.	5.3	4.6	118	16	44	84	86	..	86	781	740
Costa Rica	3.1	2.1	73	..	96	..	92	98	99	36	30
Cote d'Ivoire	6.5	4.6	112	29	13	..	85	..	57	543	810
Croatia	1.6	1.4	13	..	69	..	100	100	100	7	7
Cuba	1.7	1.5	48	8	73	..	100	..	100	37	45
Czech Republic	1.9	1.3	11	..	..	..	..	..	100	5	4
Denmark	1.7	1.9	6	..	..	..	..	..	..	10	3
Dominican Republic	3.3	2.8	109	11	61	85	99	93	96	92	150
Ecuador	3.6	2.6	83	..	73	66	84	..	75	107	210
Egypt, Arab Rep.	4.3	2.9	41	10	59	86	70	37	74	84	130
El Salvador	3.7	2.7	82	..	67	91	86	52	92	71	170
Eritrea	6.2	5.1	75	27	8	79	70	..	28	998	450
Estonia	2.0	1.5	22	..	..	..	..	..	100	29	25
Ethiopia	6.8	5.3	97	34	15	80	28	..	6	673	720
Finland	1.8	1.8	10	..	..	..	..	..	100	6	7
France	1.8	2.0	7	..	..	..	..	..	..	10	8
Gabon	4.7	3.1	85	28	33	63	94	..	86	519	520
Gambia, The	6.0	4.8	106	..	18	94	98	44	57	730	690
Georgia	2.1	1.4	31	..	47	87	94	..	92	23	66
Germany	1.5	1.3	10	..	..	..	..	..	100	8	4
Ghana	5.7	3.9	58	34	17	..	92	40	50	..	560
Greece	1.4	1.4	9	..	..	69	..	..	..	1	3
Guatemala	5.6	4.2	109	..	43	91	84	..	41	153	290
Guinea	6.6	5.5	153	21	9	79	82	31	38	980	910
Guinea-Bissau	7.1	7.1	190	..	10	91	78	..	39	405	1,100
Haiti	5.4	3.6	48	38	32	94	85	23	26	630	670

# Reproductive health

# 2.17

POPULATION

	Total fertility rate		Adolescent fertility rate births per 1,000 women ages 15-19 2006	Unmet need for contraception % of married women ages 15-49 2000-06 <sup>a</sup>	Contraceptive prevalence rate % of married women ages 15-49 2000-06 <sup>a</sup>	Newborns protected against tetanus % of births 2006	Pregnant women receiving prenatal care % 2000-06 <sup>a</sup>	Births attended by skilled health staff		Maternal mortality ratio	
	births per woman 1990	2006						1990	2000-06 <sup>a</sup>	per 100,000 live births National estimates 1990-2006 <sup>a</sup>	Modeled estimates 2005
Honduras	5.1	3.4	95	17	65	..	92	45	67	108	280
Hungary	1.8	1.4	20	..	..	..	..	..	100	4	6
India	3.8	2.5	63	..	56	83	74	..	47	301	450
Indonesia	3.1	2.2	41	9	57	87	92	32	72	307	420
Iran, Islamic Rep.	4.8	2.1	21	..	74	..	..	..	90	37	140
Iraq	5.9	..	..	..	..	..	84	54	89	..	..
Ireland	2.1	1.9	17	..	..	..	..	..	100	6	1
Israel	2.8	2.7	14	..	..	..	..	..	..	5	4
Italy	1.3	1.4	6	..	..	52	..	..	99	7	3
Jamaica	2.9	2.3	80	..	69	72	91	79	97	95	170
Japan	1.5	1.3	3	..	56	86	..	100	100	8	6
Jordan	5.4	3.2	25	11	56	..	99	87	100	41	62
Kazakhstan	2.7	2.1	30	..	51	..	100	..	100	70	140
Kenya	5.8	5.0	104	25	39	74	88	50	42	414	560
Korea, Dem. Rep.	2.4	1.9	1	..	..	..	..	..	97	105	370
Korea, Rep.	1.6	1.1	4	..	..	..	..	98	100	20	14
Kuwait	3.5	2.3	13	..	..	90	..	..	100	5	4
Kyrgyz Republic	3.7	2.4	31	1	48	82	97	..	98	104	150
Lao PDR	6.1	3.3	75	..	32	52	27	..	19	405	660
Latvia	2.0	1.4	15	..	..	..	..	..	100	10	10
Lebanon	3.1	2.2	25	..	58	72	96	..	98	..	150
Lesotho	4.9	3.5	77	31	37	72	90	..	55	762	960
Liberia	6.9	6.8	220	..	10	..	85	..	51	..	1,200
Libya	4.7	2.8	3	..	..	..	..	..	..	77	97
Lithuania	2.0	1.3	19	..	..	..	..	..	100	16	11
Macedonia, FYR	2.0	1.5	22	34	14	..	98	..	98	21	10
Madagascar	6.2	4.9	136	24	27	67	80	57	51	469	510
Malawi	6.9	5.7	140	28	42	84	92	55	54	984	1,100
Malaysia	3.7	2.7	13	..	..	88	79	..	98	28	62
Mali	7.4	6.6	183	29	8	..	57	..	41	582	970
Mauritania	5.8	4.5	88	32	8	94	64	40	57	747	820
Mauritius	2.3	2.0	41	..	76	..	..	91	99	22	15
Mexico	3.4	2.2	66	..	71	87	..	..	83	62	60
Moldova	2.3	1.2	33	..	68	..	98	..	100	19	22
Mongolia	4.0	2.3	46	14	66	87	99	..	99	93	46
Morocco	4.0	2.4	19	10	63	..	68	31	63	227	240
Mozambique	6.2	5.2	155	18	17	85	85	..	48	408	520
Myanmar	3.4	2.1	17	..	34	87	76	..	68	316	380
Namibia	5.7	3.3	61	22	44	81	91	68	76	271	210
Nepal	5.1	3.1	116	25	48	83	44	7	19	281	830
Netherlands	1.6	1.7	5	..	..	..	..	..	100	7	6
New Zealand	2.2	2.1	23	..	..	..	..	..	97	15	9
Nicaragua	4.7	2.8	114	15	69	94	86	..	67	87	170
Niger	7.9	7.0	201	16	11	53	46	15	18	648	1,800
Nigeria	6.7	5.4	131	17	13	71	58	33	36	..	1,100
Norway	1.9	1.9	9	..	..	..	..	100	..	6	7
Oman	6.5	3.1	11	..	32	94	100	..	98	15	64
Pakistan	5.8	3.9	33	..	28	80	36	19	31	533	320
Panama	3.0	2.6	84	..	..	..	..	..	91	40	130
Papua New Guinea	4.8	3.9	55	..	..	81	..	..	42	..	470
Paraguay	4.7	3.2	74	..	73	82	94	66	77	174	150
Peru	3.9	2.6	61	8	46	64	92	80	87	185	240
Philippines	4.3	3.3	48	17	49	57	88	..	60	172	230
Poland	2.0	1.3	13	..	..	..	..	..	100	4	8
Portugal	1.4	1.4	14	..	..	..	..	98	100	8	11
Puerto Rico	2.2	1.8	50	..	..	..	..	..	100	..	18



	Total fertility rate		Adolescent fertility rate	Unmet need for contraception	Contraceptive prevalence rate	Newborns protected against tetanus	Pregnant women receiving prenatal care	Births attended by skilled health staff		Maternal mortality ratio	
	births per woman		births per 1,000 women ages 15–19	% of married women ages 15–49	% of married women ages 15–49	% of births	%	% of total		per 100,000 live births	
	1990	2006	2006	2000–06 <sup>a</sup>	2000–06 <sup>a</sup>	2006	2000–06 <sup>a</sup>	1990	2000–06 <sup>a</sup>	1990–2006 <sup>a</sup>	Modeled estimates 2005
Romania	1.8	1.3	33	..	70	..	94	..	98	17	24
Russian Federation	1.9	1.3	28	..	..	..	..	..	99	23	28
Rwanda	7.4	5.9	41	38	17	82	94	26	39	750	1,300
Saudi Arabia	5.9	3.4	29	..	..	56	..	..	96	10	18
Senegal	6.5	5.3	91	32	12	86	87	..	52	434	980
Serbia	1.8	1.4	25	29	41	..	98	..	99	7 <sup>c</sup>	14 <sup>c</sup>
Sierra Leone	6.5	6.5	166	..	5	..	81	..	43	1,800	2,100
Singapore	1.9	1.3	5	..	..	4	..	..	100	6	14
Slovak Republic	2.1	1.2	20	..	..	73	..	..	100	6	6
Slovenia	1.5	1.3	7	..	..	74	..	100	100	17	6
Somalia	6.8	6.1	67	..	15	..	26	..	33	1,044	1,400
South Africa	3.3	2.7	63	..	60	88	92	..	92	150	400
Spain	1.3	1.4	9	..	..	72	..	..	..	6	4
Sri Lanka	2.5	1.9	26	..	70	93	100	..	96	43	58
Sudan	5.9	4.3	59	6	8	..	70	69	49	..	450
Swaziland	5.3	3.5	34	..	48	..	90	..	74	229	390
Sweden	2.1	1.9	4	..	..	86	..	..	..	5	3
Switzerland	1.6	1.4	4	..	..	93	..	..	100	5	5
Syrian Arab Republic	5.4	3.2	38	..	58	87	84	..	93	65	130
Tajikistan	5.1	3.4	28	..	38	88	77	..	83	97	170
Tanzania	6.1	5.3	123	22	26	..	78	53	46	578	950
Thailand	2.1	1.8	42	..	77	..	98	..	97	24	110
Timor-Leste	4.9	7.3	56	..	10	63	61	..	18	..	380
Togo	6.4	4.9	92	..	17	84	89	31	62	480	510
Trinidad and Tobago	2.4	1.6	35	..	43	..	96	..	98	45	45
Tunisia	3.5	2.0	7	..	63	89	92	69	90	69	100
Turkey	3.0	2.2	39	..	71	67	81	..	83	29	44
Turkmenistan	4.2	2.6	16	10	48	..	99	..	100	14	130
Uganda	7.1	6.7	156	41	24	88	94	38	42	505	550
Ukraine	1.8	1.3	28	..	66	..	99	..	100	13	18
United Arab Emirates	4.3	2.3	19	..	..	..	..	..	100	3	37
United Kingdom	1.8	1.9	24	..	84	..	..	..	..	7	8
United States	2.1	2.1	43	..	..	..	..	99	99	8	11
Uruguay	2.5	2.0	62	..	..	..	..	..	99	26	20
Uzbekistan	4.1	2.4	34	8	65	87	99	..	100	28	24
Venezuela, RB	3.4	2.6	90	..	..	88	94	..	95	60	57
Vietnam	3.6	2.1	18	5	76	61	91	..	88	162	150
West Bank and Gaza	6.3	4.6	82	..	50	..	99	..	99	..	..
Yemen, Rep.	8.0	5.6	73	..	23	..	41	16	27	365	430
Zambia	6.4	5.3	130	27	34	90	93	51	43	729	830
Zimbabwe	5.1	3.8	62	13	60	80	94	70	80	555	880
<b>World</b>	<b>3.1 w</b>	<b>2.5 w</b>	<b>52 w</b>		<b>60 w</b>	<b>.. w</b>	<b>80 w</b>	<b>.. w</b>	<b>65 w</b>		<b>400 w</b>
<b>Low income</b>	4.7	3.5	82		44	81	69	..	43		650
<b>Middle income</b>	2.7	2.1	32		75	..	90	53	88		160
Lower middle income	2.6	2.1	24		76	..	89	50	86		180
Upper middle income	2.7	2.0	56		..	..	..	..	94		97
<b>Low &amp; middle income</b>	3.4	2.7	56		60	..	80	..	62		440
East Asia & Pacific	2.4	2.0	16		79	..	89	47	87		150
Europe & Central Asia	2.3	1.6	29		63	..	91	81	95		43
Latin America & Carib.	3.2	2.4	77		69	84	95	73	88		130
Middle East & N. Africa	4.8	2.9	30		60	..	76	48	77		200
South Asia	4.1	2.8	69		53	84	66	32	41		500
Sub-Saharan Africa	6.2	5.2	122		22	76	72	44	45		900
<b>High income</b>	1.8	1.7	22		..	..	..	..	99		9
Euro area	1.5	1.5	8		..	..	..	..	..		5

a. Data are for most recent year available. b. Data are for 2007. c. Includes Montenegro.

