
PEOPLE

2

Achieving the Millennium Development Goals (MDGs) promises a better life for millions: lives saved; women empowered; illiteracy, hunger, and malnutrition reduced or eliminated; and children ensured access to high-quality education and health services. Because the MDGs are so important, countries have been striving to effectively monitor progress toward achieving them. Though the world overall has made progress, many countries remain off track—particularly fragile states and countries emerging from conflict. The global financial crisis could push an estimated 50 million people into poverty, with serious consequences for human development. Poor families cut short their children's schooling, prolonging poverty into the next generation because dropouts earn less as adults. Families are also likely to have to cut back on consumption as recent increases in food prices put pressures on budgets, damaging children's nutrition and health. But the story is not all bleak.

Monitoring the Millennium Development Goals: what do the available data tell us?

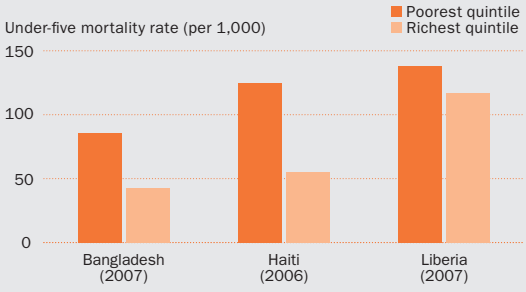
Many countries and regions have made remarkable progress. Deaths of children under age 5 have declined steadily in developing countries, falling from 101 per 1,000 live births in 1990 to 73 in 2008, despite population growth. But many countries have made little progress, especially in Sub-Saharan Africa, and large disparities persist between the richest and poorest children in countries across all regions (figure 2a).

Interventions that could yield breakthroughs for children show mixed success. One child in four in developing countries is underweight—even more in low-income countries (figure 2b). But distribution of insecticide-treated nets has reduced the toll of malaria—a major killer of children—and higher immunization rates are making advances against measles (United Nations 2009a).

Healthy births continue to be a privilege of the rich. Developed countries report 10 maternal deaths per 100,000 live births, compared with 440 in developing countries—and 14 developing countries have maternal mortality ratios of 1,000 or higher (United Nations 2009a). Interventions to prevent maternal deaths, such as prenatal care, have improved in all regions, but poor women in the world's poorest countries have the least access to them (figure 2c). Access to contraception is increasing in all regions, but unmet need remains high at 11 percent (United Nations 2009a).

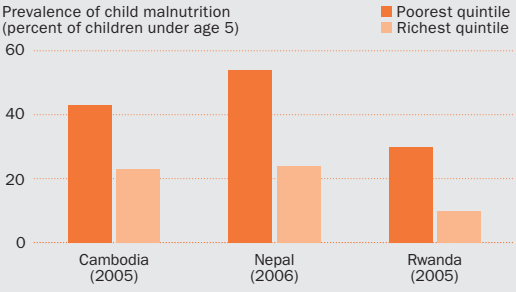
Major accomplishments have also been made in education. Enrollment in primary school reached

Child mortality is higher among the poorest children . . . 2a



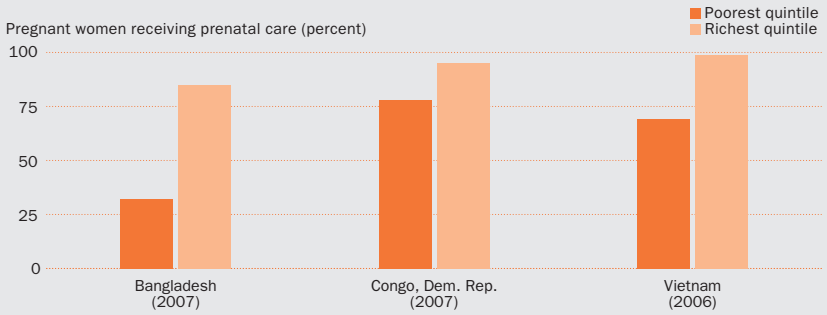
Source: Demographic and Health Surveys.

. . . as is child malnutrition 2b



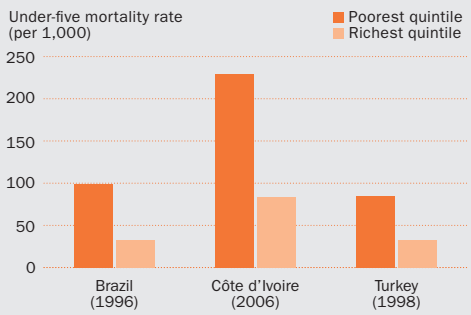
Source: Demographic and Health Surveys.

The poorest women have the least access to prenatal care 2c



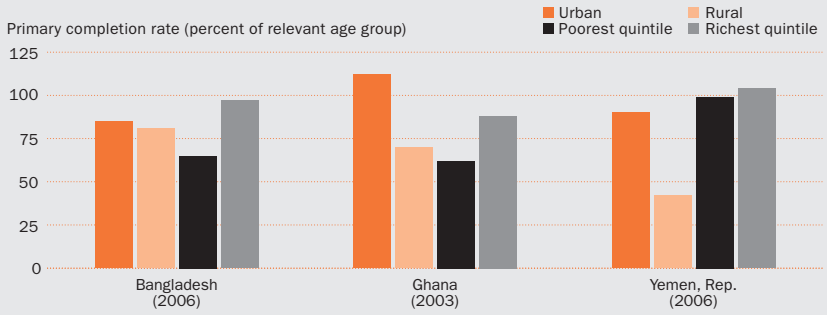
Source: Demographic and Health Surveys and Multiple Indicators Cluster Surveys.

Poorer children are more likely to die before age 5 . . . 2f



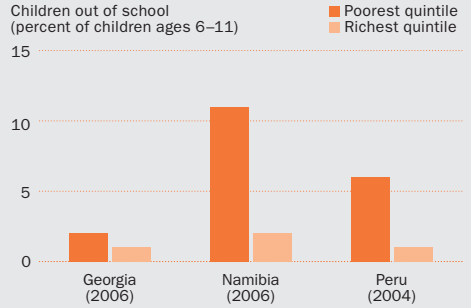
Source: Demographic and Health Surveys.

Poor and rural children are less likely to complete primary school . . . 2d



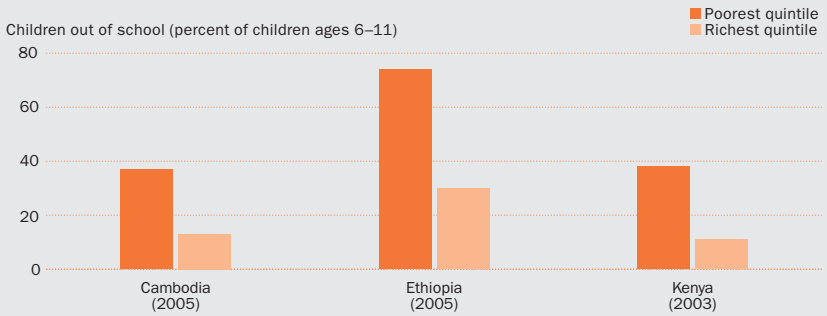
Source: Demographic and Health Surveys.

. . . and to be out of school 2g



Source: Demographic and Health Surveys.

. . . and more likely to be out of school 2e



Source: Demographic and Health Surveys.

86 percent in developing countries overall in 2007, up from 81 percent in 2000. Most of the progress was in regions lagging furthest behind—Sub-Saharan Africa (up 14 percentage points) and South Asia (up 10 percentage points). Primary school completion rates also improved, from 80 percent in 2000 to 88 percent in 2007, with the greatest improvements in the Middle East and North Africa. But the improvement was not uniformly distributed: children from poorer households and rural areas are less likely to complete their primary education (figure 2d).

In many countries and regions universal primary education (Millennium Development Goal 2) is jeopardized by the number of children who are out of school. In 2007 an estimated 72 million children were out of school, almost half of them in Sub-Saharan Africa and 18 million of them in South Asia. Nearly half of children out of school have had no contact with formal education. Another 23 percent were previously enrolled but dropped out (United Nations 2009a). Inequalities within countries mean that the poor are most likely to lose out: children from poor households are two to three times as likely to be out of school as their richest counterparts (figure 2e).

And although some of the MDG targets and indicators may be less relevant for many upper middle-income countries, they continue to matter for others. Wide disparities in well-being and achievement between the poorest and the

wealthiest populations persist, impeding countries' ability to meet their targets (figures 2f and 2g). Under-five mortality for richer children is less than half that for poorer children.

Beyond data: what more do countries need to do?

The MDGs continue to provide a focus for country efforts, along with the need to strengthen data collection and analysis to assess progress. At the same time governments need to concentrate on interventions that improve access to quality health and education services that can produce favorable outcomes for the MDGs.

Health

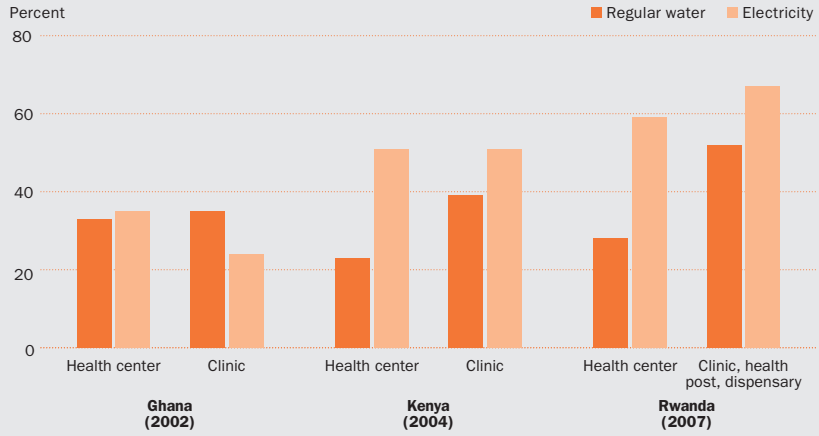
Slow progress on meeting the health MDGs has been associated with disappointing advances in access to health care. Many health systems are not equipped to provide health care for all, reflecting the inability of governments and societies to mobilize the requisite resources and institutions. In particular, countries need to improve three areas of service delivery that focus on people's needs: infrastructure, available staff to deliver services, and adequate and effective funding (Gauthier and others 2009).

Infrastructure. The quality of health services depends on the availability of basic infrastructure services such as electricity and water. Electricity—limited in many poor countries—is necessary for operating medical equipment and facilities. Because unclean water is an important vector of sickness, clean running water is fundamental to service quality. Yet data indicate that first-line facilities in many countries lack these basic services (figure 2h). And in some countries infrastructure is deteriorating (figure 2i).

The accessibility and quality of health care services are often constrained by the unavailability of basic medical services and equipment (figure 2j). Poor countries often have fewer than 1.1 doctors and 0.9 nurse per 1,000 people, with access unevenly distributed across income groups. Wealthy people are better able to get to well staffed facilities and can afford to be seen by doctors (figure 2k).

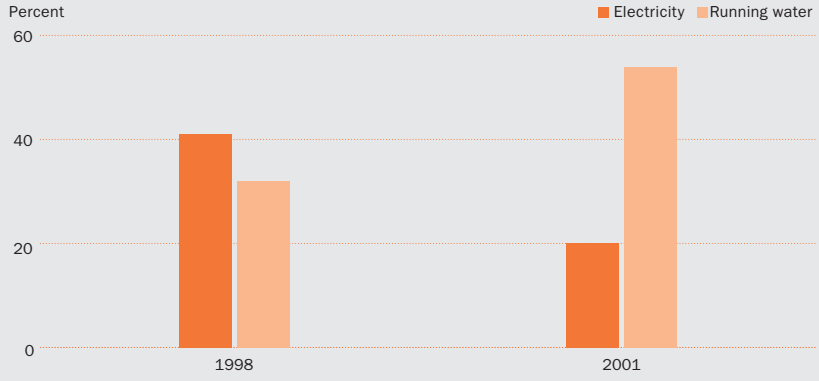
Staffing. In many developing countries staff absenteeism is high, reflecting inadequate incentives and weak local accountability. For example, on an average day 40 percent of primary

First-line health facilities in many countries lack electricity and clean water 2h



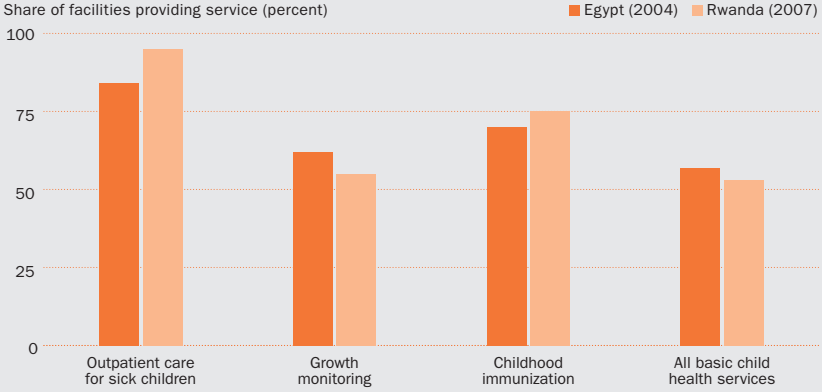
Source: Ghana Service Provision Assessment Survey 2002; Kenya HIV/AIDS Service Provision Assessment Survey 2004; Rwanda Service Provision Assessment Survey 2007.

Fewer health facilities in Guinea had electricity in 2001 than in 1998, but more had running water 2i



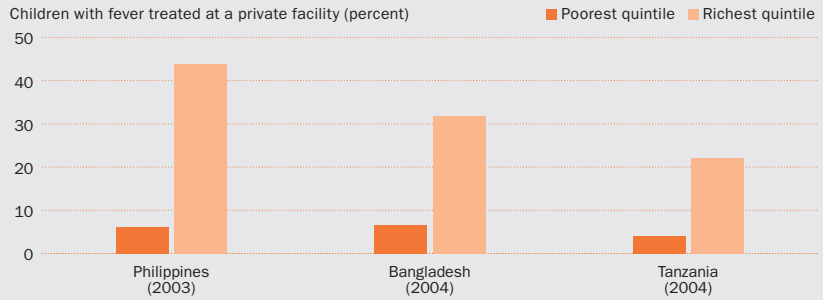
Source: Guinea Health Facility Survey 2001.

Availability of child health services is weak in Egypt and Rwanda 2j



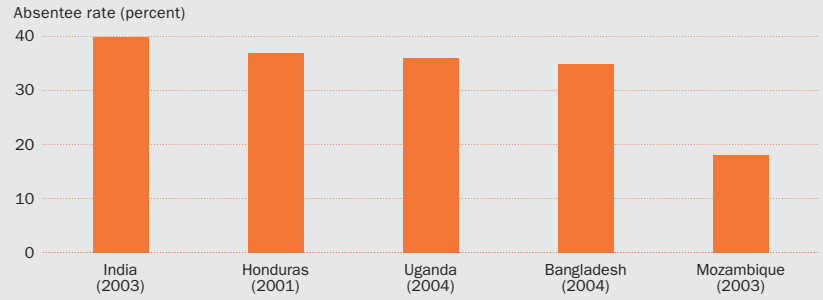
Source: Egypt Service Provision Assessment Surveys 2004; Rwanda Service Provision Assessment Survey 2007.

Wealthy people have better access to child health services **2k**



Source: Demographic and Health Surveys.

Absenteeism among health workers reduces access to health care **2l**



Source: Lewis 2006.

Distribution of health workers in Zambia, 2004 (per 100,000 people) **2m**

Classification	National	Rural	Urban	Ratio of urban to rural
Doctors	6.4	5.2	36.1	6.9
Nurses	41.6	17.7	44.7	2.5
Pharmacists/technicians	1.2	1.1	5.5	5.0
Laboratory technicians	2.7	2.5	7.9	3.2
All health workers	119.8	115.0	234.6	2.0

Source: Zambian Ministry of Health and WHO 2005.

health care workers in India are not at work (figure 2l). Because most people have to travel far to get to a health center, a high probability that the clinic will not be staffed may discourage patients from seeking care.

Uneven distribution of health workers is a major problem in several countries, especially in rural and poorer areas. For example, Zambia has twice as many health workers in urban areas as in rural areas (table 2m). Distribution of doctors is most uneven—they are seven times more common in urban areas—followed by pharmacists.

Funding. As a country's income grows, total spending on health care rises. In 2007 high-income economies spent an average of 11 percent of GDP on health services and developing economies 5 percent. Funding for front-line service providers is low in many developing countries because of leakages and allocation rules that favor other purposes. Industrialized countries have shown that the disproportionate focus on hospitals and tertiary care, which dominated practice worldwide for much of the last two decades of the 20th century, has been a major source of inefficiency and inequality. For example, less than 20 percent of doctors in Thailand were specialists 30 years ago; by 2003, 70 percent were (World Health Organization, *World Health Report 2008).*

Education

In 2002 the World Bank and development partners launched the Education for All Fast Track Initiative, a global partnership to help low-income countries meet the MDG target of universal primary education and the Education for All goal that all children complete a full cycle of primary education by 2015. The initiative encourages countries to design sound education plans and provides additional indicators for tracking progress toward the education MDG, including indicators to monitor infrastructure and capacity at the primary school level, availability and presence in the classroom of qualified teachers, and expenditures on primary education.

At the school. Many schools lack the most basic infrastructure elements that are taken for granted in developed countries (figure 2n). For example, a 2008 survey of primary schools in Asia, Latin America, and North Africa found that more than one student in five in Paraguay, the Philippines, and Sri Lanka was in a school that lacked running water (UNESCO Institute for Statistics 2008b). No country in the survey had a library in every school. In India, Paraguay, Peru, the Philippines, Sri Lanka, and Tunisia, less than half the students were in schools with a telephone.

The survey also showed major gaps in resources between urban and rural schools. In four states of India 27 percent of village schools have electricity while 76 percent of schools in towns and cities do. Only about half these rural

schools have enough toilets for girls, and less than 4 percent have a telephone. In Peru less than half of village schools have electricity, a library, or toilets for boys or girls; nearly all urban schools have electricity, 65 percent have enough lavatories, and 74 percent have libraries.

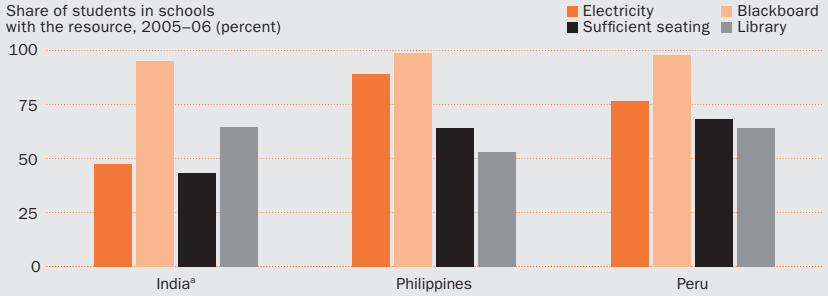
Teachers. To achieve Education for All goals, few inputs are more essential than having a teacher in the classroom. It is obvious that teacher absence will affect education quality. But teacher absence can also affect education access and school completion rates because poor quality discourages parents from making the sacrifices necessary to send their children to school. More important, high rates of teacher absence often signal deeper problems of accountability and governance that are themselves barriers to educational progress.

How prevalent is the problem of teacher absence? One difficulty in studying teacher absence is that administrative records of teachers' attendance may not be accurate. In countries with the highest absence rates, administrative records may be an especially poor guide to teacher attendance. If poor governance and low levels of accountability undermine teachers' incentives to attend school, those same factors are likely to reduce the accuracy of official attendance records. A study that measured attendance through direct observation of teachers during surprise visits to primary schools in six poor countries in 2002–03 found that teachers were absent about 19 percent of the time on average (Abadzi 2007; figure 2o). On an average day 27 percent of the teachers in Uganda were not at work compared with 5 percent in New York State.

Few teachers face serious threats of being fired for excessive absences. In a survey of 3,000 Indian government schools only one teacher was fired for poor attendance (Abdul Latif Jameel Poverty Action Lab 2009). Even in private schools, where teachers are less protected and schools have financial incentives to provide better service, only 35 of 600 schools reported a teacher being fired for poor attendance.

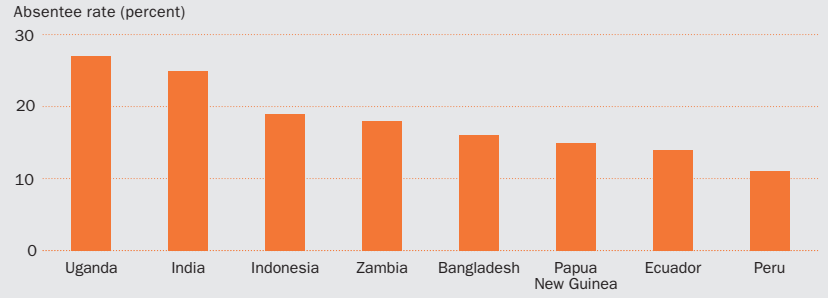
Funding. Adequate resources are critical for ensuring good quality outcomes in education. Studies have repeatedly stressed the need to ensure adequate and stable funding for education (Bruns, Mingat, and Rakotomalala 2003).

Many schools lack electricity, blackboards, seating, and libraries **2n**



a. Data cover four states only: Assam, Madhya Pradesh, Rajasthan, and Tamil Nadu.
Source: UNESCO Institute for Statistics 2008b.

Absenteeism is high among teachers in some poor countries, 2002–03 **2o**



Source: Abadzi 2007.

The cost of education **2p**

The allocation of public budgets is ultimately the result of competing demands for limited resources. Countries with rising demand for education and limited funding need to keep costs per student low. In 2005 in Sub-Saharan Africa average spending per primary school student was almost 13 percent of per capita GDP, though spending ranged from 4 percent in the Republic of Congo to 35 percent in Burkina Faso. In East Asia and Pacific average spending per primary school student was 15 percent, yet two countries reported the lowest spending levels in the world (Indonesia and Myanmar, at just 3 percent). By contrast, countries in North America and Western Europe tend to spend an average of about 22 percent and those in Central and Eastern Europe around 17 percent.

Source: UNESCO Institute for Statistics, *Global Education Digest 2007.*

Countries with higher primary gross enrollment ratios and primary completion rates tend to devote a greater share of national income or government budgets to public primary education.

Governments struggle to fund free basic education for all (box 2p). Almost a third of education funding worldwide is allocated to the primary level ($741 billion, or 1.3 percent of global GDP in purchasing power parity terms; table 2q). Sub-Saharan Africa invests the greatest share (2.1 percent of GDP), followed by the Arab States (1.8 percent) and

Latin America and the Caribbean (1.6 percent). In Burkina Faso, Cambodia, Cameroon, Dominican Republic, and Kenya the share of education funding going to primary education exceeded 60 percent in 2005. These large investments in primary education may reflect efforts to provide basic education to relatively large school-age populations—or they may indicate that few students pursue higher levels of education.

Public expenditures on primary education, by region, 2004 2q

Region	Total expenditure on education (percent of GDP)	Expenditure on primary education (percent of GDP)	Expenditure on primary education as share of total expenditure on education (percent)
Arab states	4.9	1.8	37
Central Asia	2.8	0.6	21
Central and Eastern Europe	4.2	1.1	26
East Asia and Pacific	2.8	1.0	36
Latin America and Caribbean	4.4	1.6	36
North America and Western Europe	5.6	1.5	27
South and West Asia	3.6	1.2	33
Sub-Saharan Africa	4.5	2.1	47
World	4.3	1.3	30

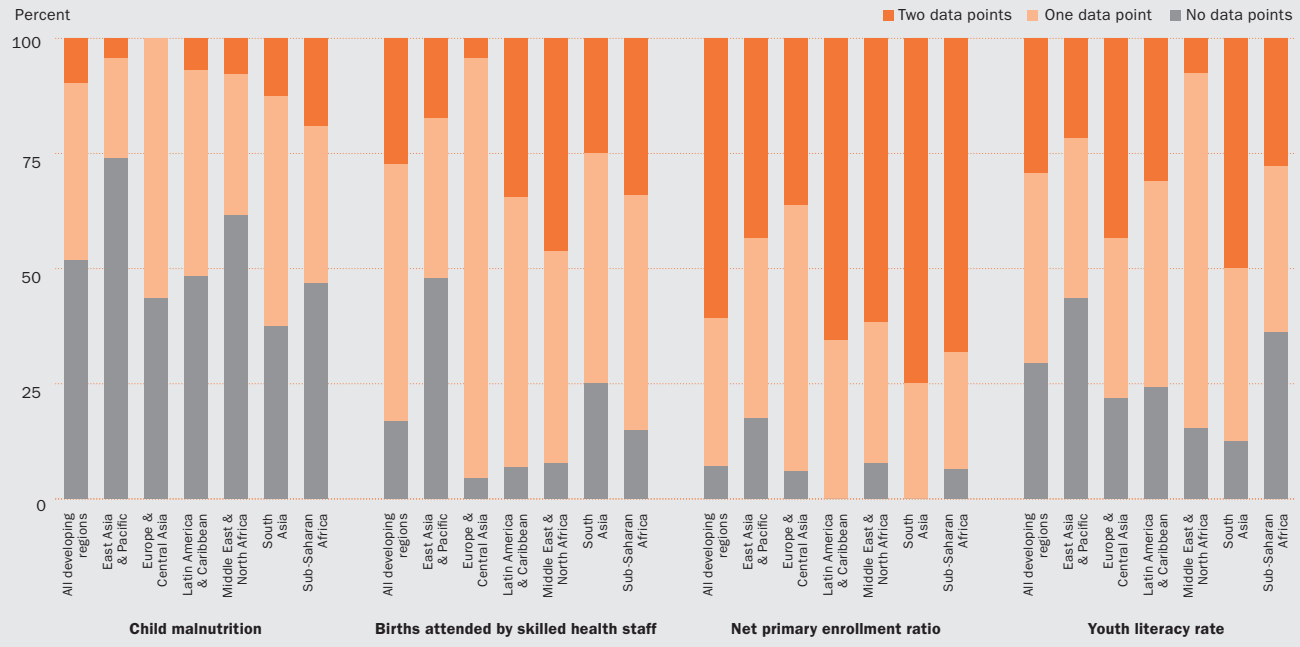
Note: Data are classified by United Nations Education, Scientific, and Cultural Organization regions.
Source: UNESCO Institute for Statistics, *Global Education Digest 2007.*

Achievements and gaps in data availability

Attention to the MDGs has been accompanied by substantial increases in the availability of health and education statistics. But data availability remains inadequate in some countries, and some countries still lack sufficient information (two or more data points) to assess progress (figure 2r). Efforts to expand and improve statistical output have benefited from programs to strengthen institutions and individual skills within national statistical systems. Where administrative sources are weak, progress in closing data gaps has been made by mounting household surveys to supplement available data.

One of the most serious gaps is the lack of reliable information on births and deaths in poor countries that lack vital registration systems. On average, only half the births in developing countries were reported from civil registration systems to the United Nations Statistics Division during 2000–07, with coverage especially low in South Asia and Sub-Saharan

Available data on human development indicators vary by region 2r



Source: World Development Indicators data files.

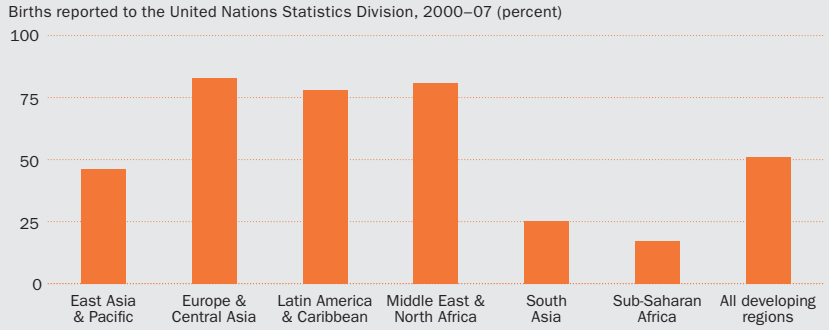
Africa (figure 2s). Reporting of infant deaths is even lower: fewer than a third of infant deaths in developing countries were reported, with low coverage in all regions except Europe and Central Asia and Latin America and the Caribbean (figure 2t).

For countries lacking vital registration systems, household surveys and censuses are important sources of fertility and mortality data. The 2010 round of censuses, covering 1996–2014, promises to be far more successful than the previous round. More than 500 million people in 27 countries and areas were not included in the 2000 census round. For 2010 only nine countries have not yet scheduled a census, reducing the number of people not enumerated to about 140 million, a drop of 75 percent from the previous census round.

In education, despite improved reporting of school enrollment and completion rates, difficulties remain in measuring dropouts and out of school children. Many children have had some contact with schooling (figure 2u), but there is still a lack of conceptual clarity in the definitions of the school-age population and school participation. Data from school censuses may overestimate enrollment rates because registered children may not show up or may drop out during the school year. Or the data may undercount students because some students who did not register or officially enroll did attend school. Likewise, household surveys may not use consistent definitions of school attendance or may fail to correct for seasonal variation in attendance.

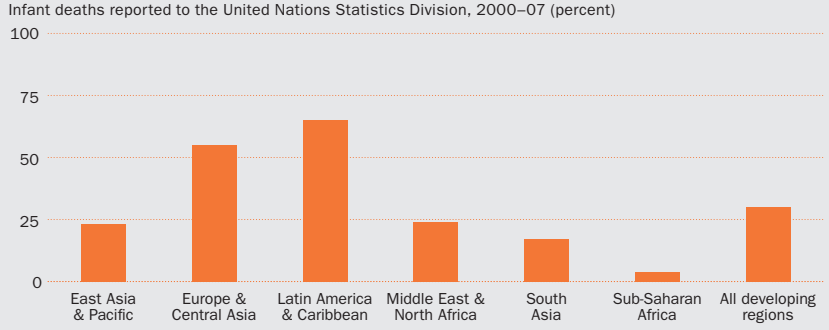
Another problem is inaccuracies in data for school-age populations (the denominator in calculations of enrollment rates). Different compilers may use different estimates of population size, or ministries of educations may use outdated population estimates. For example, some population estimates or enrollment numbers may include migrants while others exclude them. If the school enrollment data include migrant children while the population estimates exclude them, the resulting enrollment rates will not be accurate. Most critical is the problem of going from sample statistics to estimates for the universe if the sample frame or sample design is not accurate. Censuses, which will become available for virtually all developing countries, remain an important source of information on the age-sex structure of populations.

In many regions fewer than half of births are reported to the United Nations Statistics Division . . 2s



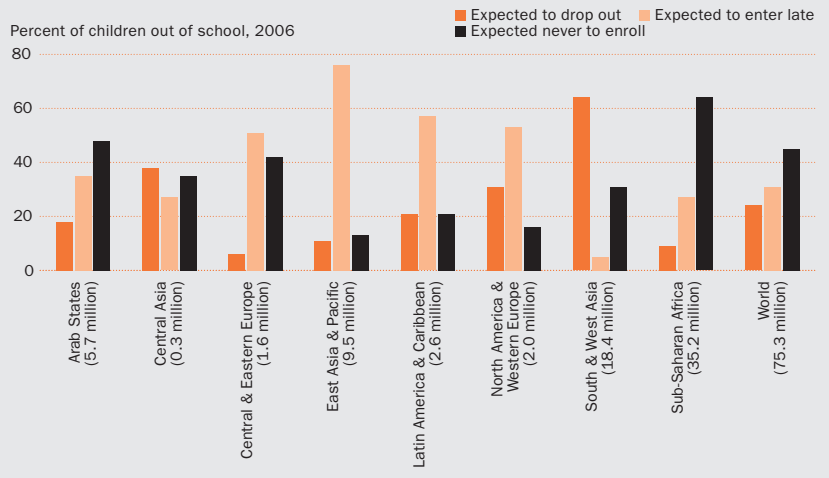
Source: World Bank staff calculations, based on data from United Nations Statistics Division's *Population and Vital Statistics Report* and United Nations Population Division (2009a).

. . . and even fewer child deaths are reported 2t



Source: World Bank staff calculations, based on data from United Nations Statistics Division's *Population and Vital Statistics Report* and United Nations Population Division (2009a).

Out of school children are difficult to measure 2u



Note: Numbers in parentheses are total number of children out of school. Data are classified by United Nations Education, Scientific, and Cultural Organization regions.
Source: UNESCO Institute for Statistics 2008a.

Beyond the Millennium Development Goals: monitoring emerging challenges

On the whole, people are healthier and better educated than they were 30 years ago, but progress has been deeply unequal. And the nature of some problems is changing at a rate that is wholly unexpected. Thirty years ago about 38 percent of the world's population lived in cities. By 2008 more than 50 percent (3.3 billion people) did. A third of urban dwellers (more than 1 billion people) live in slum areas that lack basic social services. By 2030, 60 percent of the world's population (almost 5 billion people) are projected to live in urban areas, and most of this growth will be concentrated in smaller cities in developing countries and in megacities of unprecedented size in Southern and Eastern Asia (World Health Organization, *World Health Report 2008).* While health and education outcomes are better in urban areas on average, economic and social stratification perpetuates inequities. These and other emerging challenges will raise demand for types of data different from those routinely collected today by statistical offices—and will call for increased national accountability.

Experience shows that targeted interventions and funding have succeeded in expanding programs to deliver services to those most in need. But achieving the MDGs will also require stronger accountability and a clearer focus on data and statistics, analytic methods for new data collection, improved use of data by national policymakers and planners, and regular evaluations of programs and new initiatives. Achieving the MDGs will also require targeting areas and population groups that have been left behind—rural communities and the poorest households.

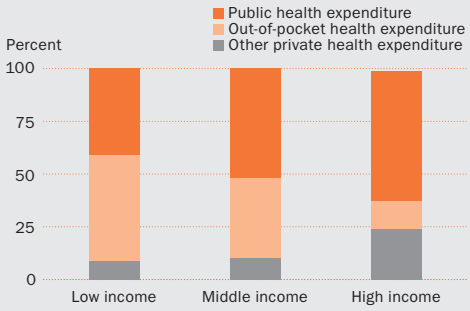
Health

Urbanization, aging populations, and a globalized lifestyle combine to make chronic and noncommunicable diseases, including diabetes, cancers, cardiovascular diseases, and injuries, increasingly important causes of mortality and morbidity in developing countries (World Health Organization, *World Health Report 2008*). In response, countries need to collect and strengthen statistics on cause of death and move away from fragmented attention to the needs of single-disease programs such as HIV/AIDS.

The increase in noncommunicable diseases, accompanied by a shift in the distribution of death and disease from younger to older people as the population ages, will affect service delivery and the allocation of health budgets. Among the economically and socially deprived populations of poor countries, these changes are most likely to affect children and young adults, especially women. And this rise in chronic, noncommunicable diseases comes on top of an unfinished agenda on communicable diseases and maternal and child health.

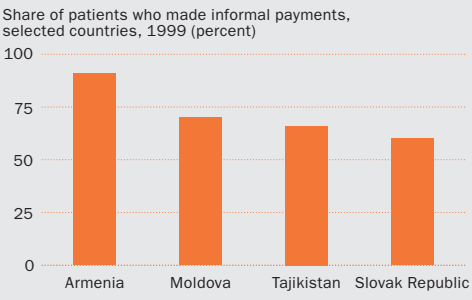
In addition to the shifting epidemiological burden of diseases, developing countries, especially low-income countries, continue to struggle with low access to health services. For people in these countries, out-of-pocket expenses make up more than half of health care costs, depriving many families of needed care because they cannot afford it (figure 2v). Also, more than 100 million people worldwide are pushed into poverty each year because of catastrophic health care expenditures (World Health Organization,

Out-of-pocket health care costs are too high for many people to afford **2v**



Source: WHO's National Health Account database.

Informal payments to health care providers are common **2w**



Source: World Bank 2000a.

World Health Report 2008). Compounding problems of access and equity is weak governance in the delivery of health services. In developing and transition economies, informal payments to health care providers are high (figure 2w).

Reliable mortality statistics, the cornerstone of national health information systems, are necessary for assessing population health, planning health policies and health services, and evaluating epidemiological and other health system programs. And the data are essential for monitoring progress toward the health-related MDGs of reducing maternal and child mortality and mortality from HIV/AIDS, tuberculosis, and malaria. Yet in 2007 only 61 percent of developing countries had complete registration systems, and among these only a handful had reliable cause of death statistics. Few efforts have been made to systematically build or strengthen country capacities to collect and use data. The pace needs to quicken.

Education

Achieving universal primary education (Goal 2) is vital to meeting all the other MDGs. The steady increase in primary school enrollment in nearly all regions is an encouraging sign. But countries still need to translate these enrollment rates into opportunities for learning.

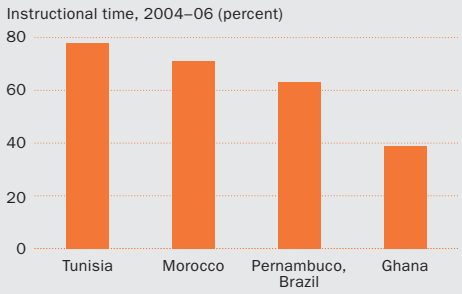
Enrollment is not a sufficient measure of learning. Because school attendance is a better predictor of learning outcomes (Abadzi 2007), monitoring of student attendance needs to be strengthened. Many students enrolled on the first day of school do not actually attend during some or part of the year (table 2x). Retaining all enrolled children in school is a challenge for most countries, requiring varied strategies, concerted effort, and investment. And school retention should translate into instructional time for children, so that they can develop cognitive skills and knowledge. Instructional time varies greatly by country (figure 2y), and few countries systematically monitor learning outcomes by assessing student achievement or participating in regional or international assessments. Countries must shift their focus from access to achievement, making learning outcomes a central part of the education agenda.

Primary school enrollment and attendance, 2003–08 **2x**

	Primary school net enrollment rate (percent)		Primary school net attendance rate (percent)	
Economy or group	Male	Female	Male	Female
Africa	79	74	69	66
Sub-Saharan Africa	76	70	65	63
Eastern and Southern Africa	83	82	69	70
West and Central Africa	68	58	63	58
Middle East and North Africa	92	88	85	81
Asia	92	89	84	81[a]
South Asia	87	82	83	79
East Asia and Pacific	98	97	88	88[a]
Latin America and Caribbean	95	95	92	93
CEE/CIS	92	90	94	92
Developed economies	94	95	..	..
Developing economies	89	86	80	78[a]
Least developed countries	81	76	67	65
World	90	87	81	78[a]

Note: CEE/CIS is Central and Eastern Europe and Commonwealth of Independent States.
a. Excludes China.
Source: UNICEF, *The State of the World's Children 2010.*

Instructional time for children varies considerably by country, 2004–06 **2y**



Source: Abadzi 2007.

2.1 Population dynamics

	Population			Average annual population growth		Population age composition			Dependency ratio		Crude death rate	Crude birth rate
		millions		%		%			% of working-age population			
	1990	2008	2015	1990–2008	2008–15	Ages 0–14 2008	Ages 15–64 2008	Ages 65+ 2008	Young 2008	Old 2008	per 1,000 people 2008	per 1,000 people 2008
Afghanistan	18.6	29.0	35.0	2.5	2.7	46	51	2	90	4	20	47
Albania	3.3	3.1	3.3	–0.3	0.5	24	66	9	36	14	6	15
Algeria	25.3	34.4	38.1	1.7	1.5	28	68	5	41	7	5	21
Angola	10.7	18.0	21.7	2.9	2.6	45	52	2	87	5	17	43
Argentina	32.5	39.9	42.4	1.1	0.9	25	64	11	40	16	8	17
Armenia	3.5	3.1	3.1	–0.8	0.2	21	68	12	30	17	9	15
Australia	17.1	21.4	23.4	1.3	1.3	19	67	13	28	20	7	14
Austria	7.7	8.3	8.4	0.4	0.2	15	68	17	22	25	9	9
Azerbaijan	7.2	8.7	9.4	1.1	1.1	25	69	7	36	10	6	18
Bangladesh	115.6	160.0	176.3	1.8	1.4	32	64	4	50	6	7	21
Belarus	10.2	9.7	9.4	–0.3	–0.4	15	71	14	21	19	14	11
Belgium	10	10.7	11.0	0.4	0.4	17	66	17	26	26	9	12
Benin	4.8	8.7	10.6	3.3	2.9	43	54	3	81	6	9	39
Bolivia	6.7	9.7	10.8	2.1	1.6	37	59	5	63	8	8	27
Bosnia and Herzegovina	4.3	3.8	3.7	–0.7	–0.2	16	71	14	22	20	10	9
Botswana	1.4	1.9	2.1	2.0	1.3	34	63	4	54	6	12	25
Brazil	149.6	192.0	202.4	1.4	0.8	26	67	7	39	10	6	16
Bulgaria	8.7	7.6	7.3	–0.7	–0.6	13	69	17	19	25	14	10
Burkina Faso	8.8	15.2	19.0	3.0	3.2	46	52	2	89	4	13	47
Burundi	5.7	8.1	9.4	2.0	2.2	39	58	3	67	5	14	34
Cambodia	9.7	14.6	16.4	2.3	1.7	34	62	3	55	5	8	25
Cameroon	12.2	19.1	22.2	2.5	2.1	41	55	4	74	6	14	37
Canada	27.8	33.3	35.7	1.0	1.0	17	70	14	24	20	7	11
Central African Republic	2.9	4.3	4.9	2.2	1.8	41	55	4	74	7	17	35
Chad	6.1	10.9	13.1	3.2	2.6	46	51	3	89	6	17	46
Chile	13.2	16.8	17.9	1.3	0.9	23	68	9	34	13	5	15
China	1,135.2	1,324.7	1,377.7	0.9	0.6	21[a]	72[a]	8[a]	29[a]	11[a]	7	12
Hong Kong SAR, China	5.7	7.0	7.3	1.1	0.7	13	75	13	17	17	6	11
Colombia	33.2	45.0	49.3	1.7	1.3	30	65	5	45	8	6	20
Congo, Dem. Rep.	37	64.3	77.4	3.1	2.7	47	50	3	93	5	17	45
Congo, Rep.	2.4	3.6	4.2	2.2	2.2	41	56	4	73	7	13	35
Costa Rica	3.1	4.5	4.9	2.1	1.3	26	67	6	39	9	4	17
Côte d'Ivoire	12.6	20.6	24.2	2.7	2.3	41	55	4	74	7	11	35
Croatia	4.8	4.4	4.4	–0.4	–0.2	15	68	17	23	25	12	10
Cuba	10.6	11.2	11.2	0.3	0.0	18	70	12	26	16	7	10
Czech Republic	10.4	10.4	10.6	0.0	0.3	14	71	15	20	21	10	11
Denmark	5.1	5.5	5.6	0.4	0.3	18	66	16	28	24	10	12
Dominican Republic	7.4	10.0	10.8	1.7	1.1	32	62	6	51	9	6	23
Ecuador	10.3	13.5	14.6	1.5	1.1	31	62	6	51	10	5	21
Egypt, Arab Rep.	57.8	81.5	91.7	1.9	1.7	32	63	5	52	7	6	25
El Salvador	5.3	6.1	6.4	0.8	0.6	33	60	7	55	12	7	20
Eritrea	3.2	4.9	6.0	2.5	2.8	42	56	2	74	4	8	37
Estonia	1.6	1.3	1.3	–0.9	–0.1	15	68	17	22	25	12	12
Ethiopia	48.3	80.7	96.2	2.9	2.5	44	53	3	83	6	12	38
Finland	5.0	5.3	5.4	0.4	0.3	17	67	17	25	25	9	11
France[b]	56.7	62.3	63.9	0.5	0.4	18	65	17	28	26	9	13
Gabon	0.9	1.4	1.6	2.5	1.8	37	59	4	62	7	10	27
Gambia, The	0.9	1.7	2.0	3.4	2.5	42	55	3	78	5	11	37
Georgia	5.5	4.3	4.1	–1.3	–0.8	17	68	14	25	21	12	12
Germany	79.4	82.1	80.6	0.2	–0.3	14	66	20	21	30	10	8
Ghana	15.0	23.4	26.6	2.5	1.9	39	58	4	67	6	11	32
Greece	10.2	11.2	11.4	0.6	0.2	14	68	18	21	27	10	10
Guatemala	8.9	13.7	16.2	2.4	2.4	42	53	4	79	8	6	33
Guinea	6.1	9.8	11.8	2.6	2.6	43	54	3	80	6	11	40
Guinea-Bissau	1.0	1.6	1.8	2.4	2.3	43	54	3	79	6	17	41
Haiti	7.1	9.9	10.7	1.8	1.1	37	59	4	62	7	9	28
Honduras	4.9	7.3	8.4	2.2	1.9	38	58	4	66	7	5	27

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+	% of working-age population Young	Old	per 1,000 people	per 1,000 people
	1990	2008	2015	1990–2008	2008–15	2008	2008	2008	2008	2008	2008	2008
Hungary	10.4	10.0	9.9	–0.2	–0.2	15	69	16	22	23	13	10
India	849.5	1,140.0	1,246.9	1.6	1.3	32	63	5	50	8	7	23
Indonesia	177.4	227.3	247.5	1.4	1.2	27	67	6	41	9	6	19
Iran, Islamic Rep.	54.4	72.0	78.6	1.6	1.3	24	71	5	35	7	6	19
Iraq	18.9	30.7	36.3	2.7	2.4	41	55	3	75	6	6	31
Ireland	3.5	4.4	4.8	1.3	1.0	21	68	11	30	16	6	17
Israel	4.7	7.3	8.2	2.5	1.7	28	62	10	45	16	5	22
Italy	56.7	59.8	60.8	0.3	0.2	14	66	20	22	31	10	10
Jamaica	2.4	2.7	2.8	0.7	0.4	30	62	8	48	12	6	17
Japan	123.5	127.7	125.3	0.2	–0.3	13	65	21	21	33	9	9
Jordan	3.2	5.9	6.8	3.5	2.0	35	61	4	57	6	4	26
Kazakhstan	16.3	15.7	16.9	–0.2	1.0	24	69	7	34	11	10	23
Kenya	23.4	38.8	46.4	2.8	2.6	43	55	3	78	5	12	39
Korea, Dem. Rep.	20.1	23.8	24.4	0.9	0.3	22	68	9	32	14	10	14
Korea, Rep.	42.9	48.6	49.3	0.7	0.2	17	72	10	24	14	5	9
Kosovo	1.9	1.8	1.9	–0.2	0.6	..	..	..	..	..	7	19
Kuwait	2.1	2.7	3.2	1.4	2.1	23	74	2	31	3	2	18
Kyrgyz Republic	4.4	5.3	5.7	1.0	1.2	30	65	5	46	8	7	24
Lao PDR	4.2	6.2	7.0	2.2	1.8	38	58	4	66	6	7	27
Latvia	2.7	2.3	2.2	–0.9	–0.5	14	69	17	20	25	14	11
Lebanon	3.0	4.2	4.4	1.9	0.8	26	67	7	39	11	7	16
Lesotho	1.6	2.0	2.2	1.4	0.8	39	56	5	70	8	17	29
Liberia	2.2	3.8	4.8	3.1	3.3	43	54	3	80	6	10	38
Libya	4.4	6.3	7.2	2.0	1.8	30	66	4	46	6	4	23
Lithuania	3.7	3.4	3.2	–0.5	–0.7	15	69	16	22	23	13	10
Macedonia, FYR	1.9	2.0	2.0	0.4	0.0	18	70	12	26	17	9	11
Madagascar	11.3	19.1	22.8	2.9	2.5	43	54	3	81	6	9	36
Malawi	9.5	14.8	18.0	2.5	2.7	46	50	3	92	6	12	40
Malaysia	18.1	27.0	30.0	2.2	1.5	30	65	5	46	7	4	20
Mali	8.7	12.7	15.4	2.1	2.7	44	53	2	83	4	16	43
Mauritania	2.0	3.2	3.7	2.7	2.1	40	58	3	69	5	10	34
Mauritius	1.1	1.3	1.3	1.0	0.4	23	70	7	33	10	7	13
Mexico	83.2	106.4	113.1	1.4	0.9	29	65	6	45	10	5	18
Moldova	4.4	3.6	3.5	–1.0	–0.7	17	72	11	24	16	13	12
Mongolia	2.2	2.6	2.9	1.0	1.1	27	70	4	38	6	7	19
Morocco	24.8	31.6	34.3	1.3	1.2	29	66	5	44	8	6	20
Mozambique	13.5	22.4	25.9	2.8	2.1	44	53	3	84	6	16	39
Myanmar	40.8	49.6	53.0	1.1	1.0	27	67	5	40	8	10	21
Namibia	1.4	2.1	2.4	2.3	1.8	37	59	4	63	6	9	28
Nepal	19.1	28.8	32.5	2.3	1.7	37	59	4	63	7	6	25
Netherlands	15.0	16.4	16.8	0.5	0.3	18	67	15	27	22	8	11
New Zealand	3.4	4.3	4.6	1.2	1.0	21	67	13	31	19	7	15
Nicaragua	4.1	5.7	6.3	1.7	1.4	36	60	4	60	7	5	25
Niger	7.9	14.7	19.1	3.4	3.8	50	48	2	103	4	15	54
Nigeria	97.3	151.2	178.7	2.4	2.4	43	54	3	79	6	16	40
Norway	4.2	4.8	5.1	0.7	0.9	19	66	15	29	22	9	13
Oman	1.8	2.8	3.2	2.3	2.0	32	65	3	49	4	3	22
Pakistan	108.0	166.1	193.5	2.4	2.2	37	59	4	63	7	7	30
Panama	2.4	3.4	3.8	1.9	1.5	30	64	6	46	10	5	21
Papua New Guinea	4.1	6.6	7.7	2.6	2.2	40	57	2	70	4	8	31
Paraguay	4.2	6.2	7.0	2.1	1.6	34	61	5	57	8	6	25
Peru	21.8	28.8	31.2	1.6	1.1	31	64	6	48	9	5	21
Philippines	62.4	90.3	102.7	2.1	1.8	34	62	4	56	7	5	25
Poland	38.1	38.1	38.0	0.0	–0.1	15	71	13	21	19	10	11
Portugal	9.9	10.6	10.7	0.4	0.0	15	67	18	23	26	10	10
Puerto Rico	3.5	4.0	4.0	0.6	0.3	21	66	13	31	20	8	12
Qatar	0.5	1.3	1.6	5.6[c]	3.4	16	83	1	20	1	2	12

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+	% of working-age population Young	Old	per 1,000 people	per 1,000 people
	1990	2008	2015	1990–2008	2008–15	2008	2008	2008	2008	2008	2008	2008
Romania	23.2	21.5	21.0	–0.4	–0.4	15	70	15	22	21	12	10
Russian Federation	148.3	142.0	139.0	–0.2	–0.3	15	72	13	20	18	15	12
Rwanda	7.2	9.7	11.7	1.7	2.7	42	55	3	76	5	14	41
Saudi Arabia	16.3	24.6	28.6	2.3	2.1	33	64	3	51	4	4	23
Senegal	7.5	12.2	14.5	2.7	2.5	44	54	2	81	4	11	38
Serbia	7.6	7.4	7.2	–0.2	–0.3	18[d]	68[d]	15[d]	26[d]	21[d]	14	9
Sierra Leone	4.1	5.6	6.6	1.7	2.4	43	55	2	79	3	16	40
Singapore	3.0	4.8	5.4	2.6	1.5	17	73	9	23	13	4	10
Slovak Republic	5.3	5.4	5.4	0.1	0.1	16	72	12	22	17	10	11
Slovenia	2.0	2.0	2.1	0.1	0.4	14	70	16	20	23	9	10
Somalia	6.6	8.9	10.7	1.7	2.6	45	52	3	86	5	16	44
South Africa	35.2	48.7	51.1	1.8	0.7	31	65	4	47	7	15	22
Spain	38.8	45.6	47.9	0.9	0.7	15	68	17	22	25	9	11
Sri Lanka	17.1	20.2	21.2	0.9	0.7	24	68	7	35	11	6	19
Sudan	27.1	41.3	47.7	2.3	2.0	40	57	4	69	6	10	31
Swaziland	0.9	1.2	1.3	1.7	1.4	40	57	3	70	6	16	30
Sweden	8.6	9.2	9.6	0.4	0.6	17	66	18	25	27	10	12
Switzerland	6.7	7.6	7.9	0.7	0.4	16	68	17	23	25	8	10
Syrian Arab Republic	12.7	20.6	24.1	2.7	2.2	35	61	3	58	5	3	28
Tajikistan	5.3	6.8	7.8	1.4	1.8	38	59	4	64	6	6	28
Tanzania	25.5	42.5	52.1	2.8	2.9	45	52	3	85	6	11	42
Thailand	56.7	67.4	69.9	1.0	0.5	22	71	7	31	11	9	15
Timor-Leste	0.7	1.1	1.4	2.2	3.3	45	52	3	87	6	9	40
Togo	3.9	6.5	7.6	2.8	2.3	40	56	3	72	6	8	33
Trinidad and Tobago	1.2	1.3	1.4	0.5	0.3	21	73	7	29	9	8	15
Tunisia	8.2	10.3	11.1	1.3	1.1	24	70	7	34	10	6	18
Turkey	56.1	73.9	79.9	1.5	1.1	27	67	6	41	9	6	18
Turkmenistan	3.7	5.0	5.5	1.8	1.3	30	66	4	46	7	8	22
Uganda	17.7	31.7	39.7	3.2	3.2	49	48	3	101	5	13	46
Ukraine	51.9	46.3	44.4	–0.6	–0.6	14	70	16	20	23	16	11
United Arab Emirates	1.9	4.5	5.2	4.9	2.1	19	80	1	24	1	2	14
United Kingdom	57.2	61.4	63.8	0.4	0.5	18	66	16	27	25	9	13
United States	249.6	304.1	323.5	1.1	0.9	20	67	13	31	19	8	14
Uruguay	3.1	3.3	3.4	0.4	0.3	23	63	14	36	22	9	15
Uzbekistan	20.5	27.3	30.2	1.6	1.5	30	65	5	46	7	5	22
Venezuela, RB	19.8	27.9	31.0	1.9	1.5	30	65	5	47	8	5	21
Vietnam	66.2	86.2	92.8	1.5	1.1	27	67	6	39	9	5	17
West Bank and Gaza	2.0	3.9	4.8	3.8	2.8	45	52	3	87	6	4	36
Yemen, Rep.	12.3	22.9	27.8	3.5	2.8	44	53	2	83	4	7	37
Zambia	7.9	12.6	15.0	2.6	2.4	46	51	3	91	6	17	43
Zimbabwe	10.5	12.5	14.0	1.0	1.7	40	56	4	72	7	16	30
World	**5,278.9 s**	**6,697.3 s**	**7,241.2 s**	**1.3 w**	**1.1 w**	**27 w**	**65 w**	**7 w**	**42 w**	**11 w**	**8 w**	**20 w**
Low income	653.6	976.2	1,127.4	2.2	2.1	38	58	4	66	6	11	32
Middle income	3,685.7	4,652.3	5,006.3	1.3	1.0	27	66	6	41	10	8	19
Lower middle income	2,889.5	3,703.0	4,011.2	1.4	1.1	28	66	6	42	9	8	20
Upper middle income	796.2	949.3	995.1	1.0	0.7	25	67	8	36	12	8	17
Low & middle income	4,339.3	5,628.5	6,133.7	1.4	1.2	29	65	6	45	9	8	21
East Asia & Pacific	1,599.6	1,929.6	2,035.6	1.0	0.8	23	70	7	33	10	7	14
Europe & Central Asia	433.2	443.3	449.2	0.1	0.2	19	70	11	28	16	11	14
Latin America & Carib.	435.5	566.1	606.8	1.5	1.0	29	65	7	44	10	6	19
Middle East & N. Africa	227.4	325.2	366.1	2.0	1.7	31	64	4	49	7	6	24
South Asia	1,128.7	1,545.1	1,706.5	1.7	1.4	33	63	5	52	7	7	24
Sub-Saharan Africa	514.9	819.3	969.5	2.6	2.4	43	54	3	79	6	14	38
High income	939.6	1,068.7	1,107.4	0.7	0.5	18	67	15	26	23	8	12
Euro area	301.6	326.1	331.0	0.4	0.2	15	67	18	23	27	9	10

a. Includes Taiwan, China. b. Excludes the French overseas departments of French Guiana, Guadeloupe, Martinique, and Réunion. c. Increase is due to a surge in the number of migrants since 2004. d. Includes Kosovo.

Population dynamics 2.1

About the data

Population estimates are usually based on national population censuses, but the 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 full and 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 155 economies in the table and the 55 economies in table 1.6, 180 (about 86 percent) conducted a census during the 2000 census round (1995–2004). As of March 2010, 61 countries have completed a census for the 2010 census round (2005–14). The currentness of a census 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 table 2.17 and *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 data and pre- and post-census estimates for countries with census data are provided by the United Nations Population Division and other agencies. The cohort component method—a standard estimation method for estimating and projecting population—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 and in the data. Because the five-year age group is the cohort unit and five-year period data are used, interpolations to obtain annual data or single age structure may not reflect actual events or age composition.

The growth rate of the total population conceals age-group differences in growth rates. In many developing countries the once rapidly growing under-15 population is shrinking. Previously high fertility rates and declining mortality rates are now reflected in the larger share of the working-age population.

Dependency ratios capture variations in the proportions of children, elderly people, and working-age people in the population that imply the dependency burden that the working-age population bears 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, and many working-age people are not.

Vital rates 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. Data for 2008 for most high-income countries are provisional estimates based on vital registers. The 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 recent births and deaths. Estimates derived in this way are subject to sampling errors and recall errors.

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 61 percent in 2007. Still, some of the most populous developing countries—China, India, Indonesia, Brazil, Pakistan, Bangladesh, Nigeria—lack complete vital registration systems. From 2000 to 2007, on average 64 percent of births, 62 percent of deaths, and 45 percent of infant deaths were registered and reported to the United Nations Statistics Division.

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 migrants in high-income countries rose 40 million. About 195 million people (3 percent of the world population) live outside their home country. Estimating 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 midyear estimates for 1990 and 2008 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 people, 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 Development Data Group in consultation with its Human Development Network, operational staff, and country offices. The United Nations Population Division's *World Population Prospects: The 2008 Revision* is a source of the demographic data for more than half the countries, most of them developing countries, and the source of data on age composition and dependency ratios for all countries. Other important sources are 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's *Demographic Statistics;* Secretariat of the Pacific Community, Statistics and Demography Programme; and U.S. Bureau of the Census, International Data Base.

2.2 Labor force structure

	Labor force participation rate				Labor force				
	Male		Female		Total		Ages 15 and older average annual	Female	
	% ages 15 and older				millions		% growth	% of labor force	
	1990	2008	1990	2008	1990	2008	1990–2008	1990	2008
Afghanistan	87	89	32	33	5.9	9.3	2.5	26.2	26.6
Albania	84	70	51	49	1.4	1.4	0.1	39.9	42.3
Algeria	75	77	23	37	7.0	14.5	4.0	23.4	31.2
Angola	90	89	74	74	4.6	8.0	3.1	46.3	46.8
Argentina	78	75	43	51	13.5	19.1	1.9	36.9	41.1
Armenia	78	67	61	59	1.7	1.6	–0.3	46.3	49.6
Australia	74	70	52	58	8.5	11.3	1.6	41.3	45.3
Austria	68	65	43	53	3.5	4.3	1.1	40.9	45.5
Azerbaijan	78	71	59	61	3.1	4.1	1.6	46.8	50.2
Bangladesh	89	84	61	58	49.5	76.8	2.4	39.9	40.9
Belarus	74	65	60	55	5.3	4.9	–0.4	48.9	49.5
Belgium	59	58	36	47	3.9	4.8	1.1	39.0	44.9
Benin	88	86	57	67	1.9	3.6	3.5	41.1	45.7
Bolivia	85	83	59	62	2.8	4.4	2.6	43.1	43.9
Bosnia and Herzegovina	82	66	53	55	2.0	1.9	0.0[a]	45.2	47.1
Botswana	78	64	64	72	0.5	1.0	3.3	45.5	47.5
Brazil	84	81	45	60	62.6	99.9	2.6	35.1	43.5
Bulgaria	63	55	55	49	4.1	3.7	–0.6	47.9	46.3
Burkina Faso	91	90	77	78	3.9	6.9	3.2	48.0	47.0
Burundi	90	91	91	91	2.8	4.4	2.5	52.5	52.7
Cambodia	85	87	78	73	4.3	7.5	3.1	52.8	48.8
Cameroon	79	75	48	53	4.4	7.5	3.0	37.5	39.8
Canada	75	71	58	62	14.7	18.7	1.3	44.1	46.9
Central African Republic	88	88	69	71	1.3	2.0	2.4	45.6	46.6
Chad	84	77	65	63	2.4	4.2	3.1	45.6	45.3
Chile	77	70	32	44	5.0	7.7	2.4	30.5	37.5
China	85	78	73	68	643.9	776.9	1.0	44.8	44.6
Hong Kong SAR, China	79	67	47	53	2.9	3.7	1.5	36.3	45.8
Colombia	76	78	29	41	11.2	18.6	2.8	28.2	35.7
Congo, Dem. Rep.	86	89	53	56	13.4	24.0	3.2	39.9	40.6
Congo, Rep.	83	82	59	63	1.0	1.6	2.6	42.1	43.5
Costa Rica	84	78	33	45	1.2	2.1	3.3	27.4	35.2
Côte d'Ivoire	89	85	43	51	4.7	8.1	3.1	30.1	36.7
Croatia	74	59	47	46	2.2	2.0	–0.5	42.7	45.5
Cuba	72	68	36	42	4.4	5.1	0.8	33.0	38.0
Czech Republic	79	66	52	49	4.9	5.2	0.3	44.4	43.4
Denmark	74	68	62	61	2.9	3.0	0.1	46.1	46.9
Dominican Republic	82	72	43	51	2.9	4.4	2.3	33.2	38.9
Ecuador	78	78	33	47	3.5	5.7	2.8	29.5	37.9
Egypt, Arab Rep.	74	71	27	23	16.8	26.3	2.5	26.6	23.9
El Salvador	80	75	41	47	1.9	2.5	1.5	35.2	42.2
Eritrea	88	86	55	60	1.2	2.1	3.2	41.4	43.6
Estonia	71	64	63	55	0.8	0.7	–1.0	49.5	49.2
Ethiopia	89	91	72	78	21.5	38.2	3.2	45.1	47.1
Finland	70	63	59	58	2.6	2.7	0.2	47.1	48.1
France	63	59	46	51	25.0	28.6	0.7	43.3	47.0
Gabon	83	79	63	69	0.4	0.7	3.0	44.2	46.4
Gambia, The	86	83	71	71	0.4	0.7	3.4	46.2	46.2
Georgia	82	74	60	55	2.8	2.3	–1.2	46.9	47.0
Germany	71	64	45	53	38.8	42.4	0.5	40.7	45.4
Ghana	74	73	70	74	6.0	10.6	3.2	48.9	49.2
Greece	65	63	36	43	4.2	5.2	1.2	36.2	40.4
Guatemala	89	84	39	48	3.1	5.3	3.0	31.0	37.8
Guinea	90	89	79	79	2.9	4.7	2.7	46.8	46.8
Guinea-Bissau	86	90	59	60	0.4	0.6	2.4	43.0	42.4
Haiti	81	83	57	58	2.8	4.4	2.5	43.0	42.7
Honduras	87	81	41	42	1.7	2.8	2.7	32.3	34.0

2.2 Labor force structure

	Labor force participation rate				Labor force				
	% ages 15 and older								
	Male		Female		Total millions		Ages 15 and older average annual % growth	Female % of labor force	
	1990	2008	1990	2008	1990	2008	1990–2008	1990	2008
Hungary	64	57	46	43	4.5	4.3	–0.3	44.5	45.4
India	85	81	34	33	317.8	449.9	1.9	27.1	27.8
Indonesia	81	86	50	52	74.9	112.8	2.3	38.4	38.4
Iran, Islamic Rep.	80	75	22	31	15.5	27.8	3.2	20.1	30.1
Iraq	73	69	11	13	4.3	7.5	3.0	13.1	16.1
Ireland	68	72	35	54	1.3	2.2	2.8	33.9	42.8
Israel	61	59	42	54	1.7	3.1	3.5	40.6	46.0
Italy	64	58	35	38	23.7	25.2	0.3	36.5	40.4
Jamaica	80	73	65	57	1.1	1.2	0.5	46.6	45.1
Japan	77	69	50	49	63.9	66.9	0.3	40.7	41.5
Jordan	68	70	15	23	0.7	1.9	5.2	16.2	22.8
Kazakhstan	78	75	62	66	7.8	8.5	0.4	47.0	50.0
Kenya	90	87	75	76	9.8	18.2	3.4	46.0	46.5
Korea, Dem. Rep.	79	78	55	55	10.0	12.2	1.1	42.6	42.6
Korea, Rep.	73	72	47	50	19.2	24.4	1.3	39.7	41.9
Kosovo	..	..	..	..	..	..	..	..	..
Kuwait	81	81	36	44	0.9	1.4	2.8	22.4	24.3
Kyrgyz Republic	74	75	58	56	1.8	2.5	1.8	46.1	42.6
Lao PDR	83	80	80	78	1.9	3.0	2.4	49.8	50.6
Latvia	76	69	63	56	1.4	1.2	–1.0	49.6	48.9
Lebanon	83	77	20	22	0.9	1.4	2.8	23.3	24.9
Lesotho	85	75	68	70	0.7	0.9	1.9	51.7	52.4
Liberia	86	85	65	67	0.8	1.5	3.3	46.7	47.6
Libya	78	77	15	24	1.2	2.3	3.7	14.8	21.9
Lithuania	73	60	59	51	1.9	1.6	–0.9	48.1	48.9
Macedonia, FYR	73	65	46	43	0.8	0.9	0.6	40.7	39.7
Madagascar	85	89	83	84	5.4	9.4	3.1	48.4	49.2
Malawi	80	80	76	75	3.9	6.1	2.5	50.7	49.9
Malaysia	80	80	43	44	7.0	11.7	2.9	34.5	35.2
Mali	70	66	37	37	2.5	3.7	2.1	36.1	36.8
Mauritania	84	80	53	59	0.7	1.4	3.4	39.8	41.7
Mauritius	82	75	38	42	0.4	0.6	1.4	32.1	36.4
Mexico	84	79	34	43	29.9	46.7	2.5	30.0	36.0
Moldova	73	48	61	47	2.1	1.5	–2.0	48.7	50.7
Mongolia	65	61	63	67	0.9	1.4	2.5	45.6	47.4
Morocco	82	79	25	27	7.8	11.8	2.3	23.7	26.1
Mozambique	84	77	85	85	6.3	10.8	3.0	53.2	52.1
Myanmar	87	86	71	64	20.7	26.8	1.4	45.3	44.5
Namibia	64	60	48	52	0.4	0.8	3.0	44.9	46.7
Nepal	80	76	52	63	7.5	12.9	3.0	38.0	45.4
Netherlands	69	69	43	59	6.9	8.9	1.4	38.8	45.5
New Zealand	73	73	54	62	1.7	2.3	1.7	43.0	46.2
Nicaragua	85	87	39	46	1.4	2.3	2.8	32.3	37.8
Niger	87	88	27	38	2.3	4.6	3.8	24.7	30.8
Nigeria	75	71	36	39	29.4	48.6	2.8	33.0	34.9
Norway	71	69	57	64	2.2	2.6	1.0	44.7	47.6
Oman	81	77	19	25	0.6	1.1	3.4	13.7	18.3
Pakistan	85	85	14	21	31.0	55.8	3.3	12.7	19.2
Panama	81	79	39	49	0.9	1.6	3.0	32.4	36.9
Papua New Guinea	75	73	71	71	1.8	2.9	2.7	46.9	48.9
Paraguay	82	84	47	56	1.7	2.9	3.1	34.9	38.7
Peru	75	82	49	57	8.3	13.3	2.6	39.7	43.3
Philippines	83	80	48	49	24.1	37.9	2.5	36.5	38.2
Poland	71	60	55	47	18.1	17.7	–0.1	45.4	44.8
Portugal	72	68	49	56	4.7	5.6	0.9	42.4	46.8
Puerto Rico	59	56	31	37	1.2	1.5	1.3	35.8	41.7
Qatar	93	90	40	48	0.3	0.9	6.7	13.5	11.6

2.2 Labor force structure

	Labor force participation rate				Labor force				
	% ages 15 and older				Total millions		Ages 15 and older average annual % growth	Female % of labor force	
	Male		Female						
	1990	2008	1990	2008	1990	2008	1990–2008	1990	2008
Romania	66	58	60	47	11.8	10.0	–0.9	46.3	44.5
Russian Federation	75	69	60	57	76.8	76.0	–0.1	48.6	49.7
Rwanda	88	80	87	86	3.2	4.8	2.3	52.1	52.8
Saudi Arabia	80	80	15	21	5.0	9.0	3.2	11.5	16.3
Senegal	90	87	62	65	3.0	5.2	3.0	40.8	43.1
Serbia	..	..	..	..	..	..	..	..	..
Sierra Leone	65	67	66	66	1.6	2.1	1.6	50.9	51.4
Singapore	79	75	51	54	1.6	2.6	2.9	39.1	41.7
Slovak Republic	78	68	59	51	2.6	2.7	0.3	46.8	44.7
Slovenia	75	64	47	54	0.8	1.0	1.2	46.8	46.5
Somalia	89	88	58	57	2.6	3.5	1.6	41.8	40.9
South Africa	64	60	36	47	10.4	18.6	3.2	37.5	43.7
Spain	68	66	34	49	15.6	22.8	2.1	34.8	43.0
Sri Lanka	79	74	37	35	6.8	8.3	1.1	31.8	32.7
Sudan	78	72	27	31	8.0	13.1	2.7	26.0	29.5
Swaziland	79	68	45	53	0.3	0.4	2.7	41.2	43.4
Sweden	70	67	63	61	4.7	5.0	0.3	47.7	47.4
Switzerland	77	72	57	61	3.8	4.4	0.8	42.9	46.5
Syrian Arab Republic	81	78	18	21	3.3	6.7	4.0	18.3	20.7
Tajikistan	83	68	59	56	2.1	2.8	1.7	43.3	43.6
Tanzania	93	90	87	86	12.3	20.8	2.9	49.8	49.4
Thailand	87	80	75	66	32.1	38.5	1.0	47.0	46.2
Timor-Leste	81	83	58	59	0.3	0.4	1.7	40.4	40.9
Togo	88	87	56	63	1.5	2.9	3.5	40.1	43.3
Trinidad and Tobago	76	78	39	54	0.5	0.7	2.3	35.0	43.0
Tunisia	75	70	21	26	2.4	3.8	2.5	21.6	26.6
Turkey	81	70	34	25	20.7	25.8	1.2	29.7	26.2
Turkmenistan	74	70	58	61	1.4	2.4	2.8	46.1	46.7
Uganda	91	90	81	78	7.9	13.6	3.0	47.7	46.6
Ukraine	71	64	56	52	25.5	23.1	–0.6	49.2	48.9
United Arab Emirates	92	94	25	42	1.0	2.8	6.0	9.8	15.5
United Kingdom	73	67	52	55	29.0	31.5	0.5	43.2	45.7
United States	75	70	57	59	129.2	158.2	1.1	44.4	46.1
Uruguay	71	73	48	53	1.4	1.6	0.9	40.8	43.7
Uzbekistan	85	70	53	58	7.3	12.3	2.9	45.5	45.9
Venezuela, RB	82	81	36	51	7.2	12.7	3.2	30.5	39.1
Vietnam	81	75	74	68	31.1	45.6	2.1	50.7	48.7
West Bank and Gaza	66	67	11	16	0.4	0.9	4.6	13.8	18.0
Yemen, Rep.	70	66	16	20	2.6	6.0	4.5	18.0	20.8
Zambia	81	81	61	60	3.0	4.7	2.5	44.3	43.8
Zimbabwe	80	78	67	60	4.1	4.9	1.0	46.3	47.8
World	**80 w**	**77 w**	**52 w**	**52 w**	**2,322.0 t**	**3,102.8 t**	**1.6 w**	**39.2 w**	**40.4 w**
Low income	85	83	65	65	276.8	441.4	2.6	44.1	44.5
Middle income	82	78	51	49	1,612.4	2,159.8	1.6	37.8	38.8
Lower middle income	83	79	53	49	1,290.3	1,727.9	1.6	37.7	38.1
Upper middle income	78	73	46	50	322.0	432.0	1.6	38.0	42.0
Low & middle income	83	79	53	52	1,889.1	2,601.3	1.8	38.7	39.8
East Asia & Pacific	84	79	69	64	847.3	1,079.8	1.3	44.1	44.6
Europe & Central Asia	75	67	56	50	199.9	200.0	0.0[a]	45.8	45.2
Latin America & Carib.	81	79	40	52	163.3	264.5	2.7	32.1	41.1
Middle East & N. Africa	77	73	22	26	62.4	111.1	3.2	21.4	26.5
South Asia	85	82	35	35	421.5	618.6	2.1	28.1	29.4
Sub-Saharan Africa	82	80	57	60	194.7	327.2	2.9	42.2	43.6
High income	72	68	49	53	432.9	501.5	0.8	41.1	43.3
Euro area	67	62	42	49	130.4	147.6	0.7	39.4	43.7

a. Less than 0.05.

2.2 Labor force structure

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 compiled by the International Labour Organization (ILO) 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 (ILO, *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 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 the ILO's Key Indicators of the Labour Market, 6th edition, database. 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. Beginning in the 2008 edition of *World Development Indicators,* the indicator covers 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 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** is 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). • **Female labor force as as a percentage of the labor force** shows the extent to which women are active in the labor force.

Data sources

Data on labor force participation rates are from the ILO's Key Indicators of the Labour Market, 6th edition, database. 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[a]	2004–08[a]	1990–92[a]	2004–08[a]	1990–92[a]	2004–08[a]	1990–92[a]	2004–08[a]	1990–92[a]	2004–08[a]	1990–92[a]	2004–08[a]
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..
Albania	..	..	..	..	..	..	..	..	..	..	..	..
Algeria	..	20	..	22	..	26	..	28	..	54	..	49
Angola	..	..	..	..	..	..	..	..	..	..	..	..
Argentina	0[b,c]	3[c]	0[b,c]	0[b,c]	40[c]	34[c]	18[c]	11[c]	59[c]	63[c]	81[c]	88[c]
Armenia	..	46	..	46	..	21	..	10	..	33	..	45
Australia	6	4	4	2	32	31	12	9	61	64	84	89
Austria	6	6	8	6	47	37	20	12	46	57	72	82
Azerbaijan	..	40	..	38	..	17	..	9	..	44	..	53
Bangladesh	54	42	85	68	16	15	9	13	25	43	2	19
Belarus	..	..	..	..	..	..	..	..	..	..	..	..
Belgium	3	2	2	1	41	36	16	11	56	61	81	88
Benin	..	..	..	..	..	..	..	..	..	..	..	..
Bolivia	3[c]	..	1[c]	..	42[c]	..	17[c]	..	55[c]	..	82[c]	..
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..	..	..
Botswana	..	35	..	24	..	19	..	11	..	46	..	65
Brazil	31[c]	23	25[c]	15	27[c]	28	10[c]	13	43[c]	50	65[c]	72
Bulgaria	..	9	..	6	..	42	..	29	..	49	..	65
Burkina Faso	..	..	..	..	..	..	..	..	..	..	..	..
Burundi	..	..	..	..	..	..	..	..	..	..	..	..
Cambodia	..	..	..	..	..	..	..	..	..	..	..	..
Cameroon	..	..	..	..	..	..	..	..	..	..	..	..
Canada	6[c]	3[c]	2[c]	2[c]	31[c]	32[c]	11[c]	11[c]	64[c]	65[c]	87[c]	88[c]
Central African Republic	..	..	..	..	..	..	..	..	..	..	..	..
Chad	..	..	..	..	..	..	..	..	..	..	..	..
Chile	24	16	6	6	32	31	15	11	45	53	79	84
China	..	..	..	..	..	..	..	..	..	..	..	..
Hong Kong SAR, China	1	0[b]	0[b]	0[b]	37	21	27	6	63	78	73	94
Colombia	2[c]	27	1[c]	6	35[c]	22	25[c]	16	63[c]	51	74[c]	78
Congo, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Congo, Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Costa Rica	32	18	5	5	27	28	25	13	41	54	69	82
Côte d'Ivoire	..	..	..	..	..	..	..	..	..	..	..	..
Croatia	..	12	..	14	..	40	..	18	..	48	..	67
Cuba	..	25	..	9	..	22	..	12	..	54	..	79
Czech Republic	..	4	..	2	..	51	..	27	..	45	..	71
Denmark	7	4	3	1	37	32	16	12	56	64	82	86
Dominican Republic	26	21	3	2	23	26	21	14	52	53	76	84
Ecuador	10[c]	11[c]	2[c]	4[c]	29[c]	28[c]	17[c]	13[c]	62[c]	61[c]	81[c]	83[c]
Egypt, Arab Rep.	35	28	52	43	25	26	10	6	41	46	37	51
El Salvador	48	29	15	5	23	26	23	19	29	45	63	76
Eritrea	..	..	..	..	..	..	..	..	..	..	..	..
Estonia	23	5	13	2	42	48	30	23	36	46	57	75
Ethiopia	..	12[c]	..	6[c]	..	27[c]	..	17[c]	..	61[c]	..	77[c]
Finland	11	6	6	3	38	39	15	11	51	54	78	86
France	7	4	5	2	39	34	17	11	54	61	78	86
Gabon	..	..	..	..	..	..	..	..	..	..	..	..
Gambia, The	..	..	..	..	..	..	..	..	..	..	..	..
Georgia	..	51	..	57	..	17	..	4	..	33	..	39
Germany	4	3	4	2	50	41	24	16	46	56	73	83
Ghana	66	..	59	..	10	..	10	..	23	..	32	..
Greece	20	8	26	9	29	22	17[c]	7	51	44	57[c]	59
Guatemala	19[c]	44	3[c]	16	36[c]	24	27[c]	21	45[c]	32	70[c]	63
Guinea	..	..	..	..	..	..	..	..	..	..	..	..
Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	..	..
Haiti	76	..	50	..	9	..	9	..	13	..	38	..
Honduras	53[c]	51[c]	6[c]	13[c]	18[c]	20[c]	25[c]	23[c]	29[c]	29[c]	69[c]	63[c]

Employment by economic activity 2.3

	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[a]	2004–08[a]	1990–92[a]	2004–08[a]	1990–92[a]	2004–08[a]	1990–92[a]	2004–08[a]	1990–92[a]	2004–08[a]	1990–92[a]	2004–08[a]
Hungary	19	6	13	2	43	42	29	21	38	52	58	77
India	..	..	..	..	..	..	..	..	..	..	..	..
Indonesia	54	41	57	41	15	21	13	15	31	38	31	44
Iran, Islamic Rep.	..	21	..	33	..	33	..	29	..	47	..	38
Iraq	..	14	..	33	..	20	..	7	..	66	..	60
Ireland	19	9	3	2	33	38	18	10	48	53	78	88
Israel	5	3	2	1	38	32	15	11	57	65	83	88
Italy	8	5	9	3	41	39	23	16	52	57	68	81
Jamaica	36	26	16	8	25	27	12	5	39	47	72	87
Japan	6	4	7	4	40	35	27	17	54	59	65	77
Jordan	..	..	..	..	..	..	..	..	..	..	..	..
Kazakhstan	..	35	..	32	..	24	..	10	..	41	..	58
Kenya	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	14	7	18	8	40	33	28	16	46	60	54	76
Kosovo	..	..	..	..	..	..	..	..	..	..	..	..
Kuwait	..	..	..	..	..	..	..	..	..	..	..	..
Kyrgyz Republic	..	37	..	35	..	26	..	11	..	37	..	54
Lao PDR	..	..	..	..	..	..	..	..	..	..	..	..
Latvia	..	10	..	6	..	40	..	17	..	49	..	77
Lebanon	..	..	..	..	..	..	..	..	..	..	..	..
Lesotho	..	..	..	..	..	..	..	..	..	..	..	..
Liberia	..	..	..	..	..	..	..	..	..	..	..	..
Libya	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	..	10	..	6	..	41	..	19	..	49	..	75
Macedonia, FYR	..	19	..	17	..	33	..	29	..	48	..	54
Madagascar	..	82	..	83	..	5	..	2	..	13	..	16
Malawi	..	..	..	..	..	..	..	..	..	..	..	..
Malaysia	23	18	20	10	31	32	32	23	46	51	48	67
Mali	..	50	..	30	..	18	..	15	..	32	..	55
Mauritania	..	..	..	..	..	..	..	..	..	..	..	..
Mauritius	15	10	13	8	36	36	48	26	48	54	39	66
Mexico	34	19	11	4	25	31	19	18	41	50	70	77
Moldova	..	36	..	30	..	25	..	12	..	39	..	58
Mongolia	..	41	..	35	..	21	..	15	..	39	..	50
Morocco	4[c]	37	3[c]	61	33[c]	22	46[c]	15	63[c]	41	51[c]	24
Mozambique	..	..	..	..	..	..	..	..	..	..	..	..
Myanmar	..	..	..	..	..	..	..	..	..	..	..	..
Namibia	45	34	52	25	21	19	8	9	34	47	40	65
Nepal	75	..	91	..	4	..	1	..	20	..	8	..
Netherlands	5	3	2	2	33	27	10	8	60	63	81	85
New Zealand	13[c]	9	8[c]	5	31[c]	32	13[c]	10	56[c]	58	79[c]	85
Nicaragua	..	42	..	8	..	20	..	18	..	38	..	73
Niger	..	..	..	..	..	..	..	..	..	..	..	..
Nigeria	..	..	..	..	..	..	..	..	..	..	..	..
Norway	7	4	3	1	34	33	10	8	58	63	86	90
Oman	..	..	..	..	..	..	..	..	..	..	..	..
Pakistan	45	36	69	72	20	23	15	13	35	41	16	15
Panama	35	21	3	3	20	25	11	10	45	54	85	87
Papua New Guinea	..	..	..	..	..	..	..	..	..	..	..	..
Paraguay	..	31	..	19	..	24	..	10	..	45	..	71
Peru	1[c]	12[c]	0[b,c]	6[c]	30[c]	41[c]	13[c]	43[c]	69[c]	46[c]	87[c]	51[c]
Philippines	53	44	32	24	17	18	14	11	29	39	55	65
Poland	..	15	..	14	..	41	..	18	..	44	..	68
Portugal	10	11	13	12	39	40	24	17	51	49	63	71
Puerto Rico	5	2	0[b]	0[b]	27	26	19	10	67	72	80	89
Qatar	..	4	..	0	..	48	..	4	..	48	..	96

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[a]	2004–08[a]	1990–92[a]	2004–08[a]	1990–92[a]	2004–08[a]	1990–92[a]	2004–08[a]	1990–92[a]	2004–08[a]	1990–92[a]	2004–08[a]
Romania	29	27	38	30	44	38	30	24	28	35	33	46
Russian Federation	..	11	..	7	..	38	..	20	..	51	..	73
Rwanda	..	..	..	..	..	..	..	..	..	..	..	..
Saudi Arabia	..	5	..	0[b]	..	23	..	1	..	72	..	99
Senegal	..	34	..	33	..	20	..	5	..	33	..	42
Serbia	..	24	..	26	..	34	..	16	..	42	..	58
Sierra Leone	..	66	..	71	..	10	..	3	..	23	..	26
Singapore	1	2	0[b]	1	36	26	32	18	63	72	68	82
Slovak Republic	..	6	..	2	..	52	..	24	..	43	..	74
Slovenia	..	10	..	10	..	44	..	23	..	45	..	65
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	..	11	..	7	..	35	..	14	..	54	..	80
Spain	11	6	8	3	41	40	17	11	49	55	75	86
Sri Lanka	..	28[c]	..	37[c]	..	26[c]	..	27	..	41	..	34
Sudan	..	..	..	..	..	..	..	..	..	..	..	..
Swaziland	..	..	..	..	..	..	..	..	..	..	..	..
Sweden	5	3	2	1	40	33	12	9	55	64	86	90
Switzerland	5	5	4	3	39	34	15	12	57	62	81	86
Syrian Arab Republic	23	..	54	..	28	..	8	..	49	..	38	..
Tajikistan	..	42	..	75	..	27	..	5	..	31	..	20
Tanzania	..	71	..	78	..	7	..	3	..	22	..	19
Thailand	59	43	62	40	17	22	13	19	24	35	25	41
Timor-Leste	..	..	..	..	..	..	..	..	..	..	..	..
Togo	..	..	..	..	..	..	..	..	..	..	..	..
Trinidad and Tobago	15	6	6	2	34	41	14	16	51	52	80	82
Tunisia	..	..	..	..	..	..	..	..	..	..	..	..
Turkey	33	19	72	46	26	30	11	15	41	51	17	39
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	..	..	..	..	..	..	..	..	..	..	..	..
Ukraine	..	..	..	..	..	..	..	..	..	..	..	..
United Arab Emirates	..	6	..	0[b]	..	45	..	6	..	49	..	92
United Kingdom	3	2	1	1	41	32	16	9	55	66	82	90
United States	4	2	1	1	34	30	14	9	62	68	85	90
Uruguay	7[c]	16	1[c]	5	36[c]	29	21[c]	13	57[c]	56	78[c]	83
Uzbekistan	..	..	..	..	..	..	..	..	..	..	..	..
Venezuela, RB	17	13	2	2	32	30	16	12	52	56	82	86
Vietnam	..	56	..	60	..	21	..	14	..	23	..	26
West Bank and Gaza	..	11	..	36	..	27	..	10	..	61	..	53
Yemen, Rep.	44	..	83	..	14	..	2	..	38	..	13	..
Zambia	47	..	56	..	15	..	3	..	22	..	18	..
Zimbabwe	..	..	..	..	..	..	..	..	..	..	..	..
World	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w
Low income	..	..	..	..	..	..	..	..	..	..	..	..
Middle income	..	..	..	..	..	..	..	..	..	..	..	..
Lower middle income	..	..	..	..	..	..	..	..	..	..	..	..
Upper middle income	..	16	..	9	..	33	..	19	..	51	..	72
Low & middle income	..	..	..	..	..	..	..	..	..	..	..	..
East Asia & Pacific	..	..	..	..	..	..	..	..	..	..	..	..
Europe & Central Asia	..	16	..	16	..	35	..	19	..	48	..	65
Latin America & Carib.	21	20	13	9	30	29	14	16	49	51	72	75
Middle East & N. Africa	..	..	..	..	..	..	..	..	..	..	..	..
South Asia	..	..	..	..	..	..	..	..	..	..	..	..
Sub-Saharan Africa	..	..	..	..	..	..	..	..	..	..	..	..
High income	6	4	5	2	38	34	19	12	55	62	76	85
Euro area	7	5	6	3	42	38	20	13	50	56	73	83

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

Employment by economic activity 2.3

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's Key Indicators of the Labour Market, 6th edition, database.

2.4 Decent work and productive employment

	Employment to population ratio				Gross enrollment ratio, secondary		Vulnerable employment				Labor productivity	
							Unpaid family workers and own-account workers					
	Total		Youth				Male		Female		GDP per person employed	
	% ages 15 and older		% ages 15–24		% of relevant age group		% of male employment		% of female employment		% growth	
	1991	2008	1991	2008	1991	2008[a]	1990	2008	1990	2008	1990–92	2003–05
Afghanistan	54	55	45	47	16	*29*	..	..	..	..	..	..
Albania	49	46	37	36	88	..	..	..	..	..	–17.5	5.4
Algeria	39	49	25	31	60	..	..	..	..	..	–4.0	1.3
Angola	77	76	71	69	10	..	..	..	..	..	–5.0	12.0
Argentina	53	57	42	36	74	*85*	..	*22*[b]	..	*17*[b]	9.0	2.1
Armenia	38	38	24	25	..	88	..	..	..	..	–24.8	12.7
Australia	56	59	58	64	82	*148*	12	*11*	9	*7*	3.3	0.3
Austria	52	55	61	53	102	*100*	..	9	..	9	0.7	2.4
Azerbaijan	57	60	38	39	88	106	..	*41*	..	*66*	–12.6	24.8
Bangladesh	74	68	66	56	*20*	*44*	..	..	..	..	1.9	4.2
Belarus	58	52	40	35	93	*95*	..	..	..	..	–4.0	10.3
Belgium	44	47	31	27	101	*110*	*17*	11	*15*	9	1.6	1.4
Benin	70	72	64	59	11	..	..	..	..	..	..	..
Bolivia	61	71	48	49	*44*	*82*	32[b]	..	50[b]	..	2.6	1.0
Bosnia and Herzegovina	42	42	17	18	..	*89*	..	..	..	..	–14.8	4.6
Botswana	47	46	34	27	49	*80*	..	..	..	..	..	..
Brazil	56	64	54	53	61	*100*	29[b]	*30*	30[b]	*24*	–0.3	0.4
Bulgaria	45	46	27	27	86	*105*	..	10	..	8	3.1	3.7
Burkina Faso	82	82	77	74	7	20[c]	..	..	..	..	1.3	2.1
Burundi	85	84	74	73	5	18	..	..	..	..	..	..
Cambodia	77	75	66	68	25	*40*	..	..	..	..	4.0	6.5
Cameroon	59	59	37	33	26	37	..	..	..	..	–6.7	1.1
Canada	58	61	57	61	101	*101*	..	*12*[b]	..	9[b]	0.8	1.4
Central African Republic	73	73	59	58	12	..	..	..	..	..	..	..
Chad	67	70	51	50	7	*19*	..	..	..	..	..	..
Chile	51	50	34	24	73	94	..	25	..	21	6.6	2.9
China	75	71	71	55	41	*74*	..	..	..	..	6.8	9.2
Hong Kong SAR, China	62	57	54	38	80	83	..	*10*	..	*4*	5.3	5.5
Colombia	52	62	38	43	53	91	*30*[b]	48	*26*[b]	46	–0.7	2.2
Congo, Dem. Rep.	68	67	60	62	*21*	35	..	..	..	..	–12.9	4.2
Congo, Rep.	66	65	49	46	46	..	..	..	..	..	..	..
Costa Rica	56	57	48	43	45	89	26	*20*	21	*20*	2.4	1.3
Côte d'Ivoire	63	60	52	45	20	..	..	..	..	..	–3.6	–0.3
Croatia	50	46	27	29	..	*94*	..	*15*[b]	..	*17*[b]	–7.7	3.0
Cuba	52	54	40	32	94	91	..	..	..	..	..	..
Czech Republic	58	54	48	29	91	*95*	..	15	..	9	–5.2	4.7
Denmark	59	60	65	61	109	*119*	*7*	7	*6*	3	2.5	2.2
Dominican Republic	44	53	28	34	..	75	*42*	*49*	*30*	30	0.7	2.2
Ecuador	52	61	39	40	55	*70*	33[b]	*29*[b]	41[b]	*41*[b]	–0.1	1.9
Egypt, Arab Rep.	43	43	22	23	69	..	..	*20*	..	*44*	2.1	1.6
El Salvador	59	54	42	39	38	64	..	*29*	..	*44*	..	..
Eritrea	66	66	60	54	..	30	..	..	..	..	..	..
Estonia	61	55	43	29	100	*100*	2	*8*	3	*4*	–9.4	7.4
Ethiopia	71	81	64	74	14	33	..	*48*[b]	..	*56*[b]	–8.4	7.3
Finland	57	55	45	44	116	*111*	..	11	..	7	1.4	2.3
France	47	48	28	29	100	*113*	*11*	7	*10*	5	1.4	1.8
Gabon	58	58	37	33	*39*	..	..	..	..	..	..	..
Gambia, The	73	72	59	55	19	51	..	..	..	..	..	..
Georgia	57	54	28	22	95	90	..	..	..	..	–25.3	9.8
Germany	54	52	58	44	98	*101*	..	7	..	6	3.7	0.8
Ghana	68	65	40	40	35	54	..	..	..	..	2.8	3.0
Greece	44	48	31	28	94	*102*	..	27	..	27	2.4	2.8
Guatemala	55	62	50	52	23	57	..	..	..	..	1.0	2.1
Guinea	82	81	75	73	10	36	..	..	..	..	..	..
Guinea-Bissau	66	67	57	63	*6*	*36*	..	..	..	..	..	..
Haiti	56	55	37	47	21	..	..	..	..	..	..	..
Honduras	59	56	49	43	33	65	48[b]	..	50[b]	..	..	..

Decent work and productive employment 2.4

	Employment to population ratio				Gross enrollment ratio, secondary		Vulnerable employment				Labor productivity	
							Unpaid family workers and own-account workers					
	Total		Youth				Male		Female		GDP per person employed	
	% ages 15 and older		% ages 15–24		% of relevant age group		% of male employment		% of female employment		% growth	
	1991	2008	1991	2008	1991	2008[a]	1990	2008	1990	2008	1990–92	2003–05
Hungary	48	45	37	20	86	*97*	*8*	8	*7*	6	0.3	4.6
India	58	56	46	40	42	*57*	..	..	..	..	1.0	5.8
Indonesia	63	62	46	41	46	*76*	..	*60*	..	*68*	6.2	4.7
Iran, Islamic Rep.	46	49	33	36	53	80	..	*40*	..	*56*	6.5	0.4
Iraq	37	37	27	23	44	..	..	..	..	..	–33.6	17.5
Ireland	44	58	38	44	100	*113*	25	17	9	5	2.4	1.6
Israel	45	50	25	27	92	*91*	..	*9*	..	*5*	0.0	3.1
Italy	43	44	30	25	79	*100*	*29*	21	*24*	15	0.6	0.6
Jamaica	61	56	40	29	66	*90*	*46*	*38*	*37*	*31*	0.7	–0.4
Japan	61	54	43	40	97	*101*	15	*10*	26	*12*	0.7	2.0
Jordan	36	38	25	20	82	*86*	..	..	..	..	–5.5	3.9
Kazakhstan	63	64	46	42	100	95[c]	..	..	..	..	–15.1	7.5
Kenya	73	73	62	59	46	58	..	..	..	..	–3.9	2.1
Korea, Dem. Rep.	62	64	46	39	..	..	..	..	..	..	..	..
Korea, Rep.	59	58	36	28	90	*97*	..	*23*	..	*28*	5.0	2.8
Kosovo	..	..	..	..	..	..	..	..	..	..	..	..
Kuwait	62	65	29	30	43	*91*	..	..	..	..	–0.2	1.4
Kyrgyz Republic	58	58	41	40	100	85	..	*47*	..	*47*	–13.1	–0.4
Lao PDR	80	78	74	64	23	44	..	..	..	..	..	..
Latvia	58	55	43	35	92	*115*	..	8	..	6	–19.6	8.1
Lebanon	44	46	31	29	*62*	82	..	..	..	..	..	..
Lesotho	48	54	40	40	24	*40*	..	..	..	..	..	..
Liberia	66	66	57	57	..	32	..	..	..	..	..	..
Libya	45	49	28	27	..	*93*	..	..	..	..	..	..
Lithuania	54	50	36	18	92	99	..	11	..	8	–13.9	6.3
Macedonia, FYR	37	35	17	13	..	*84*	..	*24*	..	*20*	–5.6	4.1
Madagascar	79	83	65	71	18	30	..	..	..	..	–5.9	1.5
Malawi	72	72	48	49	8	29	..	..	..	..	–1.9	1.9
Malaysia	60	61	47	45	57	..	*31*	*23*	*25*	*21*	6.0	5.1
Mali	49	47	40	35	7	35	..	..	..	..	0.4	1.0
Mauritania	67	47	54	23	13	23	..	..	..	..	..	..
Mauritius	56	54	45	37	55	88	13	*18*	7	*15*	..	..
Mexico	57	57	50	42	54	*87*	29	*28*	15	*32*	1.0	1.6
Moldova	58	45	39	17	80	83	..	*35*	..	*30*	–22.0	9.0
Mongolia	50	52	39	35	82	95	..	..	..	..	..	..
Morocco	46	46	40	35	36	*56*	..	*46*	..	*65*	–1.7	1.7
Mozambique	80	78	67	66	7	21	..	..	..	..	–3.0	6.2
Myanmar	74	74	62	53	23	*49*	..	..	..	..	2.0	8.9
Namibia	45	43	24	14	43	66	..	..	..	..	..	..
Nepal	60	62	52	46	33	*43*	..	..	..	..	..	..
Netherlands	51	59	55	67	120	*120*	*7*	10	*10*	8	0.4	2.3
New Zealand	55	63	55	56	92	*120*	*15*	*14*	*10*	*10*	0.5	0.3
Nicaragua	57	58	46	48	43	68	..	*45*	..	*46*	..	..
Niger	59	60	50	52	7	11	..	..	..	..	–5.7	0.2
Nigeria	53	52	29	24	23	*30*	..	..	..	..	–2.9	4.6
Norway	58	62	49	56	103	*113*	..	8	..	3	3.9	2.4
Oman	53	51	30	29	45	88	..	..	..	..	0.2	3.7
Pakistan	48	52	38	44	23	33	..	*58*	..	*75*	6.5	4.4
Panama	50	59	33	40	62	71	*44*	*30*	*19*	*24*	..	..
Papua New Guinea	70	70	57	54	12	..	..	..	..	..	..	..
Paraguay	61	73	51	58	31	*66*	17[b]	*45*	31[b]	*50*	..	..
Peru	53	69	34	53	67	*98*	30[b]	*33*[b]	46[b]	*47*[b]	–0.8	2.7
Philippines	59	60	42	39	70	*81*	..	*44*	..	*47*	–3.3	2.5
Poland	53	48	31	27	87	*100*	..	20	..	18	2.8	2.7
Portugal	58	56	53	35	66	*101*	*22*	18	*30*	19	2.2	1.4
Puerto Rico	37	41	21	29	..	..	..	..	..	..	..	..
Qatar	73	77	35	47	84	93	..	..	..	..	0.1	7.4

2.4 Decent work and productive employment

	Employment to population ratio				Gross enrollment ratio, secondary		Vulnerable employment				Labor productivity	
							Unpaid family workers and own-account workers					
	Total		Youth				Male		Female		GDP per person employed	
	% ages 15 and older		% ages 15–24		% of relevant age group		% of male employment		% of female employment		% growth	
	1991	2008	1991	2008	1991	2008[a]	1990	2008	1990	2008	1990–92	2003–05
Romania	56	48	42	24	92	*87*	*21*	31	*33*	32	–9.3	8.0
Russian Federation	57	57	34	33	93	*84*	*1*	*6*	*1*	*6*	–7.9	6.1
Rwanda	87	80	79	64	9	22	..	..	..	..	..	..
Saudi Arabia	50	51	26	25	44	95	..	..	..	..	4.9	1.8
Senegal	67	66	60	55	15	31	*77*	..	*91*	..	–1.0	3.4
Serbia	49[d]	47[d]	28[d]	30[d]	..	90	..	20	..	14	..	..
Sierra Leone	64	65	38	42	16	*35*	..	..	..	..	..	..
Singapore	64	62	56	38	..	..	*10*	*12*	*6*	*7*	1.5	6.7
Slovak Republic	55	53	43	30	..	*93*	..	14	..	6	–0.8	5.2
Slovenia	55	54	38	32	89	*94*	..	12	..	10	–2.3	4.2
Somalia	66	67	59	58	..	..	..	..	..	..	..	..
South Africa	39	41	19	15	69	*95*	..	*2*	..	*3*	–4.5	3.9
Spain	41	49	36	37	105	*119*	20	13	24	10	2.4	–1.2
Sri Lanka	51	55	31	36	72	..	..	*39*[b]	..	*44*[b]	5.5	2.2
Sudan	46	47	29	23	20	38[c]	..	..	..	..	–1.3	–0.2
Swaziland	54	50	34	26	43	*53*	..	..	..	..	..	..
Sweden	62	58	59	45	90	*103*	..	9	..	4	1.9	3.9
Switzerland	65	61	69	63	98	*96*	*8*	*10*	*11*	*11*	–0.6	2.0
Syrian Arab Republic	47	45	38	32	48	74	..	..	..	..	6.5	0.6
Tajikistan	54	55	36	38	102	84	..	..	..	..	–20.4	2.5
Tanzania	87	78	79	70	5	..	..	*82*[b]	..	*93*[b]	–2.4	4.8
Thailand	77	72	70	46	*30*	..	67	*51*	74	*56*	6.8	3.3
Timor-Leste	64	67	51	58	..	..	..	..	..	..	..	..
Togo	66	65	58	53	20	*41*	..	..	..	..	..	..
Trinidad and Tobago	45	61	33	46	82	89	22	..	21	..	–3.5	4.5
Tunisia	41	41	29	22	45	*90*	..	..	..	..	2.6	2.1
Turkey	53	42	48	31	48	*82*	..	30	..	49	1.0	6.7
Turkmenistan	56	58	35	34	..	..	..	..	..	..	–13.0	6.0
Uganda	82	83	73	75	11	25	..	..	..	..	–1.1	3.3
Ukraine	57	54	37	34	94	94	..	..	..	..	–7.9	6.0
United Arab Emirates	71	76	43	46	68	*94*	..	..	..	..	–3.9	2.2
United Kingdom	56	56	66	56	87	*97*	*13*	14	*6*	7	2.0	1.7
United States	59	59	56	51	92	*94*	..	..	..	..	1.7	1.9
Uruguay	53	56	42	39	84	*92*	..	*26*	..	*24*	5.2	5.1
Uzbekistan	54	58	36	39	99	*102*	..	..	..	..	–7.8	4.1
Venezuela, RB	51	61	35	40	53	81	..	*28*	..	*33*	4.5	15.0
Vietnam	75	69	75	51	32	..	..	..	..	..	4.6	5.7
West Bank and Gaza	30	30	19	15	..	*92*	..	*34*	..	*44*	..	..
Yemen, Rep.	38	39	23	22	..	..	..	..	..	..	0.9	0.6
Zambia	57	61	40	46	23	52	56	..	81	..	–2.5	3.2
Zimbabwe	70	65	48	50	49	*41*	..	..	..	..	–4.7	–5.6
World	**62 w**	**60 w**	**52 w**	**45 w**	**50**	**66 w**	**.. w**	**.. w**	**.. w**	**.. w**	**0.7 w**	**3.3 w**
Low income	70	69	60	56	26	*41*	..	..	..	..	–2.8	4.5
Middle income	62	60	52	42	47	*67*	..	..	..	..	1.3	5.9
Lower middle income	65	62	55	43	42	*62*	..	..	..	..	3.2	6.7
Upper middle income	54	56	41	38	67	*90*	..	*25*	..	*24*	–2.1	3.9
Low & middle income	63	62	53	45	44	*62*	..	..	..	..	1.1	5.8
East Asia & Pacific	73	69	67	51	41	*73*	..	..	..	..	6.5	7.8
Europe & Central Asia	55	52	38	32	85	*89*	..	*19*	..	*18*	–8.0	6.3
Latin America & Carib.	55	61	46	45	57	*88*	..	*32*	..	*32*	1.8	2.5
Middle East & N. Africa	43	45	29	29	54	*72*	..	*33*	..	*52*	1.5	0.9
South Asia	59	57	48	42	37	*52*	..	..	..	..	3.1	5.5
Sub-Saharan Africa	64	64	50	49	22	*33*	..	..	..	..	–5.3	3.7
High income	55	55	47	43	91	*100*	..	..	..	..	2.3	1.8
Euro area	48	50	41	37	..	..	..	*12*	..	9	2.4	1.0

a. Provisional data. b. Limited coverage. c. Data are for 2009. d. Includes Montenegro.