### 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, safe and effective contraception, and prevention and treatment of sexually transmitted diseases. Pregnancy and childbirth complications are the leading cause of death and disability among women of reproductive age in developing countries.

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. 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.

More couples in developing countries want to limit or postpone childbearing but are not using effective contraception. These couples have an unmet need for contraception. Common reasons are lack of knowledge about contraceptive methods and concerns about possible side effects. This indicator excludes women not exposed to the risk of unintended pregnancy because of menopause, infertility, or postpartum anovulation.

Contraceptive prevalence reflects all methods—ineffective traditional methods as well as highly effective modern methods. Contraceptive prevalence rates are obtained mainly from household surveys, including Demographic and Health Surveys, Multiple Indicator Cluster 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.

An important cause of infant mortality in some developing countries, neonatal tetanus can be prevented through immunization of the mother during pregnancy. The data on tetanus in this year's edition are estimated by the "protection at birth" model, which tracks the immunization status of women of child-bearing age. The estimates account for the number of doses received and the time since the mother's last immunization. A currently immune woman's child is considered protected. Because the methodology behind this indicator has changed,

these data cannot be compared with those in previous editions.

Good prenatal 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.

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. Maternal mortality ratios are generally of unknown reliability, as are many other cause-specific mortality indicators. Household surveys such as 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 national estimates of maternal mortality ratios in the table are based on national surveys, vital registration records, and surveillance data or are derived from community and hospital records. The modeled estimates are based on an exercise by the World Health Organization (WHO), United Nations Children's Fund (UNICEF), United Nations Population Fund (UNFPA), and World Bank. For countries with complete vital registration systems with good attribution of cause of death information, the data are used as reported. For countries with national data, either from complete vital registration systems with uncertain or poor attribution of cause of death information, or from household surveys, reported maternal mortality was adjusted usually by a factor of underenumeration and misclassification. For countries with no empirical national data (about 35 percent of countries), maternal mortality was estimated with a regression model using socioeconomic information, including fertility, birth attendants, and GDP. Neither set of ratios can be assumed to provide an exact estimate of maternal mortality for any of the countries in the table.

For the indicators that are from household surveys, the year in the table refers to the survey year. For more information, consult the original sources.

### 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.
- **Unmet need for contraception** is the percentage of 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 married or in-union ages 15–49 who are practicing, or whose sexual partners are practicing, any form of contraception.
- **Newborns protected against tetanus** are the percentage of births by women of child-bearing age who are immunized against tetanus.
- **Pregnant women receiving prenatal care** are the percentage of women attended at least once during pregnancy by skilled health personnel for reasons related to pregnancy.
- **Births attended by skilled health staff** are the percentage of deliveries attended by personnel trained to give the necessary care to women during pregnancy, labor, and postpartum; 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

Data on fertility rates are compiled and estimated by the World Bank's Development Data Group. Inputs come from the United Nations Population Division's *World Population Prospects: The 2006 Revision*, census reports and other statistical publications from national statistical offices, and household surveys such as Demographic and Health Surveys. Data on women with unmet need for contraception and contraceptive prevalence rates are from household surveys, including Demographic and Health Surveys by Macro International and Multiple Indicator Cluster Surveys by UNICEF. Data on tetanus vaccinations, pregnant women receiving prenatal care, births attended by skilled health staff, and national estimates of maternal mortality ratios are from UNICEF's *State of the World's Children 2008* and Childinfo and Demographic and Health Surveys by Macro International. Modeled estimates for maternal mortality ratios are from "Maternal Mortality in 2005: Estimates Developed by WHO, UNICEF, UNFPA and the World Bank" (2007).





# 2.18

## Nutrition

	Prevalence of undernourishment		Prevalence of child malnutrition		Prevalence of overweight children	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	2002–04 <sup>a</sup>	2000–06 <sup>b</sup>	2000–06 <sup>b</sup>	2000–06 <sup>b</sup>	2000–06 <sup>b</sup>	2000–06 <sup>b</sup>	2000–06 <sup>b</sup>	2005
Afghanistan	..	..	..	..	..	..	..	28	..
Albania	5 <sup>c</sup>	6	17.0	39.2	30.0	7	2	62	..
Algeria	5	4	10.2	21.6	15.4	6	7	61	..
Angola	58	35	27.5	50.8	5.3	12	11	35	79
Argentina	<2.5	3	2.3	8.2	9.9	7	..	..	..
Armenia	52 <sup>c</sup>	24	4.2	18.2	11.7	8	33	97	..
Australia	<2.5	<2.5	..	..	..	7	..	..	..
Austria	<2.5	<2.5	..	..	..	7	..	..	..
Azerbaijan	34 <sup>c</sup>	7	14.0	24.1	6.2	12	7	26	29 <sup>d</sup>
Bangladesh	35	30	39.2	47.8	0.9	22	37	84	83
Belarus	<2.5 <sup>c</sup>	4	..	..	..	4	9	55	..
Belgium	<2.5	<2.5	..	..	..	..	..	..	..
Benin	20	12	21.5	39.1	3.0	13	70	55	94
Bolivia	28	23	5.9	32.5	9.2	7	54	90	39
Bosnia and Herzegovina	9 <sup>c</sup>	9	4.2	12.1	16.3	5	18	62	..
Botswana	23	32	10.7	29.1	10.4	10	34	66	62
Brazil	12	7	3.7	..	..	8	..	88	..
Bulgaria	8 <sup>c</sup>	8	1.6	8.8	13.6	10	..	100	..
Burkina Faso	21	15	35.2	43.1	5.4	16	7	34	95
Burundi	48	66	38.9	63.1	1.4	11	45	98	69
Cambodia	43	33	28.4	43.7	1.7	11	60	73	79
Cameroon	33	26	15.1	35.4	8.7	11	21	49	95
Canada	<2.5	<2.5	..	..	..	6	..	..	..
Central African Republic	50	44	21.8	44.6	10.8	13	23	62	79
Chad	58	35	33.9	44.8	4.4	22	2	56	95
Chile	8	4	..	..	..	6	63	100	..
China	16	12	6.8	21.8	9.2	2	51	90	..
Hong Kong, China	..	..	..	..	..	5	..	..	..
Colombia	17	13	5.1	16.2	4.2	6	47	90	..
Congo, Dem. Rep.	31	74	33.6	44.4	6.5	12	36 <sup>e</sup>	72	92
Congo, Rep.	54	33	11.8	31.2	8.5	13	19	82	90
Costa Rica	6	5	..	..	..	7	..	..	60
Côte d'Ivoire	18	13	..	..	..	17	4	84	95
Croatia	16 <sup>c</sup>	7	..	..	..	6	..	..	..
Cuba	7	<2.5	..	..	..	5	26	88	..
Czech Republic	<2.5 <sup>c</sup>	<2.5	2.1	2.6	4.4	7	..	..	..
Denmark	<2.5	<2.5	..	..	..	5	..	..	..
Dominican Republic	27	29	4.2	11.7	8.6	11	4	19	40
Ecuador	8	6	6.2	29.0	5.1	..	40	..	..
Egypt, Arab Rep.	4	4	5.4	23.8	14.1	14	38	78	..
El Salvador	12	11	6.1	24.6	5.8	7	24	62	..
Eritrea	70 <sup>c</sup>	75	34.5	43.7	1.6	14	52	68	57
Estonia	9 <sup>c</sup>	<2.5	..	..	..	4	..	..	..
Ethiopia	69 <sup>c</sup>	46	34.6	50.7	5.1	14	49	20	59
Finland	<2.5	<2.5	..	..	..	4	..	..	..
France	<2.5	<2.5	..	..	..	..	..	..	..
Gabon	10	5	8.8	26.3	5.6	14	6	36	30
Gambia, The	22	29	15.4	24.1	3.0	20	41	7	95
Georgia	44 <sup>c</sup>	9	..	..	..	7	..	91	..
Germany	<2.5	<2.5	..	..	..	..	..	..	..
Ghana	37	11	18.8	35.6	4.5	9	54	32	95
Greece	<2.5	<2.5	..	..	..	..	..	..	..
Guatemala	16	22	17.7	54.3	5.6	12	51	67	44 <sup>d</sup>
Guinea	39	24	22.5	39.3	5.1	12	27	51	95
Guinea-Bissau	24	39	21.9	36.1	5.1	24	16	1	64
Haiti	65	46	18.9	29.7	3.9	25	41	3	42