Decent work and productive employment 2.4

About the data

Four targets were added to the UN Millennium Declaration at the 2005 World Summit High-Level Plenary Meeting of the 60th Session of the UN General Assembly. 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 a lower employment to population ratio can be seen as a positive sign, especially for young people, if it is caused by an increase in their education. 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, which excludes 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 excluding them from employment data (International Labour Organization, *Key Indicators of the Labour Market,* 6th 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 internationally 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 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 is used to assess a country's economic ability to create and sustain decent employment opportunities with fair and equitable remuneration. Productivity increases obtained through investment, trade, technological progress, or changes in work organization can increase social protection and reduce poverty, which in turn reduce vulnerable employment and working poverty. Productivity increases do not guarantee these improvements, but without them—and the economic growth they bring—improvements are highly unlikely. 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. Information on consistent series of output in both national currencies and purchasing power parity 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.

Definitions

• **Employment to population ratio** is the proportion of a country's population that is employed. People ages 15 and older are generally considered the working-age population. People ages 15–24 are generally considered the youth population. • **Gross enrollment ratio, secondary,** is the ratio of total enrollment in secondary education, regardless of age, to the population of the age group that officially corresponds to secondary education. • **Vulnerable employment** is unpaid family workers and own-account workers as a percentage of total employment. • **Labor productivity** is the growth rate of gross domestic product (GDP) divided by total employment in the economy.

Data sources

Data on employment to population ratio, vulnerable employment, and labor productivity are from the International Labour Organization's Key Indicators of the Labour Market, 6th edition, database. Data on gross enrollment ratios are from the United Nations Educational, Scientific, and Cultural Organization Institute for Statistics.

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		% of total unemployment			% of total unemployment		
	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[a]	Total 2005–08[a]	Male 2005–08[a]	Female 2005–08[a]	Primary 2005–08[a]	Secondary 2005–08[a]	Tertiary 2005–08[a]
Afghanistan	..	8.5	..	7.6	..	9.5	..	..	..	..	..	..
Albania	..	..	..	..	..	..	..	..	..	..	..	..
Algeria	23.0	13.8	24.2	12.9	20.3	18.4	..	..	..	..	..	..
Angola	..	..	..	..	..	..	..	..	..	..	..	..
Argentina	6.7[b]	7.3[b]	6.4[b]	6.0[b]	7.0[b]	8.9[b]	..	..	..	48.1[b]	36.7[b]	15.3[b]
Armenia	..	..	..	..	..	..	..	..	..	5.2	83.0	11.9
Australia	10.8	4.2	11.4	4.0	10.0	4.6	14.9[b]	15.7[b]	13.9[b]	48.0	34.1	17.9
Austria	3.6	3.8	3.5	3.6	3.8	4.1	24.2	25.8	22.6	37.9	52.1	10.0
Azerbaijan	..	6.5	..	7.8	..	5.3	..	..	..	6.3	78.9	14.9
Bangladesh	..	4.3	..	3.4	..	7.0	..	..	..	33.0	24.4	15.9
Belarus	..	..	..	..	..	..	..	..	..	10.0	39.0	51.0
Belgium	6.7	7.0	4.8	6.5	9.5	7.6	52.6	49.9	55.7	42.1	38.2	19.7
Benin	1.5	..	2.2	..	0.6	..	..	..	..	..	..	..
Bolivia	5.5[b]	..	5.5[b]	..	5.6[b]	..	..	..	..	..	..	..
Bosnia and Herzegovina	17.6	29.0	15.5	26.7	21.6	33.0	..	..	..	95.7	..	4.0
Botswana	..	17.6	..	15.3	..	19.9	..	..	..	..	..	..
Brazil	6.4[b]	7.9[b]	5.4[b]	6.1[b]	7.9[b]	10.0[b]	..	..	..	51.6	33.6	3.6
Bulgaria	..	5.7	..	5.5	..	5.8	51.7	50.1	53.5	41.8	49.7	8.6
Burkina Faso	..	..	..	..	..	..	..	..	..	..	..	..
Burundi	0.5	..	0.7	..	0.3	..	..	..	..	..	..	..
Cambodia	..	..	..	..	..	..	..	..	..	..	..	..
Cameroon	..	..	..	..	..	..	..	..	..	..	..	..
Canada	11.2[b]	6.1	12.0[b]	6.6	10.2[b]	5.7	7.1[b]	7.9[b]	6.1[b]	27.7[b]	41.1[b]	31.2[b]
Central African Republic	..	..	..	..	..	..	..	..	..	..	..	..
Chad	..	..	..	..	..	..	..	..	..	..	..	..
Chile	4.4	7.8	3.9	6.8	5.3	9.5	..	..	..	17.8	58.5	23.5
China	2.3[b]	4.2[b]	..	..	..	..	..	..	..	..	..	..
Hong Kong SAR, China	2.0	3.5	2.0	4.5	1.9	3.4	..	..	..	40.8	41.4	16.6
Colombia	9.5[b]	11.7	6.8[b]	8.9	13.0[b]	14.5	..	..	..	76.6	..	20.6
Congo, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Congo, Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Costa Rica	4.1	4.6	3.5	3.3	5.4	6.8	..	..	..	65.2	27.3	6.4
Côte d'Ivoire	6.7	..	..	..	..	..	..	..	..	..	..	..
Croatia	..	8.4	..	7.0	..	10.0	61.5	57.2	65.3	20.4	67.8	11.8
Cuba	..	1.8	..	1.7	..	1.9	..	..	..	43.0	52.4	4.6
Czech Republic	..	4.4	..	3.5	..	5.6	50.2	50.4	50.0	26.8	68.8	4.3
Denmark	9.0	3.3	8.3	3.0	9.9	3.7	16.1	19.0	13.9	35.9	35.1	23.0
Dominican Republic	20.7	15.6	12.0	9.3	35.2	25.4	..	..	..	35.0	44.5	16.4
Ecuador	8.9[b]	6.9	6.0[b]	5.6[b]	13.2[b]	10.9[b]	..	..	..	74.0[b]	..	23.6[b]
Egypt, Arab Rep.	9.0	8.7	6.4	5.9	17.0	19.3	..	..	..	..	..	..
El Salvador	7.9[b]	6.6	8.4[b]	8.5	7.2[b]	3.9	..	..	..	..	..	..
Eritrea	..	..	..	..	..	..	..	..	..	..	..	..
Estonia	3.7	5.5	3.9	5.8	3.5	5.2	..	..	..	23.1	57.8	16.6
Ethiopia	..	17.0[b]	..	11.7[b]	..	22.6[b]	..	..	..	35.9	13.3	3.2
Finland	11.6	6.4	13.3	6.1	9.6	6.7	18.2	20.1	16.2	35.5	45.9	18.6
France	10.2	7.4	8.1	6.9	12.8	7.9	37.9	39.3	36.5	39.9	39.6	19.9
Gabon	..	..	..	..	..	..	..	..	..	..	..	..
Gambia, The	..	..	..	..	..	..	..	..	..	..	..	..
Georgia	..	13.3	..	13.9	..	12.6	..	..	..	5.1	52.5	42.3
Germany	6.3	7.5	4.9	7.4	8.2	7.5	53.4	54.0	52.7	33.1	56.3	10.6
Ghana	4.7	..	3.7	..	5.5	..	..	..	..	..	..	..
Greece	7.8	7.7	4.9	5.1	12.9	11.4	49.6	42.8	53.8	29.3	48.4	21.8
Guatemala	..	1.8	..	1.5	..	2.4	..	..	..	..	..	..
Guinea	..	..	..	..	..	..	..	..	..	..	..	..
Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	..	..
Haiti	12.7	..	11.9	..	13.8	..	..	..	..	..	..	..
Honduras	3.2[b]	3.1[b]	3.3[b]	2.5[b]	3.0[b]	4.2[b]	..	..	..	..	..	..

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		% of total unemployment			% of total unemployment		
	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[a]	Total 2005–08[a]	Male 2005–08[a]	Female 2005–08[a]	Primary 2005–08[a]	Secondary 2005–08[a]	Tertiary 2005–08[a]
Hungary	9.9	7.8	11.0	7.6	8.7	8.1	47.6	48.8	46.3	33.1	58.7	8.1
India	..	..	..	..	..	..	..	..	..	29.0	37.7	33.3
Indonesia	2.8	8.4	2.7	8.1	3.0	10.8	..	..	..	44.4	40.7	9.6
Iran, Islamic Rep.	11.1	10.5	9.5	9.3	24.4	15.7	..	..	..	41.8	34.7	19.6
Iraq	..	..	..	..	..	..	..	..	..	..	..	..
Ireland	15.0	6.0	14.9	7.0	15.3	4.6	29.4	33.2	21.7	39.8	37.2	18.2
Israel	11.2	6.2[b]	9.2	5.7[b]	13.9	7.0[b]	..	..	..	12.2	12.8	72.5
Italy	9.3	6.7	6.7	5.5	13.9	8.5	47.5	44.9	49.9	46.5	40.6	11.3
Jamaica	15.4	10.6	9.4	7.3	22.2	14.6	..	..	..	9.7	4.3	8.4
Japan	2.2	4.0	2.1	4.1	2.2	3.8	33.3	39.9	23.8	67.2	..	32.8
Jordan	..	12.7	..	10.1	..	24.3	..	..	..	..	..	..
Kazakhstan	..	..	..	..	..	..	..	..	..	..	..	..
Kenya	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	2.5	3.2	2.8	3.6	2.1	2.6	2.7	3.7	0.4	15.2	49.7	35.2
Kosovo	..	..	..	..	..	..	..	..	..	..	..	..
Kuwait	..	..	..	..	..	..	..	..	..	19.4	41.4	9.6
Kyrgyz Republic	..	8.3	..	7.7	..	9.0	..	..	..	13.3	77.1	9.6
Lao PDR	..	1.4	..	1.3	..	1.4	..	..	..	..	..	..
Latvia	..	7.5	..	8.0	..	6.9	25.7	44.6	39.7	24.3	59.9	14.6
Lebanon	..	..	..	..	..	..	..	..	..	..	..	..
Lesotho	..	..	..	..	..	..	..	..	..	..	..	..
Liberia	..	5.6	..	6.8	..	4.2	..	..	..	..	..	..
Libya	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	..	5.8	..	6.1	..	5.6	52.4	54.1	50.8	14.2	70.4	15.4
Macedonia, FYR	..	33.8	..	33.5	..	34.2	..	..	..	..	..	..
Madagascar	..	2.6	..	1.7	..	3.5	..	..	..	43.9	23.8	9.3
Malawi	..	..	..	..	..	..	..	..	..	..	..	..
Malaysia	3.7	3.2	..	3.1	..	3.4	..	..	..	13.3	61.6	25.1
Mali	..	..	..	..	..	..	..	..	..	..	..	..
Mauritania	..	..	..	..	..	..	..	..	..	..	..	..
Mauritius	..	7.3	..	4.1	..	12.8	..	..	..	44.2	48.5	6.4
Mexico	3.1	4.0	2.7	3.9	4.0	4.2	1.7	1.6	1.8	50.7	24.5	22.9
Moldova	..	4.0	..	4.6	..	3.4	..	..	..	..	..	..
Mongolia	..	2.8	..	2.3	..	3.2	..	..	..	..	..	..
Morocco	16.0[b]	9.6	13.0[b]	9.6	25.3[b]	9.8	..	..	..	51.1[b]	22.4[b]	21.6[b]
Mozambique	..	..	..	..	..	..	..	..	..	..	..	..
Myanmar	6.0	..	4.7	..	8.8	..	..	..	..	..	..	..
Namibia	19.0	..	20.0	..	19.0	..	..	..	..	..	..	..
Nepal	..	..	..	..	..	..	..	..	..	..	..	..
Netherlands	5.5	2.8	4.3	2.5	7.3	3.0	36.3	38.3	34.4	41.3	39.7	17.0
New Zealand	10.4[b]	4.1	11.0[b]	4.0	9.6[b]	4.2	4.4[b]	5.5[b]	3.2[b]	30.6	38.8	26.9
Nicaragua	14.4	5.2	11.3	5.4	19.5	4.9	..	..	..	72.8	2.1	18.0
Niger	..	..	..	..	..	..	..	..	..	..	..	..
Nigeria	..	..	..	..	..	..	..	..	..	..	..	..
Norway	5.9	2.6	6.6	2.7	5.1	2.4	6.0	6.0	6.0	25.4	49.2	20.6
Oman	..	..	..	..	..	..	..	..	..	..	..	..
Pakistan	5.2	5.1	3.8	4.2	14.0	8.6	..	..	..	14.3	11.4	26.0
Panama	14.7	6.8	10.8	5.3	22.3	9.3	..	..	..	36.0	39.6	24.0
Papua New Guinea	7.7	..	9.0	..	5.9	..	..	..	..	..	..	..
Paraguay	5.3[b]	5.7	6.4[b]	4.6	3.8[b]	7.4	..	..	..	49.9	38.0	9.9
Peru	9.4[b]	7.0[b]	7.5[b]	5.9[b]	12.5[b]	8.2[b]	..	..	..	30.0[b]	31.9[b]	37.6[b]
Philippines	8.6	7.4	7.9	7.6	9.9	7.1	..	..	..	13.6	46.2	39.4
Poland	13.3	7.1	12.2	6.4	14.7	8.0	29.0	27.3	30.8	16.4	73.2	10.4
Portugal	4.1[b]	7.6	3.5[b]	6.5	5.0[b]	8.8	48.3	49.9	46.9	68.1	15.4	13.2
Puerto Rico	16.9	11.6	19.1	12.0	13.3	9.5	..	..	..	..	..	..
Qatar	..	..	..	..	..	..	..	..	..	..	..	..

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		% of total unemployment			% of total unemployment		
	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[a]	Total 2005–08[a]	Male 2005–08[a]	Female 2005–08[a]	Primary 2005–08[a]	Secondary 2005–08[a]	Tertiary 2005–08[a]
Romania	..	5.8	..	6.7	..	4.7	41.3	43.0	38.4	25.8	66.3	6.1
Russian Federation	5.3	6.2	5.4	6.4	5.2	5.8	..	..	..	13.7	54.2	32.1
Rwanda	0.3	..	0.6	..	0.2	..	..	..	..	..	..	..
Saudi Arabia	..	5.6	..	4.2	..	13.2	..	..	..	26.2	44.6	28.7
Senegal	..	11.1	..	7.9	..	13.6	..	..	..	40.2	6.9	2.5
Serbia	..	13.6	..	11.9	..	15.8	71.1	70.1	72.1	20.3	68.4	11.2
Sierra Leone	..	..	..	..	..	..	..	..	..	..	..	..
Singapore	2.7	3.2	2.7	3.0	2.6	3.5	..	..	..	31.0	25.6	43.2
Slovak Republic	..	9.5	..	8.4	..	10.9	66.1	65.6	66.6	29.2	65.3	5.3
Slovenia	..	4.4	..	4.0	..	4.9	42.2	38.5	40.0	25.0	60.4	12.5
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	..	22.9	..	20.0	..	26.3	..	..	..	36.2	56.3	4.5
Spain	18.1	11.3	13.9	10.1	25.8	13.0	23.8	18.8	28.9	54.8	23.6	20.4
Sri Lanka	14.6[b]	5.2[b]	10.6[b]	3.6[b]	21.0[b]	8.0[b]	..	..	..	45.4[b]	22.0[b]	32.6[b]
Sudan	..	..	..	..	..	..	..	..	..	..	..	..
Swaziland	..	28.2	..	..	..	..	..	..	..	..	..	..
Sweden	5.7	6.2	6.7	5.9	4.6	6.6	12.4	13.5	11.3	32.2	46.0	17.1
Switzerland	2.8	3.4	2.3	2.8	3.5	4.0	34.3	27.3	39.9	28.8	53.2	17.9
Syrian Arab Republic	6.8	..	5.2	..	14.0	..	..	..	..	..	..	..
Tajikistan	..	..	..	..	..	..	..	..	..	66.5	28.8	4.6
Tanzania	3.6[b]	4.3	2.8[b]	2.8	4.3[b]	5.8	..	..	..	..	..	..
Thailand	1.4	1.4	1.3	1.5	1.5	1.3	..	..	..	40.5	45.5	0.1
Timor-Leste	..	..	..	..	..	..	..	..	..	..	..	..
Togo	..	..	..	..	..	..	..	..	..	..	..	..
Trinidad and Tobago	19.6	6.5	17.0	4.4	23.9	9.6	..	..	..	..	..	..
Tunisia	..	14.2	..	13.1	..	17.3	..	..	..	41.4	37.7	13.6
Turkey	8.5	9.4	8.8	9.4	7.8	9.4	26.9	24.0	34.4	52.3	28.2	12.7
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	..	..	..	..	..	..	..	..	..	..	..	..
Ukraine	..	6.4	..	6.7	..	6.0	..	..	..	8.5	52.2	39.3
United Arab Emirates	..	3.1	..	2.5	..	7.1	..	..	..	24.3	36.0	21.6
United Kingdom	9.8	5.6	11.6	6.1	7.4	5.1	25.5	30.5	18.4	37.3	47.7	14.3
United States	7.5[b]	5.8	7.9[b]	6.0	7.0[b]	5.4	10.6[b]	10.9[b]	10.3[b]	18.7	35.5	45.7
Uruguay	9.0[b]	7.6	6.8[b]	5.4	11.8[b]	10.1	..	..	..	59.1	27.0	13.8
Uzbekistan	..	..	..	..	..	..	..	..	..	..	..	..
Venezuela, RB	7.7	7.4	8.2	7.1	6.8	7.8	..	..	..	..	..	..
Vietnam	..	..	..	..	..	..	..	..	..	..	..	..
West Bank and Gaza	..	26.0	..	26.4	..	23.8	..	..	..	54.3	14.2	23.5
Yemen, Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Zambia	18.9	..	16.3	..	22.4	..	..	..	..	..	..	..
Zimbabwe	..	..	..	..	..	..	..	..	..	..	..	..
World	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w	.. w
Low income	..	..	..	..	..	..	..	..	..	..	..	..
Middle income	..	..	..	..	..	..	..	..	..	..	..	..
Lower middle income	..	..	..	..	..	..	..	..	..	..	..	..
Upper middle income	7.2	8.0	6.7	7.3	8.0	10.0	..	..	..	37.3	43.2	17.9
Low & middle income	..	..	..	..	..	..	..	..	..	..	..	..
East Asia & Pacific	2.5	4.7	..	..	..	..	..	..	..	..	..	..
Europe & Central Asia	..	6.9	..	7.9	..	7.2	..	..	..	25.7	52.4	22.8
Latin America & Carib.	6.6	7.3	5.4	5.9	8.3	9.0	..	..	..	51.6	34.5	12.1
Middle East & N. Africa	12.7	10.6	10.8	9.0	21.6	16.2	..	..	..	..	..	..
South Asia	..	..	..	..	..	..	..	..	..	..	..	..
Sub-Saharan Africa	..	..	..	..	..	..	..	..	..	..	..	..
High income	7.2	5.9	6.9	5.8	7.7	6.0	25.2	26.4	23.2	35.3	41.5	26.6
Euro area	9.0	7.5	7.1	6.8	11.9	8.3	42.4	41.6	42.8	41.4	42.9	14.9

a. Data are for the most recent year available. b. Limited coverage.

Unemployment 2.5

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 vulnerable employment. 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, 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 2.11.

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's Key Indicators of the Labour Market, 6th edition, database.

2.6 Children at work

	Survey year	Children in employment					Employment by economic activity[a]			Status in employment[a]		
		% of children ages 7–14			% of children ages 7–14 in employment		% of children ages 7–14 in employment			% of children ages 7–14 in employment		
		Total	Male	Female	Work only	Study and work	Agriculture	Manufacturing	Services	Self-employed	Wage	Unpaid family
Afghanistan		..	..	..	..	..	..	..	..	..	..	..
Albania	2000	36.6	41.1	31.8	43.1	56.9	..	..	..	..	1.4	93.1
Algeria		..	..	..	..	..	..	..	..	..	..	..
Angola[b]	2001	30.1	30.0	30.1	26.6	73.4	..	..	..	..	6.2	80.1
Argentina	2004	12.9	15.7	9.8	4.8	95.2	..	..	..	34.2	8.1	56.2
Armenia		..	..	..	..	..	..	..	..	..	..	..
Australia		..	..	..	..	..	..	..	..	..	..	..
Austria		..	..	..	..	..	..	..	..	..	..	..
Azerbaijan	2005	5.2	5.8	4.5	6.3	93.7	91.7	0.7	7.4	4.1	3.8	92.1
Bangladesh	2006	16.2	25.7	6.4	37.8	62.2	..	..	..	–	17.0	77.8
Belarus	2005	11.7	12.1	11.2	0.0	100.0	..	..	..	..	9.2	78.8
Belgium		..	..	..	..	..	..	..	..	..	..	..
Benin	2006	74.4	72.8	76.1	36.1	63.9	..	..	..	..	..	..
Bolivia	2008	32.1	33.0	31.1	5.0	95.0	73.2	6.1	19.2	1.4	8.7	89.9
Bosnia and Herzegovina	2006	10.6	11.7	9.5	0.1	99.9	..	..	..	..	1.6	92.1
Botswana		..	..	..	..	..	..	..	..	..	..	..
Brazil	2007	6.1	8.1	4.0	6.6	93.4	55.5	8.7	33.5	6.8	23.1	70.1
Bulgaria		..	..	..	..	..	..	..	..	..	..	..
Burkina Faso	2006	42.1	49.0	34.5	67.7	32.3	70.9	1.4	24.9	1.9	2.2	95.8
Burundi	2005	11.7	12.5	11.0	38.9	61.1	..	..	25.9	68.6	..	..
Cambodia[c]	2003–04	48.9	49.6	48.1	13.8	86.2	82.3	4.2	12.9	6.0	4.1	89.4
Cameroon	2007	43.6	43.7	43.5	21.9	78.1	88.8	3.2	8.0	2.5	0.8	96.1[d]
Canada		..	..	..	..	..	..	..	..	..	..	..
Central African Republic	2000	67.0	66.5	67.6	54.9	45.1	..	..	..	..	2.0	56.4
Chad	2004	60.4	64.4	56.2	49.1	50.9	..	..	..	..	1.8	77.2
Chile	2003	4.1	5.1	3.1	3.2	96.8	24.1	6.9	66.9	..	..	..
China		..	..	..	..	..	..	..	..	..	..	..
Hong Kong SAR, China		..	..	..	..	..	..	..	..	..	..	..
Colombia	2007	3.9	5.3	2.3	24.8	75.2	41.2	10.8	46.1	22.7	29.1	45.6
Congo, Dem. Rep.[c]	2000	39.8	39.9	39.8	35.7	64.3	..	..	..	..	6.6	76.7
Congo, Rep	2005	30.1	29.9	30.2	9.9	90.1	..	..	..	..	4.2	84.5
Costa Rica[c]	2004	5.7	8.1	3.5	44.6	55.4	40.3	9.5	49.0	15.8	57.7	26.6
Côte d'Ivoire	2006	45.7	47.7	43.6	46.8	53.2	..	..	..	..	2.4	88.0
Croatia		..	..	..	..	..	..	..	..	..	..	..
Cuba		..	..	..	..	..	..	..	..	..	..	..
Czech Republic		..	..	..	..	..	..	..	..	..	..	..
Denmark		..	..	..	..	..	..	..	..	..	..	..
Dominican Republic[c]	2005	5.8	9.0	2.7	6.2	93.8	18.5	9.8	57.5	23.8	19.5	56.2[d]
Ecuador	2006	14.3	16.9	11.6	21.0	79.0	69.3	6.3	22.8	3.6	15.2	81.2
Egypt, Arab Rep.	2005	7.9	11.5	4.3	21.0	79.0	..	..	..	11.4	87.4	..
El Salvador	2007	7.1	10.1	3.8	24.9	75.1	50.1	13.3	35.2	2.2	23.6	74.2
Eritrea		..	..	..	..	..	..	..	..	..	..	..
Estonia		..	..	..	..	..	..	..	..	..	..	..
Ethiopia	2005	56.0	64.3	47.1	69.4	30.6	94.6	1.5	3.7	1.7	2.4	95.8
Finland		..	..	..	..	..	..	..	..	..	..	..
France		..	..	..	..	..	..	..	..	..	..	..
Gabon		..	..	..	..	..	..	..	..	..	..	..
Gambia, The	2005	43.5	33.9	52.3	32.1	67.9	..	..	..	..	1.1	87.3
Georgia		..	..	..	..	..	..	..	..	..	..	..
Germany		..	..	..	..	..	..	..	..	..	..	..
Ghana	2006	48.9	49.9	48.0	18.7	81.3	..	..	..	..	6.1	76.2
Greece		..	..	..	..	..	..	..	..	..	..	..
Guatemala	2006	18.2	24.5	11.7	30.5	69.5	63.7	9.7	24.7	2.0	18.8	79.2
Guinea	1994	48.3	47.2	49.5	98.6	1.4	..	..	..	..	..	..
Guinea-Bissau	2006	50.5	52.8	48.1	36.4	63.6	..	..	..	..	4.0	87.7
Haiti	2005	33.4	37.3	29.6	17.7	82.3	..	..	..	..	1.8	79.4
Honduras	2004	6.8	10.4	3.2	48.6	51.4	63.4	8.3	24.7	2.7	19.9	73.8

Children at work 2.6

	Survey year	Children in employment					Employment by economic activity[a]			Status in employment[a]		
		% of children ages 7–14			% of children ages 7–14 in employment		% of children ages 7–14 in employment			% of children ages 7–14 in employment		
		Total	Male	Female	Work only	Study and work	Agriculture	Manufacturing	Services	Self-employed	Wage	Unpaid family
Hungary		..	..	..	..	..	..	..	..	..	..	..
India	2004–05	4.2	4.2	4.2	84.9	15.2	69.4	16.0	12.4	7.1	6.8	59.3
Indonesia	2000	8.9	8.8	9.1	24.9	75.1	..	..	..	..	17.8	75.8[d]
Iran, Islamic Rep.		..	..	..	..	..	..	..	..	..	..	..
Iraq	2006	14.7	17.9	11.3	32.4	67.6	..	..	..	..	7.0	85.3
Ireland		..	..	..	..	..	..	..	..	..	..	..
Israel		..	..	..	..	..	..	..	..	..	..	..
Italy		..	..	..	..	..	..	..	..	..	..	..
Jamaica	2005	9.8	11.3	8.3	2.5	97.5	..	..	..	..	16.3	74.9
Japan		..	..	..	..	..	..	..	..	..	..	..
Jordan		..	..	..	..	..	..	..	..	..	..	..
Kazakhstan	2006	3.6	4.4	2.8	1.6	98.4	..	..	..	–	4.0	75.0
Kenya	2000	37.7	40.1	35.2	14.1	85.9	..	..	..	..	..	..
Korea, Dem. Rep.		..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.		..	..	..	..	..	..	..	..	..	..	..
Kosovo		..	..	..	..	..	..	..	..	..	..	..
Kuwait		..	..	..	..	..	..	..	..	..	..	..
Kyrgyz Republic	2006	5.2	5.8	4.6	7.9	92.1	..	..	..	–	3.7	81.9
Lao PDR		..	..	..	..	..	..	..	..	..	..	..
Latvia		..	..	..	..	..	..	..	..	..	..	..
Lebanon		..	..	..	..	..	..	..	..	..	..	..
Lesotho	2002	2.6	4.0	1.3	74.4	25.6	58.0	0.0	10.4	3.7	36.6	59.7[e]
Liberia	2007	37.4	37.8	37.1	45.0	55.0	..	..	..	..	1.7	79.3
Libya		..	..	..	..	..	..	..	..	..	..	..
Lithuania		..	..	..	..	..	..	..	..	..	..	..
Macedonia, FYR	2005	11.8	14.8	8.6	2.8	97.2	..	..	..	..	3.9	89.5
Madagascar	2007	26.1	28.0	24.1	40.6	59.4	86.9	2.5	8.6	0.0	10.4	89.6
Malawi	2006	40.3	41.3	39.4	10.5	89.5	..	..	..	..	6.7	75.5
Malaysia		..	..	..	..	..	..	..	..	..	..	..
Mali	2006	49.5	55.0	44.1	59.5	40.5	..	..	..	..	1.6	80.4
Mauritania		..	..	..	..	..	..	..	..	..	..	..
Mauritius		..	..	..	..	..	..	..	..	..	..	..
Mexico	2007	8.3	10.9	5.6	17.2	82.8	36.7	10.8	48.5	3.4	33.7	62.9
Moldova	2000	33.5	34.1	32.8	3.8	96.2	..	..	..	..	2.9	82.0
Mongolia	2006–07	10.1	11.4	8.6	16.4	83.6	91.3	0.3	6.3	5.4	0.2	94.5
Morocco	1998–99	13.2	13.5	12.8	93.2	6.8	60.6	8.3	10.1	2.1	10.0	81.7
Mozambique[c]	1996	1.8	1.9	1.7	100.0	0.0	..	..	..	..	..	..
Myanmar		..	..	..	..	..	..	..	..	..	..	..
Namibia	1999	15.4	16.2	14.7	9.5	90.5	91.5	0.4	8.0	0.1	4.5	95.0
Nepal	1999	47.2	42.2	52.4	35.6	64.4	87.0	1.4	11.1	4.2	3.3	92.4
Netherlands		..	..	..	..	..	..	..	..	..	..	..
New Zealand		..	..	..	..	..	..	..	..	..	..	..
Nicaragua	2005	10.1	16.2	3.9	30.8	69.2	70.5	9.7	19.3	1.2	13.8	85.0[e]
Niger	2006	47.1	49.2	45.0	66.5	33.5	..	..	..	4.8	74.5	..
Nigeria		..	..	..	..	..	..	..	..	..	..	..
Norway		..	..	..	..	..	..	..	..	..	..	..
Oman		..	..	..	..	..	..	..	..	..	..	..
Pakistan		..	..	..	..	..	..	..	..	..	..	..
Panama	2008	8.9	12.1	5.4	14.6	85.4	73.3	2.9	22.9	12.6	11.3	76.1[d]
Papua New Guinea		..	..	..	..	..	..	..	..	..	..	..
Paraguay[c]	2005	15.3	22.6	7.7	24.2	75.7	60.8	6.2	32.1	9.3	24.8	65.8
Peru	2007	42.2	44.8	39.4	4.0	96.0	62.6	5.0	31.2	3.9	6.1	90.0
Philippines	2001	13.3	16.3	10.0	14.8	85.2	64.3	4.1	30.6	4.1	22.8	73.1
Poland		..	..	..	..	..	..	..	..	..	..	..
Portugal	2001	3.6	4.6	2.6	3.6	96.4	48.5	11.2	33.3	..	..	..
Puerto Rico		..	..	..	..	..	..	..	..	..	..	..
Qatar		..	..	..	..	..	..	..	..	..	..	..

2.6 Children at work

	Survey year	Children in employment					Employment by economic activity[a]			Status in employment[a]		
		% of children ages 7–14			% of children ages 7–14 in employment		% of children ages 7–14 in employment			% of children ages 7–14 in employment		
		Total	Male	Female	Work only	Study and work	Agriculture	Manufacturing	Services	Self-employed	Wage	Unpaid family
Romania	2000	1.4	1.7	1.1	20.7	79.3	97.1	0.0	2.3	4.5	92.9[d]	..
Russian Federation		..	..	..	..	..	..	..	..	..	..	..
Rwanda	2008	7.5	8.0	7.0	18.5	81.5	80.8	0.6	9.4	14.9	12.8	72.4
Saudi Arabia		..	..	..	..	..	..	..	..	..	..	..
Senegal	2005	18.5	24.4	12.6	61.9	38.1	79.1	5.0	14.0	6.3	4.4	84.1
Serbia	2005	6.9	7.2	6.6	2.1	97.9	..	..	..	..	5.2	89.4
Sierra Leone	2005	62.7	63.6	61.8	29.9	70.1	..	..	..	..	1.0	71.1
Singapore		..	..	..	..	..	..	..	..	..	..	..
Slovak Republic		..	..	..	..	..	..	..	..	..	..	..
Slovenia		..	..	..	..	..	..	..	..	..	..	..
Somalia	2006	43.5	45.5	41.5	53.5	46.5	..	..	..	..	1.6	94.8
South Africa	1999	27.7	29.0	26.4	5.1	94.9	..	..	..	7.1	7.1	85.8
Spain		..	..	..	..	..	..	..	..	..	..	..
Sri Lanka	1999	17.0	20.4	13.4	5.4	94.6	71.2	13.1	15.0	2.9	8.3	88.0
Sudan[f]	2000	19.1	21.5	16.8	55.9	44.1	..	..	..	..	7.3	81.3
Swaziland	2000	11.2	11.4	10.9	14.0	86.0	..	..	..	..	10.4	85.9
Sweden		..	..	..	..	..	..	..	..	..	..	..
Switzerland		..	..	..	..	..	..	..	..	..	..	..
Syrian Arab Republic	2006	6.6	8.8	4.3	34.6	65.4	..	..	..	..	21.5	68.8
Tajikistan	2005	8.9	8.7	9.1	9.0	91.0	..	..	..	..	24.2	71.3
Tanzania	2006	31.1	35.0	27.1	28.2	71.8	85.3	0.7	14.0	56.3[g]	0.9	42.8
Thailand	2005	15.1	15.7	14.4	4.2	95.8	..	..	..	..	13.5	80.0
Timor-Leste[c]	2001	7.6	7.1	8.1	26.8	73.2	91.8	0.0	8.2	28.0	0.0	72.0
Togo	2006	38.7	39.8	37.4	29.8	70.2	82.9	1.3	15.1	5.0	1.6	93.4
Trinidad and Tobago	2000	3.9	5.2	2.8	12.8	87.2	..	..	..	..	29.8	64.9
Tunisia		..	..	..	..	..	..	..	..	..	..	..
Turkey[h]	2006	2.6	3.3	1.8	38.8	61.2	57.1	14.3	20.9	2.1	34.1	63.8
Turkmenistan		..	..	..	..	..	..	..	..	..	..	..
Uganda	2005–06	38.2	39.8	36.5	7.7	92.3	95.5	1.4	3.0	1.4	1.5	97.1
Ukraine	2005	17.3	18.0	16.6	0.1	99.9	..	..	..	..	3.1	79.3
United Arab Emirates		..	..	..	..	..	..	..	..	..	..	..
United Kingdom		..	..	..	..	..	..	..	..	..	..	..
United States		..	..	..	..	..	..	..	..	..	..	..
Uruguay		..	..	..	..	..	..	..	..	..	..	..
Uzbekistan		..	..	..	..	..	..	..	..	..	..	..
Venezuela, RB[c]	2006	5.1	6.9	3.3	19.8	80.2	32.3	7.2	55.7	31.6	33.1	35.3
Vietnam	2006	21.3	21.0	21.6	11.9	88.1	..	..	..	..	5.9	91.2
West Bank and Gaza		..	..	..	..	..	..	..	..	..	..	..
Yemen, Rep.	2006	18.3	20.7	15.9	30.9	69.1	..	..	..	..	6.1	86.1
Zambia	2005	47.9	48.9	46.8	25.9	74.1	95.9	0.6	3.5	2.6	0.7	96.5
Zimbabwe	1999	14.3	15.3	13.3	12.0	88.0	..	..	..	3.4	28.4	68.2

a. Shares 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. Refers to family workers, regardless of whether they are paid. e. Refers to unpaid workers, regardless of whether they are family workers. f. Covers northern Sudan only. g. Includes workers who are self-employed in the nonagricultural sector and workers who are working on their own or family farm or shamba. h. Covers children ages 6–14.

Children at work 2.6

About the data

The data in the table refer to children's work in the sense of "economic activity"—that is, children in employment, a broader concept than child labor (see ILO 2009a for details on this distinction).

In line with the definition of economic activity adopted by the 13th International Conference of Labour Statisticians, the threshold for classifying a person as employed is to have been engaged at least one hour in any activity during the reference period relating to the production of goods and services set by the 1993 UN System of National Accounts. Children seeking work are thus excluded. Economic activity covers all market production and certain nonmarket production, including production of goods for own use. It excludes unpaid household services (commonly called "household chores")—that is, the production of domestic and personal services by household members for own-household consumption.

Data are from household surveys conducted by the International Labor Organization (ILO), the United Nations Children's Fund (UNICEF), the World Bank, and national statistical offices. The surveys yield data on education, employment, health, expenditure, and consumption indicators related to children's work.

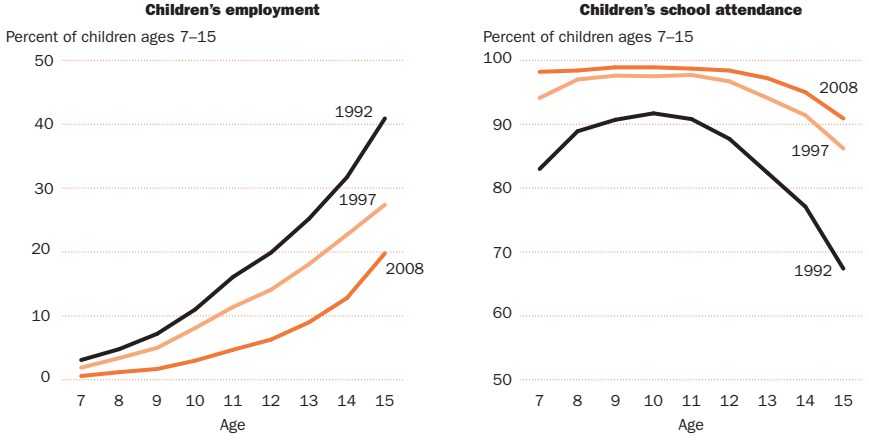
Household survey data generally include information on work type—for example, whether a child is working for payment in cash or in kind or is involved in unpaid work, working for someone who is not a member of the household, or involved in any type of family work (on the farm or in a business). Country surveys define the ages for child labor as 5–17. 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 in survey questionnaires, significant differences remain in the survey instruments that collect data on children in employment and in the sampling design underlying the surveys. Differences exist not only across different household surveys in the same country but also across the same type of survey carried out in different countries, so estimates of working children are not fully comparable across countries.

The table aggregates the distribution of children in employment by the industrial categories of the International Standard Industrial Classification (ISIC): agriculture, manufacturing, 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. Both ISIC revision 2 and revision 3 are used, depending on the country's codification for describing economic activity. This does not affect the definition of the groups in the table.

The table also aggregates the distribution of children in employment by status in employment, based on the International Classification of Status in Employment (1993), which shows the distribution in employment by three major categories: self-employed workers, wage workers (also known as employees), and unpaid family workers. A residual category—which includes those not classifiable by status—is not presented.

Brazil has rapidly reduced children's employment and raised school attendance **2.6a**



Source: Understanding Children's Work project calculations based on Brazilian Pesquisa Nacional por Amostra de Domicílios Surveys.

Definitions

• **Survey year** is the year in which the underlying data were collected. • **Children in employment** are children involved in any economic activity for at least one hour in the reference week of the survey. • **Work only** refers to children who are employed and not attending school. • **Study and work** refer to children attending school in combination with employment. • **Employment by economic activity** is the distribution of children in employment 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. • **Self-employed workers** are people whose remuneration depends directly on the profits derived from the goods and services they produce, with or without other employees, and include employers, own-account workers, and members of producers cooperatives. • **Wage workers** (also known as employees) are people who hold explicit (written or oral) or implicit employment contracts that provide basic remuneration that does not depend directly on the revenue of the unit for which they work. • **Unpaid family workers** are people who work without pay in a market-oriented establishment operated by a related person living in the same household.

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/ipec/simpoc/, www.childinfo.org, and www.worldbank.org/lsms. Detailed country statistics can be found at www.ucw-project.org.

2.7 Poverty rates at national poverty lines

	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	2007	45.0	27.0	42.0		..	..	..		..	..	..
Albania	2002	29.6	19.5	25.4	2005	24.2	11.2	18.5	2005	5.3	2.3	4.0
Algeria	1988	16.6	7.3	12.2	1995	30.3	14.7	22.6	1995	4.5	1.8	3.2
Argentina[a]	2001	..	35.9	..		..	..	..		..	..	..
Armenia	1998–99	50.8	58.3	55.1	2001	48.7	51.9	50.9	2001	..	..	15.1
Azerbaijan	1995	..	..	68.1	2001	42.0	55.0	49.6	2001	..	..	15.5
Bangladesh	2000	52.3	35.1	48.9	2005	43.8	28.4	40.0	2005	9.8	6.5	9.0
Belarus	2002	..	..	30.5	2004	..	..	17.4		..	..	..
Benin	1999	33.0	23.3	29.0	2003	46.0	29.0	39.0	2003	14.0	8.0	12.0
Bolivia	2000	75.0	27.9	45.2	2007	63.9	23.7	37.7		..	..	..
Bosnia and Herzegovina	2001–02	19.9	13.8	19.5		..	..	..	2001–02	4.9	2.8	4.6
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	2004	39.2		34.7	2007	34.7		30.1	2007	8.3	..	7.2
Cameroon[a]	2001	52.1	17.9	40.2	2007	55.0	12.2	39.9	2007	17.5	2.8	13.2
Chad	1995–96	48.6	..	43.4		..	..	..	1995–96	26.3	..	27.5
Chile[a]	2003	..	..	18.7	2006	..	..	13.7		..	..	..
China[a]	2000	3.5	..	..	2005	2.5	..	..		..	..	..
Colombia	2002	70.1	50.4	55.7	2006	62.1	39.1	45.1		..	..	..
Congo, Dem. Rep.	2004–05	75.7	61.5	71.3		..	..	..	2004–05	34.9	26.2	32.2
Congo, Rep.	2005	49.2		42.3		..	..	..		..	..	..
Costa Rica	1989	35.8	26.2	31.7	2004	28.3	20.8	23.9	2004	10.8	7.0	8.6
Croatia	2002	..	..	11.2	2004	..	..	11.1		..	..	..
Dominican Republic[a]	2000	50.8	28.9	36.5	2007	54.1	45.4	48.5		..	..	..
Ecuador[a]	1999	75.1	36.4	52.2	2006	61.5	24.9	38.3		..	..	..
Egypt, Arab Rep.	1995–96	23.3	22.5	22.9	1999–2000	..	..	16.7	1999–2000	..	..	3.0
El Salvador[a]	2000	53.7[b]	29.9[b]	38.8[b]	2006	36.0[b]	27.8[b]	30.7[b]		..	..	..
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
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		..	..	..
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
Guatemala	2000	..	..	56.2	2006	72.0	28.0	51.0		..	..	..
Guinea	1994	..	..	40.0		..	..	..		..	..	..
Guinea-Bissau	2002	..	52.6	65.7		..	..	..	2000	..	17.5	25.7
Haiti	1987	..	..	65.0	1995	66.0	..	..		..	..	..
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	19.8	13.6	17.6	2004	20.1	12.1	16.7	2004	..	..	2.9
Jamaica	1995	37.0	18.7	27.5	2000	25.1	12.8	18.7		..	..	..
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	1997	53.0	49.0	52.0	2005/06	49.7	34.4	46.6	2005/06	14.1	2.5	16.6
Kosovo	2003–04	44.2	42.1	43.5	2005–06	49.2	37.4	45.1	2005–06	..	..	13.3
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	..	..	33.5	2002–03	..	..	8.0
Latvia	2002	11.6	..	7.5	2004	12.7	..	5.9	2004	..	..	1.2

Poverty rates at national poverty lines

2.7

	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 %
Lesotho[a]	1994/95	68.9	36.7	66.6	2002/03	60.5	41.5	56.3		..	..	..
Macedonia, FYR	2002	25.3	..	21.4	2003	22.3	..	21.7	2003	6.5	..	6.7
Madagascar[a]	1999	76.7	52.1	71.3	2005	53.5	52.0	68.7	2005	28.9	19.3	26.8
Malawi	1997–98	66.5	54.9	65.3	2004–05	55.9	25.4	52.4	2004–05	8.6	2.8	8.0
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	1992	..	..	10.6		..	..	..		..	..	..
Mexico	2002	65.4	41.5	50.6	2004	56.9	41.0	47.0		..	..	..
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	54.1	51.6	55.2	2002–03	19.9	18.9	20.4
Myanmar	2004–05	36.0	22.0	32.0		..	..	..	2004–05	7.0	4.0	7.0
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
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		..	..	..
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	2003	..	..	36.8	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[c]	1990	28.5	19.7	20.5		..	..	..	1990	10.5	5.6	6.0
Peru	2003	75.7	39.5	52.2	2004	72.5	40.3	51.6	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		..	..	..
Romania	1995	..	..	25.4	2002	..	..	28.9	2002	..	..	7.6
Russian Federation	1998	..	..	31.4	2002	..	..	19.6	2002	..	..	5.1
Rwanda[a]	1999–2000	65.7	14.3	60.3	2005–06	62.5		56.9		..	..	..
Senegal	1992	40.4	23.7	33.4		..	..	..	1992	16.4	3.1	13.9
Sierra Leone	1989	..	..	82.8	2003–04	79.0	56.4	70.2	2003–04	34.0	..	29.0
Slovak Republic	2004	..	..	16.8		..	..	..	2004	..	..	5.5
South Africa[a]	2000	..	..	38.0	2008	..	..	22.0	2008	..	..	6.0
Sri Lanka	1995–96	27.0	15.0	25.0	2002	7.9	24.7	22.7	2002	5.6	1.7	5.1
Swaziland	2000–01	75.0	49.0	69.2		..	..	..	2000–01	..	..	32.9
Tajikistan	2003	73.8	68.8	72.4	2007	55.0	49.4	53.5	2003	12.4	12.5	12.4
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
Uganda[a]	2002–03	42.7	14.4	38.8	2005–06	34.2	13.7	31.1	2005–06	9.7	3.5	8.7
Ukraine	2000	34.9	..	31.5	2003	28.4	..	19.5		..	..	..
Uruguay	1994	..	20.2	..	1998	..	24.7	..	1998	..	8.6	..
Uzbekistan	2000–01	33.6	27.8	31.5	2003	29.8	22.6	27.2		..	..	..
Venezuela, RB	1989	..	..	31.3	1997–99	..	..	52.0	1997–99	..	..	24.0
Vietnam	1998	45.5	9.2	37.4	2002	35.6	6.6	28.9	2002	8.7	1.3	6.9
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. Data are from national sources. b. Data refer to share of households rather than share of population. c. Covers Asunción metropolitan area only.

2.7 Poverty rates at national poverty lines

About the data

The World Bank periodically prepares poverty assessments of 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 report the extent and causes of poverty and propose strategies to reduce it. Since 1992 the World Bank has conducted about 200 poverty assessments, which are the main source of the poverty estimates presented in the table. Countries report similar assessments as part of their Poverty Reduction Strategies.

The poverty assessments are the best available source of information on poverty estimates using national poverty lines. They often include separate assessments of urban and rural poverty. Data are derived from nationally representative household surveys conducted by national statistical offices or by private agencies under the supervision of government or international agencies and obtained from government statistical offices and World Bank Group country departments.

Some poverty assessments analyze the current poverty status of a country using the latest available household survey data, while others use survey data for several years to analyze poverty trends. Thus, poverty estimates for more than one year might be derived from a single poverty assessment. A poverty assessment might not use all available household surveys, or survey data might become available at a later date even though data were collected before the poverty assessment date. Thus poverty assessments may not fully represent all household survey data.

Many developing countries, particularly middle-income countries, have their own poverty monitoring programs with well documented estimation methodologies. The programs regularly publish what the countries consider official poverty estimates. Such estimates are reviewed by World Bank researchers and included in the table.

Data availability

The number of data sets within two years of any given year rose dramatically, from 13 between 1978 and 1982 to 158 between 2001 and 2006. Data coverage is improving in all regions, but the Middle East and North Africa and Sub-Saharan Africa continue to lag. The database, maintained by a team in the World Bank's Development Research Group, is updated annually as new survey data become available, and a major reassessment of progress against poverty is made about every three years. A complete overview of data availability by year and country is available at http://iresearch.worldbank.org/povcalnet/.

Data quality

Poverty assessments are based on surveys fielded to collect, among other things, information on income or consumption from a sample of households. To be useful for poverty estimates, surveys must be nationally representative and include sufficient information to compute a comprehensive estimate of total household consumption or income (including consumption or income from own production), from which it is possible to construct a correctly weighted distribution of consumption or income per person. There remain many potential problems with household survey data, including selective nonresponse and differences in the menu of consumption items presented and the length of the period over which respondents must recall their expenditures. These issues are discussed in *About the data* for table 2.8.

National poverty lines

National poverty lines are used to make estimates of poverty consistent with the country's specific economic and social circumstances and are not intended for international comparisons of poverty rates. The setting of national poverty lines reflects local perceptions of the level of consumption or income needed not to be poor. The perceived boundary between poor and not poor rises with the average income of a country and so does not provide a uniform measure for comparing poverty rates across countries. Nevertheless, national poverty estimates are clearly the appropriate measure for setting national policies for poverty reduction and for monitoring their results.

Almost all the national poverty lines use a food bundle based on prevailing diets that attains predetermined nutritional requirements for good health and normal activity levels, plus an allowance for nonfood spending. The rise in poverty lines with average income is driven more by the gradient in the nonfood component of the poverty lines than in the food component, although there is still an appreciable share attributable to the gradient in food poverty lines. While nutritional requirements tend to be fairly similar even across countries at different levels of economic development, richer countries tend to use a more expensive food bundle—more meat and vegetables, less starchy staples, and more processed foods generally—for attaining the same nutritional needs.

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, based on data from World Bank's country poverty assessments and country Poverty Reduction Strategies. Summaries of poverty assessments are available at www.worldbank.org/povertynet, by selecting "Poverty assessments" from the left side bar. Poverty assessment documents are available at www-wds.worldbank.org, under "By topic," "Poverty reduction," "Poverty assessment." Further discussion of how national poverty lines vary across countries can be found in Ravallion, Chen, and Sangraula's "Dollar a Day Revisited" (2008).

Poverty rates at international poverty lines

2.8

	International poverty line in local currency		International poverty line									
	$1.25 a day 2005	$2 a day 2005	Survey year	Population below $1.25 a day %	Poverty gap at $1.25 a day %	Population below $2 a day %	Poverty gap at $2 a day %	Survey year	Population below $1.25 a day %	Poverty gap at $1.25 a day %	Population below $2 a day %	Poverty gap at $2 a day %
Albania	75.51	120.82	2002[a]	<2	<0.5	8.7	1.4	2005[a]	<2	<0.5	7.8	1.4
Algeria	48.42[b]	77.48[b]	1988[a]	6.6	1.8	23.8	6.6	1995[a]	6.8	1.4	23.6	6.4
Angola	88.13	141.01	2000[a]	54.3	29.9	70.2	42.3		..	..	..	..
Argentina	1.69	2.71	2005[c,d]	4.5	1.0	11.3	3.6	2006[c,d]	3.4	1.2	7.3	2.7
Armenia	245.24	392.38	2003[a]	10.6	1.9	43.4	11.3	2007[a]	3.7	0.7	21.0	4.6
Azerbaijan	2,170.94	3,473.51	2001[a]	6.3	1.1	27.1	6.8	2005[a]	<2	<0.5	<2	<0.5
Bangladesh	31.87	50.99	2000[a]	57.8[e]	17.3[e]	85.4[e]	38.7[e]	2005[a]	49.6[e]	13.1[e]	81.3[e]	33.8[e]
Belarus	949.53	1,519.25	2005[a]	<2	<0.5	<2	<0.5	2007[a]	<2	<0.5	<2	<0.5
Belize	1.83	2.93	1995[a]	13.4	5.4	23.1	10.3		..	..	..	..
Benin	343.99	550.38	2003[a]	47.3	15.7	75.3	33.5		..	..	..	..
Bhutan	23.08	36.93	2003[a]	26.2	7.0	49.5	18.8		..	..	..	..
Bolivia	3.21	5.14	2005[b]	19.6	9.7	30.3	15.5	2007[b]	11.9	5.6	21.9	9.5
Bosnia and Herzegovina	1.09	1.74	2004[a]	<2	<0.5	<2	<0.5	2007[a]	<2	<0.5	<2	<0.5
Botswana	4.23	6.77	1985–86[a]	35.6	13.8	54.7	25.8	1993–94[a]	31.2	11.0	49.4	22.3
Brazil	1.96	3.14	2005[d]	7.8	1.6	18.3	5.9	2007[d]	5.2	1.3	12.7	4.1
Bulgaria	0.92	1.47	2001[a]	2.6	<0.5	7.8	2.2	2003[a]	<2	<0.5	<2	0.9
Burkina Faso	303.02	484.83	1998[a]	70.0	30.2	87.6	49.1	2003[a]	56.5	20.3	81.2	39.2
Burundi	558.79	894.07	1998[a]	86.4	47.3	95.4	64.1	2006[a]	81.3	36.4	93.4	56.0
Cambodia	2,019.12	3,230.60	2004[a]	40.2	11.3	68.2	28.0	2007[a]	25.8	6.1	57.8	20.1
Cameroon	368.12	588.99	1996[a]	51.5	18.9	74.4	36.0	2001[a]	32.8	10.2	57.7	23.6
Cape Verde	97.72	156.35	2001[a]	20.6	5.9	40.2	14.9		..	..	..	..
Central African Republic	384.33	614.93	1993[a]	82.8	57.0	90.7	68.4	2003[a]	62.4	28.3	81.9	45.3
Chad	409.46	655.14	2002–03[a]	61.9	25.6	83.3	43.9		..	..	..	..
Chile	484.20	774.72	2003[d]	<2	<0.5	5.3	1.3	2006[d]	<2	<0.5	2.4	0.39
China	5.11[f]	8.17[f]	2002[a]	28.4[g]	8.7[g]	51.1[g]	20.6[g]	2005[a]	15.9[g]	4.0[g]	36.3[g]	12.2[g]
Colombia	1,489.68	2,383.48	2003[d]	15.4	6.1	26.3	10.9	2006[d]	16.0	5.7	27.9	11.9
Comoros	368.01	588.82	2004[a]	46.1	20.8	65.0	34.2		..	..	..	..
Congo, Dem. Rep.	395.29	632.46	2005–06[a]	59.2	25.3	79.5	42.4		..	..	..	..
Congo, Rep.	469.46	751.14	2005[a]	54.1	22.8	74.4	38.8		..	..	..	..
Costa Rica	348.70[b]	557.92[b]	2005[d]	2.4	<0.5	8.6	2.3	2007[d]	<2	<0.5	4.3	1.3
Croatia	5.58	8.92	2001[a]	<2	<0.5	<2	<0.5	2005[a]	<2	<0.5	<2	<0.5
Czech Republic	19.00	30.39	1993[d]	<2	<0.5	<2	<0.5	1996[d]	<2	<0.5	<2	<0.5
Côte d'Ivoire	407.26	651.62	1998[a]	24.1	6.7	49.1	18.1	2002[a]	23.3	6.8	46.8	17.6
Djibouti	134.76	215.61	1996[a]	4.8	1.6	15.1	4.5	2002[a]	18.8	5.3	41.2	14.6
Dominican Republic	25.50[b]	40.79[b]	2005[d]	5.0	0.9	15.1	4.3	2007[d]	4.4	1.3	12.3	3.9
Ecuador	0.63	1.00	2005[d]	9.8	3.2	20.4	7.6	2007[d]	4.7	1.2	12.8	4.0
Egypt, Arab Rep.	2.53	4.04	1999–00[a]	<2	<0.5	19.3	3.5	2004–05[a]	<2	<0.5	18.4	3.5
El Salvador	6.02[b]	9.62[b]	2005[d]	11.0	4.8	20.5	8.9	2007[d]	6.4	2.7	13.2	5.3
Estonia	11.04	17.66	2002[a]	<2	<0.5	2.5	0.6	2004[a]	<2	<0.5	<2	<0.5
Ethiopia	3.44	5.50	1999–00[a]	55.6	16.2	86.4	37.9	2005[a]	39.0	9.6	77.5	28.8
Gabon	554.69	887.50	2005[a]	4.8	0.9	19.6	5.0		..	..	..	..
Gambia, The	12.93	20.69	1998[a]	66.7	34.7	82.0	50.0	2003[a]	34.3	12.1	56.7	24.9
Georgia	0.98	1.57	2002[a]	15.1	4.7	34.2	12.2	2005[a]	13.4	4.4	30.4	10.9
Ghana	5,594.78	8,951.64	1998–99[a]	39.1	14.4	63.3	28.5	2006[a]	30.0	10.5	53.6	22.3
Guatemala	5.68[b]	9.08[b]	2002[d]	16.9	6.5	29.8	12.9	2006[d]	11.7	3.5	24.3	8.9
Guinea-Bissau	355.34	568.55	1993[a]	52.1	20.6	75.7	37.4	2002[a]	48.8	16.5	77.9	34.8
Guinea	1,849.46	2,959.13	1994[a]	36.8	11.5	63.8	26.4	2003[a]	70.1	32.2	87.2	50.2
Guyana	131.47[b]	210.35[b]	1993[d]	5.8	2.6	15.0	5.4	1998[d]	7.7	3.9	16.8	6.9
Haiti	24.21[b]	38.73[b]	2001[d]	54.9	28.2	72.1	41.8		..	..	..	..
Honduras	12.08[b]	19.32[b]	2005[d]	22.2	10.2	34.8	16.7	2006[d]	18.2	8.2	29.7	14.2
Hungary	171.90	275.03	2002[a]	<2	<0.5	<2	<0.5	2004[a]	<2	<0.5	<2	<0.5
India	19.50[h]	31.20[h]	1993–94[a]	49.4[g]	14.4[g]	81.7[g]	35.3[g]	2004–05[a]	41.6[g]	10.8[g]	75.6[g]	30.4[g]
Indonesia	5,241.03[h]	8,385.65[h]	2005[a]	21.4[g]	4.6[g]	53.8[g]	17.3[g]	2007[a]	29.4	7.1	60.0	21.8
Iran, Islamic Rep.	3,393.53	5,429.65	1998[a]	<2	<0.5	8.3	1.8	2005[a]	<2	<0.5	8.0	1.8
Jamaica	54.20[b]	86.72[b]	2002[a]	<2	<0.5	8.7	1.6	2004[a]	<2	<0.5	5.8	0.9
Jordan	0.62	0.99	2002–03[a]	<2	<0.5	11.0	2.1	2006[a]	<2	<0.5	3.5	0.6
Kazakhstan	81.21	129.93	2003[a]	3.1	<0.5	17.2	3.9	2007[a]	<2	<0.5	<2	<0.5

2.8 Poverty rates at international poverty lines

	International poverty line in local currency		International poverty line									
	$1.25 a day 2005	$2 a day 2005	Survey year	Population below $1.25 a day %	Poverty gap at $1.25 a day %	Population below $2 a day %	Poverty gap at $2 a day %	Survey year	Population below $1.25 a day %	Poverty gap at $1.25 a day %	Population below $2 a day %	Poverty gap at $2 a day %
Kenya	40.85	65.37	1997[a]	19.6	4.6	42.7	14.7	2005–06[a]	19.7	6.1	39.9	15.1
Kyrgyz Republic	16.25	26.00	2004[a]	21.8	4.4	51.9	16.8	2007[a]	3.4	<0.5	27.5	5.2
Lao PDR	4,677.02	7,483.24	1997–98	49.3[e]	14.9[e]	79.9[e]	34.4[e]	2002–03[a]	44.0[e]	12.1[e]	76.8[e]	31.0[e]
Latvia	0.43	0.69	2004[a]	<2	<0.5	<2	<0.5	2007[a]	<2	<0.5	<2	<0.5
Lesotho	4.28	6.85	1995[a]	47.6	26.7	61.1	37.3	2002–03[a]	43.4	20.8	62.2	33.0
Liberia	0.64	1.02	2007[a]	83.7	40.8	94.8	59.5		..	..	..	..
Lithuania	2.08	3.32	2002[a]	<2	<0.5	<2	<0.5	2004[a]	<2	<0.5	<2	<0.5
Macedonia, FYR	29.47	47.16	2003[a]	<2	<0.5	3.2	0.7	2006[a]	<2	<0.5	5.3	1.3
Madagascar	945.48	1,512.76	2001[a]	76.3	41.4	88.7	57.2	2005[a]	67.8	26.5	89.6	46.9
Malawi	71.15	113.84	1997–98[d]	83.1	46.0	93.5	62.3	2004–05[a,i]	73.9	32.3	90.4	51.8
Malaysia	2.64	4.23	1997[d]	<2	<0.5	6.8	1.3	2004[d]	<2	<0.5	7.8	1.4
Mali	362.10	579.36	2001[a]	61.2	25.8	82.0	43.6	2006[a]	51.4	18.8	77.1	36.5
Mauritania	157.08	251.33	1995–96[a]	23.4	7.1	48.3	17.8	2000[a]	21.2	5.7	44.1	15.9
Mexico	9.56	15.30	2006[a]	<2	<0.5	4.8	1.0	2008[d]	4.0	1.8	8.2	3.3
Moldova	6.03	9.65	2004[a]	8.1	1.7	28.9	7.9	2007[a]	2.4	0.5	11.5	2.7
Mongolia	653.12	1,044.99	2002[a]	15.5	3.6	38.8	12.3	2007–08[a]	2.2	0.4	13.6	2.9
Montenegro	0.62	1.00	2005[a]	<2	<0.5	5.7	1.1	2007[a]	<2	<0.5	<2	<0.5
Morocco	6.89	11.02	2000[a]	6.3	0.9	24.3	6.3	2007[a]	2.5	0.5	14.0	3.1
Mozambique	14,532.12	23,251.39	1996–97[a]	81.3	42.0	92.9	59.4	2002–03[a]	74.7	35.4	90.0	53.5
Namibia	6.33	10.13	1993[d]	49.1	24.6	62.2	36.5		..	..	..	..
Nepal	33.08	52.93	1995–96[a]	68.4	26.7	88.1	46.8	2003–04[a]	55.1	19.7	77.6	37.8
Nicaragua	9.12[b]	14.59[b]	2001[d]	19.4	6.7	37.5	14.4	2005[d]	15.8	5.2	31.8	12.3
Niger	334.16	534.66	1994[a]	78.2	38.6	91.5	56.5	2005[a]	65.9	28.1	85.6	46.6
Nigeria	98.23	157.17	1996–97[a]	68.5	32.1	86.4	49.7	2003–04[a]	64.4	29.6	83.9	46.9
Pakistan	25.89	41.42	2001–02[a]	35.9	7.9	73.9	26.4	2004–05[a]	22.6	4.4	60.3	18.7
Panama	0.76[b]	1.22[b]	2004[d]	9.2	2.7	18.0	6.8	2006[d]	9.5	3.1	17.8	7.1
Papua New Guinea	2.11[b]	3.37[b]	1996[a]	35.8	12.3	57.4	25.5		..	..	..	..
Paraguay	2,659.74	4,255.59	2005[d]	9.3	3.4	18.4	7.3	2007[d]	6.5	2.7	14.2	5.5
Peru	2.07	3.31	2005[d]	8.2	2.0	19.4	6.3	2007[d]	7.7	2.3	17.8	6.2
Philippines	30.22	48.36	2003[a]	22.0	5.5	43.8	16.0	2006[a]	22.6	5.5	45.0	16.3
Poland	2.69	4.31	2002[a]	<2	<0.5	<2	<0.5	2005[a]	<2	<0.5	<2	<0.5
Romania	2.15	3.44	2002[a]	2.9	0.8	13.0	3.2	2007[a]	<2	<0.5	4.1	0.1
Russian Federation	16.74	26.78	2002[a]	<2	<0.5	3.7	0.6	2007[a]	<2	<0.5	<2	<0.5
Rwanda	295.93	473.49	1984–85[a]	63.3	19.7	88.4	41.8	2000[a]	76.6	38.2	90.3	55.7
São Tomé and Príncipe	7,949.55	12,725.55	2000–01[a]	28.4	8.4	56.6	21.6		..	..	..	..
Senegal	372.81	596.49	2001[a]	44.2	14.3	71.3	31.2	2005[a]	33.5	10.8	60.3	24.6
Serbia	42.86	68.62	2003[a]	<2	<0.5	<2	<0.5	2008[a]	<2	<0.5	<2	<0.5
Seychelles	6.53	10.46	1999–00[a]	<2	<0.5	<2	<0.5	2006–07[a]	<2	<0.5	<2	<0.5
Sierra Leone	1,745.26	2,792.42	1989–90[a]	62.8	44.8	75.0	54.0	2003[a]	53.4	20.3	76.1	37.5
Slovak Republic	23.53	37.66	1992[d]	<2	<0.5	<2	<0.5	1996[d]	<2	<0.5	<2	<0.5
Slovenia	198.25	317.20	2002[a]	<2	<0.5	<2	<0.5	2004[a]	<2	<0.5	<2	<0.5
South Africa	5.71	9.14	1995[a]	21.4	5.2	39.9	15.0	2000[a]	26.2	8.2	42.9	18.3
Sri Lanka	50.05	80.08	1995–96[a]	16.3	3.0	46.7	13.7	2002[a]	14.0	2.6	39.7	11.8
St. Lucia	2.37[b]	3.80[b]	1995[d]	20.9	7.2	40.6	15.5		..	..	..	..
Suriname	2.29[b]	3.67[b]	1999[d]	15.5	5.9	27.2	11.7		..	..	..	..
Swaziland	4.66	7.45	1994–95[a]	78.6	47.7	89.3	61.6	2000–01[a]	62.9	29.4	81.0	45.8
Tajikistan	1.16	1.85	2003[a]	36.3	10.3	68.8	26.7	2004[a]	21.5	5.1	50.8	16.8
Tanzania	603.06	964.90	1991–92[a]	72.6	29.7	91.3	50.1	2000–01[a]	88.5	46.8	96.6	64.4
Thailand	21.83	34.93	2002[a]	<2	<0.5	15.1	2.8	2004[a]	<2	<0.5	11.5	2.0
Timor-Leste	0.61[b]	0.98[b]	2001[a]	52.9	19.1	77.5	37.0	2007[a]	37.2	8.7	72.8	27.0
Togo	352.82	564.51	2006[a]	38.7	11.4	69.3	27.9		..	..	..	..
Trinidad and Tobago	5.77[b]	9.23[b]	1988[d]	<2	<0.5	8.6	1.9	1992[d]	4.2	1.1	13.5	3.9
Tunisia	0.87	1.39	1995[a]	6.5	1.3	20.4	5.8	2000[a]	2.6	<0.5	12.8	3.0
Turkey	1.25	2.00	2002[a]	2.0	<0.5	9.6	2.3	2006[a]	2.6	<0.5	8.2	2.4
Turkmenistan	5,961.06[b]	9,537.69[b]	1993[d]	63.5	25.8	85.7	44.8	1998[a]	24.8	7.0	49.6	18.4
Uganda	930.77	1,489.24	2002[a]	57.4	22.7	79.8	40.6	2005[a]	51.5	19.1	75.6	36.4

Poverty rates at international poverty lines 2.8

	International poverty line in local currency		International poverty line									
	$1.25 a day 2005	$2 a day 2005	Survey year	Population below $1.25 a day %	Poverty gap at $1.25 a day %	Population below $2 a day %	Poverty gap at $2 a day %	Survey year	Population below $1.25 a day %	Poverty gap at $1.25 a day %	Population below $2 a day %	Poverty gap at $2 a day %
Ukraine	2.14	3.42	2005[a]	<2	<0.5	<2	<0.5	2008[a]	<2	<0.5	<2	<0.5
Uruguay	19.14	30.62	2005[c,d]	<2	<0.5	4.5	0.7	2007[d]	<2	<0.5	4.3	1.0
Uzbekistan	470.09[b]	752.14[b]		..	..	..	..		..	..	..	..
Venezuela, RB	1,563.90	2,502.24	2003[d]	18.4	8.8	31.7	14.6	2006[d]	3.5	1.2	10.2	3.2
Vietnam	7,399.87	11,839.79	2004[a]	24.2	5.1	52.5	17.9	2006[a]	21.5	4.6	48.4	16.2
Yemen, Rep.	113.83	182.12	1998[a]	12.9	3.0	36.3	11.1	2005[a]	17.5	4.2	46.6	14.8
Zambia	3,537.91	5,660.65	2002–03[a]	64.6	27.1	85.1	45.8	2004–05[a]	64.3	32.8	81.5	48.3

a. Expenditure based. b. In purchasing power parity (PPP) dollars imputed using regression. c. Covers urban areas only. d. Income based. e. Adjusted by spatial consumer price index information. f. PPP conversion factor based on urban prices. g. Weighted average of urban and rural estimates. h. Weighted average of urban and rural poverty lines. i. Due to change in survey design, the most recent survey is not strictly comparable with the previous one.

Regional poverty estimates and progress toward the Millennium Development Goals

Global poverty measured at the $1.25 a day poverty line has been decreasing since the 1980s. The share of population living on less than $1.25 a day fell 10 percentage points, to 42 percent, in 1990 and then fell nearly 17 percentage points between 1990 and 2005. The number of people living in extreme poverty fell from 1.9 billion in 1981 to 1.8 billion in 1990 to about 1.4 billion in 2005 (figure 2.8a). This substantial reduction in extreme poverty over the past quarter century, however, disguises large regional differences.

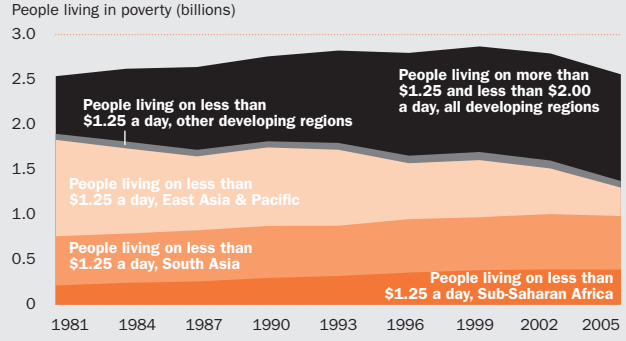
The greatest reduction in poverty occurred in East Asia and Pacific, where the poverty rate declined from 78 percent in 1981 to 17 percent in 2005 and the number of people living on less than $1.25 a day dropped more than 750 million (figure 2.8b). Much of this decline was in China, where poverty fell from 84 percent to 16 percent, leaving 620 million fewer people in poverty.

Over the same period the poverty rate in South Asia fell from 59 percent to 40 percent (table 2.8c). In contrast, the poverty rate fell only slightly in Sub-Saharan Africa—from less than 54 percent in 1981 to more than 58 percent in 1999 then down to 51 percent in 2005. But the number of people living below the poverty line has nearly doubled.

Only East Asia and Pacific is consistently on track to meet the Millennium Development Goal target of reducing 1990 poverty rates by half by 2015. A slight acceleration over historical growth rates could lift Latin America and the Caribbean and South Asia to the target. However, the recent slowdown in the global economy may leave these regions and many countries short of the target. Preliminary estimates for 2009 suggest that lower economic growth rates will likely leave 50 million more people below the $1.25 a day poverty line than had been expected before the crisis.

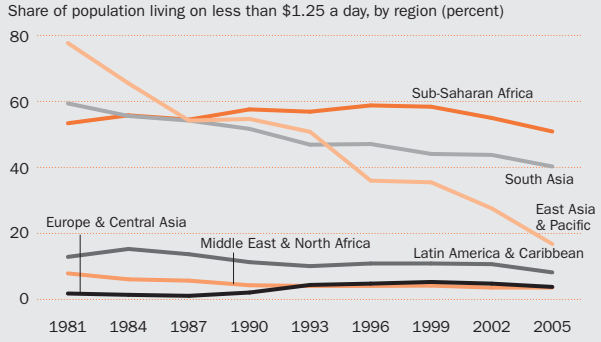
Most of the people who have escaped extreme poverty remain very poor by the standards of middle-income economies. The median poverty line for developing countries in 2005 was $2.00 a day. The poverty rate for all developing countries measured at this line fell from nearly 70 percent in 1981 to 47 percent in 2005, but the number of people living on less than $2.00 a day has remained nearly constant at 2.5 billion. The largest decrease, both in number and proportion, occurred in East Asia and Pacific, led by China. Elsewhere, the number of people living on less than $2.00 a day increased, and the number of people living between $1.25 and $2.00 a day nearly doubled, to 1.2 billion. In 2009 the global growth deceleration will likely leave 57 million more people below the $2 a day poverty line.

While the number of people living on less than $1.25 a day has fallen, the number living on $1.25–$2.00 a day has increased 2.8a



Source: PovcalNet, World Bank.

Poverty rates have begun to fall 2.8b



Source: PovcalNet, World Bank.

2.8 Poverty rates at international poverty lines

Regional poverty estimates 2.8c

Region or country	1981	1984	1987	1990	1993	1996	1999	2002	2005
People living on less than 2005 PPP $1.25 a day (millions)									
East Asia & Pacific	1,072	947	822	873	845	622	635	507	316
China	835	720	586	683	633	443	447	363	208
Europe & Central Asia	7	6	5	9	20	22	24	22	17
Latin America & Caribbean	47	59	57	50	47	53	55	57	45
Middle East & North Africa	14	12	12	10	10	11	12	10	11
South Asia	548	548	569	579	559	594	589	616	596
India	420	416	428	436	444	442	447	460	456
Sub-Saharan Africa	211	242	258	297	317	356	383	390	388
Total	1,900	1,814	1,723	1,818	1,799	1,658	1,698	1,601	1,374
Share of people living on less than 2005 PPP $1.25 a day (percent)									
East Asia & Pacific	77.7	65.5	54.2	54.7	50.8	36.0	35.5	27.6	16.8
China	84.0	69.4	54.0	60.2	53.7	36.4	35.6	28.4	15.9
Europe & Central Asia	1.7	1.3	1.1	2.0	4.3	4.6	5.1	4.6	3.7
Latin America & Caribbean	12.9	15.3	13.7	11.3	10.1	10.9	10.9	10.7	8.2
Middle East & North Africa	7.9	6.1	5.7	4.3	4.1	4.1	4.2	3.6	3.6
South Asia	59.4	55.6	54.2	51.7	46.9	47.1	44.1	43.8	40.3
India	59.8	55.5	53.6	51.3	49.4	46.6	44.8	43.9	41.6
Sub-Saharan Africa	53.4	55.8	54.5	57.6	56.9	58.8	58.4	55.0	50.9
Total	51.9	46.7	41.9	41.7	39.2	34.5	33.7	30.5	25.2
People living on less than 2005 PPP $2.00 a day (millions)									
East Asia & Pacific	1,278	1,280	1,238	1,274	1,262	1,108	1,105	954	729
China	972	963	907	961	926	792	770	655	474
Europe & Central Asia	35	28	25	32	49	56	68	57	42
Latin America & Caribbean	90	110	103	96	96	107	111	114	94
Middle East & North Africa	46	44	47	44	48	52	52	51	51
South Asia	799	836	881	926	950	1,009	1,031	1,084	1,092
India	609	635	669	702	735	757	783	813	828
Sub-Saharan Africa	294	328	351	393	423	471	509	536	556
Total	2,542	2,625	2,646	2,765	2,828	2,803	2,875	2,795	2,564
Share of people living on less than 2005 PPP $2.00 a day (percent)									
East Asia & Pacific	92.6	88.5	81.6	79.8	75.8	64.1	61.8	51.9	38.7
China	97.8	92.9	83.7	84.6	78.6	65.1	61.4	51.2	36.3
Europe & Central Asia	8.3	6.5	5.6	6.9	10.3	11.9	14.3	12.0	8.9
Latin America & Caribbean	24.6	28.1	24.9	21.9	20.7	22.0	21.8	21.6	17.1
Middle East & North Africa	26.7	23.1	22.7	19.7	19.8	20.2	19.0	17.6	16.9
South Asia	86.5	84.8	83.9	82.7	79.7	79.9	77.2	77.1	73.9
India	86.6	84.8	83.8	82.6	81.7	79.8	78.4	77.6	75.6
Sub-Saharan Africa	73.8	75.5	74.0	76.1	75.9	77.9	77.6	75.6	72.9
Total	69.4	67.7	64.3	63.4	61.6	58.3	57.1	53.3	47.0

Source: World Bank PovcalNet.

Poverty rates at international poverty lines 2.8

About the data

The World Bank produced its first global poverty estimates for developing countries for *World Development Report 1990: Poverty* using household survey data for 22 countries (Ravallion, Datt, and van de Walle 1991). Since then there has been considerable expansion in the number of countries that field household income and expenditure surveys. The World Bank's poverty monitoring database now includes more than 600 surveys representing 115 developing countries. More than 1.2 million randomly sampled households were interviewed in these surveys, representing 96 percent of the population of developing countries.

Data availability

The number of data sets within two years of any given year rose dramatically, from 13 between 1978 and 1982 to 158 between 2001 and 2006. Data coverage is improving in all regions, but the Middle East and North Africa and Sub-Saharan Africa continue to lag. The database, maintained by a team in the World Bank's Development Research Group, is updated annually as new survey data become available, and a major reassessment of progress against poverty is made about every three years. A complete overview of data availability by year and country is available at http://iresearch.worldbank.org/povcalnet/.

Data quality

Besides the frequency and timeliness of survey data, other data quality issues arise in measuring household living standards. The surveys ask detailed questions on sources of income and how it was spent, which must be carefully recorded by trained personnel. 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: the latest estimates reported here use consumption for about two-thirds of countries.

However, 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 the 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, but may not be. 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 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

International comparisons of poverty estimates entail both conceptual and practical problems. Countries have different definitions of poverty, and consistent comparisons across countries can be difficult. Local poverty lines tend to have higher purchasing power in rich countries, where more generous standards are used, than in poor countries.

Poverty measures based on an international poverty line attempt to hold the real value of the poverty line constant across countries, as is done when making comparisons over time. Since *World Development Report 1990* the World Bank has aimed to apply a common standard in measuring extreme poverty, anchored to what *poverty* means in the world's poorest countries. The welfare of people living in different countries can be measured on a common scale by adjusting for differences in the purchasing power of currencies. The commonly used $1 a day standard, measured in 1985 international prices and adjusted to local currency using purchasing power parities (PPPs), was chosen for *World Development Report 1990* because it was typical of the poverty lines in low-income countries at the time.

Early editions of *World Development Indicators* used PPPs from the Penn World Tables to convert values in local currency to equivalent purchasing power measured in U.S dollars. Later editions used 1993 consumption PPP estimates produced by the World Bank. International poverty lines were recently revised using the new data on PPPs compiled in the 2005 round of the International Comparison Program, along with data from an expanded set of household income and expenditure surveys. The new extreme poverty line is set at $1.25 a day in 2005 PPP terms, which represents the mean of the poverty lines found in the poorest 15 countries ranked by per capita consumption. The new poverty line maintains the same standard for extreme poverty—the poverty line typical of the poorest countries in the world—but updates it using the latest information on the cost of living in developing countries.

PPP exchange rates are used to estimate global poverty, because they take into account the local prices of goods and services not traded internationally. But PPP rates were designed for comparing aggregates from national accounts, not for making international poverty comparisons. As a result, there is no certainty that an international poverty line measures the same degree of need or deprivation across countries. So-called poverty PPPs, designed to compare the consumption of the poorest people in the world, might provide a better basis for comparison of poverty across countries. Work on these measures is ongoing.

Definitions

• **International poverty line in local currency** is the international poverty lines of $1.25 and $2.00 a day in 2005 prices, converted to local currency using the PPP conversion factors estimated by the International Comparison Program. • **Survey year** is the year in which the underlying data were collected. • **Population below $1.25 a day** and **population below $2 a day** are the percentages of the population living on less than $1.25 a day and $2.00 a day at 2005 international prices. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions. • **Poverty gap** is the mean shortfall from the poverty line (counting the nonpoor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.

Data sources

The poverty measures are prepared by the World Bank's Development Research Group. The international poverty lines are based on nationally representative primary household surveys conducted by national statistical offices or by private agencies under the supervision of government or international agencies and obtained from government statistical offices and World Bank Group country departments. The World Bank Group has prepared an annual review of its poverty work since 1993. For details on data sources and methods used in deriving the World Bank's latest estimates, and further discussion of the results, see Shaohua Chen and Martin Ravallion's "The Developing World Is Poorer Than We Thought, but No Less Successful in the Fight against Poverty?" (2008).

2.9 Distribution of income or consumption

	Survey year	Gini index	Percentage share of income or consumption[a]						
			Lowest 10%	Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%	Highest 10%
Afghanistan		..	..	..	..	..	..	..	..
Albania	2005[b]	33.0	3.2	7.8	12.2	16.6	22.6	40.9	25.9
Algeria	1995[b]	35.3	2.8	6.9	11.5	16.3	22.8	42.4	26.9
Angola	2000[b]	58.6	0.6	2.0	5.7	10.8	19.7	61.9	44.7
Argentina[c]	2006[d]	48.8	1.2	3.6	8.2	13.4	21.7	53.0	36.1
Armenia	2007[b]	30.2	3.6	8.6	13.0	17.1	22.1	39.2	24.5
Australia	1994[d]	35.2	2.0	5.9	12.0	17.2	23.6	41.3	25.4
Austria	2000[d]	29.1	3.3	8.6	13.3	17.4	22.9	37.8	23.0
Azerbaijan	2005[b]	16.8	6.1	13.3	16.2	18.7	21.7	30.2	17.5
Bangladesh	2005[b]	31.0	4.3	9.4	12.6	16.1	21.1	40.8	26.6
Belarus	2007[b]	28.8	3.6	8.8	13.4	17.5	22.6	37.7	23.0
Belgium	2000[d]	33.0	3.4	8.5	13.0	16.3	20.8	41.4	28.1
Belize	1995[b]	59.6	0.6	2.1	5.4	10.4	19.2	62.9	45.8
Benin	2003[b]	38.6	2.9	6.9	10.9	15.1	21.2	45.9	31.0
Bhutan	2003[b]	46.7	2.2	5.4	8.8	12.9	20.0	53.0	37.5
Bolivia	2007[b]	57.2	0.7	2.7	6.5	11.0	18.6	61.2	45.3
Bosnia and Herzegovina	2007[b]	36.3	2.6	6.7	11.4	16.0	22.9	43.1	27.1
Botswana	1993–94[b]	61.0	1.3	3.1	5.8	9.6	16.4	65.0	51.2
Brazil	2007[d]	55.0	1.1	3.0	6.9	11.8	19.6	58.7	43.0
Bulgaria	2003[b]	29.2	3.5	8.7	13.5	17.4	22.3	38.1	23.8
Burkina Faso	2003[b]	39.6	3.0	7.0	10.6	14.7	20.6	47.1	32.4
Burundi	2006[b]	33.3	4.1	9.0	11.9	15.4	21.0	42.8	28.0
Cambodia	2007[b]	44.2	2.7	6.5	9.7	12.9	18.9	52.0	36.9
Cameroon	2001[b]	44.6	2.4	5.6	9.3	13.7	20.5	50.9	35.5
Canada	2000[d]	32.6	2.6	7.2	12.7	17.2	23.0	39.9	24.8
Cape Verde	2001[b]	50.4	1.7	4.5	8.1	12.2	19.1	56.1	40.5
Central African Republic	2003[b]	43.6	2.1	5.2	9.4	14.3	21.7	49.4	33.0
Chad	2002–03[b]	39.8	2.6	6.3	10.4	15.0	21.8	46.6	30.8
Chile	2006[d]	52.0	1.6	4.1	7.7	12.2	19.3	56.8	41.7
China	2005[d]	41.5	2.4	5.7	9.8	14.7	22.0	47.8	31.4
Hong Kong SAR, China	1996[d]	43.4	2.0	5.3	9.4	13.9	20.7	50.7	34.9
Colombia	2006[d]	58.5	0.8	2.3	6.0	11.0	19.1	61.6	45.9
Comoros	2004[b]	64.3	0.9	2.6	5.4	8.9	15.1	68.1	55.0
Congo, Dem. Rep.	2005–06[b]	44.4	2.3	5.5	9.2	13.8	20.9	50.6	34.7
Congo, Rep.	2005[b]	47.3	2.1	5.0	8.4	13.0	20.5	53.1	37.1
Costa Rica	2007[d]	48.9	1.6	4.4	8.5	12.7	19.7	54.6	38.6
Côte d'Ivoire	2002[b]	48.4	2.0	5.0	8.7	12.9	19.3	54.1	39.6
Croatia	2005[b]	29.0	3.6	8.8	13.3	17.3	22.7	37.9	23.1
Cuba		..	..	..	..	..	..	..	..
Czech Republic	1996[d]	25.8	4.3	10.2	14.3	17.5	21.7	36.2	22.7
Denmark	1997[d]	24.7	2.6	8.3	14.7	18.2	22.9	35.8	21.3
Djibouti	2002[b]	39.9	2.3	6.0	10.6	15.1	21.8	46.5	30.8
Dominican Republic	2007[d]	48.4	1.6	4.4	8.5	13.1	20.2	53.8	37.7
Ecuador	2007[d]	54.4	1.2	3.4	7.2	11.8	19.2	58.5	43.3
Egypt, Arab Rep.	2004–05[b]	32.1	3.9	9.0	12.6	16.1	20.9	41.5	27.6
El Salvador	2007[d]	46.9	1.3	4.3	9.2	13.7	20.8	52.0	36.1
Eritrea		..	..	..	..	..	..	..	..
Estonia	2004[b]	36.0	2.7	6.8	11.6	16.2	22.5	43.0	27.7
Ethiopia	2005[b]	29.8	4.1	9.3	13.2	16.8	21.4	39.4	25.6
Finland	2000[d]	26.9	4.0	9.6	14.1	17.5	22.1	36.7	22.6
France	1995[d]	32.7	2.8	7.2	12.6	17.2	22.8	40.2	25.1
Gabon	2005[b]	41.5	2.5	6.1	10.1	14.6	21.2	47.9	32.7
Gambia, The	2003[b]	47.3	2.0	4.8	8.6	13.2	20.6	52.8	36.9
Georgia	2005[b]	40.8	1.9	5.4	10.5	15.3	22.2	46.7	30.6
Germany	2000[d]	28.3	3.2	8.5	13.7	17.8	23.1	36.9	22.1
Ghana	2006[b]	42.8	1.9	5.2	9.8	14.8	21.9	48.3	32.5
Greece	2000[d]	34.3	2.5	6.7	11.9	16.8	23.0	41.5	26.0

Distribution of income or consumption 2.9

	Survey year	Gini index	Percentage share of income or consumption[a]						
			Lowest 10%	Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%	Highest 10%
Guatemala	2006[d]	53.7	1.3	3.4	7.2	12.0	19.5	57.8	42.4
Guinea	2003[b]	43.3	2.4	5.8	9.6	14.1	20.8	49.7	34.4
Guinea-Bissau	2002[b]	35.5	2.9	7.2	11.6	16.0	22.1	43.0	28.0
Guyana	1998[d]	43.2	1.1	4.3	9.8	14.5	21.3	50.1	34.4
Haiti	2001[d]	59.5	0.9	2.5	5.9	10.5	18.1	63.0	47.8
Honduras	2006[d]	55.3	0.7	2.5	6.7	12.1	20.4	58.4	42.2
Hungary	2004[b]	30.0	3.5	8.6	13.1	17.1	22.5	38.7	24.1
India	2004–05[b]	36.8	3.6	8.1	11.3	14.9	20.4	45.3	31.1
Indonesia	2007[b]	37.6	3.1	7.4	11.0	14.9	21.3	45.5	30.1
Iran, Islamic Rep.	2005[b]	38.3	2.6	6.4	10.9	15.6	22.2	45.0	29.6
Iraq		..	..	..	..	..	..	..	..
Ireland	2000[d]	34.3	2.9	7.4	12.3	16.3	21.9	42.0	27.2
Israel	2001[d]	39.2	2.1	5.7	10.5	15.9	23.0	44.9	28.8
Italy	2000[d]	36.0	2.3	6.5	12.0	16.8	22.8	42.0	26.8
Jamaica	2004[b]	45.5	2.1	5.2	9.0	13.8	20.9	51.2	35.6
Japan	1993[d]	24.9	4.8	10.6	14.2	17.6	22.0	35.7	21.7
Jordan	2006[b]	37.7	3.0	7.2	11.1	15.2	21.1	45.4	30.7
Kazakhstan	2007[b]	30.9	3.6	8.7	12.8	16.6	22.0	39.9	25.1
Kenya	2005–06[b]	47.7	1.8	4.7	8.8	13.3	20.3	53.0	37.8
Korea, Dem. Rep.		..	..	..	..	..	..	..	..
Korea, Rep.	1998[d]	31.6	2.9	7.9	13.6	18.0	23.1	37.5	22.5
Kosovo		..	..	..	..	..	..	..	..
Kuwait		..	..	..	..	..	..	..	..
Kyrgyz Republic	2007[b]	33.5	3.9	8.8	11.9	15.1	21.6	42.6	27.6
Lao PDR	2002–03[b]	32.6	3.7	8.5	12.3	16.2	21.6	41.4	27.0
Latvia	2007[b]	36.3	2.6	6.7	11.5	15.9	22.6	43.3	27.8
Lebanon		..	..	..	..	..	..	..	..
Lesotho	2002–03[b]	52.5	1.0	3.0	7.2	12.5	21.0	56.4	39.4
Liberia	2007[b]	52.6	2.4	6.4	11.4	15.7	21.6	45.0	30.1
Libya		..	..	..	..	..	..	..	..
Lithuania	2004[b]	35.8	2.7	6.8	11.5	16.3	22.7	42.8	27.4
Macedonia, FYR	2006[b]	42.8	1.9	5.2	10.0	14.5	21.5	48.8	32.3
Madagascar	2005[b]	47.2	2.6	6.2	9.6	13.1	17.7	53.5	41.5
Malawi	2004–05[b]	39.0	2.9	7.0	10.8	14.9	20.9	46.4	31.7
Malaysia	2004[d]	37.9	2.6	6.4	10.8	15.8	22.8	44.4	28.5
Maldives	2004[b]	37.4	2.6	6.5	10.9	15.6	22.6	44.3	27.9
Mali	2006[b]	39.0	2.7	6.5	10.7	15.2	21.6	46.0	30.5
Mauritania	2000[b]	39.0	2.5	6.2	10.5	15.4	22.3	45.7	29.6
Mauritius		..	..	..	..	..	..	..	..
Mexico	2008[d]	51.6	1.2	3.8	8.1	12.4	19.2	56.4	41.3
Micronesia	2000[b]	0.5	1.6	5.1	10.2	19.0	64.0	47.1	
Moldova	2007[b]	37.4	2.7	6.7	11.1	15.6	22.0	44.6	28.9
Mongolia	2007–08[b]	36.6	2.9	7.1	11.2	15.6	22.1	44.0	28.3
Montenegro	2007[b]	36.9	2.6	6.5	11.4	16.1	22.2	43.7	28.6
Morocco	2007[b]	40.9	2.7	6.5	10.5	14.5	20.6	47.9	33.2
Mozambique	2002–03[b]	47.1	2.1	5.4	9.2	13.1	19.0	53.3	39.2
Myanmar		..	..	..	..	..	..	..	..
Namibia	1993[d]	74.3	0.6	1.5	2.8	5.5	12.0	78.3	65.0
Nepal	2003–04[b]	47.3	2.7	6.1	8.9	12.5	18.4	54.2	40.4
Netherlands	1999[d]	30.9	2.5	7.6	13.2	17.2	23.3	38.7	22.9
New Zealand	1997[d]	36.2	2.2	6.4	11.4	15.8	22.6	43.8	27.8
Nicaragua	2005[d]	52.3	1.4	3.8	7.7	12.3	19.4	56.9	41.8
Niger	2005[b]	43.9	2.3	5.9	9.8	13.9	20.1	50.3	35.7
Nigeria	2003–04[b]	42.9	2.0	5.1	9.7	14.7	21.9	48.6	32.4
Norway	2000[d]	25.8	3.9	9.6	14.0	17.2	22.0	37.2	23.4
Oman		..	..	..	..	..	..	..	..
Pakistan	2004–05[b]	31.2	3.9	9.1	12.8	16.3	21.3	40.5	26.5

2.9 Distribution of income or consumption

	Survey year	Gini index	Percentage share of income or consumption[a]						
			Lowest 10%	Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%	Highest 10%
Panama	2006[d]	54.9	0.8	2.5	6.6	12.1	20.8	58.0	41.4
Papua New Guinea	1996[b]	50.9	1.9	4.5	7.7	12.1	19.3	56.4	40.9
Paraguay	2007[d]	53.2	1.1	3.4	7.6	12.2	19.4	57.4	42.3
Peru	2007[d]	50.5	1.3	3.6	7.8	13.0	20.8	54.8	38.4
Philippines	2006[b]	44.0	2.4	5.6	9.1	13.7	21.2	50.4	33.9
Poland	2005[b]	34.9	3.0	7.3	11.7	16.2	22.4	42.4	27.2
Portugal	1997[d]	38.5	2.0	5.8	11.0	15.5	21.9	45.9	29.8
Puerto Rico		..	..	..	..	..	..	..	..
Qatar	2006–07[b]	41.1	1.3	3.9	..	..	..	52.0	35.9
Romania	2007[b]	32.1	3.2	7.9	12.7	16.8	22.3	40.3	25.6
Russian Federation	2007[b]	43.7	2.2	5.6	9.6	13.9	20.7	50.2	34.3
Rwanda	2000[b]	46.7	2.3	5.4	9.0	13.2	19.6	52.8	38.2
São Tomé and Príncipe	2000–01[b]	50.6	2.1	5.2	8.7	12.1	17.6	56.5	43.6
Saudi Arabia		..	..	..	..	..	..	..	..
Senegal	2005[b]	39.2	2.5	6.2	10.6	15.3	22.0	45.9	30.1
Serbia	2008[b]	28.2	3.8	9.1	13.6	17.4	22.5	37.5	22.7
Seychelles	2006–07[b]	1.6	3.7	5.7	8.4	12.4	69.8	60.0	
Sierra Leone	2003[b]	42.5	2.6	6.1	9.7	14.0	20.9	49.3	33.6
Singapore	1998[d]	42.5	1.9	5.0	9.4	14.6	22.0	49.0	32.8
Slovak Republic	1996[d]	25.8	3.1	8.8	14.9	18.6	22.9	34.8	20.8
Slovenia	2004[b]	31.2	3.4	8.2	12.8	17.0	22.6	39.4	24.6
Somalia		..	..	..	..	..	..	..	..
South Africa	2000[b]	57.8	1.3	3.1	5.6	9.9	18.8	62.7	44.9
Spain	2000[d]	34.7	2.6	7.0	12.1	16.4	22.5	42.0	26.6
Sri Lanka	2002[b]	41.1	2.9	6.8	10.4	14.4	20.5	48.0	33.3
St. Lucia	1995[d]	42.6	1.7	5.1	10.3	14.4	21.4	48.8	31.6
Sudan		..	..	..	..	..	..	..	..
Suriname	1999[d]	52.8	1.0	3.1	7.5	12.2	19.9	57.4	40.0
Swaziland	2000–01[b]	50.7	1.8	4.5	8.0	12.3	19.4	55.9	40.8
Sweden	2000[d]	25.0	3.6	9.1	14.0	17.6	22.7	36.6	22.2
Switzerland	2000[d]	33.7	2.9	7.6	12.2	16.3	22.6	41.3	25.9
Syrian Arab Republic		..	..	..	..	..	..	..	..
Tajikistan	2004[b]	33.6	3.2	7.8	12.0	16.4	21.9	41.9	26.6
Tanzania	2000–01[b]	34.6	3.1	7.3	11.8	16.3	22.3	42.3	27.0
Thailand	2004[b]	42.5	2.6	6.1	9.8	14.2	21.0	49.0	33.7
Timor-Leste	2007[b]	31.9	3.9	8.9	12.5	16.0	21.2	41.3	27.0
Togo	2006[b]	34.4	2.0	5.4	10.3	15.2	22.0	47.1	31.3
Trinidad and Tobago	1992[d]	40.3	2.1	5.5	10.3	15.5	22.7	45.9	29.9
Tunisia	2000[b]	40.81	2.4	5.9	10.2	14.9	21.8	47.2	31.6
Turkey	2006[b]	41.2	2.0	5.4	10.3	15.2	22.0	47.1	31.3
Turkmenistan	1998[b]	40.8	2.5	6.0	10.2	14.9	21.7	47.2	31.8
Uganda	2005[b]	42.6	2.6	6.1	9.8	14.1	20.7	49.3	34.1
Ukraine	2008[b]	27.6	3.9	9.4	13.6	17.4	22.6	37.0	22.5
United Arab Emirates		..	..	..	..	..	..	..	..
United Kingdom	1999[d]	36.0	2.1	6.1	11.4	16.0	22.5	44.0	28.5
United States	2000[d]	40.8	1.9	5.4	10.7	15.7	22.4	45.8	29.9
Uruguay	2007[d]	47.1	1.6	4.3	8.6	13.6	21.4	52.1	35.5
Uzbekistan	2003[b]	36.7	2.9	7.1	11.5	15.7	21.5	44.2	29.5
Venezuela, RB	2006[d]	43.4	1.7	4.9	9.6	14.8	22.1	48.6	32.7
Vietnam	2006[b]	37.8	3.1	7.1	10.8	15.2	21.6	45.4	29.8
West Bank and Gaza		..	..	..	..	..	..	..	..
Yemen, Rep.	2005[b]	37.7	2.9	7.2	11.3	15.3	21.0	45.3	30.8
Zambia	2004–05[b]	50.7	1.3	3.6	7.8	12.8	20.6	55.2	38.9
Zimbabwe	1995[b]	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.