	Prevalence of undernourishment		Prevalence of child malnutrition		Prevalence of overweight children	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	2002–04 <sup>a</sup>	2000–06 <sup>b</sup>	2000–06 <sup>b</sup>	2000–06 <sup>b</sup>	2000–06 <sup>b</sup>	2000–06 <sup>b</sup>	2000–06 <sup>b</sup>	2005
Honduras	23	23	8.6	29.9	5.8	10	30	..	40
Hungary	<2.5 <sup>c</sup>	<2.5	..	..	..	9	..	..	..
India	25	20	43.5	47.9	1.9	..	46	51	64 <sup>d</sup>
Indonesia	9	6	24.4	28.6	5.1	9	40	73	76
Iran, Islamic Rep.	4	4	..	..	..	..	44	99	..
Iraq	..	..	..	..	..	..	..	28	..
Ireland	<2.5	<2.5	..	..	..	..	..	..	..
Israel	<2.5	<2.5	..	..	..	8	..	..	..
Italy	<2.5	<2.5	..	..	..	..	..	..	..
Jamaica	14	9	3.1	4.5	7.5	12	15	..	..
Japan	<2.5	<2.5	..	..	..	8	..	..	..
Jordan	4	6	3.6	12.0	4.7	12	27	88	..
Kazakhstan	<2.5 <sup>c</sup>	6	..	..	..	6	17	92	..
Kenya	39	31	16.5	35.8	5.8	10	13	91	69
Korea, Dem. Rep.	18	33	17.8	44.7	0.9	7	65	40	95
Korea, Rep.	<2.5	<2.5	..	..	..	4	..	..	..
Kuwait	24	5	..	..	..	..	..	..	..
Kyrgyz Republic	21 <sup>c</sup>	4	..	..	..	5	32	76	88
Lao PDR	29	19	36.4	48.2	2.7	14	23	75	63
Latvia	3 <sup>c</sup>	3	..	..	..	5	..	..	..
Lebanon	<2.5	3	..	..	..	6	27	92	..
Lesotho	17	13	16.6	45.2	6.8	13	36	91	9
Liberia	34	50	22.8	45.3	4.6	..	35	..	95
Libya	<2.5	<2.5	..	..	..	..	..	..	..
Lithuania	4 <sup>c</sup>	<2.5	..	..	..	4	..	..	..
Macedonia, FYR	15 <sup>c</sup>	5	1.2	1.2	7.9	6	16	94	95
Madagascar	35	38	36.8	52.8	6.2	17	67	75	95
Malawi	50	35	18.4	52.5	10.2	13	56	48	94
Malaysia	3	3	..	..	..	9	..	..	..
Mali	29	29	30.1	42.7	3.1	23	25	74	66
Mauritania	15	10	30.4	39.5	3.8	..	20	2	96
Mauritius	6	5	..	..	..	14	21	..	..
Mexico	5	5	3.4	15.5	7.6	8	..	91	68
Moldova	5 <sup>c</sup>	11	3.2	11.3	9.1	6	46	60	..
Mongolia	34	27	4.8	23.5	6.1	6	57	83	92
Morocco	6	6	9.9	23.1	13.3	15	31	59	..
Mozambique	66	44	21.2	47.0	6.3	15	30	54	95
Myanmar	10	5	29.6	40.6	2.4	15	15	60	95
Namibia	34	24	20.3	29.5	3.3	14	19	63	68
Nepal	20	17	38.8	49.3	0.6	21	53	63	96
Netherlands	<2.5	<2.5	..	..	..	..	..	..	..
New Zealand	<2.5	<2.5	..	..	..	6	..	..	..
Nicaragua	30	27	7.8	25.2	7.1	12	31	97	98
Niger	41	32	39.9	54.8	3.5	13	14	46	94
Nigeria	13	9	27.2	43.0	6.2	14	17	97	73
Norway	<2.5	<2.5	..	..	..	5	..	..	..
Oman	..	..	..	..	..	8	..	..	95
Pakistan	24	24	31.3	41.5	4.8	..	..	17	95
Panama	21	23	..	..	..	10	..	..	4
Papua New Guinea	..	..	..	..	..	..	..	..	90
Paraguay	18	15	..	..	..	9	22	88	..
Peru	42	12	5.2	31.3	11.8	7	63	91	..
Philippines	26	18	20.7	33.8	2.4	20	34	56	85
Poland	<2.5 <sup>c</sup>	<2.5	..	..	..	6	..	..	..
Portugal	<2.5	<2.5	..	..	..	8	..	..	..
Puerto Rico	..	..	..	..	..	..	..	..	..



	Prevalence of undernourishment		Prevalence of child malnutrition		Prevalence of overweight children	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	2002–04 <sup>a</sup>	2000–06 <sup>b</sup>	2000–06 <sup>b</sup>	2000–06 <sup>b</sup>	2000–06 <sup>b</sup>	2000–06 <sup>b</sup>	2000–06 <sup>b</sup>	2005
Romania	<2.5 <sup>c</sup>	<2.5	3.5	12.8	8.3	8	16	74	..
Russian Federation	4 <sup>c</sup>	3	..	..	..	6	..	35	..
Rwanda	43	33	18.0	51.7	6.7	6	88	88	100
Saudi Arabia	4	4	..	..	..	..	..	..	..
Senegal	23	20	14.5	20.1	2.4	19	34	41	95
Serbia	5 <sup>c,f</sup>	9 <sup>f</sup>	..	..	..	5	15	..	..
Sierra Leone	46	51	24.7	38.4	4.7	24	8	45	95
Singapore	..	..	3.3	4.4	2.6	8	..	..	..
Slovak Republic	4 <sup>c</sup>	7	..	..	..	7	..	..	..
Slovenia	3 <sup>c</sup>	3	..	..	..	6	..	..	..
Somalia	..	..	..	..	..	11	9	1	6
South Africa	<2.5	<2.5	..	..	..	..	7	..	33
Spain	<2.5	<2.5	..	..	..	..	..	..	..
Sri Lanka	28	22	22.8	18.4	1.0	22	53	94	64 <sup>d</sup>
Sudan	31	26	38.4	47.6	5.2	..	34	11	90
Swaziland	14	22	9.1	36.6	14.9	9	24	59	59
Sweden	<2.5	<2.5	..	..	..	..	..	..	..
Switzerland	<2.5	<2.5	..	..	..	..	..	..	..
Syrian Arab Republic	5	4	..	..	..	9	29	79	..
Tajikistan	22 <sup>c</sup>	56	..	..	..	10	25	46	98
Tanzania	37	44	16.7	44.4	4.9	10	41	43	95
Thailand	30	22	..	..	..	9	5	58	..
Timor-Leste	11	9	40.6	55.7	5.7	12	31	72	91
Togo	33	24	..	..	..	12	28	25	95
Trinidad and Tobago	13	10	4.4	5.3	4.9	19	13	28	..
Tunisia	<2.5	<2.5	..	..	..	7	47	97	..
Turkey	<2.5	3	..	..	..	..	21	64	..
Turkmenistan	12 <sup>c</sup>	7	..	..	..	4	11	87	..
Uganda	24	19	19.0	44.8	4.9	12	60	96	78
Ukraine	<2.5 <sup>c</sup>	<2.5	4.1	22.9	26.5	4	6	18	..
United Arab Emirates	4	3	..	..	..	..	..	..	..
United Kingdom	<2.5	<2.5	..	..	..	8	..	..	..
United States	<2.5	<2.5	1.1	3.3	7.0	8	..	..	..
Uruguay	7	<2.5	6.0	13.9	9.4	8	..	..	..
Uzbekistan	8 <sup>c</sup>	25	..	..	..	5	26	53	82
Venezuela, RB	11	18	..	..	..	9	..	..	..
Vietnam	31	16	26.7	43.4	2.5	7	17	93	99 <sup>d</sup>
West Bank and Gaza	..	16	..	..	..	7	27	86	..
Yemen, Rep.	34	38	..	..	..	..	12	30	15 <sup>d</sup>
Zambia	48	46	23.3	52.5	5.9	12	40	77	66
Zimbabwe	45	47	14.0	35.8	9.1	..	22	..	81
<b>World</b>	<b>17 w</b>	<b>14 w</b>	<b>23.5 w</b>	<b>.. w</b>	<b>5.5 w</b>	<b>10 w</b>	<b>39 w</b>	<b>68 w</b>	<b>.. w</b>
<b>Low income</b>	27	24	35.3	45.9	3.4	..	38	55	76
<b>Middle income</b>	14	10	9.5	23.8	8.5	7	40	79	..
Lower middle income	16	11	10.7	24.8	8.5	7	41	81	..
Upper middle income	..	5	..	..	..	8	..	72	..
<b>Low &amp; middle income</b>	20	16	24.5	37.1	5.4	10	39	68	..
East Asia & Pacific	17	12	12.9	26.2	7.3	6	44	84	..
Europe & Central Asia	6 <sup>c</sup>	6	..	..	..	6	..	50	..
Latin America & Carib.	13	10	5.1	..	..	9	..	85	..
Middle East & N. Africa	6	7	..	..	..	12	30	72	..
South Asia	26	21	41.0	46.7	2.1	..	45	51	72
Sub-Saharan Africa	29	30	27.0	44.5	5.7	13	31	61	79
<b>High income</b>	3	3	..	..	..	..	..	..	..
Euro area	3	3	..	..	..	..	..	..	..

a. Preliminary data. b. Data are for the most recent year available. c. Data are for 1993–95. d. Country's vitamin A supplementation programs do not target children all the way up to 59 months of age. e. Data are for 2007. f. Includes Montenegro.

**About the data**

Data on undernourishment are produced by the Food and Agriculture Organization (FAO) of the United Nations 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 account for inequality in access to food (FAO, *State of Food Insecurity in the World 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 children have 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 Blössner 2000).

New international child growth reference standards for infants and young children were released in 2006 by the World Health Organization (WHO) as a tool for monitoring the nutritional status of children. They are also key in measuring and monitoring health targets for the Millennium Development Goals. The differences in children's growth to age 5 are influenced

more by nutrition, feeding practices, environment, and healthcare than by genetics or ethnicity. The data reported previously were based on the U.S. National Center for Health Statistics–WHO growth reference. Because of the change in standards, the data in this edition should not be compared with data in previous editions.

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 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 used with caution.

Improved breastfeeding practice can save an estimated 1.3 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. Widely used and inexpensive, iodized salt is the best source of iodine, and a global campaign to iodize edible salt is significantly reducing the risks (UNICEF, *Childinfo 2006*). The data on iodized salt are derived from household surveys.

Vitamin A is essential for the functioning of the immune system. Besides being a leading cause of blindness, vitamin A deficiency causes a 23 percent greater risk of dying from a range of childhood ailments such as measles, malaria, and diarrhea. Giving vitamin A to new mothers who are breastfeeding helps protect their children during the first months of life. Food fortification with vitamin A is being introduced in many developing countries.

For indicators from household surveys, the year in the table refers to the survey year. For more information, consult the original sources.

**Definitions**

- **Prevalence of undernourishment** is the percentage of the population that is undernourished—whose dietary energy consumption is continuously below a minimum dietary energy requirement for maintaining a healthy life and carrying out light physical activity.
- **Prevalence of child malnutrition** is the percentage of children under age 5 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 table presents data for the WHO's new child growth standards released in 2006.
- **Prevalence of overweight children** is the percentage of children under age 5 whose weight for height is more than two standard deviations above the median for the international reference population of the corresponding age as established by the WHO's new child growth standards released in 2006.
- **Low-birthweight babies** are the percentage of newborns weighing less than 2.5 kilograms, with the measurement taken within the first hours of life, before significant postnatal weight loss has occurred.
- **Exclusive breastfeeding** is the percentage of children less than six months old who were fed breast milk alone (no other liquids) in the past 24 hours.
- **Consumption of iodized salt** is the percentage of households that use edible salt fortified with iodine.
- **Vitamin A supplementation** is the percentage of children ages 6–59 months old who received at least one dose of vitamin A in the previous six months, as reported by mothers.