Distribution of income or consumption 2.9

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.

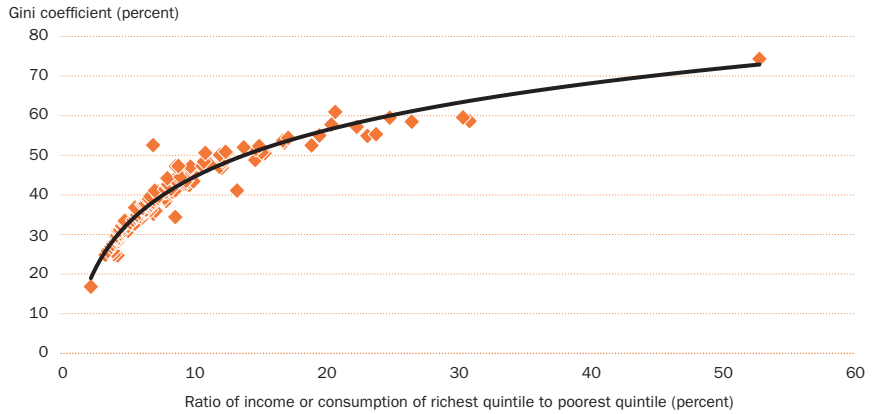
The distribution data have been adjusted for household size, providing a more consistent measure of per capita income or consumption. No adjustment has been made for spatial differences in cost of living within countries, because the data needed for such calculations are generally unavailable. For further 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 tables 2.7 and 2.8).

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.

The Gini coefficient and ratio of income or consumption of the richest quintile to the poorest quintiles are closely correlated **2.9a**



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.

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.

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.

2.10 Assessing vulnerability and security

	Youth unemployment		Female-headed households	Pension contributors			Public expenditure on pensions			
	Male % of male labor force ages 15–24 **2005–08[a]**	Female % of female labor force ages 15–24 **2005–08[a]**	% of total **2005–08[a]**	Year	% of labor force	% of working-age population	Year	% of GDP	Year	Average pension % of average wage
Afghanistan	..	..	..	2005	..	2.2	2005	0.5		..
Albania	..	..	..	2007	49.8	34.1	2007	5.9		..
Algeria	..	..	..	2002	36.7	22.1	2002	3.2		..
Angola	..	..	25		..	..		..		..
Argentina	16[b]	24[b]	34	2007	42.5	30.8	2007	8.0	2000	43.8
Armenia	..	..	36	2007	88.0	65.7	2006	3.2	2007	20.3
Australia	9[b]	9[b]	..	2005	92.6	69.6	2005	3.5[c]		..
Austria	8	8	..	2005	96.4	68.7	2005	12.6[c]		..
Azerbaijan	18	10	25	2007	36.8	30.2	2006	3.7	2006	24.3
Bangladesh	8	14	13	2004	2.8	2.1	2001	0.5		..
Belarus	..	..	54	2008	94.7	67.0	2008	10.2	2002	41.6
Belgium	17	19	..	2005	94.2	61.6	2005	9.0[c]		..
Benin	..	..	23	1996	4.8	..	2006	1.5		..
Bolivia	..	..	..	2007	11.5	9.2	2000	4.5		..
Bosnia and Herzegovina	55	62	..	2005	35.5	25.5	2005	7.7		..
Botswana	..	..	..		..	..		..		..
Brazil	..	..	..	2007	51.0	39.2	2004	12.6		..
Bulgaria	14	11	..	2007	83.5	48.3	2007	9.8	2004	42.9
Burkina Faso	..	..	..	1993	3.1	3.0	1992	0.3		..
Burundi	..	..	..	1993	3.3	3.0	1991	0.2		..
Cambodia	..	..	24		..	..		..		..
Cameroon	..	..	..	1993	13.7	11.5	2001	0.8		..
Canada	12[b]	10[b]	..	2005	90.5	71.4	2005	4.1[c]		..
Central African Republic	..	..	..	2004	1.5	1.3	2004	0.8		..
Chad	..	..	..	1990	1.1	1.0	1997	0.1		..
Chile	17	22	..	2007	57.3	35.5	2001	2.9	2006	53.5
China	..	..	..	2005	20.5	17.2	1996	2.7		..
Hong Kong SAR, China	11	7	..	2008	77.0	55.6		..		..
Colombia	16	28	19	2007	24.9	19.0	2006	2.7		..
Congo, Dem. Rep.	..	..	21		..	..		..		..
Congo, Rep.	..	..	23	1992	5.8	5.6	2004	0.9		..
Costa Rica	8	15	..	2004	55.3	37.6	2006	2.4		..
Côte d'Ivoire	..	..	..	1997	9.3	9.1	1997	0.3		..
Croatia	19	27	..	2007	75.2	51.0	2007	11.3	2005	32.4
Cuba	..	..	46		..	..	1992	12.6		..
Czech Republic	10	10	..	2008	93.0	66.0	2008	8.1	2005	40.7
Denmark	7	8	..	2007	94.4	86.9	2005	5.4[c]		..
Dominican Republic	21	45	35	2007	21.4	15.1	2000	0.8		..
Ecuador	12[b]	23[b]	..	2004	27.0	20.8	2002	2.5		..
Egypt, Arab Rep.	23	62	12	2004	55.5	27.7	2004	4.1		..
El Salvador	14	10	..	2007	24.0	16.6	2006	1.9		..
Eritrea	..	..	..		..	..	2001	0.3		..
Estonia	12	12	..	2004	95.2	68.6	2003	6.0	2007	35.4
Ethiopia	20[b]	29[b]	23		..	..	2007	0.3		..
Finland	17	16	..	2005	88.7	67.2	2005	8.4[c]		..
France	18	18	..	2005	89.9	61.4	2005	12.4[c]		..
Gabon	..	..	..	1995	15.0	14.0		..		..
Gambia, The	..	..	..	2003	3.8	2.9		..		..
Georgia	28	37	..	2004	29.9	22.7	2004	3.0	2003	13.0
Germany	11	10	..	2005	88.2	65.5	2005	11.4[c]		..
Ghana	..	..	34	2004	9.1	7.1	2002	1.3		..
Greece	17	29	..	2005	85.2	58.5	2005	11.5[c]		..
Guatemala	..	..	..	2005	24.0	18.0	2005	1.0		..
Guinea	..	..	17	1993	1.5	1.8		..		..
Guinea-Bissau	..	..	..	2004	1.9	1.5	2005	2.1		..
Haiti	..	..	44		..	..		..		..
Honduras	5[b]	11[b]	26	2006	16.1	12.4	1994	0.6		..

2.10 Assessing vulnerability and security

	Youth unemployment		Female-headed households	Pension contributors			Public expenditure on pensions			
	Male % of male labor force ages 15–24 **2005–08[a]**	Female % of female labor force ages 15–24 **2005–08[a]**	% of total **2005–08[a]**	Year	% of labor force	% of working-age population	Year	% of GDP	Year	Average pension % of average wage
Hungary	19	21	..	2008	92.0	56.0	2008	10.5	2005	39.8
India	..	..	14	2004	9.0	5.7	2007	2.0		..
Indonesia	24	27	13	2002	15.5	11.3		..		..
Iran, Islamic Rep.	20	30	..	2001	35.1	20.0	2000	1.1		..
Iraq	..	..	11		..	..		..		..
Ireland	15	10	..	2005	88.0	63.9	2005	3.4[c]		..
Israel	15	17	..	1992	82.0	63.0	1996	5.9		..
Italy	19	25	..	2005	92.4	58.4	2005	14.0[c]		..
Jamaica	..	..	..	2004	17.4	12.6	1996	..		..
Japan	8	7	..	2005	95.3	75.0	2005	8.7[c]		..
Jordan	..	..	41	2004	32.2	18.6	2001	2.2		..
Kazakhstan	..	..	..	2004	33.8	26.4	2004	4.9	2003	24.9
Kenya	..	..	..	2005	8.0	6.7	2003	1.1		..
Korea, Dem. Rep.	..	..	..		..	..		..		..
Korea, Rep.	11	7	..	2005	78.0	55.0	2005	1.6[c]		..
Kosovo	..	..	..	2005	23.0	..	2005	3.4		..
Kuwait	..	..	..		..	..	1990	3.5		..
Kyrgyz Republic	14	16	25	2006	42.2	28.9	2006	4.8	2003	27.5
Lao PDR	..	..	..		..	..		..		..
Latvia	13	13	..	2003	92.4	66.5	2002	7.5	2005	33.1
Lebanon	..	..	..	2003	33.1	19.9	2003	2.1		..
Lesotho	..	..	..	2005	5.7	3.6		..		..
Liberia	6	4	31		..	..		..		..
Libya	..	..	..	2004	65.5	38.1	2001	2.1		..
Lithuania	13	15	..	2007	..	68.7	2007	6.3	2005	30.9
Macedonia, FYR	57	58	8	2008	48.4	30.4	2008	9.4	2006	55.0
Madagascar	2	3	..	1993	5.4	4.8	1990	0.2		..
Malawi	..	..	..		..	..		..		..
Malaysia	11	12	..	2008	46.9	32.5	1999	6.5		..
Mali	..	..	12	1990	2.5	2.0	1991	0.4		..
Mauritania	..	..	..	1995	5.0	4.0	1992	0.2		..
Mauritius	20	31	..	2000	51.4	33.6	1999	4.4		..
Mexico	6	8	..	2006	36.2	24.3	2005	1.3[c]		..
Moldova	15	14	34	2007	42.0	77.8	2007	7.2	2003	20.9
Mongolia	..	..	29	2005	33.6	21.4	2007	6.5[d]		..
Morocco	18	16	..	2003	22.4	12.8	2003	1.9		..
Mozambique	..	..	..	1995	2.0	2.1	1996	0.0		..
Myanmar	..	..	..		..	..		..		..
Namibia	..	..	44		..	..		..		..
Nepal	..	..	23	2006	3.5	2.5	2003	0.3		..
Netherlands	7	8	..	2005	90.3	70.4	2005	5.0[c]		..
New Zealand	10[b]	10[b]	..	2003	92.7	72.2	2005	4.4[c]		..
Nicaragua	8	10	..	2005	17.9	11.5	1996	2.5		..
Niger	..	..	19	2006	1.3	1.2	2006	0.7		..
Nigeria	..	..	..	2005	1.7	1.2	1991	0.1		..
Norway	8	7	..	2005	90.8	75.7	2005	4.8[c]		..
Oman	..	..	..		..	..		..		..
Pakistan	7	9	10	2004	6.4	4.0	1993	0.9		..
Panama	13	24	..	2008	..	42.0	1996	4.3		..
Papua New Guinea	..	..	..		..	..		..		..
Paraguay	9	18	..	2004	11.6	9.1	2001	1.2		..
Peru	14[b]	15[b]	22	2007	16.5	13.1	2000	2.6		..
Philippines	14	17	19	2007	20.8	15.5	1993	1.0		..
Poland	15	20	..	2005	84.9	54.5	2005	11.4[c]	2007	47.1
Portugal	13	20	..	2005	91.4	71.9	2005	10.2[c]		..
Puerto Rico	24	19	..		..	..		..		..
Qatar	..	..	..		..	..		..		..

2.10 Assessing vulnerability and security

	Youth unemployment		Female-headed households	Pension contributors			Public expenditure on pensions			
	Male % of male labor force ages 15–24 **2005–08[a]**	Female % of female labor force ages 15–24 **2005–08[a]**	% of total **2005–08[a]**	Year	% of labor force	% of working-age population	Year	% of GDP	Year	Average pension % of average wage
Romania	19	18	..	2007	53.4	36.3	2007	5.7	2005	41.5
Russian Federation	14	15	..		..	..	2007	4.7	2003	29.2
Rwanda	..	..	34	2004	4.8	4.1		..		..
Saudi Arabia	..	..	..		..	..	1998	0.2		..
Senegal	..	..	23	2003	5.3	3.9	2003	1.3		..
Serbia	41	48	29	2003	46.0[e]	32.2[e]	2007	13.3[e]		..
Sierra Leone	..	..	..	2004	4.6	3.6		..		..
Singapore	7	11	..	2008	62.0	45.3	1996	1.4		..
Slovak Republic	19	20	..	2005	85.5	55.3	2005	6.2[c]	2005	44.7
Slovenia	10	11	..	2007	87.3	62.7	2007	11.8	2005	44.3
Somalia	..	..	..		..	..		..		..
South Africa	43	52	..		..	..		..		..
Spain	24	26	..	2005	91.0	63.2	2005	8.1[c]	2006	58.6
Sri Lanka	17[b]	28[b]	..	2004	35.6	22.2	2002	2.0		..
Sudan	..	..	19	1995	12.1	12.0		..		..
Swaziland	..	..	48		..	..		..		..
Sweden	20	21	..	2005	91.0	72.3	2005	7.7[c]		..
Switzerland	7	7	..	2005	100.0	79.1	2005	6.8[c]	2000	40.0
Syrian Arab Republic	..	..	..	2004	17.4	11.4	2004	1.3		..
Tajikistan	..	..	..		..	..	2005	2.4	2003	25.7
Tanzania	7	10	25	2006	4.3	4.1	2006	0.9		..
Thailand	5	4	30	2005	27.2	21.8		..		..
Timor-Leste	..	..	..		..	..		..		..
Togo	..	..	..	1997	15.9	15.0	1997	0.6		..
Trinidad and Tobago	13	22	..	2004	55.6	..	1996	0.6		..
Tunisia	31	29	..	2004	45.3	25.4	2003	4.3		..
Turkey	18	18	..	2007	55.0	30.5	2007	9.6	2007	61.3
Turkmenistan	..	..	..		..	..	1996	2.3		..
Uganda	..	..	30	2004	10.7	9.3	2003	0.3		..
Ukraine	15	14	49	2007	68.2	47.4	2007	15.5	2007	48.3
United Arab Emirates	7	13	..		..	..		..		..
United Kingdom	17	13	..	2005	92.7	71.4	2005	5.7[c]		..
United States	12[b]	9[b]	..	2005	92.5	72.5	2005	6.0[c]	2006	29.2
Uruguay	20	30	..	2004	55.0	44.3	2007	10.0		..
Uzbekistan	..	..	18	2005	86.0	57.0	2005	6.5	2005	40.0
Venezuela, RB	13	17	..	2004	31.8	23.8	2001	2.7		..
Vietnam	..	..	..	2005	13.2	10.8	1998	1.6		..
West Bank and Gaza	34	43	..	2008	17.0	7.8	2008	4.0		..
Yemen, Rep.	..	..	..	2005	10.0	5.5	1999	0.9		..
Zambia	..	..	24	2006	10.9	8.0	2006	1.0		..
Zimbabwe	..	..	38	1995	12.0	10.0	2002	2.3		..
World	**.. w**	**.. w**								
Low income		..								
Middle income	..	..								
Lower middle income	..	..								
Upper middle income	17	21								
Low & middle income	..	..								
East Asia & Pacific	..	..								
Europe & Central Asia	18	18								
Latin America & Carib.	..	..								
Middle East & N. Africa	..	..								
South Asia	..	..								
Sub-Saharan Africa	..	..								
High income	13	12								
Euro area	16	17								

a. Data are for the most recent year available. b. Limited coverage. c. Includes expenditure on old-age and survivors benefits only. d. Includes old-age, survivors, disability, military, and work accident or disease pensions. e. Includes Montenegro.

Assessing vulnerability and security 2.10

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 2.11 and 2.16).

Poor households face many risks, and vulnerability is thus multidimensional. The indicators in the table focus on individual risks—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 and to increase their household's labor market participation by sending their children to work (see tables 2.4 and 2.6). Income security is a prime concern for the elderly.

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 used 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 Hinz and others forthcoming). 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 the pension programs of the social insurance schemes for which contributions had previously been made. In many cases noncontributory pensions or social assistance targeted to the elderly and disabled are also included. A country's pattern of spending is correlated with its demographic structure—spending increases as the population ages.

Definitions

• **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 and older) 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 the average pension payment of all pensioners of the main pension schemes (including old-age, survivors, disability, military, and work accident or disease pensions) divided by the average wage of all formal sector workers.

Data sources

Data on youth unemployment are from the ILO's Key Indicators of the Labour Market, 6th edition, database. Data on female-headed household are from Demographic and Health Surveys by Macro International. Data on pension contributors and pension spending are from Hinz and others' "International Patterns of Pension Provision II" (forthcoming).

2.11 Education inputs

	Public expenditure per student						Public expenditure on education		Trained teachers in primary education	Primary school pupil–teacher ratio
	% of GDP per capita									
	Primary		Secondary		Tertiary		% of GDP	% of total government expenditure	% of total	pupils per teacher
	1999	2008[a]	1999	2008[a]	1999	2008[a]	2008[a]	2008[a]	2008[a]	2008[a]
Afghanistan	..	..	..	..	..	..	..	..	..	43
Albania	..	..	..	..	..	..	..	..	..	..
Algeria	12.0	..	..	..	..	..	..	..	98.9	23
Angola	..	..	..	..	..	*80.8*	*2.6*	..	..	..
Argentina	12.9	*13.2*	18.2	*20.3*	17.7	*14.2*	*5.5*	*15.0*	..	*16*
Armenia	..	..	..	..	..	..	*3.0*	*15.0*	..	*19*
Australia	16.9	*18.2*	15.4	*16.2*	27.2	*24.7*	*5.2*	*14.0*	..	..
Austria	24.9	..	29.9	..	51.6	..	..	..	..	*12*
Azerbaijan	6.9	*5.2*	17.0	*8.0*	19.1	9.2	1.9	11.9	99.9	11
Bangladesh	..	10.5	13.6	14.3	50.7	*39.8*	2.4	14.0	54.4	44
Belarus	..	..	..	..	..	*18.1*	*5.2*	*9.3*	99.9	15
Belgium	*18.2*	*20.5*	*23.7*	..	*38.3*	*35.5*	*6.0*	*12.4*	..	*11*
Benin	*11.9*	*12.4*	*24.2*	..	*157.0*	*153.4*	*3.6*	*15.9*	*71.8*	45
Bolivia	14.2	*13.7*	11.7	*14.5*	44.1	..	*6.3*	..	..	*24*
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..
Botswana	..	*12.6*	..	*38.3*	..	..	*8.1*	*21.0*	*94.3*	*25*
Brazil	10.8	..	9.5	..	57.1	..	*5.0*	*16.2*	..	*24*
Bulgaria	*15.5*	*23.6*	*18.8*	*22.0*	*17.9*	*23.2*	*4.2*	*11.6*	..	*16*
Burkina Faso	..	*29.1*	..	*30.3*	..	*308.3*	*4.6*	*15.4*	87.7	49[b]
Burundi	14.7	18.8	..	58.2	1,051.5	563.9	7.2	22.3	*87.4*	*52*
Cambodia	*5.9*	..	*11.5*	..	*43.7*	..	*1.6*	*12.4*	98.2	49
Cameroon	..	*7.6*	..	*39.1*	..	*126.1*	*3.9*	*17.0*	*61.8*	46
Canada	..	..	..	..	47.1	..	..	..	..	..
Central African Republic	..	*5.5*	..	..	..	*305.2*	*1.3*	*12.0*	..	90
Chad	9.2	..	28.3	..	..	..	..	..	35.5	62
Chile	*14.4*	*11.9*	*14.8*	*13.4*	*19.4*	*11.5*	*3.4*	*18.2*	..	27
China	..	..	11.6	..	90.1	..	..	..	..	*18*
Hong Kong SAR, China	*12.4*	12.7	*17.7*	15.6	..	*47.3*	3.3	23.0	95.1	17
Colombia	15.2	12.4	16.1	14.8	37.8	26.0	3.9	14.9	100.0	29
Congo, Dem. Rep.	..	..	..	..	..	..	..	..	93.3	39
Congo, Rep.	15.2	..	..	..	362.2	..	..	..	*89.0*	52
Costa Rica	16.0	..	23.2	..	55.0	..	5.0	22.8	86.0	19
Côte d'Ivoire	17.9	..	56.1	..	218.9	..	4.6	24.6	100.0	42
Croatia	..	..	..	..	35.8	..	..	..	..	*17*
Cuba	27.9	*51.1*	41.4	*60.1*	86.6	*43.5*	*13.3*	18.5	100.0	10
Czech Republic	11.2	*13.6*	21.7	*23.1*	33.7	*37.4*	*4.6*	*10.5*	..	*19*
Denmark	24.6	*24.5*	38.1	*34.4*	65.9	*53.4*	*7.9*	*15.5*	..	..
Dominican Republic	*7.1*	7.4	..	6.5	..	..	*2.2*	*11.0*	89.2	20
Ecuador	4.5	..	9.7	..	..	..	..	..	*71.6*	*23*
Egypt, Arab Rep.	..	..	..	..	..	..	3.7	12.1	..	*27*
El Salvador	8.6	8.5	*7.5*	9.1	*8.9*	31.5	3.6	*13.1*	93.2	33
Eritrea	*15.1*	*8.2*	*37.6*	*8.1*	*433.2*	..	*2.0*	..	89.3	47
Estonia	21.0	..	27.3	..	32.0	..	..	..	..	*13*
Ethiopia	..	*12.4*	..	*8.9*	..	*642.7*	*5.5*	*23.3*	89.7	59
Finland	17.4	*17.9*	25.8	*31.5*	40.3	*33.1*	*6.1*	*12.6*	..	*15*
France	17.3	*17.1*	28.5	*26.6*	29.7	*33.5*	*5.6*	*10.6*	..	*19*
Gabon	..	..	..	..	..	..	..	..	..	..
Gambia, The	..	..	..	..	..	..	..	..	..	34
Georgia	..	14.7	..	15.4	..	11.4	2.9	7.2	95.0	9
Germany	14.8	*16.1*	20.5	*20.7*	..	..	*4.4*	*9.7*	..	*14*
Ghana	..	*17.9*	..	*28.3*	..	..	..	..	49.1	31
Greece	11.7	..	15.5	..	26.2	..	..	..	..	*10*
Guatemala	*6.7*	*10.3*	*4.3*	*5.9*	..	*19.0*	*3.0*	..	..	29
Guinea	11.4	5.0	..	4.4	..	71.5	1.7	19.2	82.1	44
Guinea-Bissau	..	..	..	..	..	..	..	..	..	*62*
Haiti	..	..	..	..	..	..	..	..	..	..
Honduras	..	1.1	..	1.1	..	..	..	..	36.4	33

Education inputs 2.11

	Public expenditure per student						Public expenditure on education		Trained teachers in primary education	Primary school pupil–teacher ratio
	% of GDP per capita									
	Primary		Secondary		Tertiary		% of GDP	% of total government expenditure	% of total	pupils per teacher
	1999	2008[a]	1999	2008[a]	1999	2008[a]	2008[a]	2008[a]	2008[a]	2008[a]
Hungary	18.0	*25.6*	19.1	*23.2*	34.2	*23.8*	*5.4*	*10.4*	..	*10*
India	11.9	*8.9*	24.7	*16.2*	*90.8*	*55.0*	*3.2*	..	..	..
Indonesia	..	..	..	..	..	..	*3.5*	*17.5*	..	*19*
Iran, Islamic Rep.	*9.1*	13.5	9.9	20.3	*34.8*	20.7	4.8	20.0	..	20
Iraq	..	..	..	..	..	..	..	..	..	..
Ireland	11.0	*15.0*	16.8	*22.8*	28.5	*26.4*	*4.8*	*14.0*	..	*16*
Israel	20.6	*20.2*	22.0	*20.5*	31.1	*23.1*	*6.2*	..	..	*13*
Italy	24.0	*25.1*	27.7	*28.6*	27.6	*23.4*	*4.7*	*9.7*	..	*10*
Jamaica	*13.4*	*17.3*	*21.0*	*19.9*	*70.4*	..	*5.5*	..	..	..
Japan	21.1	*21.9*	20.9	*22.4*	15.1	*19.1*	*3.5*	*9.5*	..	*18*
Jordan	13.7	*13.0*	15.8	*16.5*	..	..	..	..	..	..
Kazakhstan	..	..	..	..	..	*7.9*	*2.8*	..	..	16[b]
Kenya	*22.5*	*22.3*	*15.1*	*22.0*	*207.8*	..	6.6	20.2	98.4	47
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	18.4	*17.2*	15.7	*22.2*	8.4	*9.5*	*4.2*	..	..	*26*
Kosovo	..	..	..	..	..	..	..	..	..	..
Kuwait	*19.2*	11.1	..	*14.6*	..	*82.8*	*3.8*	*12.9*	100.0	9
Kyrgyz Republic	..	..	..	..	24.3	*22.8*	6.6	*25.6*	64.4	24
Lao PDR	2.2	..	4.5	..	68.6	..	2.3	12.2	96.9	30
Latvia	19.5	*37.3*	23.7	*19.3*	27.9	*15.9*	*5.1*	*13.4*	..	*12*
Lebanon	..	..	..	..	14.2	12.5	2.0	8.1	12.8	14
Lesotho	34.4	22.3	76.6	50.2	1,385.2	*1,182.4*	12.4	23.7	*71.4*	*37*
Liberia	..	*5.7*	..	*8.4*	..	..	2.7	12.1	40.2	24
Libya	..	..	..	..	23.9	..	..	..	..	..
Lithuania	..	*16.4*	..	*20.3*	*34.2*	*17.0*	*4.8*	*14.4*	..	*13*
Macedonia, FYR	..	..	..	..	..	..	4.7	13.3	..	*18*
Madagascar	8.9	7.4	..	13.0	171.7	137.2	2.9	13.4	52.1	47
Malawi	..	..	..	..	..	..	..	..	..	93
Malaysia	*12.5*	*10.8*	*21.7*	..	*81.1*	*59.7*	*4.7*	..	..	*16*
Mali	13.5	10.4	53.0	34.5	227.7	114.8	3.8	*19.5*	50.1	51
Mauritania	11.2	12.8	35.3	36.7	77.8	..	4.4	*15.6*	100.0	37
Mauritius	9.7	*10.3*	*15.3*	*17.4*	*40.4*	*29.8*	*3.9*	*12.7*	100.0	22
Mexico	11.7	*13.4*	14.2	*13.8*	47.8	*35.4*	*4.8*	..	..	*28*
Moldova	..	34.3	..	32.4	..	38.9	8.2	19.8	..	16
Mongolia	..	*14.7*	..	*14.7*	..	..	*5.1*	..	99.0	30[b]
Morocco	17.0	16.3	44.5	*38.3*	94.9	72.1	*5.5*	*26.1*	100.0	27
Mozambique	..	*14.5*	..	*83.7*	..	..	*5.0*	*21.0*	67.0	64
Myanmar	..	..	*6.8*	..	*27.5*	..	..	..	*99.0*	*29*
Namibia	22.1	15.7	36.2	16.0	156.9	*117.8*	6.5	22.4	95.0	29
Nepal	9.1	15.1	13.1	11.2	*141.6*	..	3.8	..	66.4	38
Netherlands	15.2	*17.8*	22.2	*25.4*	47.4	*43.9*	*5.5*	*12.0*	..	..
New Zealand	20.1	*17.6*	24.3	*19.8*	41.6	*29.2*	*6.2*	*19.7*	..	*16*
Nicaragua	..	*9.8*	..	*4.5*	..	..	..	..	72.7	29
Niger	*20.2*	27.1	*60.9*	49.6	..	398.0	3.7	15.5	98.0[b]	39[b]
Nigeria	..	..	..	..	..	..	..	..	*51.2*	*46*
Norway	19.8	*18.2*	26.8	..	45.8	*44.8*	*6.5*	*16.2*	..	..
Oman	11.2	..	21.8	..	..	..	*4.0*	*31.1*	*100.0*	12
Pakistan	..	..	..	..	..	..	2.9	*11.2*	85.1	41
Panama	13.7	7.5	19.1	10.0	33.6	..	3.8	18.0	91.3	24
Papua New Guinea	..	..	..	..	..	..	..	..	..	*36*
Paraguay	*13.6*	..	*18.4*	..	*58.9*	..	..	..	..	..
Peru	*7.6*	*7.3*	*10.8*	*8.9*	*21.2*	*10.9*	*2.5*	*16.4*	..	*22*
Philippines	*12.8*	..	*11.0*	..	*15.4*	..	..	..	..	*34*
Poland	..	27.0	*16.5*	*24.9*	21.1	*18.4*	*5.7*	*12.0*	..	*11*
Portugal	19.5	*22.4*	27.5	*34.0*	28.1	*28.8*	*5.3*	*11.3*	..	*12*
Puerto Rico	..	..	..	..	..	..	..	..	..	..
Qatar	..	..	..	..	..	..	..	..	52.3	13

2.11 Education inputs

	Public expenditure per student						Public expenditure on education		Trained teachers in primary education	Primary school pupil–teacher ratio
	% of GDP per capita									
	Primary		Secondary		Tertiary		% of GDP	% of total government expenditure	% of total	pupils per teacher
	1999	2008[a]	1999	2008[a]	1999	2008[a]	2008[a]	2008[a]	2008[a]	2008[a]
Romania	*8.5*	..	*16.0*	..	*32.6*	..	..	..	..	*17*
Russian Federation	..	..	..	..	..	16.0	4.0	11.8	..	*17*
Rwanda	*7.7*	8.2	*29.4*	34.3	*680.7*	222.8	4.1	20.4	94.2	68
Saudi Arabia	..	*18.4*	..	*18.3*	..	..	..	..	*91.5*	11
Senegal	14.1	*17.0*	..	*31.3*	..	*207.7*	*4.8*	*26.3*	..	36
Serbia	..	..	..	..	..	..	..	..	*100.0*	17
Sierra Leone	..	..	..	..	..	..	..	..	*49.4*	*44*
Singapore	..	11.2[b]	..	16.6[b]	..	26.9[b]	3.2[b]	11.6[b]	97.1	19
Slovak Republic	10.2	*15.3*	18.4	..	32.9	..	*3.8*	*10.2*	..	*15*
Slovenia	*26.3*	..	*25.7*	..	*27.9*	*21.6*	*5.7*	*12.9*	..	*16*
Somalia	..	..	..	..	..	..	..	..	..	..
South Africa	14.2	13.7	20.0	16.0	60.7	..	5.1	16.2	..	*31*
Spain	18.0	*19.4*	24.4	*24.0*	19.6	*23.5*	*4.3*	*11.1*	..	*13*
Sri Lanka	..	..	..	..	..	..	..	..	..	*24*
Sudan	..	..	..	..	..	..	..	..	59.7[b]	38[b]
Swaziland	8.4	*16.3*	23.7	*41.1*	351.5	*347.5*	7.9	21.6	*94.0*	*32*
Sweden	22.5	*24.7*	26.2	*32.0*	52.1	*39.5*	6.9	*12.6*	..	*10*
Switzerland	22.7	*23.3*	27.3	*26.5*	53.8	*53.5*	*5.5*	*16.3*	..	..
Syrian Arab Republic	11.2	*18.4*	21.7	*14.0*	..	..	*4.9*	*16.7*	..	18
Tajikistan	..	..	..	..	..	21.8	3.5	18.7	88.3	23
Tanzania	..	..	..	..	..	..	..	..	*100.0*	52
Thailand	*17.8*	..	*15.9*	..	*36.0*	*30.5*	*4.0*	*20.9*	..	16
Timor-Leste	..	*27.6*	..	..	..	..	7.1	7.3	..	41
Togo	8.5	*9.4*	30.3	*19.1*	..	*155.2*	*3.7*	*17.2*	*14.6*	*39*
Trinidad and Tobago	11.6	..	12.3	..	149.3	..	..	..	86.6	17
Tunisia	15.6	..	27.1	..	89.4	*54.0*	*7.1*	*20.5*	..	*18*
Turkey	*8.2*	..	*10.4*	..	*33.5*	*28.1*	..	..	..	..
Turkmenistan	..	..	..	..	..	..	..	..	..	..
Uganda	..	7.5[b]	..	20.3[b]	..	*121.1*	3.3[b]	15.6[b]	89.4	50
Ukraine	..	..	..	..	*36.5*	*25.1*	*5.3*	*20.2*	99.8	16
United Arab Emirates	8.7	*4.9*	11.6	*6.9*	*41.5*	..	..	..	*100.0*	*17*
United Kingdom	14.1	*22.1*	24.2	*27.3*	26.0	*29.2*	*5.6*	*11.9*	..	*17*
United States	17.9	*22.2*	22.5	*24.6*	27.0	*25.4*	*5.7*	*14.8*	..	*14*
Uruguay	*7.2*	*8.5*	*9.9*	*10.4*	..	*18.1*	3.9	14.4	..	15
Uzbekistan	..	..	..	..	..	..	..	..	*100.0*	*18*
Venezuela, RB	..	*9.1*	..	*8.1*	..	..	*3.7*	..	83.5	16
Vietnam	..	19.7	..	17.3	..	61.7	5.3	..	98.6	20
West Bank and Gaza	..	..	..	..	..	..	..	..	*100.0*	*30*
Yemen, Rep.	..	..	..	..	..	..	5.2	16.0	..	..
Zambia	*7.2*	..	*19.4*	..	*164.6*	..	1.4	..	..	61
Zimbabwe	*12.7*	..	*19.3*	..	*193.0*	..	..	..	..	*38*
World	**.. m**	**.. m**	**.. m**	**.. m**	**.. m**	**.. m**	***4.6 m***	**.. m**		***24 w***
Low income	..	..	..	..	..	..	..	..		45
Middle income	..	..	..	..	..	..	*4.5*	..		*23*
Lower middle income	..	..	..	..	..	..	*4.0*	..		..
Upper middle income	*13.5*	..	*18.1*	..	*34.2*	*18.4*	*4.6*	*14.0*		*22*
Low & middle income	..	..	..	..	..	..	*4.0*	..		*27*
East Asia & Pacific	..	..	..	..	*38.2*	..	..	..		*19*
Europe & Central Asia	..	..	..	..	..	*18.4*	*4.5*	*14.4*		*16*
Latin America & Carib.	*12.7*	*11.0*	*13.7*	*10.7*	*44.0*	..	*3.6*	..		*25*
Middle East & N. Africa	..	..	..	..	..	..	*5.2*	*18.5*		*24*
South Asia	..	..	13.6	..	*90.8*	..	2.9	..		..
Sub-Saharan Africa	..	..	..	..	..	..	..	..		49
High income	17.9	*18.2*	22.4	*23.2*	32.9	*29.0*	*5.4*	*12.6*		*15*
Euro area	17.3	*17.8*	24.4	*26.0*	29.1	*28.8*	*5.3*	*11.3*		*14*

a. Provisional data. b. Data are for 2009.

Education inputs 2.11

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. However, coverage and data collection methods vary across countries and over time within countries, so comparisons should be made 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 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).

Data on education finance are generally of poor quality. This is partly because ministries of education, from which the UNESCO Institute for Statistics collects data, may not be 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 2.12). 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 (ISCED 1997). Consistent historical time series with reclassification of the pre–ISCED 1997 series were produced for a selection of indicators in 2008. The full set of the historical series is forthcoming.

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 2006, for example, are now listed for 2007. 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.

2.12 Participation in education

	Gross enrollment ratio				Net enrollment ratio				Adjusted net enrollment ratio, primary		Children out of school	
	% of relevant age group				% of relevant age group				% of primary-school-age children		thousand primary-school-age children	
	Preprimary	Primary	Secondary	Tertiary	Primary		Secondary		Male	Female	Male	Female
	2008[a]	2008[a]	2008[a]	2008[a]	1991	2008[a]	1999	2008[a]	2008[a]	2008[a]	2008[a]	2008[a]
Afghanistan	..	106	*29*	..	25	..	..	*27*	..	..	..	..
Albania	..	..	..	..	..	..	70	..	..	..	..	..
Algeria	23	108	..	*24*	89	95	..	..	96	95	68	88
Angola	..	..	..	*3*	49	..	..	..	..	..	..	..
Argentina	*67*	*115*	*85*	*68*	95	..	76	*79*	..	..	..	..
Armenia	*33*	80	88	*34*	..	74	*86*	*86*	73	75	22	18
Australia	*101*	*105*	*148*	*75*	98	*97*	*90*	*88*	*97*	*98*	*32*	*22*
Austria	*92*	*101*	*100*	*50*	88	*98*	..	..	*97*	*98*	*5*	*3*
Azerbaijan	26	116	106	16	89	96	75	98	97	95	7	9
Bangladesh	..	*94*	*44*	*7*	70	*88*	40	*41*	*88*	*94*	*1,028*	*518*
Belarus	*102*	99	*95*	73	85	94	*82*	*87*	94	96	12	7
Belgium	*121*	*102*	*110*	*62*	96	*98*	..	*87*	*98*	*98*	*8*	6
Benin	13	117	..	*6*	46	93	18	..	99	86	7	91
Bolivia	*49*	*108*	*82*	*38*	..	*94*	*68*	*70*	*95*	*95*	*39*	*32*
Bosnia and Herzegovina	*11*	*111*	*89*	*34*	79	..	..	..	..	..	..	..
Botswana	*16*	*110*	*80*	..	89	86	60	..	..	..	*10*	2
Brazil	*62*	*130*	*100*	*30*	..	*93*	66	*77*	*93*	*94*	*465*	*440*
Bulgaria	*82*	*101*	*105*	*50*	..	*95*	85	*88*	*97*	*96*	*5*	*5*
Burkina Faso	3	79[b]	20[b]	3	27	63[b]	9	15[b]	68[b]	60[b]	392[b]	473[b]
Burundi	*3*	136	18	3	53	99	..	..	*91*	*89*	*55*	*67*
Cambodia	13	116	*40*	7	72	89	15	*34*	90	87	99	131
Cameroon	25	111	37	8	69	88	..	..	94	82	83	255
Canada	*70*	99	*101*	..	98	..	*95*	..	..	..	..	..
Central African Republic	*3*	77	..	2	53	59	..	..	68	50	107	168
Chad	..	83	*19*	2	34	..	7	..	..	..	..	..
Chile	*56*	105	94	50	89	*94*	..	*85*	*95*	*94*	*41*	*46*
China	*42*	*112*	*74*	*22*	97	..	..	..	..	..	..	..
Hong Kong SAR, China	..	..	83	*34*	92	..	*74*	75	..	..	..	..
Colombia	49	120	91	35	71	90	56	71	93	94	147	138
Congo, Dem. Rep.	3	90	35	5	56	..	..	..	..	..	..	..
Congo, Rep.	12	114	..	..	81	*59*	..	..	*66*	*62*	*91*	*102*
Costa Rica	69	110	89	..	87	..	..	..	..	..	..	..
Côte d'Ivoire	3	74	..	*8*	46	..	18	..	..	..	..	..
Croatia	*51*	99	*94*	*47*	..	*90*	81	*88*	*98*	*100*	*2*	0[c]
Cuba	111	102	91	122	94	99	73	84	100	99	2	2
Czech Republic	*114*	*102*	*95*	*54*	87	*92*	..	..	*91*	*94*	*22*	*14*
Denmark	*96*	*99*	*119*	*80*	98	*96*	88	*90*	*95*	*97*	*10*	*6*
Dominican Republic	35	104	75	..	..	80	38	58	82	83	117	103
Ecuador	*100*	*118*	*70*	*35*	98	*97*	46	*59*	..	..	..	..
Egypt, Arab Rep.	*16*	*100*	..	..	81	*94*	*71*	..	*97*	*93*	*137*	*324*
El Salvador	60	115	64	25	..	94	*47*	55	95	96	23	15
Eritrea	13	52	30	2[b]	15	39	17	26	43	37	173	187
Estonia	*95*	*99*	*100*	*65*	88	*94*	*84*	*90*	*96*	*97*	*1*	*1*
Ethiopia	4	98	33	4	24	78	12	*25*	82	76	1,180	1,552
Finland	*64*	*98*	*111*	*94*	98	*96*	95	*97*	*96*	*97*	*7*	*6*
France	*113*	*110*	*113*	*55*	100	*99*	94	*98*	*99*	*99*	*16*	*13*
Gabon	..	..	..	..	91	..	..	..	..	..	..	..
Gambia, The	*22*	86	51	..	50	69	26	42	69	74	40	33
Georgia	63	107	90	34	97	99	76	*81*	*96*	*93*	*6*	*10*
Germany	*108*	*106*	*101*	..	84	*98*	..	..	..	..	..	..
Ghana	67	102	54	*6*	56	74	33	46	74	75	460	422
Greece	*69*	*101*	*102*	*91*	95	*99*	82	*91*	*99*	*100*	*2*	0[c]
Guatemala	*29*	114	57	*18*	64	95	24	40	98	95	23	55
Guinea	11	90	36	9	27	71	12	28	77	67	175	245
Guinea-Bissau	..	*120*	*36*	*3*	40	..	*10*	..	..	..	..	..
Haiti	..	..	..	..	21	..	..	..	..	..	..	..
Honduras	40	116	65	19	88	97	..	..	96	98	22	9

Participation in education

2.12

	Gross enrollment ratio				Net enrollment ratio				Adjusted net enrollment ratio, primary		Children out of school	
	% of relevant age group				% of relevant age group				% of primary-school-age children		thousand primary-school-age children	
	Preprimary	Primary	Secondary	Tertiary	Primary		Secondary		Male	Female	Male	Female
	2008[a]	2008[a]	2008[a]	2008[a]	1991	2008[a]	1999	2008[a]	2008[a]	2008[a]	2008[a]	2008[a]
Hungary	89	98	97	67	..	89	82	90	95	95	10	10
India	47	113	57	13	..	90	..	..	97	94	1,782	3,781
Indonesia	45	121	76	18	98	95	50	70	..	..	..	..
Iran, Islamic Rep.	52	128	80	36	91	..	..	75	..	..	..	..
Iraq	..	..	..	..	92	..	30	..	..	..	..	..
Ireland	..	105	113	61	90	97	84	88	96	97	8	6
Israel	98	111	91	60	..	97	86	88	97	98	13	8
Italy	101	104	100	67	98	99	88	92	100	99	5	14
Jamaica	89	90	90	..	97	85	83	77	86	85	24	26
Japan	88	102	101	58	100	100	99	98	..	..	..	..
Jordan	33	96	86	38	..	89	79	84	93	94	32	23
Kazakhstan	39[b]	109[b]	95[b]	41[b]	88	89[b]	87	87[b]	99[b]	100[b]	4[b]	2[b]
Kenya	48	112	58	4[b]	..	82	33	49	82	83	563	524
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	105	104	97	96	99	99	97	96	100	98	4	41
Kosovo	..	..	..	..	..	..	..	..	..	..	..	..
Kuwait	76	95	91	18	49	88	89	80	94	93	6	8
Kyrgyz Republic	17	95	85	52	92	84	..	80	91	91	19	19
Lao PDR	15	112	44	13	60	82	26	36	84	81	65	76
Latvia	90	97	115	69	94	..	..	..	..	..	..	..
Lebanon	72	101	82	52	66	88	..	75	90	89	25	25
Lesotho	..	108	40	4	72	73	17	25	71	75	54	47
Liberia	84	91	32	..	..	..	20	..	..	..	..	..
Libya	9	110	93	..	..	..	..	..	..	..	..	..
Lithuania	69	96	99	76	..	91	90	92	94	94	4	4
Macedonia, FYR	38	93	84	36	..	87	79	..	91	92	5	4
Madagascar	9	152	30	3	72	98	12	24	99	100	16	3
Malawi	..	120	29	0	48	91	29	25	88	94	155	80
Malaysia	57	98	..	30	93	97	65	..	98	97	39	41
Mali	4	91	35	5	23	72	..	29	81	68	190	316
Mauritania	..	98	23	4	35	80	14	16	78	83	54	40
Mauritius	98	99	88	16[b]	93	93	67	..	93	94	4	4
Mexico	113	113	87	26	98	98	56	71	99	100	52	28
Moldova	72	89	83	40	89	83	80	79	86	85	12	12
Mongolia	57	102	95	50	90	89	58	82	99	99	1	1
Morocco	57	107	56	12	56	89	30	..	92	88	148	217
Mozambique	..	114	21	..	42	80	3	6	82	77	378	486
Myanmar	6	115	49	11	96	..	31	46	..	..	..	..
Namibia	31	112	66	9	84	89	39	54	88	93	22	12
Nepal	35	124	43	..	62	..	..	..	..	..	..	..
Netherlands	101	107	120	60	95	99	91	89	99	98	5	11
New Zealand	93	101	120	79	100	99	90	..	99	100	2	1
Nicaragua	56	117	68	..	70	92	35	45	93	94	29	24
Niger	3[b]	62[b]	11	1[b]	23	54[b]	6	9	60[b]	48[b]	510[b]	636[b]
Nigeria	16	93	30	..	54	61	..	26	66	60	4,023	4,626
Norway	92	98	113	76	100	98	96	97	98	98	4	3
Oman	34	75	88	26	69	68	65	78	71	73	54	48
Pakistan	..	85	33	5	33	66	22	33	72	60	3,060	4,201
Panama	69	111	71	45	92	98	59	66	99	98	2	3
Papua New Guinea	..	55	..	..	66	..	..	..	..	..	..	..
Paraguay	34	108	66	..	94	92	..	58	93	93	31	27
Peru	68	113	98	34	87	97	62	76	..	..	..	..
Philippines	47	108	81	28	96	90	50	60	90	92	635	481
Poland	60	97	100	67	..	96	90	94	95	96	60	49
Portugal	80	115	101	57	98	99	82	88	99	99	2	4
Puerto Rico	..	..	..	..	..	..	..	..	..	..	..	..
Qatar	51	109	93	11	89	..	74	79	..	..	..	..