**Data sources**

Data on undernourishment are from [www.fao.org/faostat/foodsecurity/index\\_en.htm](http://www.fao.org/faostat/foodsecurity/index_en.htm). Data on malnutrition and overweight children are from the WHO's Global Database on Child Growth and Malnutrition ([www.who.int/nutgrowthdb](http://www.who.int/nutgrowthdb)). Data on low-birthweight babies, breastfeeding, iodized salt consumption, and vitamin A supplementation are from the United Nations Children's Fund's *State of the World's Children 2008* and *Childinfo*.



	Prevalence of smoking		Incidence of tuberculosis	Prevalence of diabetes	Prevalence of HIV						Condom use	
	% of adults				per 100,000 people	% of population ages 20–79	Total % of population ages 15–49		Female % of total population with HIV	Youth % of population ages 15–24		% of population ages 15–24
	Male 2000–05 <sup>a</sup>	Female 2000–05 <sup>a</sup>	2006	2007			2003	2005		2003	2005	Male 2005
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..
Albania	60	18	19	4.5	0.2	0.2	..	..	..	..	..	..
Algeria	32	0 <sup>b</sup>	56	8.4	0.1	0.1	20.6	21.6	..	..	..	..
Angola	..	..	285	3.3	3.7	3.7	59.3	60.7	0.9	2.5	..	..
Argentina	32	25	39	5.6	0.6	0.6	26.7	27.7	..	..	..	..
Armenia	62	2	72	7.7	0.1	0.1	..	..	..	..	32	7
Australia	19	16	6	5.0	0.1	0.1	..	..	..	..	..	..
Austria	..	..	13	7.9	0.3	0.3	19.2	19.2	..	..	..	..
Azerbaijan	..	1	77	7.3	<0.1	0.1	..	..	..	..	..	..
Bangladesh	55	27	225	5.3	<0.1	<0.1	..	12.7	..	..	..	..
Belarus	53	7	61	7.6	0.3	0.3	24.4	25.5	..	..	..	..
Belgium	30	25	13	5.2	0.2	0.3	45.5	38.6	..	..	..	..
Benin	..	..	90	4.4	2.0	1.8	59.3	58.4	0.4	1.1	32	8
Bolivia	..	..	198	5.8	0.1	0.1	27.0	27.9	..	..	29	10
Bosnia and Herzegovina	49	30	51	7.0	..	<0.1	..	..	..	..	..	..
Botswana	..	..	551	5.2	24.0	24.1	56.0	53.8	5.7	15.3	..	..
Brazil	22	14	50	6.2	0.5	0.5	34.5	36.1	..	..	..	..
Bulgaria	44	23	40	7.6	..	<0.1	..	..	..	..	..	..
Burkina Faso	..	..	248	3.7	1.8 <sup>c</sup>	2.0	59.2	57.1	0.5	1.4	54	17
Burundi	..	..	367	1.7	3.3	3.3	60.8	60.8	0.8	2.3	..	..
Cambodia	..	..	500	5.0	2.0	1.6	46.4	45.4	..	..	..	3
Cameroon	..	..	192	3.7	5.5	5.5 <sup>d</sup>	62.2	61.7	1.4	4.9	52	24
Canada	22	17	5	7.4	0.3	0.3	12.2	16.3	..	..	..	..
Central African Republic	..	..	345	4.4	10.8	10.7	59.1	56.5	2.5	7.3	..	..
Chad	..	..	299	3.6	3.4	3.5	54.7	56.3	0.9	2.2	18	7
Chile	48	37	15	5.6	0.3	0.3	26.4	27.1	..	..	..	..
China	67	4	99	4.1	0.1 <sup>e</sup>	0.1 <sup>e</sup>	24.5 <sup>e</sup>	27.7 <sup>e</sup>	..	..	..	..
Hong Kong, China	22	4	62	8.2	..	..	..	..	..	..	..	..
Colombia	..	..	45	5.0	0.5	0.6	26.4	28.1	..	..	..	23
Congo, Dem. Rep.	..	..	392	3.0	3.2	3.2	59.0	58.4	0.8	2.2	..	..
Congo, Rep.	..	..	403	5.0	5.4	5.3	58.6	61.0	1.2	3.7	36	16
Costa Rica	29	10	14	9.3	0.3	0.3	27.0	27.4	..	..	..	..
Côte d'Ivoire	..	..	420	4.6	7.0	7.1	57.8	58.8	1.7	5.1	..	..
Croatia	32	23	40	7.1	..	<0.1	..	..	..	..	..	..
Cuba	..	..	9	9.3	0.1	0.1	54.8	55.3	..	..	..	..
Czech Republic	31	20	10	7.6	<0.1	0.1	..	..	..	..	..	..
Denmark	31	25	8	5.5	<0.1	0.2	24.0	23.6	..	..	..	..
Dominican Republic	16	11	89	8.7	1.0 <sup>f</sup>	1.1	49.2	50.0	..	..	40	10
Ecuador	..	..	128	5.7	0.3	0.3	52.4	54.5	..	..	..	..
Egypt, Arab Rep.	40	18	24	11.0	<0.1	<0.1	..	..	..	..	..	..
El Salvador	42	15	50	9.0	0.9	0.9	27.1	28.3	0.6	0.4	..	..
Eritrea	..	..	94	2.3	2.4	2.4	59.2	58.5	0.6	1.6	..	2
Estonia	45	18	39	7.6	1.1	1.3	22.1	24.0	..	..	..	..
Ethiopia	6	0 <sup>b</sup>	378	2.3	..	1.4 <sup>g</sup>	..	..	0.2	1.1	18	2
Finland	26	19	5	5.9	0.1	0.1	..	..	..	..	..	..
France	30	21	14	5.9	0.4	0.4	33.3	34.6	..	..	..	..
Gabon	..	..	354	4.9	7.7	7.9	59.6	58.9	1.8	5.4	..	..
Gambia, The	..	..	257	4.1	2.2	2.4	58.8	57.9	0.6	1.7	..	..
Georgia	53	6	84	7.4	0.1	0.2	..	..	..	..	..	..
Germany	37	28	6	7.9	0.1	0.1	29.5	30.6	..	..	..	..
Ghana	7	1	203	4.2	2.2 <sup>c</sup>	2.3	60.7	60.0	0.2	1.3	45	19
Greece	47	29	18	5.9	0.2	0.2	20.7	21.5	..	..	..	..
Guatemala	21	2	79	8.6	0.9	0.9	26.4	27.1	..	..	..	..
Guinea	..	..	265	4.1	1.6	1.5	68.9	67.9	0.6	1.2	35	10
Guinea-Bissau	..	..	219	3.8	3.8	3.8	59.3	58.6	0.9	2.5	..	..
Haiti	15	6	299	9.0	3.8	2.2 <sup>h</sup>	52.9	53.3	0.6	1.5	28	20

# Health risk factors and public health challenges

# 2.19

**POP**

	Prevalence of smoking		Incidence of tuberculosis	Prevalence of diabetes	Prevalence of HIV						Condom use	
	% of adults				per 100,000 people	% of population ages 20–79	Total		Female % of total population with HIV	Youth % of population ages 15–24		% of population ages 15–24
	Male 2000–05 <sup>a</sup>	Female 2000–05 <sup>a</sup>	2003	2005			2003	2005		Male 2005	Female 2005	Male 2000–06 <sup>a</sup>
Honduras	..	..	76	9.1	1.5	1.5	25.0	26.2	..	..	..	7
Hungary	41	28	19	7.6	0.1	0.1	..	..	..	..	..	..
India	47	17	168	6.7	0.9	0.9	28.8	28.6	..	..	..	..
Indonesia	58	3	234	2.3	0.1	0.1	13.6	17.1	..	..	..	1
Iran, Islamic Rep.	22	2	22	7.8	0.1	0.2	13.0	16.7	..	..	..	..
Iraq	..	..	..	..	..	..	..	..	..	..	..	..
Ireland	28	26	13	5.1	0.2	0.2	32.0	36.0	..	..	..	..
Israel	32	18	8	6.9	0.2	0.2	..	..	..	..	..	..
Italy	31	17	7	5.8	0.5	0.5	33.6	33.3	..	..	..	..
Jamaica	..	..	7	10.3	1.5	1.5	27.1	27.6	..	..	..	..
Japan	47	15	22	4.9	<0.1	<0.1	56.5	58.2	..	..	..	..
Jordan	51	8	5	9.8	0.2	0.2	..	..	..	..	..	4
Kazakhstan	65	9	130	5.6	0.1	0.1	56.0	56.7	..	..	..	..
Kenya	21	1	384	3.3	6.7 <sup>c</sup>	6.1	64.2	61.7	1.0	5.2	39	9
Korea, Dem. Rep.	..	..	178	5.2	0.2	0.2	..	..	..	..	..	..
Korea, Rep.	..	..	88	7.8	<0.1	<0.1	59.1	56.9	..	..	..	..
Kuwait	..	..	24	14.4	0.2	0.2	..	..	..	..	..	..
Kyrgyz Republic	51	5	123	5.1	<0.1	0.1	..	..	..	..	..	..
Lao PDR	59	13	152	3.1	0.1	0.1	..	..	..	..	..	..
Latvia	51	19	57	7.6	0.6	0.8	20.3	22.0	..	..	..	..
Lebanon	42	31	11	7.7	0.1	0.1	..	..	..	..	..	..
Lesotho	..	..	635	3.8	23.7	23.4 <sup>d</sup>	56.0	60.0	5.9	14.1	44	26
Liberia	..	..	331	4.6	..	..	..	..	..	..	..	..
Libya	..	..	18	4.4	0.2	0.2	..	..	..	..	..	..
Lithuania	44	13	62	7.6	0.1	0.2	..	..	..	..	..	..
Macedonia, FYR	..	..	29	7.1	<0.1	<0.1	..	..	..	..	..	..
Madagascar	..	..	248	3.0	0.5	0.5	28.2	27.7	0.6	0.3	8	2
Malawi	21	5	377	2.1	14.2	14.1	59.3	58.8	3.4	9.6	28	9
Malaysia	43	2	103	10.7	0.4	0.5	25.0	25.4	..	..	..	..
Mali	..	..	280	4.1	1.8 <sup>i</sup>	1.7	57.3	60.0	0.4	1.2	32	9
Mauritania	..	..	316	4.6	0.7	0.7	59.2	57.3	0.2	0.5	..	..
Mauritius	32	1	23	11.1	0.2	0.6	..	..	..	..	..	..
Mexico	13	5	21	10.6	0.3	0.3	20.0	23.3	..	..	..	..
Moldova	34	2	141	7.6	0.9	1.1	56.5	57.1	..	..	55	22
Mongolia	68	26	188	1.9	<0.1	<0.1	..	..	..	..	..	..
Morocco	29	0 <sup>b</sup>	93	8.1	0.1	0.1	18.2	21.1	..	..	..	..
Mozambique	..	..	443	3.7	16.0	16.1	57.5	60.0	3.6	10.7	27	12
Myanmar	36	12	171	3.2	1.4	1.3	31.6	31.4	..	..	..	..
Namibia	23	10	767	4.2	19.5	19.6	60.0	61.9	4.4	13.4	65	42
Nepal	49	24	176	4.2	0.5	0.5	20.3	21.6	..	..	24	8
Netherlands	36	28	8	5.2	0.2	0.2	33.8	34.7	..	..	..	..
New Zealand	24	22	9	6.4	0.1	0.1	..	..	..	..	..	..
Nicaragua	..	5	58	10.1	0.2	0.2	22.4	23.6	..	..	..	7
Niger	..	..	174	3.7	1.1	1.1	59.7	59.2	0.2	0.8	..	..
Nigeria	..	1	311	4.5	3.7	3.9	58.3	61.5	0.9	2.7	38	8
Norway	27	25	6	3.6	0.1	0.1	..	..	..	..	..	..
Oman	..	..	13	13.1	0.2	0.2	..	..	..	..	..	..
Pakistan	..	..	181	9.6	0.1	0.1	13.3	16.7	..	..	..	..
Panama	..	..	45	9.7	0.9	0.9	26.0	25.3	..	..	..	..
Papua New Guinea	..	..	250	2.9	1.6	1.8	59.2	59.6	..	..	..	..
Paraguay	23	7	71	4.8	0.4	0.4	27.3	26.9	..	..	..	..
Peru	..	..	162	6.0	0.5	0.6	26.8	28.6	..	..	..	9
Philippines	41	8	287	7.6	<0.1	<0.1	20.2	28.3	..	..	13	3
Poland	40	25	25	7.6	0.1	0.1	30.0	30.0	..	..	..	..
Portugal	..	..	32	5.7	0.4	0.4	3.9	4.1	..	..	..	..
Puerto Rico	17	10	5	10.7	..	..	..	..	..	..	..	..



	Prevalence of smoking		Incidence of tuberculosis	Prevalence of diabetes	Prevalence of HIV						Condom use	
	% of adults				per 100,000 people	% of population ages 20–79	Total % of population ages 15–49		Female % of total population with HIV	Youth % of population ages 15–24		% of population ages 15–24
	Male 2000–05 <sup>a</sup>	Female 2000–05 <sup>a</sup>	2006	2007			2003	2005		2003	2005	2005
Romania	32	10	128	7.6	..	<0.1	..	..	..	..	..	..
Russian Federation	60	16	107	7.6	0.9	1.1	21.1	22.3	..	..	..	..
Rwanda	..	..	397	1.5	3.8	3.0 <sup>g</sup>	52.6	56.9	0.4	1.5	19	5
Saudi Arabia	19	8	44	16.7	0.2	0.2	..	..	..	..	..	..
Senegal	..	..	270	4.6	0.9	0.7 <sup>g</sup>	58.5	58.9	0.1	0.4	48	5
Serbia	48 <sup>j</sup>	34 <sup>j</sup>	32 <sup>j</sup>	7.1 <sup>j</sup>	0.2 <sup>j</sup>	0.2 <sup>j</sup>	22.2 <sup>j</sup>	20.0 <sup>j</sup>	..	..	..	..
Sierra Leone	..	..	517	4.3	1.6	1.6	60.0	60.5	0.4	1.1	..	..
Singapore	24	4	26	10.1	0.3	0.3	25.5	27.3	..	..	..	..
Slovak Republic	..	..	15	7.6	<0.1	<0.1	..	..	..	..	..	..
Slovenia	28	20	13	7.6	<0.1	<0.1	..	..	..	..	..	..
Somalia	..	..	218	2.8	0.9	0.9	60.5	57.5	0.2	0.6	..	..
South Africa	23	8	940	4.4	15.6 <sup>f</sup>	18.8	56.9	58.5	4.5	14.8	57	46
Spain	39	25	30	5.7	0.7	0.6	22.9	22.9	..	..	..	..
Sri Lanka	23	2	60	8.4	<0.1	<0.1	..	..	..	..	..	..
Sudan	..	..	242	4.0	1.6	1.6	56.7	56.3	..	..	..	..
Swaziland	11	3	1,155	4.0	32.4	33.4	63.2	57.1	7.7	22.7	..	..
Sweden	17	18	6	5.2	0.2	0.2	31.3	31.3	..	..	..	..
Switzerland	27	23	7	7.9	0.4	0.4	36.0	36.9	..	..	..	..
Syrian Arab Republic	..	..	32	10.6	0.2	0.2	..	..	..	..	..	..
Tajikistan	..	..	204	4.9	<0.1	0.1	..	..	..	..	..	..
Tanzania	..	..	312	2.9	7.0 <sup>k</sup>	6.5	52.3	54.6	2.8	3.8	36	13
Thailand	49	3	142	6.9	1.4	1.4	38.6	39.3	..	..	..	..
Timor-Leste	..	..	556	1.7	0.2	0.2	..	..	..	..	..	..
Togo	..	..	389	4.1	3.2	3.2	58.9	61.0	0.8	2.2	..	..
Trinidad and Tobago	..	..	8	11.5	2.6	2.6	56.0	57.7	..	..	..	..
Tunisia	50	2	25	5.2	0.1	0.1	..	22.1	..	..	..	..
Turkey	49	18	29	7.8	0.2	0.2	..	..	..	..	..	..
Turkmenistan	..	..	65	5.2	..	<0.1	..	..	..	..	..	1
Uganda	25	3	355	2.0	6.8	6.4 <sup>l</sup>	57.6	57.8	1.1	4.3	38	15
Ukraine	53	11	106	7.6	1.3	1.4	47.4	48.8	..	..	..	..
United Arab Emirates	17	1	16	19.5	0.2	0.2	..	..	..	..	..	..
United Kingdom	27	25	15	2.9	0.2	0.2	..	..	..	..	..	..
United States	24	19	4	7.8	0.6	0.6	25.5	25.0	..	..	..	..
Uruguay	35	24	27	5.6	0.4	0.5	55.6	55.8	..	..	..	..
Uzbekistan	24	1	121	5.1	0.1	0.2	..	13.2	..	..	18	2
Venezuela, RB	..	..	41	5.4	0.6	0.7	27.7	28.2	..	..	..	..
Vietnam	35	2	173	2.9	0.4	0.5 <sup>g</sup>	30.5	33.6	0.8	..	..	8
West Bank and Gaza	..	..	20	8.4	..	..	..	..	..	..	..	..
Yemen, Rep.	..	..	78	2.9	0.2	0.2	..	..	..	..	..	..
Zambia	16	1	553	3.8	15.6 <sup>m</sup>	17.0	56.3	57.0	3.8	12.7	36	19
Zimbabwe	20	2	557	4.0	22.1	18.1 <sup>h</sup>	58.1	59.3	4.4	14.7	52	9
<b>World</b>	<b>.. w</b>	<b>.. w</b>	<b>139 w</b>	<b>5.8 w</b>	<b>1.0 w</b>	<b>1.0 w</b>	<b>30.4 w</b>	<b>31.4 w</b>				
<b>Low income</b>	..	15	221	5.7	1.7	1.7	35.8	34.3				
<b>Middle income</b>	..	..	114	5.6	0.6	0.7	26.1	28.7				
Lower middle income	..	..	116	5.0	0.3	0.3	24.9	27.9				
Upper middle income	..	..	109	7.3	1.6	1.7	29.9	31.3				
<b>Low &amp; middle income</b>	..	..	161	5.6	1.1	1.1	29.9	31.1				
East Asia & Pacific	67	4	135	4.2	0.2	0.2	24.3	27.4				
Europe & Central Asia	..	..	82	7.3	0.5	0.6	..	..				
Latin America & Carib.	..	..	57	7.1	0.5	0.6	30.3	31.9				
Middle East & N. Africa	..	..	42	8.7	0.1	0.1	..	..				
South Asia	47	18	174	6.9	0.7	0.7	26.9	25.4				
Sub-Saharan Africa	..	..	368	3.6	6.4	5.8	57.6	58.5				
<b>High income</b>	..	..	16	6.8	0.4	0.4	33.1	33.3				
Euro area	..	..	13	6.4	0.4	0.3	29.3	29.7				

a. Data are for the most recent year available. b. Less than 0.5. c. Survey data, 2003. d. Survey data, 2004. e. Includes Hong Kong, China. f. Survey data, 2002. g. Survey data, 2005. h. Survey data, 2005–06. i. Survey data, 2001. j. Includes Montenegro. k. Survey data, 2003–04. l. Survey data, 2004–05. m. 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). 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 spread of Western lifestyles and diet to developing countries, resulting in a substantial increase in diabetes. Without effective prevention and control programs, diabetes will likely continue to increase. Data are estimated based on sample surveys.

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 developing countries most new infections occur in young adults, with young women especially vulnerable.

The current HIV estimates from the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the WHO are lower than the previous estimates, due mostly to increased availability of reliable data, including more population-based HIV prevalence surveys, new and improved HIV surveillance data, and improved quality and coverage of sentinel surveillance in many countries, including rural areas, where prevalence is known to be lower.

Estimates from recent Demographic and Health Surveys that have collected data on HIV/AIDS differ somewhat from those of UNAIDS and the WHO, which are based on surveillance systems that focus on pregnant women who attend sentinel antenatal clinics. Caution should be exercised in about comparing the two sets of estimates. Demographic and Health Surveys are household surveys that use a representative sample from the whole population, whereas surveillance data from antenatal clinics are 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 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.

Data on condom use are from household surveys and refer to condom use at last intercourse. However, condoms are not as effective at preventing the transmission of HIV unless used consistently. Some surveys have tried to ask directly about consistent use, but the question is subject to recall and other biases. Caution should be used in interpreting the data.

For indicators from household surveys, the year in the table refers to the survey year. For more information, consult the original sources.

**Definitions**

- **Prevalence of smoking** is the percentage of men and women who smoke cigarettes. The age range varies, but in most countries 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.
- **Prevalence of HIV** is the percentage of people who are infected with HIV. Total and youth rates are as a percentage of the relevant age group. Female rate is as a percentage of the total population with HIV.
- **Condom use** is the percentage of the population ages 15–24 who used condom at last intercourse in the last 12 months.

**Data sources**

Data on smoking are from J. McCay, M. Erksen, and O. Shafey's *Tobacco Atlas*, 2nd edition (2006). Data on tuberculosis are from the WHO's *Global Tuberculosis Control Report 2008: Surveillance, Planning, Financing*. Data on diabetes are from the International Diabetes Federation's *Diabetes Atlas*, 3rd edition. Data on prevalence of HIV are from UNAIDS and the WHO's *2006 Report on the Global AIDS Epidemic*. Data on condom use are from Demographic and Health Surveys by Macro International.