2.12 Participation in education

	Gross enrollment ratio				Net enrollment ratio				Adjusted net enrollment ratio, primary		Children out of school	
	% of relevant age group				% of relevant age group				% of primary-school-age children		thousand primary-school-age children	
	Preprimary	Primary	Secondary	Tertiary	Primary		Secondary		Male	Female	Male	Female
	2008[a]	2008[a]	2008[a]	2008[a]	1991	2008[a]	1999	2008[a]	2008[a]	2008[a]	2008[a]	2008[a]
Romania	*72*	*105*	*87*	*58*	81	*94*	75	*73*	*96*	97	*16*	*14*
Russian Federation	*89*	*97*	*84*	*75*	99	..	..	..	..	..	..	..
Rwanda	..	151	22	4	67	96	..	..	95	97	38	22
Saudi Arabia	11	98	95	30	59	85	..	*73*	85	84	244	259
Senegal	11	84	31	8	45	73	..	*25*	75	76	248	233
Serbia	57	101	90	49	..	97	..	90	98	98	3	3
Sierra Leone	*5*	*158*	*35*	..	40	..	..	*25*	..	..	..	..
Singapore	..	..	..	..	..	..	..	..	..	..	..	..
Slovak Republic	*94*	*102*	*93*	*50*	..	..	..	..	..	..	..	..
Slovenia	*80*	*103*	*94*	*85*	96	*96*	90	*89*	*97*	*96*	*2*	*2*
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	*51*	*105*	*95*	..	90	*87*	63	*72*	*92*	*94*	*284*	*219*
Spain	*123*	*105*	*119*	*68*	100	*100*	88	*94*	*100*	*100*	*1*	*5*
Sri Lanka	..	*105*	..	..	83	*100*	..	..	..	..	..	..
Sudan	28[b]	74[b]	38[b]	..	..	..	..	..	..	..	..	..
Swaziland	..	*108*	*53*	*4*	74	*83*	32	*29*	*82*	*84*	*19*	*18*
Sweden	*101*	*94*	*103*	*75*	100	*94*	87	*99*	*94*	*94*	*20*	*20*
Switzerland	*101*	*102*	*96*	*47*	84	*93*	84	*85*	*98*	*99*	*5*	*3*
Syrian Arab Republic	10	124	74	..	91	..	36	68	..	..	..	..
Tajikistan	9	102	84	20	77	97	63	83	99	96	2	15
Tanzania	34	110	..	*1*	51	99	*5*	..	*96*	*95*	*138*	*179*
Thailand	..	..	..	..	..	..	..	..	..	..	..	..
Timor-Leste	..	107	..	15[b]	..	76	*23*	*31*	79	76	20	22
Togo	*4*	*105*	*41*	*5*	65	*83*	20	..	*91*	*80*	*44*	99
Trinidad and Tobago	82	103	89	..	90	92	70	74	96	95	3	3
Tunisia	..	*108*	*90*	*32*	94	*98*	69	..	99	*100*	*6*	*0*[c]
Turkey	*16*	*98*	*82*	*37*	89	*94*	..	*71*	*95*	*92*	*194*	*313*
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	19	120	25	4	51	97	8	*19*	96	99	134	49
Ukraine	98	98	94	79	81	89	*91*	85	89	90	89	81
United Arab Emirates	*87*	*108*	*94*	25	99	*92*	69	*84*	99	99	*1*	*1*
United Kingdom	*73*	*104*	*97*	*59*	98	*97*	95	*91*	*98*	*99*	*42*	*24*
United States	*61*	*98*	*94*	*82*	97	*91*	88	*88*	*92*	*93*	*1,018*	*797*
Uruguay	*81*	*114*	*92*	*64*	91	*98*	..	*68*	*98*	*98*	*4*	*3*
Uzbekistan	*27*	*94*	*102*	*10*	78	*90*	..	*92*	*94*	*91*	*74*	*98*
Venezuela, RB	69	103	81	78	..	90	47	69	92	92	141	123
Vietnam	..	..	..	..	89	..	59	..	..	..	..	..
West Bank and Gaza	*30*	*80*	*92*	47	..	*73*	77	*89*	*77*	*78*	56	*52*
Yemen, Rep.	..	85	..	*10*	..	73	32	..	80	66	395	641
Zambia	..	119	52	..	80	95	17	49	96	98	47	29
Zimbabwe	..	*104*	*41*	..	84	*90*	40	*38*	*90*	*91*	*121*	*103*
World	***45*** **w**	***106*** **w**	***66*** **w**	***26*** **w**	**.. w**	***87*** **w**	**.. w**	**.. w**	***90*** **w**	***88*** **w**		
Low income	..	*101*	*41*	*6*	..	*80*	..	..	*83*	79		
Middle income	*46*	*109*	*67*	*23*	..	*88*	..	..	*92*	*90*		
Lower middle income	*41*	*108*	*62*	*18*	..	*87*	..	..	*91*	*89*		
Upper middle income	*64*	*110*	*90*	*43*	..	*94*	..	..	*95*	*95*		
Low & middle income	*41*	*107*	*62*	*20*	..	*86*	..	..	*90*	*87*		
East Asia & Pacific	*42*	*112*	*73*	..	96	..	..	..	..	..		
Europe & Central Asia	*54*	*98*	*89*	*55*	90	*92*	..	..	*94*	*93*		
Latin America & Carib.	*66*	*117*	*88*	*35*	..	*94*	60	*71*	*94*	*95*		
Middle East & N. Africa	*29*	*106*	*72*	*26*	..	*91*	*60*	..	*94*	*90*		
South Asia	*47*	*108*	*52*	*11*	68	*86*	..	..	*92*	*86*		
Sub-Saharan Africa	*16*	*97*	*33*	*6*	..	*73*	..	..	*76*	*71*		
High income	*79*	*102*	*100*	*69*	95	*95*	..	..	*94*	*95*		
Euro area	*106*	..	..	..	..	..	..	..	..	..		

a. Provisional data. b. Data are for 2009. c. Less than 0.5.

Participation in education 2.12

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, and whether an education system has the capacity to meet the needs of universal primary education, as indicated in part by gross enrollment ratios.

Enrollment ratios, while a useful measure of participation in education, have limitations. They are based on annual school surveys, which are typically conducted at the beginning of the school year and 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, 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 shorter duration for primary education tends to increase the ratio; a longer one to decrease it (in part because more older children drop out).

Overage or underage enrollments are frequent, particularly when 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 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).

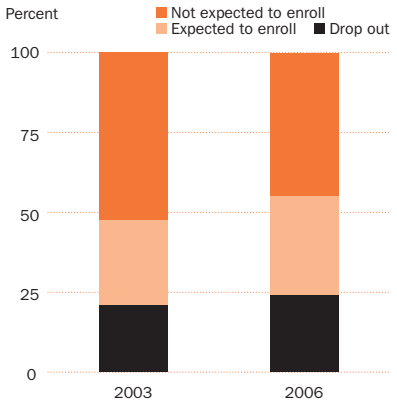
Gross enrollment ratios indicate the capacity of each level of the education system, but a high ratio may reflect a substantial number of overage children enrolled in each grade because of repetition rather than a successful education system. The net enrollment ratio excludes overage and underage students 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.

Adjusted net primary enrollment (called total net primary enrollment in the 2008 edition), recently added as a Millennium Development Goal indicator, captures primary-school-age children who have progressed to secondary education, which the traditional net enrollment ratio excludes.

Data on children out of school (primary-school-age children not enrolled in school—dropouts, children never enrolled, and children of primary age enrolled in preprimary education) are compiled from administrative data. 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 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 2.11.

The situations of out of school children vary widely **2.12a**



Some children who are out of school can be expected to enter school late, some have already had some contact with schooling but will drop out, and others will never enter school. For countries to reach the goal of education for all, policies that address all three situations will need to be implemented.

Source: UNESCO Institute for Statistics 2008b.

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. • **Adjusted 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.

2.13 Education efficiency

	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		%	
			Reaching grade 5				Reaching last grade of primary education					
	Male	Female	Male		Female		Male	Female	Male	Female	Male	Female
	2008[a]	2008[a]	1991	2007[a]	1991	2007[a]	2007[a]	2007[a]	2008[a]	2008[a]	2007[a]	2007[a]
Afghanistan	*119*	*82*	..	..	..	..	..	..	0	0	..	..
Albania	..	..	..	..	..	..	..	..	..	..	..	..
Algeria	104	102	95	95	94	97	91	95	10	6	90	92
Angola	..	..	..	..	..	..	..	..	..	..	..	..
Argentina	*112*	*111*	..	*95*	..	*97*	*93*	*96*	*8*	*5*	*93*	*95*
Armenia	90	93	..	..	..	..	29	27	0[b]	0[b]	100	98
Australia	..	..	98	..	99	..	..	..	..	..	..	..
Austria	*106*	*102*	..	..	..	..	*97*	*99*	..	..	*100*	*99*
Azerbaijan	115	114	..	..	..	..	100	98	0[b]	0[b]	100	99
Bangladesh	*97*	*99*	..	*52*	..	*58*	*52*	*58*	13	13	*95*	*100*
Belarus	97	102	..	..	..	..	99	*100*	*0*[b]	*0*[b]	*100*	*100*
Belgium	*99*	*101*	90	*95*	92	*97*	*92*	*95*	*3*	*3*	*100*	*99*
Benin	171	157	54	..	56	..	..	..	14	14	*72*	*70*
Bolivia	*121*	*120*	..	*83*	..	*83*	*81*	*80*	*3*	*2*	*90*	*90*
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	*1*	*0*[b]	..	..
Botswana	*116*	*113*	81	*94*	87	*95*	*90*	*94*	*6*	*4*	*98*	*98*
Brazil	..	..	..	..	..	..	..	..	..	..	..	..
Bulgaria	*109*	*110*	..	..	..	..	*94*	*94*	*3*	*2*	*94*	*95*
Burkina Faso	90[c]	83[c]	71	78	68	81	68	71	11	10	54	50
Burundi	151	142	65	59	58	65	51	57	33	34	*37*	*31*
Cambodia	129	122	..	60	..	65	52	57	12	10	80	79
Cameroon	127	110	..	63	..	63	57	56	17	16	46	50
Canada	*98*	*98*	95	..	98	..	..	..	*0*	*0*	..	..
Central African Republic	93	70	24	61	22	57	53	47	26	27	*44*	*51*
Chad	*114*	*84*	56	*41*	41	*34*	*33*	*25*	*21*	*23*	*64*	*65*
Chile	*103*	*102*	94	*96*	91	*97*	..	..	5	3	..	..
China	*92*	*95*	58	..	78	..	..	..	*0*[b]	*0*[b]	..	..
Hong Kong SAR, China	..	..	..	100	..	100	100	100	1	1	100	100
Colombia	127	124	..	*85*	..	*93*	*85*	*93*	4	3	98	99
Congo, Dem. Rep.	105	128	58	80	50	79	82	76	15	16	64	54
Congo, Rep.	107	98	56	76	65	80	70	71	23	22	63	63
Costa Rica	95	95	83	95	85	98	93	96	8	6	100	94
Côte d'Ivoire	81	69	75	*83*	70	*73*	*83*	*66*	18	18	50	43
Croatia	*94*	*94*	..	..	..	..	*100*	*100*	*0*[b]	*0*[b]	*99*	*100*
Cuba	96	98	..	96	..	97	95	97	1	0[b]	98	99
Czech Republic	*112*	*110*	..	*98*	..	*99*	*98*	*99*	*1*	*0*[b]	*99*	*99*
Denmark	*98*	*99*	94	*100*	94	*100*	..	..	*0*	*0*	*97*	*96*
Dominican Republic	110	98	..	70	..	77	64	74	4	3	90	94
Ecuador	*141*	*139*	..	46	..	39	38	32	*2*	*1*	72	67
Egypt, Arab Rep.	*98*	*96*	..	*96*	..	*97*	*94*	*96*	*4*	*2*	..	..
El Salvador	123	119	..	78	..	82	74	78	7	5	92	92
Eritrea	44	37	..	77	..	69	77	69	16	15	84	81
Estonia	*100*	*99*	..	*98*	..	*98*	*99*	*98*	*0*	*0*	..	..
Ethiopia	162	144	16	46	23	49	39	42	5	5	88	89
Finland	*99*	*99*	100	*100*	100	*100*	*100*	*100*	*1*	*0*[b]	*100*	*100*
France	..	..	69	..	95	..	..	..	..	..	..	..
Gabon	..	..	..	..	..	..	..	..	..	..	..	..
Gambia, The	91	96	..	71	..	72	68	72	6	5	84	84
Georgia	114	118	..	94	..	97	94	97	0[b]	0[b]	99	100
Germany	*104*	*102*	..	..	..	..	*98*	*99*	*1*	*1*	*99*	*98*
Ghana	109	112	81	..	79	..	..	..	7	6	90	96
Greece	*102*	*103*	100	99	100	*98*	*98*	*98*	*1*	*1*	*100*	*99*
Guatemala	123	121	..	71	..	70	65	64	13	11	93	90
Guinea	97	87	64	74	48	65	60	49	15	16	34	26
Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	..	..
Haiti	..	..	..	..	..	..	..	..	..	..	..	..
Honduras	126	122	..	75	..	80	74	79	6	5	*68*	*74*

2.13 Education efficiency

	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									
			Reaching grade 5				Reaching last grade of primary education		% of enrollment		%	
	Male	Female	Male		Female		Male	Female	Male	Female	Male	Female
	2008[a]	2008[a]	1991	2007[a]	1991	2007[a]	2007[a]	2007[a]	2008[a]	2008[a]	2007[a]	2007[a]
Hungary	99	98	..	..	..	..	98	98	2	2	100	95
India	132	124	..	66	..	65	66	65	3	3	86	84
Indonesia	131	125	34	92	78	94	78	81	4	3	99	98
Iran, Islamic Rep.	118	159	91	..	89	..	..	..	3	1	84	74
Iraq	..	..	..	..	..	..	..	..	..	..	..	..
Ireland	100	102	99	97	100	100	..	..	1	1	..	..
Israel	100	103	..	100	..	99	100	99	2	1	71	71
Italy	106	105	..	99	..	100	99	100	0[b]	0[b]	100	99
Jamaica	90	86	..	..	..	..	..	..	3	2	..	..
Japan	102	101	100	..	100	..	..	..	..	..	..	..
Jordan	94	96	..	..	..	..	..	..	1	1	98	97
Kazakhstan	108[c]	108[c]	..	..	..	..	99[d]	99[d]	0[b,c]	0[b,c]	100[d]	100[d]
Kenya	..	..	..	71	..	74	..	..	..	..	61[d]	59[d]
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	113	110	99	98	100	98	97	97	0[b]	0[b]	99	98
Kosovo	..	..	..	..	..	..	..	..	..	..	..	..
Kuwait	95	93	..	100	..	99	100	99	1	1	100	100
Kyrgyz Republic	97	96	..	..	..	..	98	98	0[b]	0[b]	100	100
Lao PDR	124	115	..	66	..	68	66	68	18	16	80	77
Latvia	100	101	..	..	..	..	97	97	4	2	97	97
Lebanon	97	95	..	91	..	95	86	93	10	7	83	89
Lesotho	101	94	58	55	73	69	37	56	24	18	68	66
Liberia	117	107	..	..	..	..	..	..	6	7	..	..
Libya	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	100	99	..	..	..	..	98	98	1	1	99	99
Macedonia, FYR	92	93	..	..	..	..	98	97	0[b]	0[b]	100	99
Madagascar	188	185	22	42	21	43	42	43	21	19	61	59
Malawi	137	144	71	44	57	43	37	35	21	20	79	75
Malaysia	96	96	97	92	97	92	89	90	..	..	100	98
Mali	104	91	71	87	67	81	79	72	14	14	68	64
Mauritania	117	125	76	48	75	51	40	42	2	2	45	39
Mauritius	100	102	97	100	98	98	100	97	5	3	63	74
Mexico	118	118	35	94	71	95	91	94	5	3	95	94
Moldova	95	91	..	..	..	..	94	97	0[b]	0[b]	99	98
Mongolia	134	133	..	94	..	95	94	95	0[b]	0[b]	96	98
Morocco	107	105	75	83	76	82	77	76	14	10	80	78
Mozambique	165	155	36	63	32	58	46	42	6	5	56	60
Myanmar	138	132	..	..	..	..	..	..	1	0[b]	75	70
Namibia	101	101	60	97	65	99	87	87	22	14	76	79
Nepal	..	..	51	60	51	64	60	64	17	17	81	81
Netherlands	103	102	..	..	..	..	..	..	..	..	..	..
New Zealand	..	..	..	..	..	..	..	..	..	..	..	..
Nicaragua	158	148	11	48	37	55	45	52	13	9	..	..
Niger	97[c]	83[c]	61	72[d]	65	66[d]	69[d]	64[d]	5[c]	5[c]	49[d]	44[d]
Nigeria	..	..	..	..	..	..	..	..	3	3	..	..
Norway	101	100	99	100	100	99	100	99	..	..	100	99
Oman	73	73	97	99	96	100	99	100	1	1	97	97
Pakistan	114	98	..	..	..	..	..	..	5	4	73	71
Panama	109	106	..	87	..	88	85	86	6	4	98	99
Papua New Guinea	33	29	70	..	68	..	..	..	..	..	..	..
Paraguay	107	103	73	82	75	82	75	78	3	4	..	..
Peru	108	111	..	93	..	93	90	90	8	8	99	96
Philippines	134	126	..	73	..	81	69	78	3	2	98	97
Poland	97	98	..	..	..	..	..	..	1	0[b]	..	..
Portugal	113	110	..	..	..	..	..	..	..	..	..	..
Puerto Rico	..	..	..	..	..	..	..	..	..	..	..	..
Qatar	106	107	63	93	65	100	94	100	1	1	97	100

2.13 Education efficiency

	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		%	
			Reaching grade 5				Reaching last grade of primary education					
	Male	Female	Male		Female		Male	Female	Male	Female	Male	Female
	2008[a]	2008[a]	1991	2007[a]	1991	2007[a]	2007[a]	2007[a]	2008[a]	2008[a]	2007[a]	2007[a]
Romania	*98*	*98*	..	..	..	..	*95*	*95*	*2*	*1*	99	*98*
Russian Federation	*102*	*101*	..	..	..	..	..	..	*1*	*1*	..	..
Rwanda	213	207	61	..	59	..	..	..	18	18	..	..
Saudi Arabia	100	101	82	100	84	94	100	93	3	3	92	97
Senegal	97	102	..	70	..	72	57	60	8	8	65	58
Serbia	101	100	..	..	..	..	98	99	1	1	99	99
Sierra Leone	*201*	*182*	..	..	..	..	..	..	*10*	*10*	..	..
Singapore	..	..	..	..	..	..	..	..	0[b]	0[b]	88	95
Slovak Republic	*102*	*102*	..	..	..	..	*98*	*98*	*3*	*2*	*97*	*98*
Slovenia	*100*	*100*	..	..	..	..	..	..	*1*	0[b]	..	..
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	*112*	*104*	..	..	..	..	..	..	*8*	*8*	*93*	*94*
Spain	*107*	*106*	..	*100*	..	*100*	*100*	*100*	*3*	*2*	..	..
Sri Lanka	*104*	*105*	92	*98*	93	*99*	*98*	*99*	*1*	*1*	*98*	*99*
Sudan	86	76	90	89	99	100	88	100	4[c]	4[c]	90	98
Swaziland	*105*	*101*	74	*76*	80	*88*	*71*	*76*	*21*	*15*	*90*	*87*
Sweden	*100*	*100*	100	*100*	100	*100*	*100*	*100*	*0*	*0*	*100*	*100*
Switzerland	*93*	*96*	..	..	..	..	..	..	*2*	*1*	*99*	*100*
Syrian Arab Republic	118	116	97	..	95	..	96	97	8	6	95	96
Tajikistan	106	101	..	..	..	..	*100*	*97*	0[b]	0[b]	*98*	*98*
Tanzania	*107*	*105*	81	*85*	82	*89*	*81*	*85*	*4*	*4*	*47*	*45*
Thailand	..	..	..	..	..	..	..	..	*12*	*6*	*85*	*89*
Timor-Leste	144	134	..	..	..	..	..	..	13	12	100	100
Togo	*106*	*99*	52	*58*	42	*50*	*49*	*39*	*23*	*24*	*56*	*49*
Trinidad and Tobago	97	96	..	..	..	..	..	..	8	5	88	92
Tunisia	*104*	*105*	94	*96*	77	*96*	*94*	*94*	*9*	*6*	*86*	*90*
Turkey	*100*	*96*	98	*100*	97	*94*	..	..	*3*	*3*	..	..
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	158	160	..	59	..	*59*	*34*	*31*	11	11	63	60
Ukraine	100	100	..	..	..	..	96	98	0[b]	0[b]	100	100
United Arab Emirates	*110*	*109*	80	*100*	80	*100*	*100*	*100*	*2*	*2*	*98*	*99*
United Kingdom	..	..	..	..	..	..	..	..	*0*	*0*	..	..
United States	*100*	*106*	..	96	..	98	..	..	*0*	*0*	..	..
Uruguay	*104*	*103*	96	*93*	98	*96*	*92*	*95*	*8*	*6*	*71*	*83*
Uzbekistan	*94*	*91*	..	..	..	..	*99*	*99*	0[b]	0[b]	*100*	*100*
Venezuela, RB	103	101	..	82	..	87	78	83	4	3	95	96
Vietnam	..	..	..	..	..	..	..	..	..	..	..	..
West Bank and Gaza	*80*	*79*	..	..	..	..	*99*	*99*	*1*	*1*	*97*	*98*
Yemen, Rep.	110	98	..	..	..	..	..	..	6	5	..	..
Zambia	122	127	..	92	..	88	82	75	6	6	69	72
Zimbabwe	..	..	72	..	81	..	..	..	..	..	..	..
World	***114*** **w**	***110*** **w**	**.. w**	**.. w**	**.. w**	**.. w**	**.. w**	**.. w**	***4*** **w**	***4*** **w**	**.. w**	**.. w**
Low income	*120*	*113*	..	..	..	..	..	..	..	..	..	..
Middle income	*115*	*110*	..	..	..	..	..	..	*4*	*3*	..	..
Lower middle income	*115*	*111*	..	..	..	..	..	..	*3*	*3*	..	..
Upper middle income	*106*	*104*	..	..	..	..	..	..	*6*	*4*	..	..
Low & middle income	*116*	*111*	..	..	..	..	..	..	*5*	*4*	..	..
East Asia & Pacific	*103*	*104*	55	..	78	..	..	..	*2*	*1*	..	..
Europe & Central Asia	*99*	*98*	..	..	..	..	..	..	*1*	*1*	..	..
Latin America & Carib.	..	..	..	..	..	..	..	..	..	..	..	..
Middle East & N. Africa	*105*	*112*	..	..	..	..	..	..	*7*	*4*	..	..
South Asia	*126*	*117*	..	*65*	..	*65*	*65*	*65*	*4*	*4*	*85*	*83*
Sub-Saharan Africa	*121*	*113*	..	..	..	..	..	..	*10*	*10*	..	..
High income	*102*	*104*	..	..	..	..	..	..	*1*	*1*	..	..
Euro area	*105*	*104*	..	..	..	..	*98*	*99*	*1*	*1*	..	..

a. Provisional data. b. Less than 0.5. c. Data are for 2009. d. Data are for 2008.

Education efficiency 2.13

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 in some situations, such as immediately after fees have been abolished or when the number of reenrolled children is large. The quality of data is reduced when new entrants and repeaters are not correctly distinguished in grade 1.

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.

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. In other cases the number of repeaters is almost 0 because of automatic promotion—suggesting a system that is highly efficient but that may not be endowing students with enough cognitive skills. 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 2.11.

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.

Data sources

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

2.14 Education completion and outcomes

	Primary completion rate						Youth literacy rate				Adult literacy rate	
	% of relevant age group						% ages 15–24				% ages 15 and older	
	Total		Male		Female		Male		Female		Male	Female
	1991	2008[a]	1991	2008[a]	1991	2008[a]	1990	2005–08[b]	1990	2005–08[b]	2005–08[b]	2005–08[b]
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..
Albania	..	..	..	..	..	..	..	99	..	100	99	99
Algeria	80	114	86	119	73	108	..	94	..	89	81	64
Angola	34	..	..	..	..	..	..	81	..	65	83	57
Argentina	..	*100*	..	*98*	..	*102*	*98*	99	*99*	99	98	98
Armenia	..	98	..	97	..	98	*100*	100	*100*	100	100	99
Australia	..	..	..	..	..	..	..	..	..	..	..	..
Austria	..	*102*	..	*102*	..	*102*	..	..	..	..	..	..
Azerbaijan	..	121	..	123	..	119	..	100	..	100	100	99
Bangladesh	..	*58*	..	*56*	..	*60*	*52*	73	*38*	76	60	50
Belarus	94	96	..	*93*	..	92	*100*	100	*100*	100	100	100
Belgium	79	*86*	76	*84*	82	*88*	..	..	..	..	..	
Benin	22	65	30	75	14	55	*55*	64	*27*	42	54	28
Bolivia	*71*	*98*	*78*	*98*	*64*	*98*	*96*	100	*92*	99	96	86
Bosnia and Herzegovina	..	..	..	..	..	..	..	100	..	99	99	96
Botswana	90	99	83	96	98	*102*	*86*	94	*92*	96	83	84
Brazil	..	..	..	..	..	..	..	97	..	99	90	90
Bulgaria	*101*	*98*	*101*	*99*	*101*	*98*	..	97	..	97	99	98
Burkina Faso	20	38	25	42	15	34	*27*	47	*14*	33	37	22
Burundi	46	45	49	48	43	42	59	77	48	75	72	60
Cambodia	..	79	..	80	..	79	..	90	..	84	86	69
Cameroon	53	73	57	79	49	67	..	88	..	84	84	68
Canada	..	*96*	..	*96*	..	*96*	..	..	..	..	..	..
Central African Republic	28	33	37	41	20	25	*63*	72	*35*	56	69	41
Chad	18	*31*	29	*40*	7	*22*	..	54	..	37	44	22
Chile	..	96	..	94	..	96	*98*	99	*99*	99	99	99
China	107	*99*	..	*98*	..	*102*	97	99	91	99	97	91
Hong Kong SAR, China	102	..	..	..	..	..	..	..	..	..	..	..
Colombia	73	110	70	109	76	112	..	98	..	98	93	93
Congo, Dem. Rep.	48	53	61	63	36	44	..	69	..	62	78	56
Congo, Rep.	54	73	59	75	49	71	..	..	..	..	..	..
Costa Rica	79	93	77	91	81	95	..	98	..	99	96	96
Côte d'Ivoire	42	48	53	57	32	39	*60*	72	*38*	60	64	44
Croatia	..	*102*	..	*102*	..	*101*	*100*	100	*100*	100	100	98
Cuba	99	90	..	90	..	90	..	100	..	100	100	100
Czech Republic	..	*94*	..	*95*	..	*94*	..	..	..	..	..	..
Denmark	98	*101*	98	*100*	98	*101*	..	..	..	..	..	..
Dominican Republic	..	91	..	89	..	92	..	95	..	97	88	88
Ecuador	..	*106*	..	*105*	..	*107*	97	95	96	96	87	82
Egypt, Arab Rep.	..	*95*	..	*97*	..	*93*	..	88	..	82	75	58
El Salvador	65	89	64	88	66	91	*85*	95	*85*	96	87	81
Eritrea	..	47	..	52	..	42	..	91	..	84	77	55
Estonia	..	*100*	..	*101*	..	*100*	*100*	100	*100*	100	100	100
Ethiopia	..	52	..	56	..	48	..	..	..	..	..	..
Finland	97	*98*	98	*98*	97	*98*	..	..	..	..	..	..
France	106	..	..	..	..	..	..	..	..	..	..	..
Gabon	..	..	..	..	..	..	..	98	..	96	91	83
Gambia, The	..	79	..	76	..	83	..	70	..	58	57	34
Georgia	..	100	..	103	..	97	..	100	..	100	100	100
Germany	..	*105*	..	*104*	..	*105*	..	..	..	..	..	..
Ghana	64	79	71	81	56	77	..	81	..	78	72	59
Greece	..	*101*	..	*102*	..	*101*	99	99	*99*	99	98	96
Guatemala	..	80	..	83	..	77	..	89	..	84	80	69
Guinea	17	55	24	62	9	47	..	..	..	..	..	..
Guinea-Bissau	..	..	..	..	..	..	..	78	..	62	66	37
Haiti	27	..	29	..	26	..	..	..	..	..	..	..
Honduras	64	90	67	87	61	93	..	93	..	95	84	83

Education completion and outcomes

2.14

	Primary completion rate						Youth literacy rate				Adult literacy rate	
	% of relevant age group						% ages 15–24				% ages 15 and older	
	Total		Male		Female		Male		Female		Male	Female
	1991	2008[a]	1991	2008[a]	1991	2008[a]	1990	2005–08[b]	1990	2005–08[b]	2005–08[b]	2005–08[b]
Hungary	*94*	*95*	*93*	*95*	*95*	*94*	..	98	..	99	99	99
India	63	*94*	75	*95*	51	*92*	*74*[c]	88	*49*[c]	74	75	51
Indonesia	93	*108*	..	*109*	..	*107*	97	97	95	96	95	89
Iran, Islamic Rep.	88	*117*	93	*108*	82	*126*	*92*	97	*81*	96	87	77
Iraq	..	..	..	..	..	..	..	85	..	80	86	69
Ireland	..	*97*	..	*96*	..	*98*	..	..	..	..	..	..
Israel	..	*102*	..	*101*	..	*104*	..	..	..	..	..	..
Italy	98	*101*	98	*101*	97	*100*	..	100	..	100	99	99
Jamaica	94	*89*	90	*88*	98	*90*	..	92	..	98	81	91
Japan	102	..	102	..	102	..	..	..	..	..	..	..
Jordan	*95*	99	*94*	98	*95*	*100*	..	99	..	99	95	89
Kazakhstan	..	105[d]	..	105[d]	..	105[d]	*100*	100	*100*	100	100	100
Kenya	..	80	..	85	..	75	..	92	..	93	90	83
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	98	*99*	97	*101*	98	*97*	..	..	..	..	..	..
Kosovo	..	..	..	..	..	..	..	..	..	..	..	..
Kuwait	..	*98*	..	*98*	..	*98*	..	98	..	99	95	93
Kyrgyz Republic	..	92	..	93	..	92	..	100	..	100	100	99
Lao PDR	*45*	75	..	78	..	71	..	89	..	79	82	63
Latvia	..	*95*	..	*97*	..	*94*	*100*	100	*100*	100	100	100
Lebanon	..	87	..	84	..	89	..	98	..	99	93	86
Lesotho	59	*73*	42	*62*	76	*84*	..	86	..	98	83	95
Liberia	..	58	..	..	..	53	..	70	..	80	63	53
Libya	..	..	..	..	..	..	..	100	..	100	95	81
Lithuania	..	*96*	..	*96*	..	*96*	*100*	100	*100*	100	100	100
Macedonia, FYR	..	*92*	..	*92*	..	*92*	..	99	..	99	99	95
Madagascar	36	71	35	71	37	71	..	..	..	..	..	..
Malawi	28	*54*	36	*54*	21	*54*	..	87	..	85	80	66
Malaysia	91	*96*	91	*97*	91	*96*	*96*	98	*95*	99	94	90
Mali	12	57	15	65	9	48	..	47	..	31	35	18
Mauritania	33	64	39	63	26	66	..	71	..	63	64	50
Mauritius	115	90	115	90	115	91	91	95	92	97	90	85
Mexico	88	*104*	..	*103*	..	*105*	96	98	95	98	95	91
Moldova	..	84	..	85	..	84	*100*	99	*100*	100	99	98
Mongolia	..	93	..	94	..	92	..	93	..	97	97	98
Morocco	48	81	57	85	39	78	..	85	..	68	69	44
Mozambique	26	59	32	67	21	52	..	78	..	62	70	40
Myanmar	..	*97*	..	*94*	..	*100*	..	96	..	95	95	89
Namibia	..	81	..	76	..	86	*86*	91	*90*	95	89	88
Nepal	50	*76*	..	*79*	..	*72*	*68*	86	*33*	75	71	45
Netherlands	..	..	..	..	..	..	..	..	..	..	..	..
New Zealand	103	..	104	..	102	..	..	..	..	..	..	..
Nicaragua	42	75	..	71	..	78	..	85	..	89	78	78
Niger	17	40[d]	21	47[d]	13	34[d]	..	52	..	23	43	15
Nigeria	..	..	..	..	..	..	*81*	78	*62*	65	72	49
Norway	100	*96*	100	*96*	100	*97*	..	..	..	..	..	..
Oman	*65*	80	*67*	80	*62*	81	..	98	..	98	90	81
Pakistan	..	60	..	67	..	53	..	79	..	59	67	40
Panama	..	102	..	102	..	102	95	97	95	96	94	93
Papua New Guinea	46	..	51	..	42	..	..	65	..	69	64	56
Paraguay	68	*95*	68	*95*	69	*95*	96	99	*95*	99	96	93
Peru	..	*103*	..	*103*	..	*102*	..	98	..	97	95	85
Philippines	*88*	*92*	..	*90*	..	*95*	96	94	97	96	93	94
Poland	*98*	*96*	..	..	..	..	..	100	..	100	100	99
Portugal	95	..	94	..	95	..	99	100	99	100	97	93
Puerto Rico	..	..	..	..	..	..	92	86	94	85	90	90
Qatar	71	115	71	119	72	112	..	99	..	99	94	90

2.14 Education completion and outcomes

	Primary completion rate						Youth literacy rate				Adult literacy rate	
	% of relevant age group						% ages 15–24				% ages 15 and older	
	Total		Male		Female		Male		Female		Male	Female
	1991	2008[a]	1991	2008[a]	1991	2008[a]	1990	2005–08[b]	1990	2005–08[b]	2005–08[b]	2005–08[b]
Romania	*100*	*120*	*100*	*120*	*100*	*121*	99	97	99	98	98	97
Russian Federation	..	*94*	..	..	..	..	*100*	100	*100*	100	100	99
Rwanda	35	54	39	52	32	56	*75*	77	*75*	77	75	66
Saudi Arabia	55	95	60	99	51	92	*94*	98	*81*	96	90	80
Senegal	*43*	56	*52*	57	*33*	56	*49*	58	*28*	45	52	33
Serbia	..	104	..	104	..	105	99[e]	..	98[e]	..	..	..
Sierra Leone	..	*88*	..	*101*	..	*75*	..	66	..	46	52	29
Singapore	..	..	..	..	..	..	99	100	99	100	97	92
Slovak Republic	..	*94*	..	*94*	..	*94*	..	..	..	..	..	..
Slovenia	..	..	..	..	..	..	*100*	100	*100*	100	100	100
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	76	*86*	72	*86*	80	*86*	..	96	..	98	90	88
Spain	*103*	*98*	*104*	*99*	*103*	*98*	*100*	100	*100*	100	98	97
Sri Lanka	101	*105*	101	*105*	101	*105*	..	97	..	99	92	89
Sudan	40	57[d]	45	53	36	47	..	89	..	82	79	60
Swaziland	61	*72*	57	*75*	64	69	..	92	..	95	87	86
Sweden	96	*95*	96	*94*	96	*95*	..	..	..	..	..	..
Switzerland	53	*93*	53	*92*	54	*94*	..	..	..	..	..	..
Syrian Arab Republic	89	114	94	114	84	113	..	96	..	93	90	77
Tajikistan	..	98	..	97	..	*93*	*100*	100	*100*	100	100	100
Tanzania	63	*83*	62	*85*	64	*81*	*86*	79	*78*	76	79	66
Thailand	..	..	..	..	..	..	..	98	..	98	96	92
Timor-Leste	..	80	..	80	..	79	..	..	..	..	..	..
Togo	35	*61*	48	*71*	22	*51*	..	87	..	80	77	54
Trinidad and Tobago	102	92	99	92	105	92	99	100	99	100	99	98
Tunisia	74	*102*	79	*103*	70	*102*	..	97	..	95	86	70
Turkey	90	*99*	93	*104*	86	*94*	97	99	88	94	96	81
Turkmenistan	..	..	..	..	..	..	..	100	..	100	100	99
Uganda	..	56	..	57	..	55	*77*	89	*63*	86	82	67
Ukraine	94	99	..	98	..	99	..	100	..	100	100	100
United Arab Emirates	103	*105*	104	*103*	103	*107*	..	94	..	97	89	91
United Kingdom	..	..	..	..	..	..	..	..	..	..	..	..
United States	..	*96*	..	*95*	..	*97*	..	..	..	..	..	..
Uruguay	94	*104*	91	*102*	96	*105*	..	99	..	99	98	98
Uzbekistan	..	*96*	..	*97*	..	*95*	..	100	..	100	100	99
Venezuela, RB	79	95	..	94	..	97	95	98	96	99	95	95
Vietnam	..	..	..	..	..	..	*94*	97	*93*	96	95	90
West Bank and Gaza	..	*83*	..	*83*	..	*83*	..	99	..	99	97	91
Yemen, Rep.	..	61	..	72	..	49	..	95	..	70	79	43
Zambia	..	93	..	98	..	88	67	82	66	68	81	61
Zimbabwe	97	..	99	..	96	..	*97*	98	*94*	99	94	89
World	**.. w**	***89* w**	**.. w**	***90* w**	**.. w**	***88* w**	**87 w**	**92 w**	**76 w**	**86 w**	**87 w**	**76 w**
Low income	..	*66*	..	*69*	..	*62*	..	81	..	77	76	63
Middle income	..	*94*	..	*95*	..	*93*	89	93	79	88	88	77
Lower middle income	..	*92*	..	*93*	..	*91*	88	92	76	85	87	73
Upper middle income	..	*100*	..	..	..	..	96	98	94	98	95	92
Low & middle income	..	*88*	..	*90*	..	*86*	87	92	76	86	87	76
East Asia & Pacific	..	*100*	..	*99*	..	*101*	97	98	92	98	96	90
Europe & Central Asia	..	*98*	..	..	..	..	99	99	97	99	99	97
Latin America & Carib.	..	*101*	..	*102*	..	*103*	..	97	..	98	92	91
Middle East & N. Africa	..	*94*	..	*95*	..	*92*	82	92	62	86	82	65
South Asia	..	*79*	..	*82*	..	*76*	71	86	48	73	73	50
Sub-Saharan Africa	..	*62*	..	*67*	..	*57*	..	79	..	71	74	57
High income	..	..	..	..	..	..	..	..	..	..	..	..
Euro area	101	..	100	..	100	..	..	..	..	..	..	..

a. Provisional data. b. Data are for the most recent year available. c. Includes the Indian-held part of Jammu and Kashmir. d. Data are for 2009. e. Includes Montenegro.

Education completion and outcomes 2.14

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 education outcome at the primary level and of progress toward 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 population estimates 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. In many countries national assessments are enabling the ministry of education to monitor progress in these outcomes. Internationally comparable assessments are not yet available, except for a few, mostly industrialized, 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 1985–2007. For countries that have not reported national estimates, the UNESCO Institute for Statistics derived the modeled estimates. For detailed information on sources, definitions, and methodology, 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 better captures the ability of participants in the formal education system 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.

Data sources

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

2.15 Education gaps by income and gender

	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 15–19		% of relevant age group				% of relevant age group	
		Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Male	Female	Poorest quintile	Richest quintile
Armenia	2005	93	80	106	102	9	10	119	116	113	112	2	1
Azerbaijan	2006	92	118	100	108	9	11	94	109	103	105	20	11
Bangladesh	2006	144	147	96	105	8	13	65	97	83	86	12	6
Belize	2006	80	89	106	113	8	11	59	130	107	72	5	7
Benin	2006	67	107	61	114	6	8	31	95	67	52	57	12
Bolivia	2003	92	95	108	129	6	9	76	98	90	81	22	5
Burundi	2005	201	191	91	144	4	7	20	70	44	39	5	3
Cambodia	2005	208	151	113	134	5	8	42	121	88	85	37	13
Cameroon	2006	108	75	93	116	6	14	43	111	90	74	3	2
Colombia	2005	161	84	127	99	6	10	94	109	100	103	11	2
Côte d'Ivoire	2006	51	77	57	110	5	8	47	127	88	71	4	3
Dominican Republic	2007	130	112	113	107	7	11	69	109	88	106	12	4
Egypt, Arab Rep.	2005	107	97	95	99	9	12	84	92	92	88	12	1
Ethiopia	2005	86	124	47	112	3	6	14	90	46	33	74	30
Georgia	2006	90	104	101	103	15	14	102	102	106	104	2	1
Ghana	2006	107	121	81	117	5	8	62	88	93	86	22	12
Guatemala	2000	176	124	81	114	4	8	15	80	34	36	7	3
Guinea	2005	55	119	52	121	5	7	32	93	76	48	60	16
Guinea-Bissau	2006	135	184	94	166	4	7	34	125	80	54	12	11
Guyana	2006	74	76	105	101	10	10	109	118	91	112	2	1
Haiti	2005	177	188	87	159	4	7	31	136	73	82	69	24
Kazakhstan	2006	118	101	106	103	9	9	102	115	102	97	0[a]	1
Kenya	2003	134	125	92	106	6	9	40	76	71	72	38	11
Kosovo	2000	104	119	95	104	9	11	82	94	98	83	1	4
Lesotho	2004	169	111	116	124	5	8	36	122	69	85	18	3
Macedonia, FYR	2005	102	190	89	97	8	10	120	119	133	78	0[a]	0[a]
Madagascar	2003–04	250	153	118	145	3	8	42	141	77	77	33	3
Malawi	2006	234	207	133	169	5	7	30	80	49	52	0[a]	0[a]
Mali	2006	41	98	46	110	5	8	36	79	55	41	67	20
Mauritania	2007	67	96	62	116	5	9	17	89	48	52	2	2
Moldova	2005	96	84	99	95	9	12	97	100	96	98	2	1
Mozambique	2003	128	143	75	143	3	6	13	100	57	43	46	7
Namibia	2006	112	104	118	109	7	10	81	109	94	90	11	2
Nepal	2001	184	141	109	139	5	8	49	96	69	62	33	6
Nicaragua	2001	149	106	85	105	4	9	34	124	78	83	40	4
Niger	2006	50	90	35	89	4	7	31	71	60	30	74	28
Nigeria	2003	78	101	70	108	7	10	48	71	70	54	52	6
Panama	2003	125	116	108	102	7	11	100	94	105	88	1	1
Peru	2004	121	90	118	96	7	11	106	99	100	97	6	1
Rwanda	2005	274	195	131	151	3	5	31	88	48	42	13	8
Serbia	2005	90	98	98	100	9	10	86	96	94	89	1	0[a]
Somalia	2005	13	44	8	93	8	10	2	58	26	20	87	46
Swaziland	2006	147	117	117	114	6	9	69	110	85	98	17	4
Syrian Arab Republic	2006	110	149	102	107	7	8	92	93	93	92	0[a]	0[a]
Tanzania	2004	123	123	82	119	5	7	32	108	58	60	44	15
Togo	2006	115	148	99	128	6	7	40	82	67	56	1	1
Turkey	2003	108	111	97	97	6	7	95	85	100	81	20	5
Uganda	2006	180	144	107	124	5	8	27	68	50	42	25	7
Vietnam	2006	99	100	108	100	13	18	99	104	96	103	3	2
Yemen, Rep.	2006	66	109	50	101	7	10	25	103	84	31	2	2
Zambia	2007	135	123	105	112	5	9	50	101	88	73	22	3
Zimbabwe	1999	106	111	144	144	7	10	36	80	51	57	22	8

a. Less than 0.5.

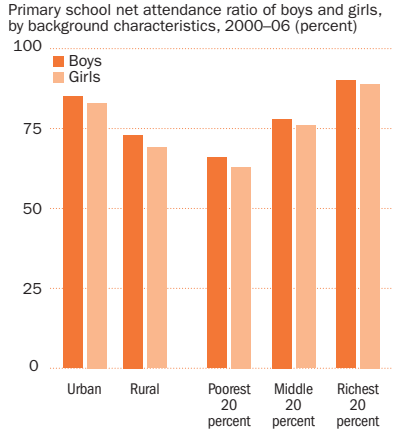
Education gaps by income and gender 2.15

About the data

The data in the table describe basic information on school participation and educational 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, Multiple Indicator Cluster Surveys conducted by the United Nations Children's Fund (UNICEF), and Living Standards Measurement Studies conducted by the World Bank's Development Economics Research Group. 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, the surveys collect basic information on educational attainment and enrollment levels from every household member ages 5 or 6 and older as part of household socioeconomic characteristics. The surveys are not intended for the collection of detailed education data; thus the education section of the surveys is not as detailed as the Demographic and Health Surveys health section and the data obtained from them do not replace other data on education flows. Still, the education data provide micro-level information on education that cannot be obtained from administrative data, such as information on children not attending school.

Gender disparities in net primary school attendance are largest in poor and rural households **2.15a**



Source: UNICEF 2007.

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, which is used to create break-points defining wealth quintiles, expressed as quintiles of individuals in the population.

The selection 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 about 80 countries. The table shows the most recent estimates for the poorest and richest quintiles and by gender only; the full set of estimates for all other subgroups, including by urban and rural location and for other years, 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 used 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 2.13. • **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 15–19. • **Primary completion rate** is the number of students in the last year of primary school minus the number of repeaters in that grade, divided by the number of students of official graduation age. These data differ from those in table 2.14 because the definition and methodology are different. • **Children out of school** are the percentage of children of official primary school age who are not attending primary or secondary education. Children of official primary school age who are attending preprimary education are considered out of school. These data differ from those in table 2.12 because the definition and methodology are different.

Data sources

Data on education gaps by income and gender are from an analysis by the World Bank's Human Development Network Education Group of Demographic and Health Surveys conducted by Macro International, Multiple Indicator Cluster Surveys conducted by UNICEF, and Living Standards Measurement Studies conducted by the World Bank's Development Economics Research Group and the World Bank. Country reports are available at www.worldbank.org/education/edstats/.

2.16 Health services

	Health expenditure					Health workers		Hospital beds	Outpatient visits
				Per capita		per 1,000 people			
	Total % of GDP	Public % of total	Out of pocket % of private	$	PPP $	Physicians	Nurses and midwives	per 1,000 people	per capita
	2007	2007	2007	2007	2007	2003–08[a]	2003–08[a]	2003–08[a]	2000–08[a]
Afghanistan	7.6	23.6	98.9	42	126	2.0[b]	0.5	0.4	..
Albania	7.0	41.2	93.9	244	505	1.1	4.0	2.9	1.5
Algeria	4.4	81.6	94.7	173	338	1.2	1.9	1.7	..
Angola	2.5[c]	80.3[c]	100.0[c]	86[c]	131[c]	0.1	1.4	0.8	..
Argentina	10.0	50.8	42.9	663	1,322	3.2	0.5	4.0	..
Armenia	4.4	47.3	91.4	133	246	3.7	4.9	4.1	2.8
Australia	8.9	67.5	55.5	3,986	3,261	1.0	10.9	4.0	6.2
Austria	10.1	76.4	65.2	4,523	3,763	3.8	6.6	7.8	6.7
Azerbaijan	3.7	26.8	87.8	140	279	3.8	8.4	7.9	4.6
Bangladesh	3.4	33.6	97.4	15	42	0.3	0.3	0.4	..
Belarus	6.5	74.9	69.4	302	704	4.9	12.6	11.2	13.2
Belgium	9.4	74.1	76.4	4,056	3,323	4.2	0.5	5.3	7.0
Benin	4.8	51.8	94.9	32	70	0.1	0.8	0.5	..
Bolivia	5.0	69.2	79.4	69	219	..	..	1.1	..
Bosnia and Herzegovina	9.8	56.8	100.0	397	766	1.4	4.7	3.0	3.3
Botswana	5.7	74.6	27.3	372	762	0.4	2.7	1.8	..
Brazil	8.4	41.6	58.8	606	799	1.7	2.9	2.4	..
Bulgaria	7.3	57.2	86.4	384	800	3.7	4.7	6.4	..
Burkina Faso	6.1	56.1	91.3	29	67	0.1	0.7	0.9	..
Burundi	13.9[c]	37.7[c]	60.5[c]	17[c]	51[c]	0.0[d]	0.2	0.7	..
Cambodia	5.9	29.0	84.7	36	108	..	..	0.1	..
Cameroon	4.9[c]	25.9[c]	94.5[c]	54[c]	104[c]	0.2	1.6	1.5	..
Canada	10.1	70.0	49.6	4,409	3,899	1.9	10.1	3.4	6.3
Central African Republic	4.1	34.7	95.0	16	30	0.1	0.4	1.2	..
Chad	4.8	56.3	96.2	32	72	0.0[d]	0.3	0.4	..
Chile	6.2	58.7	53.2	615	768	1.3	0.6	2.3	..
China	4.3	44.7	92.0	108	233	1.5	1.0	2.2	..
Hong Kong SAR, China	..	..	..	..	..	..	..	..	..
Colombia	6.1	84.2	48.7	284	516	1.4	..	1.0	..
Congo, Dem. Rep.	5.8	20.8	51.7	9	18	0.1	0.5	0.8	..
Congo, Rep.	2.4	70.4	100.0	52	90	0.1	0.8	1.6	..
Costa Rica	8.1	72.9	84.6	488	878	..	..	1.3	..
Côte d'Ivoire	4.2	24.0	88.7	41	67	0.1	0.5	0.4	..
Croatia	7.6	87.0	91.9	1,009	1,398	2.6	5.6	5.3	6.4
Cuba	10.4	95.5	91.3	585	1,001	6.4	8.6	6.0	..
Czech Republic	6.8	85.2	89.0	1,141	1,626	3.6	9.0	8.1	15.0
Denmark	9.8	84.5	89.0	5,551	3,558	3.2	9.8	3.5	4.1
Dominican Republic	5.4	35.9	65.3	224	411	..	..	1.0	..
Ecuador	5.8	39.1	75.2	200	434	..	..	0.6	..
Egypt, Arab Rep.	6.3	38.1	95.1	101	310	2.4	3.4	2.1	..
El Salvador	6.2	58.9	89.0	24	402	1.5	..	0.8	..
Eritrea	3.3[c]	45.3[c]	100.0[c]	9[c]	20[c]	0.1	0.6	1.2	..
Estonia	5.4	76.5	94.1	837	1,106	3.3	7.0	5.6	6.9
Ethiopia	3.8	58.1	80.6	9	30	0.0[d]	0.2	0.2	..
Finland	8.2	74.6	74.3	3,809	2,840	3.3	8.9	6.8	4.3
France	11.0	79.0	32.5	4,627	3,709	3.7	8.1	7.2	6.9
Gabon	4.6[c]	64.5[c]	100.0[c]	373[c]	650[c]	0.3	5.0	1.3	..
Gambia, The	5.5	47.9	48.4	22	90	0.0[d]	0.6	1.1[b]	..
Georgia	8.2	18.4	86.8	191	384	4.5	3.9	3.3	2.2
Germany	10.4	76.9	56.6	4,209	3,588	3.5	8.0	8.3	7.0
Ghana	8.3	51.6	79.3	54	113	0.1	1.0	0.9[b]	..
Greece	9.6	60.3	94.5	2,679	2,727	5.4	3.5	4.8	..
Guatemala	7.3	29.3	92.6	186	336	..	..	0.6	..
Guinea	5.6	11.0	99.5	26	62	0.1	0.0[d]	0.3	..
Guinea-Bissau	6.1[c]	25.9[c]	55.7[c]	16[c]	33[c]	0.0[d]	0.6	1.0[b]	..
Haiti	5.3	23.3	57.4	35	58	..	..	1.3	..
Honduras	6.2	65.7	96.0	107	260	..	..	0.7	..