	Survey year	Prevalence of child malnutrition				Child immunization rate				Infant mortality rate		Under-five mortality rate	
		Moderate underweight % of children under age 5				% of children ages 12–23 months <sup>a</sup>				per 1,000 live births		per 1,000	
		New reference		Old reference		Measles		DTP3		Poorest quintile	Richest quintile	Poorest quintile	Richest quintile
		Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Poorest quintile	Richest quintile				
Armenia	2000	3	2	3	1	68	74 <sup>b</sup>	89	84 <sup>b</sup>	52	27	61	30
Bangladesh	2004	36	19	41	24	60	91	71	91	90	65	121	71
Benin	2001	18	6	21	9	57	83	63	89	112	50	198	93
Bolivia	2003	7	1	10	1	62	74	64	85	87	32	119	37
Brazil	1996	7	2	10	3	78	90	66	82	83	29	99	33
Burkina Faso	2003	19	13	26	16	48	71	45	73	97	78	206	144
Cambodia	2000	27	23	35	28	44	82	39	75	110	50	155	64
Cameroon	2004	..	..	..	..	57	86	55	86	101	52	189	88
Central African Republic	1994–95	20	11	25	15	31	80	27	76	132	54	193	98
Chad	2004	24	16	27	19	8	38	5	42	109	101	176	187
Colombia	2005	7	2	11	3	70	91	73	91	32	14	39	16
Côte d'Ivoire	1994	17	7	21	10	31	79	26	74	117	63	190	97
Dominican Republic	2002	7	1	9	1	83	94	46	66	50	20	66	22
Egypt, Arab Rep.	2000	4	2	5	2	95	99	94	93	76	30	98	34
Eritrea	1995	..	..	..	..	37	92	30	89	74	68	152	104
Ethiopia	2000	25	22	32	29	18	52	14	43	93	95	159	147
Gabon	2000	10	4	14	7	34	71	18	49	57	36	93	55
Ghana	2003	17	6	22	10	74	88	64	87	61	58	128	88
Guatemala	1998–99	21	9	26	10	80	91	74	76	58	39	78	39
Guinea	1999	17	9	22	13	33	73	30	69	119	70	230	133
Haiti	2000	14	4	18	6	43	63	31	58	100	97	164	109
India	1998–99	28	16	33	21	28	81	36	85	97	38	141	46
Indonesia	2002–03	..	..	..	..	59	85	42	72	61	17	77	22
Jordan	1997	..	..	..	..	90	93	98	93	35	23	42	25
Kazakhstan	1999	3	5	5	6	74	76 <sup>b</sup>	90	82 <sup>b</sup>	68	42	82	45
Kenya	2003	17	6	22	7	54	88	56	73	96	62	149	91
Kyrgyz Republic	1997	6	5	10	7	82	81	82	87	83	46	96	49
Madagascar	1997	24	18	29	24	32	79	32	81	119	58	195	101
Malawi	2000	18	9	24	12	80	90	79	93	132	86	231	149
Mali	2001	20	10	26	13	40	77	28	71	137	90	248	148
Mauritania	2000–01	18	11	23	15	42	86	18	61	61	62	98	79
Morocco	2003–04	11	2	13	3	83	98	89	98	62	24	78	26
Mozambique	2003	16	5	21	7	61	96	52	96	143	71	196	108
Namibia	2000	17	6	22	9	76	86	76	83	36	23	55	31
Nepal	2001	34	20	40	26	61	83	62	85	86	53	130	68
Nicaragua	2001	9	2	13	2	76	94	77	83	50	16	64	19
Niger	1998	27	18	30	26	23	66	9	68	131	86	282	184
Nigeria	2003	20	9	24	10	16	71	7	61	133	52	257	79
Pakistan	1990–91	28	14	33	19	28	75	24	64	89	63	125	74
Paraguay	1990	3	1	5	1	48	69	40	69	43	16	57	20
Peru	2000	9	1	13	1	81	92	76	93	64	14	93	18
Philippines	2003	..	..	..	..	70	89	64	92	42	19	66	21
Rwanda	2000	15	8	19	12	84	89	80	89	139	88	246	154
Senegal	1997	..	..	..	..	..	..	..	..	85	45	181	70
South Africa	1998	..	..	..	..	74	85	64	85	62	17	87	22
Tanzania	2004	14	8	20	11	65	91	34	36	88	64	137	93
Togo	1998	17	8	23	10	35	63	29	68	84	66	168	97
Turkey	1998	..	..	..	..	64	89	45	81	68	30	85	33
Turkmenistan	2000	..	..	..	..	91	80	97	86	89	58	106	70
Uganda	2000–01	16	7	21	10	49	65	35	55	106	60	192	106
Uzbekistan	1996	11	8	15	10	96	93	89	82	54	46	70	50
Vietnam	2002	..	..	..	..	64	98	53	94	39	14	53	16
Yemen, Rep.	1997	..	..	36	24	16	73	14	71	109	60	163	73
Zambia	2001–02	18	12	24	17	81	88	74	89	115	57	192	92
Zimbabwe	1999	10	5	16	6	80	86	81	86	59	44	100	62

a. Refers to children who were immunized at any time before the survey. b. The data contain large sampling errors because of the small number of cases.

# Health gaps by income and gender

**2.20** PEOPLE

	Survey year	Prevalence of child malnutrition		Child immunization rate				Infant mortality rate		Under-five mortality rate	
		Old reference		% of children ages 12–23 months <sup>a</sup>				per 1,000 live births		per 1,000	
		Moderate underweight % of children under age 5		Measles		DTP3		Male	Female	Male	Female
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Armenia	2000	2	3	71	79	90	89	46	42	51	45
Bangladesh	2004	34	35	76	76	81	81	80	64	102	91
Benin	2001	19	17	69	67	74	71	98	92	162	163
Bolivia	2003	6	6	65	63	70	73	71	64	94	91
Brazil	1996	6	5	87	87	82	80	52	44	60	53
Burkina Faso	2003	25	23	54	58	57	57	95	89	195	192
Cambodia	2000	32	33	57	54	50	47	103	82	133	110
Cameroon	2004	14	15	65	66	65	68	88	74	154	141
Central African Republic	1994–95	21	19	52	53	49	46	109	94	165	152
Chad	2004	23	23	23	23	20	21	122	108	207	198
Colombia	2005	6	6	83	82	84	81	26	18	30	21
Côte d'Ivoire	1994	19	16	54	52	49	45	99	83	163	137
Dominican Republic	2002	5	5	89	88	54	61	38	31	46	40
Egypt, Arab Rep.	2000	4	3	97	97	94	94	55	55	69	70
Eritrea	1995	26	27	52	50	49	49	82	69	163	141
Ethiopia	2000	32	31	28	26	22	19	124	101	197	178
Gabon	2000	10	9	55	55	40	33	74	49	103	80
Ghana	2003	17	17	82	83	81	77	70	59	111	108
Guatemala	1998–99	21	18	82	87	73	74	50	48	64	65
Guinea	1999	17	19	52	52	46	47	112	101	202	188
Haiti	2000	14	13	54	54	43	43	97	83	143	132
India	1998–99	28	30	52	50	56	54	75	71	98	105
Indonesia	2002–03	..	..	73	71	58	59	46	40	58	51
Jordan	1997	4	5	90	90	96	96	34	23	38	30
Kazakhstan	1999	4	4	79	78	89	88	62	47	72	53
Kenya	2003	18	14	73	72	71	74	84	67	122	103
Kyrgyz Republic	1997	11	8	84	85	83	81	72	60	81	70
Madagascar	1997	27	27	47	45	48	49	109	90	176	152
Malawi	2000	20	19	83	83	84	85	117	108	207	199
Mali	2001	24	21	49	48	41	38	136	116	250	226
Mauritania	2000–01	22	22	61	63	39	41	74	59	110	94
Morocco	2003–04	9	8	88	92	95	95	51	37	59	48
Mozambique	2003	18	17	77	76	73	71	127	120	181	176
Namibia	2000	19	18	79	82	78	81	45	34	67	54
Nepal	2001	35	36	73	69	74	70	79	75	105	112
Nicaragua	2001	9	7	87	86	84	81	39	32	48	41
Niger	1998	29	30	36	34	25	25	141	131	299	306
Nigeria	2003	19	20	34	38	19	24	116	102	222	212
Pakistan	1990–91	27	27	55	46	45	40	102	86	122	119
Paraguay	1990	3	4	56	61	50	57	39	33	49	45
Peru	2000	6	6	84	85	85	84	46	40	64	57
Philippines	2003	..	..	78	81	78	80	35	25	48	34
Rwanda	2000	19	19	86	88	85	87	123	112	215	198
Senegal	1997	..	..	..	..	..	..	74	65	144	134
South Africa	1998	..	..	84	81	74	78	49	35	66	48
Tanzania	2004	18	18	80	80	37	33	83	82	135	130
Togo	1998	19	18	45	40	43	41	89	71	156	132
Turkey	1998	7	7	79	78	60	57	51	46	61	58
Turkmenistan	2000	11	10	87	88	93	92	83	60	101	76
Uganda	2000–01	18	17	56	57	45	48	93	85	164	149
Uzbekistan	1996	15	13	91	92	87	90	50	37	65	46
Vietnam	2002	..	..	84	82	72	73	25	25	34	31
Yemen, Rep.	1997	33	30	45	40	41	39	98	80	128	114
Zambia	2001–02	21	21	83	86	78	82	95	93	176	160
Zimbabwe	1999	12	11	77	81	80	82	63	56	95	85

a. Refers to children who were immunized at any time before the survey.