2.16 Health services

	Health expenditure					Health workers		Hospital beds	Outpatient visits
						per 1,000 people			
	Total % of GDP	Public % of total	Out of pocket % of private	Per capita $	Per capita PPP $	Physicians	Nurses and midwives	per 1,000 people	per capita
	2007	2007	2007	2007	2007	2003–08[a]	2003–08[a]	2003–08[a]	2000–08[a]
Hungary	7.4	70.6	84.7	1,019	1,388	2.8	9.2	7.1	12.9
India	4.1	26.2	89.9	40	109	0.6	1.3	0.9	..
Indonesia	2.2	54.5	66.2	42	81	0.1	0.8	..	..
Iran, Islamic Rep.	6.4	46.8	95.4	253	689	0.9	1.6	1.4	..
Iraq	2.5[e]	75.0[e]	100.0[e]	62[e]	121[e]	0.5	1.0	1.3	..
Ireland	7.6	80.7	51.2	4,556	3,424	3.1	15.8	5.3	..
Israel	8.0	55.9	74.4	1,893	2,181	3.6	6.1	5.8	7.1
Italy	8.7	76.5	85.9	3,136	2,686	3.7	6.9	3.9	6.1
Jamaica	4.7	50.3	71.0	224	357	0.9	1.7	1.7	..
Japan	8.0	81.3	80.8	2,751	2,696	2.1	9.5	14.0	14.4
Jordan	8.9[f]	60.6[f]	88.3[f]	248[f]	434[f]	2.6	3.2	1.8	..
Kazakhstan	3.7	66.1	98.4	253	405	3.9	7.8	7.7	6.6
Kenya	4.7	42.0	77.2	34	72	0.1	..	1.4	..
Korea, Dem. Rep.	3.6	83.7	100.0	22	..	3.3	4.1	..	..
Korea, Rep.	6.3	54.9	79.2	1,362	1,688	1.7	4.4	8.6	..
Kosovo	..	..	..	..	..	..	..	..	..
Kuwait	2.2	77.5	91.6	901	*911*	1.8	3.7	1.8	..
Kyrgyz Republic	6.5	54.0	91.9	46	111	2.3	5.7	5.1	3.6
Lao PDR	4.0	18.9	76.1	27	84	0.4	1.0	1.2	..
Latvia	6.2	57.9	97.1	784	1,071	3.0	5.7	7.6	5.5
Lebanon	8.8	44.7	77.6	525	921	3.3	1.3	3.4	..
Lesotho	6.2	58.3	68.9	51	92	0.1	0.6	1.3	..
Liberia	10.6[c]	26.2[c]	52.2[c]	22[c]	39[c]	0.0[d]	0.3	0.7[b]	..
Libya	2.7[c]	71.8[c]	100.0[c]	299[c]	453[c]	1.3	4.8	3.7	..
Lithuania	6.2	73.0	98.3	717	1,109	4.0	7.6	8.1	6.6
Macedonia, FYR	7.1	65.6	100.0	277	698	2.6	4.3	4.6	6.0
Madagascar	4.1	66.2	67.9	16	32	0.2	0.3	0.3	0.5
Malawi	9.9	59.7	28.4	17	50	0.0[d]	0.3	1.1	..
Malaysia	4.4	44.4	73.2	307	604	..	..	1.8	..
Mali	5.7	51.4	99.5	34	67	0.1	0.2	0.6	..
Mauritania	2.4[c]	65.3[c]	100.0[c]	22[c]	47[c]	0.1[b]	0.7[b]	0.4	..
Mauritius	4.2	49.0	81.5	247	502	1.1	3.7	3.3	..
Mexico	5.9	45.4	93.1	564	823	2.9	4.0	1.7	2.5
Moldova	10.3[g]	50.8[g]	97.6[g]	127[g]	281[g]	2.7	6.6	6.1	6.0
Mongolia	4.3	81.7	84.4	64	176	..	..	6.1	..
Morocco	5.0	33.8	86.3	120	215	0.6	0.8	1.1	..
Mozambique	4.9	71.8	42.1	18	38	0.0[d]	0.3	0.8	..
Myanmar	1.9	11.7	95.1	7	26	0.4	1.0	0.6	..
Namibia	7.6	42.1	5.8	319	467	0.3	3.1	2.7[b]	..
Nepal	5.1	39.7	90.8	20	55	0.2	0.5	5.0	..
Netherlands	8.9	82.0	33.5	4,243	3,621	3.9	15.1	4.8	5.4
New Zealand	9.0	78.9	71.7	2,790	2,497	2.2	8.9	..	4.4
Nicaragua	8.3	54.9	93.0	92	258	0.4	1.1	0.9	..
Niger	5.3	52.8	96.4	16	34	0.0[d]	0.1	0.3	..
Nigeria	6.6	25.3	95.9	74	131	0.4	1.6	0.5	..
Norway	8.9	84.1	95.1	7,354	4,774	3.9	16.3	3.9	..
Oman	2.4	78.7	61.3	375	*513*	1.8	3.9	2.0	..
Pakistan	2.7	30.0	82.1	23	64	0.8	0.4	0.6	..
Panama	6.7	64.6	82.7	396	773	..	..	2.2	..
Papua New Guinea	3.2	81.3	41.3	31	65	..	..	..	..
Paraguay	5.7	42.4	97.0	114	253	..	..	1.3	..
Peru	4.3	58.4	75.3	160	327	..	..	1.5	..
Philippines	3.9	34.7	83.7	63	130	..	..	1.1	..
Poland	6.4	70.9	83.2	716	1,035	2.0	5.2	5.2	6.1
Portugal	10.0	70.6	77.5	2,108	2,284	3.4	4.8	3.5	3.9
Puerto Rico	..	..	..	..	..	..	..	..	..
Qatar	3.8	75.6	88.2	2,403	*2,571*	2.8	7.4	2.5	..

2.16 Health services

	Health expenditure					Health workers		Hospital beds	Outpatient visits
	Total % of GDP	Public % of total	Out of pocket % of private	Per capita $	Per capita PPP $	per 1,000 people Physicians	per 1,000 people Nurses and midwives	per 1,000 people	per capita
	2007	2007	2007	2007	2007	2003–08[a]	2003–08[a]	2003–08[a]	2000–08[a]
Romania	4.7	80.3	98.8	369	592	1.9	4.2	6.5	5.6
Russian Federation	5.4	64.2	83.0	493	797	4.3	8.5	9.7	9.0
Rwanda	10.3	47.0	44.4	37	90	0.0[d]	0.4	1.6	..
Saudi Arabia	3.4	79.5	32.2	531	768	1.6	3.6	2.2	..
Senegal	5.7	56.0	78.5	54	101	0.1	0.4	0.3	..
Serbia	9.9[h]	61.8[h]	91.7[h]	408[h]	784[h]	2.0	4.4	5.4	..
Sierra Leone	4.4[c]	31.3[c]	58.8[c]	14[c]	32[c]	0.0[d]	0.2	0.4	..
Singapore	3.1	32.6	93.9	1,148	1,643	1.5	4.4	3.2	..
Slovak Republic	7.7	66.8	79.1	1,077	1,555	3.1	6.6	6.8	12.5
Slovenia	7.8	71.5	48.6	1,836	2,099	2.4	7.8	4.7	6.6
Somalia	..	..	..	..	..	0.0[d]	0.1	..	..
South Africa	8.6	41.4	29.7	497	819	0.8	4.1	2.8	..
Spain	8.5	71.8	74.6	2,712	2,671	3.8	7.6	3.4	9.5
Sri Lanka	4.2	47.5	86.7	68	179	0.6	1.7	3.1	..
Sudan	3.5[c]	36.8[c]	100.0[c]	40[c]	71[c]	0.3	0.9	0.7	..
Swaziland	6.0	62.5	42.3	151	287	0.2	6.3	2.1	..
Sweden	9.1	81.7	87.0	4,495	3,323	3.6	11.6	..	2.8
Switzerland	10.8	59.3	75.0	6,108	4,417	4.0	..	5.5	..
Syrian Arab Republic	3.6	45.9	100.0	68	154	0.5	1.4	1.5	..
Tajikistan	5.3	21.5	94.4	29	93	2.0	5.0	5.4	8.3
Tanzania	5.3	65.8	75.0	22	63	0.0[d]	0.2	1.1	..
Thailand	3.7	73.2	71.7	136	286	..	..	..	..
Timor-Leste	13.6	84.6	37.2	58	116	0.1	2.2	..	..
Togo	6.1	24.9	84.2	33	68	0.1	0.3	0.9	..
Trinidad and Tobago	4.8	56.1	89.7	785	1,178	1.2	3.6	2.7	..
Tunisia	6.0	50.5	84.3	211	463	1.3	2.9	2.0	..
Turkey	5.0	69.0	71.8	465	677	1.5	1.9	2.8	4.6
Turkmenistan	2.6[c]	52.1[c]	100.0[c]	139[c]	1[c]	2.4	4.5	4.1	3.7
Uganda	6.3	26.2	51.0	28	74	0.1	1.3	0.4[b]	..
Ukraine	6.9	57.6	92.4	210	470	3.1	8.5	8.7	10.8
United Arab Emirates	2.7	70.5	64.9	1,253	*1,414*	1.5	4.6	1.9	..
United Kingdom	8.4	81.7	62.7	3,867	2,992	2.2	0.6	3.9	4.9
United States	15.7	45.5	22.6	7,285	7,290	2.7	9.8	3.1	9.0
Uruguay	8.0	74.0	50.3	582	994	4.2	..	2.9	..
Uzbekistan	5.0	46.1	98.0	41	114	2.6	10.8	4.8	8.7
Venezuela, RB	5.8	46.5	88.1	477	641	..	..	1.3	..
Vietnam	7.1	39.3	90.2	58	183	..	0.7	2.7	..
West Bank and Gaza	..	..	..	..	..	..	..	..	..
Yemen, Rep.	3.9	39.6	97.8	43	104	0.3	0.7	0.7	..
Zambia	6.2	57.7	67.6	57	79	0.1	0.7	1.9	..
Zimbabwe	8.9[c]	46.3[c]	50.4[c]	79[c]	1[c]	0.2	0.7	3.0	..
World	**9.7 w**	**59.6 w**	**43.9 w**	**806 w**	**871 w**	**.. w**	**.. w**	**.. w**	**.. w**
Low income	5.4	42.7	83.2	27	69	..	..	..	..
Middle income	5.4	50.2	78.8	164	299	1.3	..	2.2	..
Lower middle income	4.3	42.4	90.5	80	182	1.1	..	1.7	..
Upper middle income	6.4	55.2	69.0	488	753	..	..	4.8	..
Low & middle income	5.4	49.9	78.9	140	261	..	..	..	..
East Asia & Pacific	4.1	46.3	89.1	95	208	1.5	1.0	2.1	..
Europe & Central Asia	5.6	65.7	83.8	396	647	3.1	6.6	7.1	7.6
Latin America & Carib.	7.1	48.5	68.2	473	715	..	..	..	..
Middle East & N. Africa	5.5	50.8	93.1	151	364	..	..	1.6	..
South Asia	4.0	27.5	89.8	36	98	0.6	1.3	0.9	..
Sub-Saharan Africa	6.4	41.1	60.2	69	124	..	..	..	..
High income	11.2	61.3	36.1	4,406	4,182	..	..	6.2	8.6
Euro area	9.7	76.4	60.8	3,695	3,189	3.6	7.9	6.0	6.8

a. Data are for the most recent year available. b. Data are for 2009. c. Derived from incomplete data. d. Less than 0.05. e. Excludes northern Iraq. f. Includes contributions from the United Nations Relief and Works Agency for Palestine Refugees. g. Excludes Transnistria. h. Excludes Metohija.

Health services 2.16

About the data

Health systems—the combined arrangements of institutions and actions whose primary purpose is to promote, restore, or maintain health (World Health Organization, *World Health Report 2000)*—are increasingly being recognized as key to combating disease and improving the health status of populations. The World Bank's (2007a) *Healthy Development: Strategy for Health, Nutrition, and Population Results* emphasizes the need to strengthen health systems, which are weak in many countries, in order to increase the effectiveness of programs aimed at reducing specific diseases and further reduce morbidity and mortality (World Bank 2007a). To evaluate health systems, the World Health Organization (WHO) has recommended that key components—such as financing, service delivery, workforce, governance, and information—be monitored using several key indicators (WHO 2008b). The data in the table are a subset of the first four indicators. Monitoring health systems allows the effectiveness, efficiency, and equity of different health system models to be compared. Health system data also help identify weaknesses and strengths and areas that need investment, such as additional health facilities, better health information systems, or better trained human resources.

Health expenditure data are broken down into public and private expenditures, with private expenditure further broken down into out-of-pocket expenditure (direct payments by households to providers), which make up the largest proportion of private expenditures. In general, low-income economies have a higher share of private health expenditure than do middle- and high-income countries. High out-of-pocket expenditures may discourage people from accessing preventive or curative care and can impoverish households that cannot afford needed care. Health financing data are collected through national health accounts, which systematically, comprehensively, and consistently monitoring health system resource flows. To establish a national health account, countries must define the boundaries of the health system and classify health expenditure information along several dimensions, including sources of financing, providers of health services, functional use of health expenditures, and beneficiaries of expenditures. The accounting system can then provide an accurate picture of resource envelopes and financial flows and allow analysis of the equity and efficiency of financing to inform policy.

Many low-income countries use Demographic and Health Surveys or Multiple Indicator Cluster Surveys funded by donors to obtain health system data. Data on health worker (physicians, nurses, and midwives) density shows the availability of medical personnel. The WHO estimates that at least 2.5 physicians, nurses, and midwives per 1,000 people are needed to provide adequate coverage with primary care interventions associated with achieving the Millennium Development Goals (WHO, *World Health Report 2006).* The WHO compiles data from household and labor force surveys, censuses, and administrative records. Data comparability is limited by differences in definitions and training of medical personnel varies. In addition, human resources tend to be concentrated in urban areas, so that average densities do not provide a full picture of health personnel available to the entire population.

Availability and use of health services, shown by hospital beds per 1,000 people and outpatient visits per capita, reflect both demand- and supply-side factors. In the absence of a consistent definition these are crude indicators of the extent of physical, financial, and other barriers to health care.

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, for health practitioners and pharmaceutical suppliers, therapeutic appliances, and other goods and services whose primary intent is to restore or enhance health. • **Health expenditure per capita** is total health expenditure divided by population in U.S. dollars and in international dollars converted using 2005 purchasing power parity (PPP) rates. • **Physicians** include generalist and specialist medical practitioners.• **Nurses and midwives** include professional nurses and midwives, auxiliary nurses and midwives, enrolled nurses and midwives, and other personnel, such as dental nurses and primary care nurses. • **Hospital beds** are inpatient beds for both acute and chronic care available in public, private, general, and specialized hospitals and rehabilitation centers. • **Outpatient visits per capita** are the number of visits to health care facilities per capita, including repeat visits.

Data sources

Data on health expenditures are from the WHO's National Health Account database (www.who.int/nha/en), supplemented by country data. Data on physicians, nurses and midwives, hospital beds, and outpatient visits are from the WHO, Organisation for Economic Co-operation and Development, and TransMONEE, supplemented by country data.

2.17 Health information

	Year last national health account completed	Number of national health accounts completed	Year of last health survey	Year of last census	Completeness		
					Birth registration	% Infant death reporting	Total death reporting
		1995–2008		2000–10	2000–08[a]	2003–08[a]	2003–08[a]
Afghanistan		0	2003		6	..	..
Albania	2005	3	2005	2001	98	28	76
Algeria	2001	2	2006	2008	99	..	89
Angola		0	2001		29	..	..
Argentina	1999	5		2001	91	100	100
Armenia	2008	5	2005	2001	96	38	100
Australia	2007	13		2006	..	95	97
Austria	2007	13		2001	..	89	97
Azerbaijan		0	2006	2009	94	24	100
Bangladesh	2007	12	2007	2001	10	..	..
Belarus		0	2005	2009	..	55	94
Belgium	2007	5		2001	..	100	97
Benin	2006	3	2006	2002	60	..	..
Bolivia	2007	13	2008	2001	74	..	30
Bosnia and Herzegovina	2006	3	2006		100	54	92
Botswana	2003	3	2000	2001	58	..	..
Brazil	2006	7	1996	2000	89	47	86
Bulgaria	2006	5		2001	..	79	100
Burkina Faso	2006	4	2006	2006	64	29	61
Burundi	2007	1	2005	2008	60	..	..
Cambodia		0	2005	2008	66	0	100
Cameroon	1995	1	2006	2005	70	..	0
Canada	2008	14		2006	..	100	98
Central African Republic		0	2006	2003	49	..	..
Chad		0	2004		9	..	..
Chile	2007	13		2002	96	100	100
China	2006	12		2000	..	..	99
Hong Kong SAR, China		0		2006	..	66	97
Colombia	2003	9	2005	2005	90	57	76
Congo, Dem. Rep.		0	2007		31	..	..
Congo, Rep.	2005	1	2005	2007	81	..	..
Costa Rica	2003	2	1993	2000	..	91	97
Côte d'Ivoire		0	2006		55	..	..
Croatia		0		2001	..	75	100
Cuba		0	2006	2002	100	97	100
Czech Republic	2007	13	1993	2001	..	84	94
Denmark	2007	13		2001	..	97	97
Dominican Republic	2002	2	2007	2002	78	1	54
Ecuador	2005	5	2004	2001	85	59	85
Egypt, Arab Rep.	2002	2	2008	2006	99	49	96
El Salvador	2008	13	2008	2007	..	36	75
Eritrea		0	2002		..	..	0
Estonia	2007	5		2000	..	68	96
Ethiopia	2005	3	2005	2007	7	..	..
Finland	2007	13		2000	..	84	98
France	2007	13		2006	..	95	100
Gabon		0	2000	2003	89	..	..
Gambia, The	2004	3	2005/06	2003	55	..	..
Georgia	2008	8	2005	2002	92	54	83
Germany	2007	13		2001	..	96	99
Ghana	2002	1	2008	2000	51	..	..
Greece		0		2001	..	78	95
Guatemala	2007	13	2002	2002	..	62	93
Guinea		0	2005	2009	43	..	..
Guinea-Bissau		0	2006	2009	39	..	..
Haiti	2006	1	2005/06	2003	81	..	9
Honduras	2005	3	2005/06	2001	94	100	99

2.17 Health information

	Year last national health account completed	Number of national health accounts completed	Year of last health survey	Year of last census	Completeness		
					Birth registration	% Infant death reporting	Total death reporting
		1995–2008		2000–10	2000–08[a]	2003–08[a]	2003–08[a]
Hungary	2007	13		2001	..	84	97
India	2004	2	2005/06	2001	41	..	..
Indonesia	2008	8	2007	2000	55	..	..
Iran, Islamic Rep.	2001	3	2000	2006	..	..	99
Iraq		0	2006		95	100	100
Ireland	2007	13		2006	..	75	99
Israel		0		2008	..	90	100
Italy		0		2001	..	99	98
Jamaica	2007	10	2005	2001	89	76	85
Japan	2006	12		2005	..	88	98
Jordan	2007	4	2007	2004	..	..	83
Kazakhstan	2007	1	2006		99	95	88
Kenya	2006	2	2004		48	37	39
Korea, Dem. Rep.		0	2000	2008	99	..	..
Korea, Rep.	2008	14		2005	..	85	94
Kosovo		0			..	..	..
Kuwait		0	1996	2005	..	97	100
Kyrgyz Republic	2008	4	2005/06	2009	94	86	97
Lao PDR		0	2006	2005	72	..	..
Latvia	2005	3		2000	..	79	99
Lebanon	2005	4	2000		..	..	72
Lesotho		0	2004	2006	26	..	..
Liberia	2008	1	2007	2008	4	..	..
Libya		0	2000	2006	..	..	..
Lithuania	2006	5		2001	..	64	100
Macedonia, FYR		0	2005	2002	94	94	100
Madagascar	2007	2	2003/04		75	..	..
Malawi	2006	5	2006	2008	..	..	100
Malaysia	2006	10		2000	..	62	100
Mali	2004	6	2006	2009	53	..	..
Mauritania		0	2007	2000	56	..	..
Mauritius	2004	2		2000	..	99	94
Mexico	2007	13	1995	2005	..	87	100
Moldova		0	2005	2004	98	43	88
Mongolia	2003	5	2005	2000	98	48	88
Morocco	2006	3	2006	2004	85	..	..
Mozambique	2006	4	2003	2007	31	..	..
Myanmar	2001	4	2000		65	49	50
Namibia	2006	9	2006/07	2001	67	..	100
Nepal	2005	5	2006	2001	35	..	..
Netherlands	2007	13		2001	..	84	97
New Zealand	2006	12		2006	..	100	97
Nicaragua	2004	9	2006/07	2005	81	64	65
Niger	2006	4	2006	2001	32	..	..
Nigeria	2005	8	2008	2006	30	..	..
Norway	2008	12		2001	..	82	100
Oman	1998	1	1995	2003	..	49	88
Pakistan	2006	1	2006/07		..	84	..
Panama	2003	1	2003	2000	..	77	88
Papua New Guinea	2000	3	1996	2000	..	19	14
Paraguay	2007	2	2004	2002	..	11	58
Peru	2005	11	2008	2007	93	80	54
Philippines	2007	13	2007/08	2007	83	39	100
Poland	2007	13		2002	..	95	100
Portugal	2007	8		2001	..	79	96
Puerto Rico		0	1996	2000	..	100	95
Qatar		0		2004	..	95	77

2.17 Health information

	Year last national health account completed	Number of national health accounts completed	Year of last health survey	Year of last census	Completeness		
						%	
					Birth registration	Infant death reporting	Total death reporting
		1995–2008		2000–10	2000–08[a]	2003–08[a]	2003–08[a]
Romania	2006	9	1999	2002	..	79	96
Russian Federation	2007	13	1996	2002	..	79	96
Rwanda	2006	5	2007/08	2002	82	..	..
Saudi Arabia		0	2007	2004	..	94	100
Senegal	2005	2	2005	2002	55	..	..
Serbia	2008	6	2005/06	2002	99	35	89
Sierra Leone		0	2008	2004	48	..	..
Singapore		0	2005	2000	..	84	75
Slovak Republic	2007	11		2001	..	90	99
Slovenia	2006	5		2002	..	72	95
Somalia		0	2006		3	..	..
South Africa	1998	3	1998	2001	78	81	87
Spain	2007	13		2001	..	99	100
Sri Lanka	2006	12	1987	2001	..	..	92
Sudan		0	2006	2008	33	..	..
Swaziland		0	2006/07	2007	30	..	..
Sweden	2007	7			..	83	99
Switzerland	2007	13		2000	..	100	98
Syrian Arab Republic		0	2006	2004	95	..	100
Tajikistan		0	2005	2000	88	19	69
Tanzania	2006	3	2004/05	2002	8	..	..
Thailand	2007	13	2005/06	2000	99	84	66
Timor-Leste		0	2003	2004	53	..	..
Togo	2002	1	2006		78	..	..
Trinidad and Tobago	2000	1	2006	2000	96	50	94
Tunisia	2005	5	2006	2004	..	..	93
Turkey	2005	8	2003	2000	84	56	..
Turkmenistan		0	2006		96	..	..
Uganda	2006	6	2006	2002	21	..	..
Ukraine	2004	2	2007	2001	100	90	100
United Arab Emirates		0		2005	..	75	100
United Kingdom	2007	11		2001	..	100	94
United States	2007	13	2009	2000	..	100	100
Uruguay	2008	13		2004	..	86	100
Uzbekistan		0	2006		100	..	..
Venezuela, RB		0	2000	2001	92	62	84
Vietnam	2007	10	2006	2009	88	72	83
West Bank and Gaza		0	2006	2007	96	..	..
Yemen, Rep.	2006	3	2006	2004	22	..	15
Zambia	2006	11	2007	2000	10	..	..
Zimbabwe	2001	3	2005/06	2002	74	..	..

a. Data are for the most recent year available.

Health information 2.17

About the data

According to the World Health Organization (WHO), health information systems are crucial for monitoring and evaluating health systems, which are increasingly recognized as important for combating disease and improving health status. Health information systems underpin decisionmaking through four data functions: generation, compilation, analysis and synthesis, and communication and use. The health information system collects data from the health sector and other relevant sectors; analyzes the data and ensures their overall quality, relevance, and timeliness; and converts data into information for health-related decisionmaking (WHO 2008b).

Numerous indicators have been proposed to assess a country's health information system. They can be grouped into two broad types: indicators related to data generation using core sources and methods (health surveys, civil registration, censuses, facility reporting, health system resource tracking) and indicators related to capacity for data synthesis, analysis, and validation. Indicators related to data generation reflect a country's capacity to collect relevant data at suitable intervals using the most appropriate data sources. Benchmarks include periodicity, timeliness, contents, and availability. Indicators related to capacity for synthesis, analysis, and validation measure the dimensions of the institutional frameworks needed to ensure data quality, including independence, transparency, and access. Benchmarks include the availability of independent coordination mechanisms and micro- and meta-data (WHO 2008a).

The indicators in the table are all related to data generation, including the years the last national health account, last health survey, and latest population census were completed. Frequency of data collection, a benchmark of data generation, is shown as the number of years for which a national health account was completed between 1995 and 2008. National health account data may be collected using different approaches such as Organisation for Economic Co-operation and Development (OECD) System of Health Accounts, WHO National Health Account producers guide approach, local national health accounting methods, or Pan American Health Organization/WHO satellite health accounts approach.

Indicators related to data generation include completeness of birth registration, infant death reporting, and total death reporting.

Definitions

• **Year last national health account completed** is the latest year for which the health expenditure data are available using the national health account approach. • **Number of national health accounts completed** is the number of national health accounts completed between 1995 and 2008. • **Year of last health survey** is the latest year the national survey that collects health information was conducted. • **Year of last census** is the latest year a census was conducted in the last 10 years. • **Completeness of birth registration** is the percentage of children under age 5 whose births were registered at the time of the survey. The numerator of completeness of birth registration includes children whose birth certificate was seen by the interviewer or whose mother or caretaker says the birth has been registered. • **Completeness of infant death reporting** is the number of infant deaths reported by national statistical authorities to the United Nations Statistics Division's *Demographic Yearbook* divided by the number of infant deaths estimated by the United Nations Population Division. • **Completeness of total death reporting** is the number of total deaths reported by national statistical authorities to the United Nations Statistics Division's *Demographic Yearbook* divided by the number of total deaths estimated by the United Nations Population Division.

Data sources

Data on year last national health account completed and number of national health accounts completed were compiled by staff in the World Bank's Health, Nutrition, and Population Unit using data on the health expenditures reported by the WHO and OECD and consultation with colleagues from countries and other international organizations. Data on year of last health survey are from Macro International and the United Nations Children's Fund (UNICEF). Data on year of last census are from United Nations Statistics Division's 2010 World Population and Housing Census Program (http://unstats.un.org/unsd/demographic/sources/census/2010_PHC/default.htm). Data on completeness of birth registration are compiled by UNICEF in *State of the World's Children 2010* based mostly on household surveys and ministry of health data. Data used to calculate completeness of infant death reporting and total death reporting are from the United Nations Statistics Division's *Population and Vital Statistics Report* and the United Nations Population Division's *World Population Prospects: The 2008 Revision.*

2.18 Disease prevention coverage and quality

	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 nets[a]	Children with fever receiving antimalarial drugs	Tuberculosis	
					% of children ages 12–23 months[b]						Treatment success rate	Case detection rate
	% of population		% of population				% 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	2006	1990	2006	Measles 2008	DTP3 2008	2003–08[c]	2003–08[c]	2003–08[c]	2003–08[c]	2007	2008
Afghanistan	..	22	..	30	75	85	28	48	..	..	87	55
Albania	..	97	..	97	98	99	45	50	..	..	85	87
Algeria	94	85	88	94	88	93	53	24	..	..	90	103
Angola	39	51	26	50	79	81	..	..	17.7	29.3	74	85
Argentina	94	96	81	91	99	96	..	..	..	..	62	78
Armenia	..	98	..	91	94	89	36	59	..	..	70	74
Australia	100	100	100	100	94	92	..	..	..	..	85	87
Austria	100	100	100	100	83	83	..	..	..	..	*71*	87
Azerbaijan	68	78	..	80	66	70	33	45	..	..	58	67
Bangladesh	78	80	26	36	89	95	28	68	..	..	92	42
Belarus	100	100	..	93	99	97	90	54	..	..	74	82
Belgium	..	..	..	..	93	99	..	..	..	..	*73*	87
Benin	63	65	12	30	61	67	36	42	20.1	54.0	87	49
Bolivia	72	86	33	43	86	83	51	54	..	..	85	65
Bosnia and Herzegovina	97	99	..	95	84	91	91	53	..	..	97	90
Botswana	93	96	38	47	94	96	..	..	..	..	73	63
Brazil	83	91	71	77	99	97	50	..	..	..	*73*	82
Bulgaria	99	99	99	99	96	95	..	..	..	..	*80*	91
Burkina Faso	34	72	5	13	75	79	39	42	9.6	48.0	72	13
Burundi	70	71	44	41	84	92	38	23	8.3	30.0	86	24
Cambodia	19	65	8	28	89	91	48	50	4.2	0.2	94	55
Cameroon	49	70	39	51	80	84	35	22	13.1	57.8	*74*	69
Canada	100	100	100	100	94	94	..	..	..	..	64	87
Central African Republic	58	66	11	31	62	54	32	47	15.1	57.0	67	47
Chad	..	48	5	9	23	20	12	27	..	44.0	*54*	22
Chile	91	95	84	94	92	96	..	..	..	..	85	126
China	67	88	48	65	94	97	..	..	..	..	94	75
Hong Kong SAR, China	..	..	..	..	..	..	..	..	..	..	66	87
Colombia	89	93	68	78	92	92	62	39	..	..	77	70
Congo, Dem. Rep.	43	46	15	31	67	69	42	42	5.8	29.8	87	43
Congo, Rep.	..	71	..	20	79	89	48	39	6.1	48.0	*53*	63
Costa Rica	..	98	94	96	91	90	..	..	..	..	88	104
Côte d'Ivoire	67	81	20	24	63	74	35	45	3.0	36.0	73	28
Croatia	99	99	99	99	96	96	..	..	..	..	*30*	87
Cuba	..	91	98	98	99	99	..	..	..	..	*90*	123
Czech Republic	100	100	100	99	97	99	..	..	..	..	*69*	87
Denmark	100	100	100	100	89	75	..	..	..	..	*77*	87
Dominican Republic	84	95	68	79	79	77	70	55	..	0.6	78	59
Ecuador	73	95	71	84	66	75	..	..	..	..	75	50
Egypt, Arab Rep.	94	98	50	66	92	97	73	19	..	..	89	57
El Salvador	69	84	73	86	95	94	62	..	..	..	91	88
Eritrea	43	60	3	5	95	97	..	..	..	..	88	62
Estonia	100	100	95	95	95	95	..	..	..	..	*68*	88
Ethiopia	13	42	4	11	74	81	19	15	33.1	9.5	84	47
Finland	100	100	100	100	97	99	..	..	..	..	..	87
France	..	100	..	..	87	98	..	..	..	..	..	87
Gabon	..	87	..	36	55	38	..	..	..	..	36	69
Gambia, The	..	86	..	52	91	96	69	38	49.0	62.6	84	48
Georgia	76	99	94	93	96	92	74	37	..	..	*75*	96
Germany	100	100	100	100	95	90	..	..	..	..	*40*	87
Ghana	56	80	6	10	86	87	51	29	28.2	43.0	84	30
Greece	96	100	97	98	99	99	..	..	..	..	..	87
Guatemala	79	96	70	84	96	85	..	..	..	..	*47*	38
Guinea	45	70	13	19	64	66	42	38	1.4	43.5	79	34
Guinea-Bissau	..	57	..	33	76	63	57	25	39.0	45.7	71	*68*
Haiti	52	58	29	19	58	53	31	43	..	5.1	82	60
Honduras	72	84	45	66	95	93	56	49	..	0.5	85	60

Disease prevention coverage and quality

2.18

	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 nets[a]	Children with fever receiving antimalarial drugs	Tuberculosis	
					% of children ages 12–23 months[b]						Treatment success rate	Case detection rate
	% of population		% of population		Measles	DTP3	% 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	2006	1990	2006	2008	2008	2003–08[c]	2003–08[c]	2003–08[c]	2003–08[c]	2007	2008
Hungary	96	100	100	100	99	99	..	..	..	..	*46*	87
India	71	89	14	28	70	66	69	33	..	8.2	87	67
Indonesia	72	80	51	52	83	77	66	54	3.3	..	91	69
Iran, Islamic Rep.	92	..	83	..	98	99	..	..	..	..	*83*	65
Iraq	83	77	..	76	69	62	82	64	..	..	86	47
Ireland	..	..	..	..	89	93	..	..	..	..	66	87
Israel	100	100	..	..	84	93	..	..	..	..	*74*	87
Italy	..	..	..	..	91	96	..	..	..	..	*0*	87
Jamaica	92	93	83	83	88	87	75	39	..	..	56	59
Japan	100	100	100	100	97	98	..	..	..	..	46	87
Jordan	97	98	..	85	95	97	75	32	..	..	*71*	91
Kazakhstan	96	96	97	97	99	99	71	48	..	..	69	85
Kenya	41	57	39	42	90	85	49	33	4.6	26.5	85	79
Korea, Dem. Rep.	..	100	..	..	98	92	93	..	..	..	87	88
Korea, Rep.	..	..	..	..	92	94	..	..	..	..	*81*	87
Kosovo	..	..	..	..	..	..	..	..	..	..	..	..
Kuwait	..	..	..	..	99	99	..	..	..	..	79	87
Kyrgyz Republic	..	89	..	93	99	95	62	22	..	..	85	77
Lao PDR	..	60	..	48	52	61	32	49	40.5	..	92	44
Latvia	99	99	..	78	97	97	..	..	..	..	*73*	93
Lebanon	100	100	..	..	53	74	..	..	..	..	90	91
Lesotho	..	78	..	36	85	83	59	53	..	..	67	92
Liberia	57	64	40	32	64	64	62	47	..	58.8	71	46
Libya	71	..	97	97	98	98	..	..	..	..	67	192
Lithuania	..	..	..	..	97	96	..	..	..	..	*74*	89
Macedonia, FYR	..	100	..	89	98	95	93	45	..	..	87	91
Madagascar	39	47	8	12	81	82	42[d]	47	45.8[d]	19.7[d]	80	45
Malawi	41	76	46	60	88	91	52	27	24.7	24.9	85	50
Malaysia	98	99	..	94	95	90	..	..	..	..	72	62
Mali	33	60	35	45	68	68	38	38	27.1	31.7	78	15
Mauritania	37	60	20	24	65	74	45	32	2.1	20.7	66	26
Mauritius	100	100	94	94	98	99	..	..	..	..	85	38
Mexico	88	95	56	81	96	98	..	..	..	..	84	93
Moldova	..	90	..	79	94	95	60	48	..	..	62	70
Mongolia	64	72	..	50	97	96	63	47	..	..	89	83
Morocco	75	83	52	72	96	99	38	46	..	..	86	73
Mozambique	36	42	20	31	77	72	65	47	22.8	14.9	79	42
Myanmar	57	80	23	82	82	85	66	65	..	..	85	62
Namibia	57	93	26	35	73	83	72	48	10.5	9.8	82	84
Nepal	72	89	9	27	79	82	43	37	..	0.1	*88*	70
Netherlands	100	100	100	100	96	97	..	..	..	..	*84*	87
New Zealand	97	..	..	..	86	89	..	..	..	..	86	87
Nicaragua	70	79	42	48	99	96	..	..	..	..	86	89
Niger	41	42	3	7	80	66	47	34	7.4	33.0	79	35
Nigeria	50	47	26	30	62	54	32	28	5.5	33.9	82	19
Norway	100	100	..	..	93	94	..	..	..	..	*93*	87
Oman	81	..	85	..	99	92	..	..	..	..	91	87
Pakistan	86	90	33	58	85	73	69	37	..	3.3	91	60
Panama	..	92	..	74	85	82	..	..	..	..	79	95
Papua New Guinea	39	40	44	45	54	52	..	..	..	..	39	85
Paraguay	52	77	60	70	77	76	..	..	..	..	82	75
Peru	75	84	55	72	90	99	67	60	..	..	92	94
Philippines	83	93	58	78	92	91	50	76	..	0.2	89	54
Poland	..	..	..	..	98	99	..	..	..	..	*75*	79
Portugal	96	99	92	99	97	97	..	..	..	..	*87*	87
Puerto Rico	..	..	..	..	..	..	..	..	..	..	*80*	87
Qatar	100	100	100	100	92	94	..	..	..	..	*69*	81

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	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 nets[a]	Children with fever receiving antimalarial drugs	Tuberculosis	
					% of children ages 12–23 months[b]						Treatment success rate	Case detection rate
	% of population		% of population				% 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	2006	1990	2006	Measles 2008	DTP3 2008	2003–08[c]	2003–08[c]	2003–08[c]	2003–08[c]	2007	2008
Romania	76	88	72	72	..	..	..	..	..	..	*83*	76
Russian Federation	94	97	87	87	99	98	..	..	..	..	58	85
Rwanda	65	65	29	23	92	97	28	24	55.7	12.3	86	20
Saudi Arabia	94	96	91	99	97	98	..	..	..	..	67	86
Senegal	67	77	26	28	77	88	47	43	29.2[d]	22.0	77	33
Serbia	..	99[e]	..	92[e]	92	95	93	71	..	..	84	95
Sierra Leone	..	53	..	11	60	60	46	31	25.9	51.9	89	32
Singapore	100	100	100	100	95	97	..	..	..	..	*84*	87
Slovak Republic	100	100	100	100	99	99	..	..	..	..	*81*	87
Slovenia	..	..	..	..	96	97	..	..	..	..	*92*	87
Somalia	..	29	..	23	24	31	13	7	11.4	7.9	86	36
South Africa	81	93	55	59	62	67	65	..	..	..	74	72
Spain	100	100	100	100	98	97	..	..	..	..	..	87
Sri Lanka	67	82	71	86	98	98	58	..	2.9	0.3	86	70
Sudan	64	70	33	35	79	86	90	56	27.6	54.2	78	49
Swaziland	..	60	..	50	95	95	73	22	0.6	0.6	58	61
Sweden	100	100	100	100	96	98	..	..	..	..	*63*	87
Switzerland	100	100	100	100	87	95	..	..	..	..	..	87
Syrian Arab Republic	83	89	81	92	81	82	77	34	..	..	88	79
Tajikistan	..	67	..	92	86	86	64	22	1.3	1.2	83	47
Tanzania	49	55	35	33	88	84	59	53	25.7	58.2	88	75
Thailand	95	98	78	96	98	99	84	46	..	..	83	60
Timor-Leste	..	62	..	41	..	..	24	..	..	..	84	60
Togo	49	59	13	12	77	89	23	22	38.4	47.7	76	10
Trinidad and Tobago	88	94	93	92	91	90	74	32	..	..	65	87
Tunisia	82	94	74	85	98	99	59	62	..	..	89	94
Turkey	85	97	85	88	97	96	41	..	..	..	91	79
Turkmenistan	..	..	..	..	99	96	83	25	..	..	84	110
Uganda	43	64	29	33	68	64	73	39	9.7	61.3	75	43
Ukraine	..	97	96	93	94	90	..	..	..	..	59	81
United Arab Emirates	100	100	97	97	92	92	..	..	..	..	64	37
United Kingdom	100	100	..	..	86	92	..	..	..	..	*72*	87
United States	99	99	100	100	92	96	..	..	..	..	85	87
Uruguay	100	100	100	100	95	94	..	..	..	..	*87*	93
Uzbekistan	90	88	93	96	98	98	68	28	..	..	79	49
Venezuela, RB	89	..	83	..	82	47	..	..	..	..	82	68
Vietnam	52	92	29	65	92	93	83	65	5.0	2.6	92	56
West Bank and Gaza	..	89	..	80	..	..	..	..	..	..	93	5
Yemen, Rep.	..	66	28	46	62	69	47	48	..	..	84	41
Zambia	50	58	42	52	85	80	68	56	41.1	38.4	*85*	74
Zimbabwe	78	81	44	46	66	62	25	47	2.9	4.7	78	39
World	**76 w**	**86 w**	**51 w**	**60 w**	**83 w**	**82 w**	**.. w**	**.. w**	**.. w**	**.. w**	***85* w**	**61 w**
Low income	54	67	25	38	78[w]	80	45	..	..	28.3	*85*	48
Middle income	74	88	47	58	83	81	..	..	..	..	*85*	66
Lower middle income	71	86	39	52	81	79	..	..	..	..	*87*	64
Upper middle income	88	94	76	82	93	92	..	..	..	..	*73*	78
Low & middle income	72	84	43	55	82	81	..	..	..	..	*85*	61
East Asia & Pacific	68	87	48	66	91	92	..	..	..	..	*91*	69
Europe & Central Asia	90	95	88	89	96	96	..	..	..	..	*70*	78
Latin America & Carib.	84	91	68	78	93	91	..	..	..	..	*76*	77
Middle East & N. Africa	89	88	67	74	86	89	62	..	..	..	*86*	70
South Asia	73	87	18	33	75	71	..	..	..	7.2	*87*	63
Sub-Saharan Africa	49	58	26	31	72	72	44	..	15.9	34.4	*76*	46
High income	99	100	99	100	93	95	..	..	..	..	*67*	87
Euro area	..	100	..	..	93	95	..	..	..	..	..	87

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 2009. e. Includes Kosovo.

Disease prevention coverage and quality 2.18

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. 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. Insecticide-treated nets, 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 net 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 submitted data to the WHO. The treatment success rate for tuberculosis provides a useful indicator of the quality of health services. A low rate suggests that infectious patients may not be receiving adequate treatment. An important complement to the tuberculosis treatment success rate is the case detection rate, which indicates whether there is adequate coverage by the recommended case detection and treatment strategy.

Previous editions included the tuberculosis detection rates by DOTS, the internationally recommended strategy for tuberculosis control. This year's edition shows the tuberculosis detection rate for all detection methods, so data on the case detection rate cannot be compared with data in previous editions.

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** refers to people with access to at least 20 liters of water a person a day from an improved source, such as piped water into a dwelling, public tap, tubewell, protected dug well, and rainwater collection, within 1 kilometer of the dwelling. • **Access to improved sanitation facilities** refers to 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** refers to children ages 12–23 months who, before 12 months or at any time before the survey, had received one dose of measles vaccine and three doses of diphtheria, pertussis (whooping cough), and tetanus (DTP3) vaccine. • **Children with acute respiratory infection (ARI) taken to health provider** are children under age 5 with ARI 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 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 nets** are children under age 5 who slept under an insecticide-treated net to prevent malaria the night before the survey. • **Children with fever receiving antimalarial drugs** are 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 new registered infectious tuberculosis cases that were cured or that completed a full course of treatment as a percentage of smear-positive cases registered for treatment outcome evaluation. • **Tuberculosis case detection rate** is newly identified tuberculosis cases (including relapses) as a percentage of estimated incident cases (case detection, all forms).