	Survey year	Pregnant women receiving prenatal care		Contraceptive prevalence rate		Births attended by skilled health staff <sup>a</sup>		Total fertility rate		Exclusive breastfeeding	
		%		modern methods % of married women ages 15–49		% of total		births per woman		% of children under 4 months	
		Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Poorest quintile	Richest quintile
Armenia	2000	85	97	16	29	93	100	2.5	1.6	..	..
Bangladesh	2004	25	81	45	50	3	39	4.1	2.2	62	31
Benin	2001	73	100	4	15	50	99	7.2	3.5	50	42 <sup>b</sup>
Bolivia	2003	62	98	23	49	27	98	6.7	2.0	79	31
Brazil	1996	72	98	56	77	72	99	4.8	1.7	33	60 <sup>b</sup>
Burkina Faso	2003	56	96	2	27	19	84	6.6	3.6	17	28
Cambodia	2000	22	80	13	25	15	81	4.7	2.2	14	18
Cameroon	2004	65	97	2	27	29	95	6.5	3.2	33	30 <sup>b</sup>
Central African Republic	1994–95	39	91	1	9	14	82	5.1	4.9	9	4
Chad	2004	9	77	0	7	1	51	5.1	6.0	1	2
Colombia	2005	84	99	60	72	72	99	4.1	1.4	60	64
Côte d'Ivoire	1994	62	98	1	13	17	84	6.4	3.7	0	5
Dominican Republic	2002	97	99	59	70	94	100	4.5	2.1	18	6
Egypt, Arab Rep.	2000	31	84	43	61	31	94	4.0	2.9	72	57
Eritrea	1995	34	90	0 <sup>c</sup>	19	5	74	8.0	3.7	64	73
Ethiopia	2000	15	60	3	23	1	25	6.3	3.6	63	46
Gabon	2000	85	98	6	18	67	97	6.3	3.0	6	5 <sup>b</sup>
Ghana	2003	83	98	9	26	21	90	6.4	2.8	62 <sup>b</sup>	..
Guatemala	1998–99	37	97	5	60	9	92	7.6	2.9	62	..
Guinea	1999	58	97	1	9	12	82	5.8	4.0	9	8
Haiti	2000	65	91	17	24	4	70	6.8	2.7	40	15 <sup>b</sup>
India	1998–99	44	93	29	55	16	84	3.4	1.8	64	37
Indonesia	2002–03	78	99	49	58	40	94	3.0	2.2	58	35
Jordan	1997	93	97	28	47	91	99	5.2	3.1	14	14 <sup>b</sup>
Kazakhstan	1999	97	91	49	55	99	99	3.4	1.2	..	..
Kenya	2003	75	94	12	44	17	75	7.6	3.1	22	17
Kyrgyz Republic	1997	96	99	44	54	96	100	4.6	2.0	18 <sup>b</sup>	..
Madagascar	1997	67	96	2	24	30	89	8.1	3.4	57	65
Malawi	2000	89	98	20	40	43	83	7.1	4.8	53	72
Mali	2001	42	92	4	18	22	89	7.3	5.3	38	18
Mauritania	2000–01	33	89	0 <sup>c</sup>	17	15	93	5.4	3.5	28	30
Morocco	2003–04	40	93	51	57	29	95	3.3	1.9	53	36
Mozambique	2003	67	98	14	37	25	89	6.3	3.8	47	27
Namibia	2000	81	96	29	64	55	97	6.0	2.7	100 <sup>b</sup>	85 <sup>b</sup>
Nepal	2001	30	80	24	55	4	45	5.3	2.3	76	67
Nicaragua	2001	69	97	50	71	78	99	5.6	2.1	53	15 <sup>b</sup>
Niger	1998	24	85	1	18	4	63	8.4	5.7	1	3
Nigeria	2003	37	96	4	21	13	85	6.5	4.2	15	34
Pakistan	1990–91	8	72	1	23	5	55	5.1	4.0	36	9
Paraguay	1990	73	98	21	46	41	98	7.9	2.7	7	0
Peru	2000	41	74	37	58	13	88	5.5	1.6	88	59
Philippines	2003	72	97	24	35	25	92	5.9	2.0	60	20
Rwanda	2000	90	95	2	15	17	60	6.0	5.4	89	79
Senegal	1997	67	97	1	24	20	86	7.4	3.6	13	19
South Africa	1998	96	94	34	70	68	98	4.8	1.9	15	11 <sup>b</sup>
Tanzania	2004	91	97	11	36	31	87	7.3	3.3	58	55
Togo	1998	69	97	3	13	25	91	7.3	2.9	7	34
Turkey	1998	38	96	24	48	53	98	3.9	1.7	10	4 <sup>b</sup>
Turkmenistan	2000	98	97	51	50	97	98	3.4	2.1	11	28 <sup>b</sup>
Uganda	2000–01	88	98	11	41	20	77	8.5	4.1	73	59
Uzbekistan	1996	93	96	46	52	92	100	4.4	2.2	..	..
Vietnam	2002	68	100	58	52	58	100	2.2	1.4	18	..
Yemen, Rep.	1997	17	68	1	24	7	50	7.3	4.7	20	13
Zambia	2001–02	89	99	11	53	20	91	7.3	3.6	39	70 <sup>b</sup>
Zimbabwe	1999	94	97	41	67	57	94	4.9	2.6	36	46 <sup>b</sup>

a. Based on births in the five years before the survey. b. The data contain large sampling errors because of the small number of cases. c. 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.

Socioeconomic status as displayed in the table is based on 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 collect 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 primarily in 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 was carried out for 56 countries, with the results issued in country reports. The table shows the estimates for the poorest and richest quintiles and by sex only; the full set of estimates for up to 117 indicators is available in the country reports (see *Data sources*).

Demographic and Health Surveys try to collect cross-country comparable data, but the age group of the reference population could differ across countries. Caution should be exercised when comparing the data. The estimates in the table are based on survey data, which refer to a period preceding the survey date, or use a definition or methodology different from the estimates in tables 2.16–2.18 and 2.21. Thus the estimates may differ from those in the other tables, and caution should be exercised in using the data.

**Definitions**

- **Survey year** is the year in which the underlying data were collected.
- **Prevalence of child malnutrition** is the percentage of children under age 5 whose weight for age is two to three standard deviations below the median reference standard for their age. New international child growth standards were released in 2006 by the World Health Organization. The table presents malnutrition data using both the new and old reference standards. For more information about the change in standards, see *About the data* for table 2.18.
- **Child immunization rate** is the percentage of children ages 12–23 months at the time of the survey who, at any time before the survey, had received measles vaccine and three doses of diphtheria, tetanus, and pertussis (whooping cough) vaccine (DTP3).
- **Infant mortality rate** is the number of infants dying before reaching one year of age, per 1,000 live births.
- **Under-five mortality rate** is the probability that a newborn baby will die before reaching age 5, per 1,000, if subject to current age-specific mortality rates.
- **Pregnant women receiving prenatal care** are the percentage of women with one or more births during the five years preceding the survey who were attended at least once during pregnancy by skilled health personnel for reasons related to pregnancy.
- **Contraceptive prevalence rate** is the percentage of women married or in-union ages 15–49 who are practicing, or whose sexual partners are practicing, any modern method of contraception.
- **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, and trained midwives, but exclude trained or untrained traditional birth attendants.
- **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.
- **Exclusive breastfeeding** refers to the percentage of children ages 0–3 months who received only breast milk in the 24 hours preceding the survey.

**Data sources**

Data on health gaps by income and gender are from an analysis of Demographic and Health Surveys by the World Bank and Macro International. Country reports are available at [www.worldbank.org/povertyandhealth/countrydata](http://www.worldbank.org/povertyandhealth/countrydata).



	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	2006	1990	2006	1990	2006	Male 1997-2006 <sup>a</sup>	Female 1997-2006 <sup>a</sup>	Male 2004-06 <sup>a</sup>	Female 2004-06 <sup>a</sup>	Male 2006	Female 2006
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..
Albania	72	76	37	15	45	17	..	..	108	52	81	90
Algeria	67	72	54	33	69	38	..	..	123	105	77	81
Angola	40	42	154	154	260	260	..	..	486	437	30	35
Argentina	72	75	25	14	29	16	..	..	168	80	74	87
Armenia	68	72	47	21	56	24	8	3	197	88	68	83
Australia	77	81	8	5	10	6	..	..	85	49	87	93
Austria	76	80	8	4	10	5	..	..	111	55	84	92
Azerbaijan	71	72	84	73	105	88	..	..	218	103	62	77
Bangladesh	55	64	100	52	149	69	24	29	235	203	61	66
Belarus	71	69	20	12	24	13	..	..	368	128	52	82
Belgium	76	79	8	4	10	4	..	..	114	62	84	92
Benin	53	56	111	88	185	148	64	65	287	239	52	58
Bolivia	59	65	89	50	125	61	25	29	238	178	63	71
Bosnia and Herzegovina	72	75	18	13	22	15	..	..	148	77	76	86
Botswana	63	50	45	90	58	124	..	..	586	575	31	35
Brazil	67	72	48	19	57	20	..	..	234	123	66	80
Bulgaria	72	73	15	12	19	14	..	..	221	92	69	86
Burkina Faso	50	52	123	122	206	204	110	113	288	187	46	57
Burundi	46	49	114	109	190	181	..	..	412	377	39	44
Cambodia	55	59	85	65	116	82	20	20	359	248	49	61
Cameroon	55	50	85	87	139	149	73	72	416	420	41	43
Canada	77	80	7	5	8	6	..	..	95	57	86	91
Central African Republic	50	44	114	115	173	175	..	..	566	536	28	33
Chad	51	51	120	124	201	209	96	101	352	303	43	50
Chile	74	78	18	8	21	9	..	..	130	62	80	89
China	69	72	36	20	45	24	..	..	153	92	75	82
Hong Kong, China	77	82	..	..	..	..	..	..	78	34	87	94
Colombia	68	73	26	17	35	21	4	3	206	97	71	83
Congo, Dem. Rep.	46	46	129	129	205	205	..	..	439	401	35	40
Congo, Rep.	57	55	67	79	103	126	49	43	402	377	44	50
Costa Rica	76	79	16	11	18	12	..	..	116	62	82	89
Côte d'Ivoire	53	48	105	90	153	127	83	58	429	408	38	42
Croatia	72	76	11	5	12	6	..	..	159	62	75	89
Cuba	75	78	11	5	13	7	..	..	119	74	82	88
Czech Republic	71	76	11	3	13	4	..	..	139	60	78	90
Denmark	75	78	8	4	9	5	..	..	116	68	83	88
Dominican Republic	68	72	50	25	65	29	9	9	222	134	68	78
Ecuador	69	75	43	21	57	24	..	..	171	91	75	85
Egypt, Arab Rep.	62	71	67	29	91	35	10	10	158	94	72	82
El Salvador	66	72	47	22	60	25	..	..	209	127	70	80
Eritrea	49	57	88	48	147	74	55	50	430	326	41	54
Estonia	69	73	12	5	16	7	..	..	282	100	59	84
Ethiopia	48	52	122	77	204	123	56	56	367	329	44	49
Finland	75	79	6	3	7	4	..	..	132	57	83	92
France	77	81	7	4	9	4	..	..	127	57	84	93
Gabon	61	57	60	60	92	91	32	33	378	374	49	51
Gambia, The	51	59	103	84	153	113	..	..	221	180	57	62
Georgia	70	71	39	28	46	32	..	..	214	82	67	83
Germany	75	79	7	4	9	4	..	..	112	58	84	92
Ghana	57	60	76	76	120	120	44	52	289	283	56	58
Greece	77	79	9	4	11	4	..	..	93	42	85	92
Guatemala	63	70	60	31	82	41	15	18	237	131	67	79
Guinea	47	56	139	98	235	161	89	86	275	236	52	58
Guinea-Bissau	42	46	142	119	240	200	..	..	447	396	35	41
Haiti	55	60	105	60	152	80	33	36	309	245	54	62

	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	2006	1990	2006	1990	2006	Male 1997-2006 <sup>a</sup>	Female 1997-2006 <sup>a</sup>	Male 2004-06 <sup>a</sup>	Female 2004-06 <sup>a</sup>	Male 2006	Female 2006
Honduras	66	70	45	23	58	27	8	9	245	141	65	78
Hungary	69	73	15	6	17	7	..	..	256	107	66	85
India	59	64	80	57	115	76	25	37	260	168	59	69
Indonesia	62	68	60	26	91	34	13	11	172	123	71	79
Iran, Islamic Rep.	65	71	54	30	72	34	..	..	155	104	73	81
Iraq	62	..	42	..	53	..	..	..	..	..	..	..
Ireland	75	79	8	4	9	5	..	..	90	52	85	91
Israel	77	80	10	4	12	5	..	..	82	39	87	93
Italy	77	81	8	4	9	4	..	..	86	45	85	93
Jamaica	71	71	28	26	33	31	..	..	222	140	70	79
Japan	79	82	5	3	6	4	..	..	93	45	87	94
Jordan	68	72	33	21	40	25	5	5	167	116	73	80
Kazakhstan	68	66	51	26	60	29	11	6	369	147	49	76
Kenya	59	53	64	79	97	121	42	39	432	408	42	47
Korea, Dem. Rep.	70	67	42	42	55	55	..	..	182	128	65	75
Korea, Rep.	71	78	8	5	9	5	..	..	114	47	81	92
Kuwait	75	78	14	9	16	11	..	..	87	53	85	89
Kyrgyz Republic	68	68	63	36	75	41	10	11	281	132	57	75
Lao PDR	55	64	120	59	163	75	..	..	238	196	61	67
Latvia	69	71	14	8	18	9	..	..	311	111	63	86
Lebanon	69	72	32	26	37	30	..	..	155	103	73	82
Lesotho	59	43	81	102	101	132	22	19	715	698	20	24
Liberia	43	45	157	157	235	235	..	..	466	430	33	37
Libya	68	74	35	17	41	18	..	..	152	94	74	83
Lithuania	71	71	10	7	13	8	..	..	326	110	62	86
Macedonia, FYR	71	74	33	15	38	17	..	..	137	81	77	85
Madagascar	51	59	103	72	168	115	45	45	289	231	54	61
Malawi	49	48	131	76	221	120	101	67	540	525	32	37
Malaysia	70	74	16	10	22	12	..	..	156	89	75	85
Mali	48	54	140	119	250	217	132	125	263	184	48	58
Mauritania	58	64	85	78	133	125	38	38	177	111	64	73
Mauritius	69	73	20	13	23	14	..	..	210	108	68	82
Mexico	71	74	42	29	53	35	..	..	144	81	78	86
Moldova	67	69	30	16	37	19	7	4	296	140	58	77
Mongolia	63	67	79	34	109	43	..	..	268	175	59	70
Morocco	64	71	69	34	89	37	9	11	151	101	73	82
Mozambique	44	42	158	96	235	138	61	64	609	589	25	29
Myanmar	59	62	91	74	130	104	..	..	304	192	54	66
Namibia	62	52	60	45	86	61	22	20	523	508	37	41
Nepal	54	63	99	46	142	59	21	19	235	211	61	65
Netherlands	77	80	7	4	9	5	..	..	83	53	86	91
New Zealand	75	80	8	5	11	6	..	..	81	53	86	91
Nicaragua	64	72	52	29	68	36	10	9	214	124	70	80
Niger	47	56	191	148	320	253	138	136	169	182	59	57
Nigeria	47	47	120	99	230	191	120	123	432	410	37	40
Norway	77	80	7	3	9	4	..	..	86	53	86	92
Oman	70	76	25	10	32	12	..	..	103	76	82	87
Pakistan	59	65	100	78	130	97	..	..	177	145	66	69
Panama	72	75	27	18	34	23	..	..	140	75	78	87
Papua New Guinea	55	57	69	54	94	73	..	..	422	305	41	55
Paraguay	68	72	33	19	41	22	..	..	176	129	72	79
Peru	66	71	58	21	78	25	19	8	201	125	70	79
Philippines	66	71	41	24	62	32	14	9	161	107	73	81
Poland	71	75	19	6	18	7	..	..	190	66	71	89
Portugal	74	78	11	3	14	5	..	..	139	58	83	91
Puerto Rico	75	78	..	..	..	..	..	..	138	54	79	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	2006	1990	2006	1990	2006	Male 1997-2006 <sup>a</sup>	Female 1997-2006 <sup>a</sup>	Male 2004-06 <sup>a</sup>	Female 2004-06 <sup>a</sup>	Male 2006	Female 2006
Romania	70	72	27	16	31	18	..	..	205	87	69	85
Russian Federation	69	66	23	14	27	16	..	..	429	158	43	77
Rwanda	32	46	106	98	176	160	90	87	471	422	33	39
Saudi Arabia	68	73	35	21	44	25	3	4	143	93	75	84
Senegal	57	63	72	60	149	116	69	69	174	106	63	72
Serbia	71	73	..	7	..	8	..	..	159	85	74	85
Sierra Leone	39	42	169	159	290	270	..	..	412	349	33	39
Singapore	74	80	7	2	8	3	..	..	83	47	86	92
Slovak Republic	71	74	12	7	14	8	..	..	196	76	71	88
Slovenia	73	78	8	3	10	4	..	..	149	57	80	91
Somalia	42	48	121	90	203	145	..	..	389	339	39	44
South Africa	62	51	45	56	60	69	18	13	605	568	29	36
Spain	77	81	8	4	9	4	..	..	110	45	85	94
Sri Lanka	71	75	26	11	32	13	..	..	241	102	66	83
Sudan	53	58	74	61	120	89	38	30	311	270	52	58
Swaziland	57	41	78	112	110	164	..	..	750	727	17	21
Sweden	78	81	6	3	7	3	..	..	78	49	88	93
Switzerland	77	82	7	4	9	5	..	..	80	47	87	93
Syrian Arab Republic	68	74	31	12	38	14	..	..	126	86	78	85
Tajikistan	63	67	91	56	115	68	..	..	213	141	63	73
Tanzania	51	52	102	74	161	118	56	52	444	412	40	45
Thailand	67	70	26	7	31	8	..	..	276	162	63	77
Timor-Leste	46	57	133	47	177	55	..	..	272	237	56	61
Togo	58	58	88	69	149	108	73	65	280	235	54	61
Trinidad and Tobago	70	70	30	33	34	38	..	..	243	191	66	73
Tunisia	70	74	41	19	52	23	..	..	126	73	78	86
Turkey	66	71	67	24	82	26	10	13	154	87	73	84
Turkmenistan	63	63	81	45	99	51	19	17	300	144	53	72
Uganda	50	51	93	78	160	134	71	61	446	433	39	43
Ukraine	70	68	22	20	25	24	..	..	375	132	51	80
United Arab Emirates	73	79	13	8	15	8	..	..	75	50	86	91
United Kingdom	76	79	8	5	10	6	..	..	88	56	85	90
United States	75	78	9	6	11	8	..	..	140	82	81	88
Uruguay	73	76	20	11	23	12	..	..	145	68	76	88
Uzbekistan	69	67	61	38	74	43	..	..	242	138	61	74
Venezuela, RB	71	74	27	18	33	21	..	..	181	96	73	84
Vietnam	65	71	38	15	53	17	10	7	139	93	78	84
West Bank and Gaza	69	73	34	20	40	22	..	..	131	95	77	83
Yemen, Rep.	54	62	98	75	139	100	33	36	259	210	58	65
Zambia	48	42	101	102	180	182	89	74	636	632	23	26
Zimbabwe	61	43	52	68	76	105	21	21	706	729	21	21
<b>World</b>	<b>65 w</b>	<b>68 w</b>	<b>63 w</b>	<b>50 w</b>	<b>92 w</b>	<b>73 w</b>			<b>226 w</b>	<b>155 w</b>	<b>67 w</b>	<b>76 w</b>
<b>Low income</b>	57	60	93	74	143	112			285	223	56	63
<b>Middle income</b>	68	71	43	26	56	33			195	116	70	80
Lower middle income	67	71	44	27	60	36			173	108	72	81
Upper middle income	69	70	38	22	47	26			260	137	64	80
<b>Low &amp; middle income</b>	63	66	69	54	101	79			232	159	64	73
East Asia & Pacific	67	71	42	24	56	29			165	104	73	81
Europe & Central Asia	69	69	40	22	49	26			298	122	58	81
Latin America & Carib.	68	73	43	22	55	26			197	107	71	82
Middle East & N. Africa	64	70	58	34	77	42			166	115	71	79
South Asia	59	64	86	62	123	83			251	172	60	68
Sub-Saharan Africa	50	50	109	94	184	157			421	391	40	45
<b>High income</b>	76	79	9	6	12	7			117	63	83	91
Euro area	76	80	8	4	9	4			112	54	84	92

a. Data are for the most recent year available.

### About the data

Mortality rates for different age groups (infants, children, and adults) and overall mortality indicators (life expectancy at birth or survival to a given age) are important indicators of a country's health status. Because data on disease incidence and prevalence are frequently unavailable, mortality rates are often used to identify vulnerable populations. They are among the indicators most frequently used to compare 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—covering at least 90 percent of vital events in the population—is the best source of age-specific mortality data. Where reliable age-specific mortality data are available, life expectancy at birth is directly estimated from the life table constructed based on age-specific mortality data. But "complete" vital registration 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 (see *Primary data documentation*). 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 estimated using infant mortality data and model life tables for many developing countries, similar reliability issues arise for this indicator. 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 transparently use all available information, the United Nations Children's Fund (UNICEF) and the World Bank developed 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 childhood mortality estimates, see UNICEF, WHO, World Bank, and United Nations Population Division 2007.)

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. Child mortality rates in the table are not compatible with infant mortality and under-five mortality rates because of differences in methodologies and reference years. Child mortality data were directly estimated from surveys, based on vital events that occurred during the 10 years preceding the survey. The reference year for the child mortality data is the survey year.

Adult mortality rates increased in many countries in Sub-Saharan Africa and in 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 (high prevalence of smoking, high-fat diet, excessive alcohol use, stressful conditions related to the economic transition) and affect men more.

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. 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.

Revised lower estimates of HIV prevalence have led adult mortality estimates for many countries, notably in Sub-Saharan Africa, to be revised drastically downward from previous estimates from 1990 onward and life expectancy at birth and survival to age 65 to be revised upward.

### 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 per 1,000 that a newborn baby will die before reaching age 5, if subject to current age-specific mortality rates.
- **Child mortality rate** is the probability per 1,000 of dying between ages 1 and 5—that is, the probability of a 1-year-old dying before reaching age 5—if subject to current age-specific mortality rates.
- **Adult mortality rate** is the probability per 1,000 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 those ages.
- **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.

### Data sources

Data on infant and under-five mortality rates are the harmonized estimates of the World Health Organization, UNICEF, and the World Bank, based mainly on household surveys, censuses, and vital registration data, supplemented by the World Bank's estimates based on household surveys and vital registration and sample registration data. Data on child mortality rates are from Demographic and Health Surveys by Macro International. Other estimates are compiled and produced by the World Bank's 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 United Nations Population Division's *World Population Prospects: The 2006 Revision*, census reports and other statistical publications from national statistical offices, Eurostat, Demographic and Health Surveys by Macro International, and the Human Mortality Database by the University of California, Berkeley, and the Max Planck Institute for Demographic Research ([www.mortality.org](http://www.mortality.org)).