Data sources

Data on access to water and sanitation are from the WHO and UNICEF's *Progress on Drinking Water and Sanitation* (2008). Data on immunization are from WHO and UNICEF estimates (www.who.int/immunization_monitoring). Data on children with ARI, with diarrhea, sleeping under treated nets, and receiving antimalarial drugs are from UNICEF's *State of the World's Children 2009*, Childinfo, and Demographic and Health Surveys by Macro International. Data on tuberculosis are from the WHO's *Global Tuberculosis Control: A Short Update to the 2009 Report.*

2.19 Reproductive health

	Total fertility rate		Wanted fertility rate	Adolescent fertility rate	Unmet need for contraception	Contraceptive prevalence rate	Pregnant women receiving prenatal care	Births attended by skilled health staff		Maternal mortality ratio	
	births per woman		births per woman	births per 1,000 women ages 15–19	% of married women ages 15–49	% of married women ages 15–49	%	% of total		per 100,000 live births	
	1990	2008	2003–08[a]	2008	2003–08[a]	2003–08[a]	2003–08[a]	1990	2003–08[a]	National estimates 2000–08[a]	Modeled estimates 2005
Afghanistan	8.0	6.6	..	120	..	15	36	..	24	1,600	1,800
Albania	2.9	1.9	..	14	..	60	97	..	100	20	92
Algeria	4.7	2.4	..	7	..	61	89	*77*	95	..	180
Angola	7.2	5.8	..	123	..	..	80	..	47	..	1,400
Argentina	3.0	2.2	..	57	..	..	99	*96*	99	44	77
Armenia	2.5	1.7	1.6	36	13	53	93	..	100	15	76
Australia	1.9	2.0	..	15	..	..	..	*100*	100	..	4
Austria	1.5	1.4	..	13	..	..	..	..	..	..	4
Azerbaijan	2.7	2.3	1.8	34	23	51	77	..	88	26	82
Bangladesh	4.4	2.3	1.9	70	17	56	51	..	18	351	570
Belarus	1.9	1.4	..	21	..	73	99	..	100	12	18
Belgium	1.6	1.8	..	8	..	..	..	..	..	..	8
Benin	6.7	5.4	4.8	111	30	17	84	..	74	397	840
Bolivia	4.9	3.5	2.1	78	23	61	77	*43*	66	229	290
Bosnia and Herzegovina	1.7	1.2	..	16	23	36	99	*97*	100	3	3
Botswana	4.7	2.9	..	51	..	..	..	*77*	..	..	380
Brazil	2.8	1.9	..	75	..	81	98	*72*	97	53	110
Bulgaria	1.8	1.5	..	42	..	..	..	..	99	7	11
Burkina Faso	6.8	5.9	5.1	129	29	17	85	..	54	..	700
Burundi	6.6	4.6	..	19	..	9	92	..	34	615	1,100
Cambodia	5.8	2.9	2.8	39	25	40	69	..	44	472	540
Cameroon	5.9	4.6	4.5	126	20	29	82	*58*	63	669	1,000
Canada	1.8	1.6	..	13	..	..	..	..	100	..	7
Central African Republic	5.8	4.8	..	104	..	19	69	..	53	543	980
Chad	6.7	6.2	6.1	162	21	3	39	..	14	1,099	1,500
Chile	2.6	1.9	..	59	..	58	..	..	100	20	16
China	2.3[b]	1.8[b]	..	10[b]	..	85	91	*50*	98	37	45
Hong Kong SAR, China	1.3	1.0	..	6	..	..	..	..	100	..	..
Colombia	3.1	2.4	1.7	74	6	78	94	82	96	75	130
Congo, Dem. Rep.	7.1	6.0	5.6	198	24	21	85	..	74	549	1,100
Congo, Rep.	5.4	4.4	4.4	111	16	44	86	..	83	781	740
Costa Rica	3.2	2.0	..	67	..	96	90	*98*	99	33	30
Côte d'Ivoire	6.3	4.6	..	128	29	13	85	..	57	543	810
Croatia	1.6	1.5	..	14	..	..	100	100	100	10	7
Cuba	1.8	1.5	..	45	8	77	100	..	100	29	45
Czech Republic	1.9	1.5	..	11	..	..	..	..	100	8	4
Denmark	1.7	1.9	..	6	..	..	..	..	..	..	3
Dominican Republic	3.5	2.6	1.9	108	11	73	99	*93*	98	159	150
Ecuador	3.7	2.6	..	83	..	73	84	..	75	60	210
Egypt, Arab Rep.	4.6	2.9	2.3	38	10	60	74	*37*	79	84	130
El Salvador	4.0	2.3	..	82	..	73	94	*52*	92	59	170
Eritrea	6.2	4.6	..	66	..	..	..	..	..	..	450
Estonia	2.0	1.7	..	21	..	..	..	..	100	7	25
Ethiopia	7.1	5.3	4.0	102	34	15	28	..	6	673	720
Finland	1.8	1.8	..	11	..	..	..	..	100	..	7
France	1.8	2.0	..	7	..	..	..	..	..	..	8
Gabon	5.2	3.3	..	89	..	..	..	..	..	519	520
Gambia, The	6.1	5.1	..	88	..	..	98	44	57	730	690
Georgia	2.2	1.6	..	44	..	47	94	..	98	23	66
Germany	1.5	1.4	..	8	..	..	..	..	100	..	4
Ghana	5.6	4.0	3.7	63	34	24	95	*40*	59	451	560
Greece	1.4	1.5	..	9	..	..	..	..	..	..	3
Guatemala	5.6	4.1	..	106	..	..	..	..	..	133	290
Guinea	6.7	5.4	5.1	151	21	9	88	*31*	46	980	910
Guinea-Bissau	5.9	5.7	..	128	..	10	78	..	39	405	1,100
Haiti	5.4	3.5	2.4	46	38	32	85	*23*	26	630	670
Honduras	5.1	3.3	2.3	92	17	65	92	*45*	67	..	280

2.19 Reproductive health

	Total fertility rate		Wanted fertility rate	Adolescent fertility rate	Unmet need for contraception	Contraceptive prevalence rate	Pregnant women receiving prenatal care	Births attended by skilled health staff		Maternal mortality ratio	
	births per woman		births per woman	births per 1,000 women ages 15–19	% of married women ages 15–49	% of married women ages 15–49	%	% of total		per 100,000 live births	
	1990	2008	2003–08[a]	2008	2003–08[a]	2003–08[a]	2003–08[a]	1990	2003–08[a]	National estimates 2000–08[a]	Modeled estimates 2005
Hungary	1.8	1.4	..	20	..	..	..	..	100	8	6
India	4.0	2.7	1.9	67	13	56	74	..	47	301	450
Indonesia	3.1	2.2	2.2	39	9	61	93	*32*	79	228	420
Iran, Islamic Rep.	4.8	1.8	..	18	..	79	98	..	97	25	140
Iraq	6.0	4.1	..	84	..	50	84	*54*	80	84	300
Ireland	2.1	2.1	..	16	..	..	..	..	100	..	1
Israel	2.8	3.0	..	14	..	..	..	..	..	..	4
Italy	1.3	1.4	..	5	..	..	..	..	99	..	3
Jamaica	2.9	2.4	..	77	..	..	91	*79*	95	95	170
Japan	1.5	1.3	..	5	..	..	..	100	100	..	6
Jordan	5.5	3.5	2.8	24	12	57	99	87	99	..	62
Kazakhstan	2.7	2.6	..	30	..	51	100	..	100	31	140
Kenya	6.0	4.9	3.6	103	25	39	88	*50*	42	414	560
Korea, Dem. Rep.	2.4	1.9	..	0	..	..	..	..	97	..	370
Korea, Rep.	1.6	1.2	..	6	..	..	..	98	100	..	14
Kosovo	3.9	2.4	..	..	..	..	..	..	..	..	..
Kuwait	3.5	2.2	..	13	..	..	..	..	..	..	4
Kyrgyz Republic	3.7	2.7	..	32	1	48	97	..	98	104	150
Lao PDR	6.0	3.5	..	37	..	38	35	..	20	405	660
Latvia	2.0	1.5	..	15	..	..	..	..	100	9	10
Lebanon	3.1	1.8	..	16	..	58	96	..	98	..	150
Lesotho	4.9	3.3	2.5	72	31	37	90	..	55	762	960
Liberia	6.5	5.9	4.6	140	36	11	79	..	46	994	1,200
Libya	4.8	2.7	..	3	..	..	..	..	..	..	97
Lithuania	2.0	1.5	..	21	..	..	..	..	100	13	11
Macedonia, FYR	2.1	1.4	..	21	34	14	94	..	99	4	10
Madagascar	6.3	4.7	4.6	131	24	40[c]	86[c]	*57*	44[c]	469	510
Malawi	7.0	5.5	4.9	133	28	41	92	*55*	54	807	1,100
Malaysia	3.7	2.6	..	13	..	..	79	..	98	30	62
Mali	6.7	6.5	6.0	161	31	8	70	..	49	464	970
Mauritania	5.9	4.5	..	88	..	9	75	*40*	61	686	820
Mauritius	2.3	1.6	..	40	..	..	..	91	99	22	15
Mexico	3.4	2.1	..	64	..	71	94	..	93	56	60
Moldova	2.4	1.5	..	33	7	68	98	..	100	16	22
Mongolia	4.2	2.0	..	16	14	66	89	..	100	49	46
Morocco	4.0	2.4	1.8	19	10	63	68	*31*	63	227	240
Mozambique	6.2	5.1	4.9	146	18	16	89	..	55	408	520
Myanmar	3.4	2.3	..	18	..	34	..	..	68	316	380
Namibia	5.2	3.4	2.7	72	7	55	95	68	81	449	210
Nepal	5.2	2.9	2.0	99	25	48	44	*7*	19	281	830
Netherlands	1.6	1.8	..	4	..	..	..	..	100	..	6
New Zealand	2.2	2.2	..	22	..	..	..	..	..	..	9
Nicaragua	4.8	2.7	..	112	8	72	90	..	74	87	170
Niger	7.9	7.1	6.8	156	16	11	46	*15*	33	648	1,800
Nigeria	6.6	5.7	5.3	124	17	15	58	33	39	..	1,100
Norway	1.9	2.0	..	8	..	..	..	*100*	..	..	7
Oman	6.6	3.0	..	10	..	..	..	..	99	23	64
Pakistan	6.1	4.0	3.1	45	25	30	61	*19*	39	276	320
Panama	3.0	2.5	..	82	..	..	..	..	92	60	130
Papua New Guinea	4.8	4.1	..	54	..	32	79	..	53	..	470
Paraguay	4.5	3.0	..	72	..	79	96	66	82	121	150
Peru	3.8	2.6	..	54	8	71	91	*80*	71	185	240
Philippines	4.3	3.1	2.5	44	22	51	91	..	62	162	230
Poland	2.0	1.4	..	14	..	..	..	..	100	3	8
Portugal	1.4	1.4	..	16	..	..	..	*98*	..	..	11
Puerto Rico	2.2	1.8	..	53	..	..	..	..	100	..	18
Qatar	4.4	2.4	..	16	..	..	..	..	..	..	12

2.19 Reproductive health

	Total fertility rate		Wanted fertility rate	Adolescent fertility rate	Unmet need for contraception	Contraceptive prevalence rate	Pregnant women receiving prenatal care	Births attended by skilled health staff		Maternal mortality ratio	
	births per woman		births per woman	births per 1,000 women ages 15–19	% of married women ages 15–49	% of married women ages 15–49	%	% of total		per 100,000 live births	
	1990	2008	2003–08[a]	2008	2003–08[a]	2003–08[a]	2003–08[a]	1990	2003–08[a]	National estimates 2000–08[a]	Modeled estimates 2005
Romania	1.8	1.4	..	31	..	70	94	..	98	15	24
Russian Federation	1.9	1.5	..	25	..	..	..	..	100	22	28
Rwanda	6.8	5.4	4.6	36	38	36	96	*26*	52	750	1,300
Saudi Arabia	5.8	3.1	..	26	..	..	..	..	96	10	18
Senegal	6.7	4.8	4.5	102	32	12	87	..	52	401	980
Serbia	*1.8*	1.4	..	22	29	41	98	..	99	13	14[d]
Sierra Leone	5.5	5.2	..	125	..	8	81	..	43	857	2,100
Singapore	1.9	1.3	..	4	..	..	..	..	100	..	14
Slovak Republic	2.1	1.3	..	20	..	..	..	..	100	4	6
Slovenia	1.5	1.5	..	5	..	..	..	*100*	100	17	6
Somalia	6.6	6.4	..	70	..	15	26	..	33	1,044	1,400
South Africa	3.7	2.5	..	58	..	60	92	..	91	166	400
Spain	1.3	1.5	..	12	..	..	..	..	..	..	4
Sri Lanka	2.5	2.3	..	29	..	68	99	..	99	44	58
Sudan	6.0	4.2	..	56	6	8	64	69	49	1,107	450
Swaziland	5.7	3.5	2.1	82	24	51	85	..	69	589	390
Sweden	2.1	1.9	..	8	..	..	..	..	..	..	3
Switzerland	1.6	1.5	..	5	..	..	..	..	100	..	5
Syrian Arab Republic	5.5	3.2	..	59	..	58	84	..	93	65	130
Tajikistan	5.2	3.4	..	28	..	37	80	..	88	97	170
Tanzania	6.2	5.6	4.9	130	22	26	76	*53*	43	578	950
Thailand	2.1	1.8	..	37	..	77	98	..	97	12	110
Timor-Leste	5.3	6.5	..	53	..	20	61	..	18	..	380
Togo	6.3	4.3	..	64	..	17	84	*31*	62	..	510
Trinidad and Tobago	2.4	1.6	..	34	..	43	96	..	98	..	45
Tunisia	3.5	2.1	..	7	..	60	96	*69*	95	..	100
Turkey	3.1	2.1	..	38	..	73	54	..	91	29	44
Turkmenistan	4.3	2.5	..	19	..	48	99	..	100	14	130
Uganda	7.1	6.3	5.1	148	41	24	94	*38*	42	435	550
Ukraine	1.8	1.4	1.1	28	10	67	99	..	99	24	18
United Arab Emirates	4.4	1.9	..	16	..	..	..	..	100	..	37
United Kingdom	1.8	1.9	..	24	..	..	..	..	..	..	8
United States	2.1	2.1	..	35	..	..	..	*99*	99	..	11
Uruguay	2.5	2.0	..	61	..	..	97	..	99	18	20
Uzbekistan	4.1	2.6	..	13	8	65	99	..	100	28	24
Venezuela, RB	3.4	2.5	..	90	..	..	..	..	95	61	57
Vietnam	3.7	2.1	..	17	..	76	91	..	88	162	150
West Bank and Gaza	6.4	5.0	..	77	..	50	99	..	99	..	..
Yemen, Rep.	8.1	5.2	..	67	..	28	47	*16*	36	365	430
Zambia	6.5	5.8	5.2	139	27	41	94	*51*	47	591	830
Zimbabwe	5.2	3.4	3.3	64	13	60	94	*70*	69	555	880
World	**3.3 w**	**2.5 w**	**.. w**	**51 w**	**.. w**	**61 w**	**82 w**	**50 w**	**66 w**		**400 w**
Low income	5.4	4.0	..	90	..	38	69	..	44		790
Middle income	3.3	2.4	..	47	..	66	84	46	70		320
Lower middle income	3.4	2.5	..	46	..	65	83	41	65		370
Upper middle income	2.8	2.0	..	51	..	72	90	..	95		110
Low & middle income	3.6	2.7	..	55	..	61	82	46	63		440
East Asia & Pacific	2.6	1.9	..	17	..	77	91	48	89		150
Europe & Central Asia	2.3	1.8	..	27	..	..	..	..	97		45
Latin America & Carib.	3.2	2.2	..	72	..	75	95	72	90		130
Middle East & N. Africa	4.9	2.7	..	35	..	62	83	47	80		200
South Asia	4.3	2.9	1.9	66	13	53	69	32	42		500
Sub-Saharan Africa	6.3	5.1	..	116	..	23	72	..	46		900
High income	1.8	1.8	..	19	..	..	..	..	99		10
Euro area	1.5	1.6	..	8	..	..	..	..	..		5

a. Data are for most recent year available. b. Includes Taiwan, China. c. Data are for 2009. d. Includes Montenegro.

Reproductive health 2.19

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. Complications of pregnancy and childbirth 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.

Unwanted fertility—actual fertility minus desired fertility—can been avoided when couples use effective contraception. One approach to measuring unwanted fertility is to calculate what the total fertility rate would be if all unwanted births were avoided—the wanted fertility rate. It is calculated in the same manner as the total fertility rate (from a household survey), but unwanted births are excluded from the numerator. Unwanted births are defined as those that exceed the number considered ideal by the same respondent in the survey.

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.

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, 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 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. • **Wanted fertility rate** is the estimated total fertility rate if all unwanted births were avoided. • **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. • **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 total fertility are compiled from the United Nations Population Division's *World Population Prospects: The 2008 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's *Demographic Statistics,* and the U.S. Bureau of the Census International Data Base. Data on wanted fertility are from Demographic and Health Surveys by Macro International. Data on adolescent fertility are from *World Population Prospects: The 2008 Revision,* with annual data linearly interpolated by the Development Data Group. Data on women with unmet need for contraception and contraceptive prevalence are from household surveys, including Demographic and Health Surveys by Macro International and Multiple Indicator Cluster Surveys by UNICEF. Data on 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 2010* and Childinfo and Demographic and Health Surveys by Macro International. Modeled estimates of maternal mortality ratios are from WHO, UNICEF, UNFPA and the World Bank's *Maternal Mortality in 2005* (2007).

2.20 Nutrition

	Prevalence of undernourishment		Prevalence of child malnutrition		Prevalence of overweight children	Low-birthweight babies	Exclusive breast-feeding	Consumption of iodized salt	Vitamin A supplementation	Prevalence of anemia	
	% 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	% Children under age 5	% Pregnant women
	1990–92	2004–06	Underweight 2000–08[a]	Stunting 2000–08[a]	2000–08[a]	2003–08[a]	2003–08[a]	2003–08[a]	2008	2000–06[a]	2000–06[a]
Afghanistan	..	..	32.9	59.3	4.6	..	83	28	96	38	61
Albania	<5	<5	6.6	27.0	25.2	7	40	60	..	31	34
Algeria	<5	<5	11.1	23.3	14.7	6	7	61	..	43	43
Angola	66	44	27.5	50.8	5.3	..	..	45	82	..	57
Argentina	<5	<5	2.3	8.2	6.5	7	..	..	..	18	25
Armenia	46	23	4.2	18.2	11.7	7	33	97	..	37	12
Australia	<5	<5	..	..	..	..	..	..	..	8	12
Austria	<5	<5	..	..	..	..	..	..	..	11	15
Azerbaijan	27	11	8.4	26.8	13.9	10	12	54	90[b]	32	38
Bangladesh	36	26	41.3	43.2	1.1	22	43	84	97	47	47
Belarus	<5	<5	1.3	4.5	9.7	4	9	55	..	27	26
Belgium	<5	<5	..	..	..	..	..	..	..	9	13
Benin	28	19	20.2	44.7	11.4	15	43	55	52	78	75
Bolivia	24	23	5.9	32.5	9.2	7	60	88	45	52	37
Bosnia and Herzegovina	<5	<5	1.6	11.8	25.6	5	18	62	..	27	35
Botswana	20	26	10.7	29.1	10.4	..	..	..	..	..	21
Brazil	10	6	2.2	7.1	7.3	8	40	96	..	55	29
Bulgaria	<5	<5	1.6	8.8	13.6	9	..	100	..	27	30
Burkina Faso	14	9	37.4	44.5	7.7	16	7	34	100	92	68
Burundi	44	63	38.9	63.1	1.4	11	45	98	80	56	47
Cambodia	38	25	28.8	39.5	2.0	14	60	73	88	62	66
Cameroon	34	23	16.6	36.4	9.6	11	21	49	..	68	51
Canada	<5	<5	..	..	..	..	..	..	..	8	12
Central African Republic	47	41	21.8	44.6	10.8	13	23	62	68	..	..
Chad	59	38	33.9	44.8	4.4	22	2	56	0	71	60
Chile	7	<5	0.5	2.0	9.5	6	85	..	..	24	28
China	15[c]	10[c]	6.8	21.8	9.2	2	51	95	..	20	29
Hong Kong SAR, China	..	..	..	..	..	..	..	..	..	..	..
Colombia	15	10	5.1	16.2	4.2	6	47	..	..	28	31
Congo, Dem. Rep.	29	75	28.2	45.8	6.8	8	36	79	85	71	67
Congo, Rep.	40	21	11.8	31.2	8.5	13	19	82	10	66	55
Costa Rica	<5	<5	..	..	..	7	15	..	..	..	..
Côte d'Ivoire	15	14	16.7	40.1	9.0	17	4	84	90	69	55
Croatia	<5	<5	..	..	..	5	..	..	..	23	28
Cuba	5	<5	..	..	..	5	26	88	..	27	39
Czech Republic	<5	<5	2.1	2.6	4.4	..	..	..	..	18	22
Denmark	<5	<5	..	..	..	..	..	..	..	9	12
Dominican Republic	27	21	3.4	10.1	8.3	11	9	19	..	35	40
Ecuador	24	13	6.2	29.0	5.1	10	40	..	..	38	38
Egypt, Arab Rep.	<5	<5	6.8	30.7	20.5	13	53	79	68[b]	49	34
El Salvador	9	10	6.1	24.6	5.8	7	31	..	*20*	18	..
Eritrea	67	66	34.5	43.7	1.6	..	..	..	49	70	55
Estonia	<5	<5	..	..	..	..	..	..	..	23	23
Ethiopia	71	44	34.6	50.7	5.1	20	49	20	88	75	63
Finland	<5	<5	..	..	..	..	..	..	..	11	15
France	<5	<5	..	..	..	..	..	..	..	8	11
Gabon	5	<5	8.8	26.3	5.6	..	..	..	0	44	46
Gambia, The	20	29	15.8	27.6	2.7	20	41	7	28	..	..
Georgia	47	12	2.3	14.7	21.0	5	11	87	..	41	42
Germany	<5	<5	1.1	1.3	3.5	..	..	..	..	8	12
Ghana	34	8	13.9	28.1	2.6	9	63	32	24	76	65
Greece	<5	<5	..	..	..	..	..	..	..	12	19
Guatemala	14	16	17.7	54.3	5.6	..	..	76	20	38	22
Guinea	19	16	22.5	39.3	5.1	12	48	41	94	76	63
Guinea-Bissau	20	31	17.4	47.7	17.0	24	16	1	66	75	58
Haiti	63	58	18.9	29.7	3.9	25	41	3	*42*	65	50
Honduras	19	12	8.6	29.9	5.8	10	30	..	*40*	30	21

Nutrition 2.20

	Prevalence of undernourishment		Prevalence of child malnutrition		Prevalence of overweight children	Low-birthweight babies	Exclusive breast-feeding	Consumption of iodized salt	Vitamin A supplementation	Prevalence of anemia	
	% 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	% Children under age 5	% Pregnant women
	1990–92	2004–06	Underweight 2000–08[a]	Stunting 2000–08[a]	2000–08[a]	2003–08[a]	2003–08[a]	2003–08[a]	2008	2000–06[a]	2000–06[a]
Hungary	<5	<5	..	..	..	..	..	..	..	19	21
India	24	22	43.5	47.9	1.9	28	46	51	53	74	50
Indonesia	19	16	19.6	40.1	11.2	9	32	62	86	44	44
Iran, Islamic Rep.	<5	<5	..	..	..	7	23	99	..	35	21
Iraq	..	..	7.1	27.5	15.0	15	25	28	*1*	56	38
Ireland	<5	<5	..	..	..	..	..	..	..	10	15
Israel	<5	<5	..	..	..	..	..	..	..	12	17
Italy	<5	<5	..	..	..	..	..	..	..	11	15
Jamaica	11	5	2.2	3.7	7.5	14	15	..	..	..	..
Japan	<5	<5	..	..	..	..	..	..	..	11	15
Jordan	<5	<5	3.6	12.0	4.7	13	22	..	..	28	39
Kazakhstan	<5	<5	4.9	17.5	14.8	6	17	92	..	..	26
Kenya	33	30	16.5	35.8	5.8	10	13	..	27	..	..
Korea, Dem. Rep.	21	32	17.8	44.7	0.9	..	65	40	98	..	..
Korea, Rep.	<5	<5	..	..	..	..	..	..	..	..	23
Kosovo	..	..	..	..	..	..	..	..	..	..	..
Kuwait	20	<5	..	..	..	..	..	..	..	32	31
Kyrgyz Republic	17	<5	2.7	18.1	10.7	5	32	76	99	..	34
Lao PDR	27	19	31.6	47.6	1.3	11	26	84	*83*	48	56
Latvia	<5	<5	..	..	..	..	..	..	..	27	25
Lebanon	<5	<5	4.2	16.5	16.7	..	..	92	..	..	32
Lesotho	15	15	16.6	45.2	6.8	13	36	91	*85*	49	25
Liberia	30	38	20.4	39.4	4.2	14	29	..	*85*	..	..
Libya	<5	<5	5.6	21.0	22.4	..	..	..	..	34	34
Lithuania	<5	<5	..	..	..	..	..	..	..	24	24
Macedonia, FYR	<5	<5	1.8	11.5	16.2	6	16	94	..	..	32
Madagascar	32	35	36.8	52.8	6.2	17	67	75	97	68	50
Malawi	45	29	15.5	53.2	11.3	13	57	50	95	73	47
Malaysia	<5	<5	..	..	..	..	..	..	..	32	38
Mali	14	10	27.9	38.5	4.7	19	38	79	97	83	73
Mauritania	10	8	23.2	28.9	2.3	34	16	2	87	68	53
Mauritius	7	6	..	..	..	14	..	..	..	..	..
Mexico	<5	<5	3.4	15.5	7.6	8	..	91	*68*	24	21
Moldova	<5	<5	3.2	11.3	9.1	6	46	60	..	41	36
Mongolia	30	29	5.3	27.5	14.2	6	57	83	95	21	37
Morocco	5	<5	9.9	23.1	13.3	15	31	21	..	32	37
Mozambique	59	37	21.2	47.0	6.3	15	37	25	83	75	52
Myanmar	44	17	29.6	40.6	2.4	..	15	93	94	63	50
Namibia	29	19	17.5	29.6	4.6	16	24	..	*68*	41	31
Nepal	21	16	38.8	49.3	0.6	21	53	..	93	48	42
Netherlands	<5	<5	..	..	..	..	..	..	..	9	13
New Zealand	<5	<5	..	..	..	..	..	..	..	11	18
Nicaragua	52	21	4.3	18.8	5.2	8	31	97	95	17	33
Niger	38	28	39.9	54.8	3.5	27	4	46	92	81	61
Nigeria	15	8	27.2	43.0	6.2	14	13	97	74	..	..
Norway	<5	<5	..	..	..	..	..	..	..	6	9
Oman	..	..	..	..	..	9	..	..	..	42	43
Pakistan	22	23	31.3	41.5	4.8	32	37	..	97	51	39
Panama	18	17	..	..	..	10	..	..	*4*	..	..
Papua New Guinea	..	..	18.1	43.9	3.4	10	56	92	*7*	60	55
Paraguay	16	12	..	..	..	9	22	94	..	30	39
Peru	28	13	5.4	29.8	9.1	8	69	91	..	50	43
Philippines	21	15	26.2	27.9	2.0	20	34	81	86	36	44
Poland	<5	<5	..	..	..	..	..	..	..	23	25
Portugal	<5	<5	..	..	..	..	..	..	..	13	17
Puerto Rico	..	..	..	..	..	..	..	..	..	..	..
Qatar	..	..	..	..	..	..	..	..	..	..	29

2.20 Nutrition

	Prevalence of undernourishment		Prevalence of child malnutrition		Prevalence of overweight children	Low-birthweight babies	Exclusive breast-feeding	Consumption of iodized salt	Vitamin A supplementation	Prevalence of anemia	
	% 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	2004–06	Underweight 2000–08[a]	Stunting 2000–08[a]	2000–08[a]	2003–08[a]	2003–08[a]	2003–08[a]	2008	Children under age 5 2000–06[a]	Pregnant women 2000–06[a]
Romania	<5	<5	3.5	12.8	8.3	8	16	74	..	40	30
Russian Federation	<5	<5	..	..	..	6	..	..	..	27	21
Rwanda	45	40	18.0	51.7	6.7	6	88	88	89	56	..
Saudi Arabia	<5	<5	5.3	9.3	6.1	..	..	..	..	33	32
Senegal	28	25	14.5	20.1	2.4	19	34	41	90	70	58
Serbia	<5[d]	<5[d]	1.8	8.1	19.3	8	15	..	..	..	..
Sierra Leone	45	46	28.3	46.9	5.9	24	11	45	12	83	60
Singapore	..	..	3.3	4.4	2.6	..	..	..	..	19	24
Slovak Republic	<5	<5	..	..	..	..	..	..	..	23	25
Slovenia	<5	<5	..	..	..	..	..	..	..	14	19
Somalia	..	..	32.8	42.1	4.7	11	9	1	100	..	..
South Africa	<5	<5	..	..	..	..	8	..	39	..	22
Spain	<5	<5	..	..	..	..	..	..	..	13	18
Sri Lanka	27	21	21.1	17.3	1.6	18	76	94	64	30	29
Sudan	31	20	31.7	37.9	5.3	..	34	11	67	85	58
Swaziland	12	18	6.1	29.5	11.4	9	32	80	44	47	24
Sweden	<5	<5	..	..	..	..	..	..	..	9	13
Switzerland	<5	<5	..	..	..	..	..	..	..	6	..
Syrian Arab Republic	<5	<5	10.0	28.6	18.7	9	29	79	..	41	39
Tajikistan	34	26	14.9	33.1	6.7	10	25	49	87	38	45
Tanzania	28	35	16.7	44.4	4.9	10	41	43	93	72	58
Thailand	29	17	7.0	15.7	8.0	9	5	47	..	..	..
Timor-Leste	18	23	40.6	55.7	5.7	12	31	60	57	32	23
Togo	45	37	22.3	27.8	4.7	12	48	25	64	52	50
Trinidad and Tobago	11	10	4.4	5.3	4.9	19	13	28	..	30	30
Tunisia	<5	<5	3.3	9.0	8.8	5	6	..	..	..	..
Turkey	<5	<5	3.5	15.6	9.1	..	40	69	..	33	40
Turkmenistan	9	6	..	..	..	4	11	87	..	36	30
Uganda	19	15	16.4	38.7	4.9	14	60	96	67	73	64
Ukraine	<5	<5	4.1	22.9	26.5	4	18	18	..	22	27
United Arab Emirates	<5	<5	..	..	..	..	..	..	..	28	28
United Kingdom	<5	<5	..	..	..	..	..	..	..	..	15
United States	<5	<5	1.3	3.9	8.0	..	..	..	..	3	6
Uruguay	5	<5	6.0	13.9	9.4	9	57	..	..	19	27
Uzbekistan	5	13	4.4	19.6	12.8	5	26	53	38	38	..
Venezuela, RB	10	12	..	..	..	9	..	..	..	33	40
Vietnam	28	13	20.2	35.8	2.5	7	17	93	98[b]	34	32
West Bank and Gaza	8	15	2.2	11.8	11.4	7	27	86	..	..	..
Yemen, Rep.	30	32	43.1	57.7	5.0	..	12	30	47[b]	68	58
Zambia	40	45	14.9	45.8	8.4	11	61	..	96	53	..
Zimbabwe	40	39	14.0	35.8	9.1	11	22	91	20	58	47
World	**17 w**	**14 w**	**22.4 w**	**34.6 w**	**6.3 w**	**15 w**	**39 w**	**71 w**	**.. w**	**.. w**	**.. w**
Low income	35	30	27.5	43.6	4.7	15	37	62	81	..	..
Middle income	16	13	22.2	33.6	6.7	16	40	73	..	..	..
Lower middle income	19	15	25.1	36.8	6.4	17	40	72	..	..	..
Upper middle income	8	6	3.8	13.5	8.8	7	..	73	..	38	30
Low & middle income	19	16	23.5	36.1	6.2	15	39	71	..	..	..
East Asia & Pacific	18	12	11.9	27.4	8.1	6	42	86	..	20	29
Europe & Central Asia	7	6	..	..	..	6	..	50	..	30	30
Latin America & Carib.	12	9	4.5	15.9	7.2	9	..	89	..	..	..
Middle East & N. Africa	7	7	12.2	30.0	15.3	11	29	67	..	48	..
South Asia	25	22	41.1	46.6	2.2	27	45	55	65	74	50
Sub-Saharan Africa	31	28	25.3	43.3	6.0	14	31	60	73	..	..
High income	5	5	..	..	..	..	..	..	..	..	13
Euro area	5	5	..	..	..	..	..	..	..	10	14

a. Data are for the most recent year available. b. Country's vitamin A supplementation programs do not target children all the way up to 59 months of age. c. Includes Hong Kong SAR, China; Macau SAR, China; and Taiwan, China. d. Includes Montenegro.

About the data

Data on undernourishment are from the Food and Agriculture Organization (FAO) of the United Nations and measure food deprivation based on average food available for human consumption per person, the level of inequality in access to food, and the minimum calories required for an average person.

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 underweight children is the most common malnutrition indicator. Being even mildly underweight increases the risk of death and inhibits cognitive development in children. And it perpetuates the problem across generations, as malnourished women are more likely to have low-birthweight babies. Height for age reflects linear growth achieved pre- and postnatally; a deficit indicates long-term, cumulative effects of inadequate health, diet, or care. Stunting is often used as a proxy for multifaceted deprivation and as an indicator of long-term changes in malnutrition.

Estimates of overweight children are also from national survey data. Overweight children have become a growing concern in developing countries. Research shows an association between childhood obesity and a high prevalence of diabetes, respiratory disease, high blood pressure, and psychosocial and orthopedic disorders (de Onis and Blössner 2000).

New international growth reference standards for infants and young children were released in 2006 by the World Health Organization (WHO) to monitor children's nutritional status. They are also key in monitoring health targets for the Millennium Development Goals. Differences in growth to age 5 are influenced more by nutrition, feeding practices, environment, and healthcare than by genetics or ethnicity. The previously reported data 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 editions prior to 2008.

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 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 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 may confer cognitive benefits. 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 (www.childinfo.org). The data on iodized salt are derived from household surveys.

Vitamin A is essential for immune system functioning. Vitamin A deficiency, a leading cause of blindness, also 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 breastfeeding mothers helps protect their children during the first months of life. Food fortification with vitamin A is being introduced in many developing countries.

Data on anemia are compiled by the WHO based mainly on nationally representative surveys between 1993 and 2005, which measured hemoglobin in the blood. WHO's hemoglobin thresholds were then used to determine anemia status based on age, sex, and physiological status. Children under age 5 and pregnant women have the highest risk for anemia. Data should be used with caution because surveys differ in quality, coverage, age group interviewed, and treatment of missing values across countries and over time.

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 whose dietary energy consumption is continuously below a minimum requirement for maintaining a healthy life and carrying out light physical activity with an acceptable minimum weight for height. • **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. Height is measured by recumbent length for children up to two years old and by stature while standing for older children. Data are for the WHO 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 child growth standards released in 2006. • **Low-birthweight babies** are the percentage of newborns weighing less than 2.5 kilograms 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. • **Prevalence of anemia, children under age 5,** is the percentage of children under age 5 whose hemoglobin level is less than 110 grams per liter at sea level. • **Prevalence of anemia, pregnant women,** is the percentage of pregnant women whose hemoglobin level is less than 110 grams per liter at sea level.

Data sources

Data on undernourishment are from 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). 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 2010* and Childinfo. Data on anemia are from the WHO's *Worldwide Prevalence of Anemia 1993–2005* (2008) and Integrated WHO Nutrition Global Databases.

2.21 Health risk factors and future challenges

	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 2006	Female 2006	2008	2010	1990	2007	2001	2007	Male 2007	Female 2007	Male 2000–08[a]	Female 2000–08[a]
Afghanistan	..	..	189	8.6	..	..	..	..	..	..	..	..
Albania	43	4	16	4.5	..	..	..	..	..	..	..	..
Algeria	26	0[b]	58	8.5	..	0.1	25.0	28.6	0.1	0.1	..	..
Angola	..	..	292	3.5	0.3	2.1	60.9	61.1	0.2	0.3	..	..
Argentina	34	24	30	5.7	0.2	0.5	25.0	26.7	0.6	0.3	..	..
Armenia	61	3	73	7.8	..	0.1	<27.8	<41.7	0.2	0.1	32	7
Australia	22	19	7	5.7	0.1	0.2	<7.1	6.7	0.2	<0.1	..	..
Austria	47	41	0	8.9	<0.1	0.2	27.3	29.6	0.2	0.1	..	..
Azerbaijan	..	..	110	7.5	..	0.2	..	16.7	0.3	0.1	25	1
Bangladesh	43	1	225	6.6	..	..	<1.3	16.7	..	..	..	..
Belarus	64	22	43	7.6	..	0.2	27.5	30.0	0.3	0.1	..	..
Belgium	30	24	9	5.3	0.1	0.2	26.2	27.3	0.2	0.1	..	..
Benin	13	1	92	4.6	0.1	1.2	63.3	62.7	0.3	0.9	39	10
Bolivia	34	26	144	6.0	*0.1*	0.2	24.6	27.8	0.2	0.1	29	10
Bosnia and Herzegovina	49	35	51	7.1	..	<0.1	..	..	..	..	..	..
Botswana	..	..	712	5.4	4.7	23.9	59.3	60.7	5.1	15.3	..	..
Brazil	19	12	46	6.4	0.4	0.6	34.4	33.8	1.0	0.6	..	..
Bulgaria	49	38	43	6.5	..	..	..	..	..	..	..	..
Burkina Faso	13	1	220	3.8	1.9	1.6	45.4	50.8	0.5	0.9	54	17
Burundi	..	..	357	1.8	1.7	2.0	59.2	58.9	0.4	1.3	..	..
Cambodia	46	6	490	5.2	0.7	0.8	25.8	28.6	0.8	0.3	31	3
Cameroon	9	1	187	3.9	0.8	5.1	61.2	60.0	1.2	4.3	52	24
Canada	21	18	5	9.2	0.2	0.4	26.5	27.4	0.4	0.2	..	..
Central African Republic	..	..	336	4.5	1.8	6.3	66.7	65.0	1.1	5.5	..	..
Chad	12	1	291	3.7	0.7	3.5	60.7	61.1	2.0	2.8	18	7
Chile	42	31	11	5.7	<0.1	0.3	26.0	28.1	0.3	0.2	..	..
China	59	4	97	4.2	..	0.1[c]	25.5[c]	29.0[c]	0.1[c]	0.1[c]	..	..
Hong Kong SAR, China	..	..	91	8.5	..	..	..	..	..	..	..	..
Colombia	..	..	36	5.2	0.1	0.6	26.9	29.4	0.7	0.3	..	23
Congo, Dem. Rep.	10	1	382	3.2	..	..	..	..	..	..	16	26
Congo, Rep.	9	0[b]	393	5.1	5.1	3.5	58.4	58.9	0.8	2.3	36	16
Costa Rica	26	7	11	9.3	*0.1*	0.4	27.5	28.1	0.4	0.2	..	..
Côte d'Ivoire	11	1	410	4.7	2.2	3.9	58.2	59.5	0.8	2.4	..	..
Croatia	39	29	25	6.9	..	<0.1	..	..	..	..	..	..
Cuba	36	28	6	9.5	..	0.1	<43.5	29.0	0.1	0.1	..	..
Czech Republic	35	27	9	6.4	..	..	<38.5	<33.3	<0.1	..	..	..
Denmark	35	30	7	5.6	0.1	0.2	..	22.9	0.2	0.1	..	..
Dominican Republic	15	11	73	11.2	0.6	1.1	54.0	50.8	0.3	0.6	58	19
Ecuador	23	5	72	5.9	0.1	0.3	25.8	28.4	0.4	0.2	..	..
Egypt, Arab Rep.	24	1	20	11.4	..	..	26.8	28.9	..	..	..	..
El Salvador	..	..	32	9.0	0.1	0.8	25.7	28.5	0.9	0.5	..	..
Eritrea	15	1	97	2.5	0.1	1.3	60.0	60.0	0.3	0.9	..	2
Estonia	48	25	34	7.6	..	1.3	<28.6	24.2	1.6	0.7	..	..
Ethiopia	8	1	368	2.5	0.7	2.1	59.5	59.6	0.5	1.5	18	2
Finland	33	23	7	5.7	..	0.1	<50.0	<41.7	0.1	<0.1	..	..
France	36	27	6	6.7	0.1	0.4	25.0	27.1	0.4	0.2	..	..
Gabon	..	..	452	5.0	0.9	5.9	58.3	58.7	1.3	3.9	..	..
Gambia, The	17	1	263	4.3	..	0.9	59.0	60.0	0.2	0.6	..	..
Georgia	57	6	107	7.5	..	0.1	20.0	37.0	0.1	0.1	..	..
Germany	37	26	5	8.9	<0.1	0.1	27.3	28.8	0.1	0.1	..	..
Ghana	7	1	202	4.3	0.1	1.9	58.3	60.0	0.4	1.3	45	19
Greece	63	39	6	6.0	0.1	0.2	26.5	27.3	0.2	0.1	..	..
Guatemala	24	4	63	8.6	<0.1	0.8	97.9	98.1	..	1.5	..	..
Guinea	..	..	302	4.3	0.2	1.6	59.6	59.3	0.4	1.2	35	10
Guinea-Bissau	..	..	224	3.9	0.2	1.8	59.2	58.0	0.4	1.2	..	..
Haiti	..	..	246	7.2	1.2	2.2	45.7	52.7	0.6	1.4	42	37
Honduras	..	..	64	9.1	1.3	0.7	25.7	28.5	0.7	0.4	..	7

Health risk factors and future challenges

2.21

	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 2006	Female 2006	2008	2010	1990	2007	2001	2007	Male 2007	Female 2007	Male 2000–08[a]	Female 2000–08[a]
Hungary	45	35	16	6.4	..	0.1	<35.7	<30.3	0.1	<0.1	..	..
India	28	1	168	7.8	*0.1*	0.3	38.5	38.3	0.3	0.3	37	18
Indonesia	58	4	189	4.8	..	0.2	10.8	20.0	0.3	0.1	..	1
Iran, Islamic Rep.	24	2	20	8.0	..	0.2	26.7	28.2	0.2	0.1	..	..
Iraq	29	3	64	10.2	..	..	..	..	..	..	..	..
Ireland	34	28	9	5.2	..	0.2	26.1	27.3	0.2	0.1	..	..
Israel	31	18	6	6.5	<0.1	0.1	60.0	59.2	<0.1	0.1	..	..
Italy	34	19	7	5.9	0.4	0.4	25.7	27.3	0.4	0.2	..	..
Jamaica	18	8	7	10.6	0.3	1.6	26.4	29.2	1.7	0.9	74	66
Japan	42	13	22	5.0	..	..	22.2	24.0	..	..	..	..
Jordan	59	10	6	10.1	..	..	..	..	..	..	..	4
Kazakhstan	43	9	175	5.8	..	0.1	<29.4	27.5	0.2	0.1	..	..
Kenya	23	1	328	3.5	..	..	..	..	..	..	39	9
Korea, Dem. Rep.	58	..	344	5.3	..	..	..	..	..	..	..	..
Korea, Rep.	53	6	88	7.9	..	<0.1	26.5	27.7	<0.1	<0.1	..	..
Kosovo	..	..	..	..	..	..	..	..	..	..	..	..
Kuwait	36	4	34	14.6	..	..	..	..	..	..	..	..
Kyrgyz Republic	46	2	159	5.2	..	0.1	<50	26.2	0.2	0.1	..	..
Lao PDR	60	13	150	5.6	..	0.2	<45.5	24.1	0.2	0.1	..	..
Latvia	53	24	50	7.6	..	0.8	<23.8	27.0	0.9	0.5	..	..
Lebanon	31	7	14	7.8	<0.1	0.1	<45.5	<33.3	0.1	0.1	..	..
Lesotho	..	..	635	3.9	0.8	23.2	58.3	57.7	5.9	14.9	44	26
Liberia	10	..	283	4.7	0.4	1.7	59.1	59.4	0.4	1.3	19	9
Libya	..	..	17	9.0	..	..	..	..	..	..	..	..
Lithuania	50	22	71	7.6	..	0.1	<35.7	<45.5	0.1	0.1	..	..
Macedonia, FYR	..	..	24	6.9	..	<0.1	..	..	..	..	..	..
Madagascar	..	..	256	3.2	..	0.1	23.8	26.2	0.2	0.1	8	2
Malawi	17	2	324	2.3	2.1	11.9	56.4	58.3	2.4	8.4	32	9
Malaysia	49	2	102	11.6	*0.1*	0.5	23.3	26.6	0.6	0.3	..	..
Mali	13	1	322	4.2	0.2	1.5	60.5	60.2	0.4	1.1	29	4
Mauritania	24	1	324	4.8	<0.1	0.8	25.8	27.9	0.9	0.5	..	..
Mauritius	34	1	22	16.2	<0.1	1.7	<27.8	29.2	1.8	1.0	..	..
Mexico	36	12	19	10.8	0.2	0.3	27.1	28.5	0.3	0.2	..	..
Moldova	45	5	175	7.6	..	0.4	<50.0	29.5	0.4	0.2	55	22
Mongolia	46	6	205	1.6	..	0.1	..	<20.0	0.1	..	..	..
Morocco	27	0[b]	116	8.3	..	0.1	27.5	28.1	0.1	0.1	..	..
Mozambique	19	1	420	4.0	1.4	12.5	59.4	57.9	2.9	8.5	27	12
Myanmar	40	13	404	3.2	0.4	0.7	33.4	41.7	0.7	0.6	..	..
Namibia	22	8	747	4.4	1.2	15.3	60.7	61.1	3.4	10.3	81	64
Nepal	30	28	163	3.9	<0.1	0.5	21.8	25.0	0.5	0.3	24	8
Netherlands	33	28	7	5.3	0.1	0.2	25.6	27.2	0.2	0.1	..	..
New Zealand	22	20	8	5.2	0.1	0.1	<16.7	<35.7	0.1	..	..	..
Nicaragua	..	..	46	10.0	<0.1	0.2	25.6	28.0	0.3	0.1	..	7
Niger	..	..	178	3.9	0.1	0.8	29.3	30.4	0.9	0.5	..	..
Nigeria	8	0[b]	303	4.7	0.7	3.1	60.0	58.3	0.8	2.3	38	8
Norway	30	30	6	3.6	<0.1	0.1	<41.7	<33.3	0.1	0.1	..	..
Oman	20	0[b]	14	13.4	..	..	..	..	..	..	..	..
Pakistan	30	3	231	9.1	..	0.1	26.0	28.7	0.1	0.1	..	..
Panama	..	..	47	9.6	0.4	1.0	26.9	28.9	1.1	0.6	..	..
Papua New Guinea	..	..	250	3.0	..	1.5	34.7	39.6	0.6	0.7	..	..
Paraguay	33	14	47	4.9	<0.1	0.6	26.4	29.0	0.7	0.3	..	..
Peru	..	..	119	6.2	0.1	0.5	26.8	28.4	0.5	0.3	..	9
Philippines	50	11	285	7.7	..	..	<50	26.8	..	..	13	3
Poland	30	38	25	7.6	..	0.1	26.0	28.9	0.1	0.1	..	..
Portugal	34	15	30	9.7	0.2	0.5	26.6	27.6	0.5	0.3	..	..
Puerto Rico	..	..	3	10.6	..	..	..	..	..	..	..	..
Qatar	..	..	55	15.4	..	..	..	..	..	..	..	..

2.21 Health risk factors and future challenges

	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 2006	Female 2006	2008	2010	1990	2007	2001	2007	Male 2007	Female 2007	Male 2000–08[a]	Female 2000–08[a]
Romania	46	24	134	6.9	..	0.1	50.7	50.0	0.2	0.2	..	..
Russian Federation	70	28	107	7.6	..	1.1	22.1	25.5	1.3	0.6	..	..
Rwanda	..	..	387	1.6	9.2	2.8	60.6	60.0	0.5	1.4	19	5
Saudi Arabia	22	3	19	16.8	..	..	..	..	..	..	..	..
Senegal	13	1	277	4.7	0.1	1.0	60.9	59.4	0.3	0.8	48	5
Serbia	40	27	18	6.9[d]	<0.1	0.1	25.5	28.1	0.1	0.1	..	..
Sierra Leone	..	..	608	4.4	0.2	1.7	59.4	58.8	0.4	1.3	..	..
Singapore	34	5	39	10.2	..	0.2	<34.5	29.3	0.2	0.1	..	..
Slovak Republic	41	20	12	6.4	..	<0.1	..	..	..	..	..	..
Slovenia	32	21	12	7.7	..	<0.1	..	..	..	..	..	..
Somalia	..	..	388	3.0	<0.1	0.5	26.5	27.9	0.6	0.3	..	..
South Africa	27	8	960	4.5	0.8	18.1	58.7	59.3	4.0	12.7	57	46
Spain	37	27	17	6.6	0.4	0.5	20.8	20.0	0.6	0.2	..	..
Sri Lanka	27	0[b]	66	10.9	..	..	<33.3	37.8	<0.1	..	..	..
Sudan	25	2	119	4.2	0.8	1.4	56.0	58.6	0.3	1.0	..	..
Swaziland	21	2	1,227	4.2	0.9	26.1	60.7	58.8	5.8	22.6	66	44
Sweden	17	23	6	5.2	0.1	0.1	43.4	46.8	0.1	0.1	..	..
Switzerland	32	23	5	8.9	0.4	0.6	33.2	36.8	0.4	0.5	..	..
Syrian Arab Republic	40	..	22	10.8	..	..	..	..	..	..	..	..
Tajikistan	..	..	199	5.0	..	0.3	<20.8	21.0	0.4	0.1	..	..
Tanzania	20	2	190	3.2	4.8	6.2	61.7	58.5	0.5	0.9	36	13
Thailand	40	2	137	7.1	1.0	1.4	36.9	41.7	1.2	1.2	..	..
Timor-Leste	..	..	498	3.5	..	..	..	..	..	..	..	..
Togo	..	..	438	4.3	0.7	3.3	61.0	57.5	0.8	2.4	..	..
Trinidad and Tobago	..	..	24	11.7	0.2	1.5	57.5	59.2	0.3	1.0	..	..
Tunisia	53	6	24	9.3	..	0.1	<45.5	27.8	0.1	<0.1	..	..
Turkey	51	20	30	8.0	..	..	..	..	..	..	..	..
Turkmenistan	..	..	68	5.3	..	<0.1	..	..	..	..	..	1
Uganda	17	2	311	2.2	13.7	5.4	58.9	59.3	1.3	3.9	56	39
Ukraine	65	24	102	7.6	..	1.6	35.7	44.2	1.5	1.5	69	73
United Arab Emirates	24	2	6	18.7	..	..	..	..	..	..	..	..
United Kingdom	26	24	12	3.6	<0.1	0.2	..	..	..	..	..	..
United States	25	19	5	10.3	0.5	0.6	18.0	20.9	0.7	0.3	..	..
Uruguay	39	29	22	5.7	0.1	0.6	25.4	28.0	0.6	0.3	..	..
Uzbekistan	23	3	128	5.2	..	0.1	<35.7	28.8	0.1	0.1	18	2
Venezuela, RB	32	27	33	6.5	..	..	..	..	..	..	..	..
Vietnam	41	2	200	3.5	0.1	0.5	24.7	27.1	0.6	0.3	16	8
West Bank and Gaza	..	..	19	8.6	..	..	..	..	..	..	..	..
Yemen, Rep.	28	6	88	3.0	..	..	..	..	..	..	..	..
Zambia	17	2	468	4.0	8.9	15.2	54.7	57.1	3.6	11.3	47	39
Zimbabwe	28	2	762	4.1	14.2	15.3	58.8	56.7	2.9	7.7	52	9
World	**39 w**	**8 w**	**139 w**	**6.4 w**	**0.3 w**	**0.8 w**	**30.8 w**	**32.9 w**	**0.5 w**	**0.7 w**	**..**	**..**
Low income	29	3	282	4.3	2.1	2.3	35.0	39.2	..	..	..	..
Middle income	42	6	137	6.4	0.1	0.6	31.6	33.4	0.4	0.6	..	..
Lower middle income	43	3	145	6.2	0.1	0.4	31.8	33.7	0.3	0.4	..	..
Upper middle income	39	18	106	7.5	..	1.5	30.8	32.0	0.9	1.3	..	..
Low & middle income	40	6	162	6.1	0.4	0.9	32.1	34.2	0.5	0.7	..	..
East Asia & Pacific	56	4	138	4.6	0.1	0.2	25.5	28.5	0.2	0.2	..	..
Europe & Central Asia	55	24	87	7.3	..	0.6	28.6	30.5	0.8	0.5	..	..
Latin America & Carib.	27	15	47	7.4	0.3	0.5	32.1	32.8	0.7	0.4	..	..
Middle East & N. Africa	28	2	44	9.1	..	0.1	27.9	28.6	..	..	..	..
South Asia	30	2	180	7.8	0.1	0.3	32.8	34.6	0.3	0.3	36	17
Sub-Saharan Africa	14	2	352	3.8	2.1	5.0	57.1	56.9	1.1	3.3	36	15
High income	33	20	14	7.9	0.3	0.3	23.3	24.9	0.5	0.2	..	..
Euro area	37	25	8	7.1	0.2	0.3	25.8	26.9	0.3	0.2	..	..

a. Data are for the most recent year available. b. Less than 0.5. c. Includes Hong Kong SAR, China.

Health risk factors and future challenges 2.21

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 capacity and willingness to collect or report information. To compensate for this and improve 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 and the prevalence of smoking is therefore a good measure 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 only in the next few decades. Because the data present a one-time estimate, with no information on intensity or duration of smoking, and because the definition of adult varies, the data should be used with caution.

Tuberculosis is one of the main causes of adult deaths from a single infectious agent in developing countries. In developed countries tuberculosis has reemerged largely as a result of cases among immigrants. Since tuberculosis incidence cannot be directly measured, estimates are obtained by eliciting expert opinion or are derived from measurements of prevalence or mortality. These estimates include uncertainty intervals, which are not shown in the table.

Diabetes, an important cause of ill health and a risk factor for other diseases in developed countries, is spreading rapidly in developing countries. Highest 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 misleading, however. They often disguise epidemics that are initially concentrated in certain localities or 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 Joint United Nations Programme on HIV/AIDS (UNAIDS) and the WHO estimate HIV prevalence from sentinel surveillance, population-based surveys, and special studies. Since the 2009 edition the estimates in the table have been more reliable than previous estimates because of expanded sentinel surveillance and improved data quality. Findings from population-based HIV surveys, which are geographically more representative than sentinel surveillance and include both men and women, influenced a downward adjustment to prevalence rates based on sentinel surveillance. And assumptions about the average time people living with HIV survive without antiretroviral treatment were improved in the most recent model. Thus, estimates in this edition should not be compared with estimates in previous editions.

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 used in 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. Household surveys also frequently provide better coverage of rural populations. However, respondents who refuse to participate or are absent from the household add 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 estimate HIV prevalence for the adult population (ages 15–49) by assuming 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. Other potential biases are 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 asked 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 adjusted and age-standardized prevalence estimate of smoking among adults. 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 percentages 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 a condom at last intercourse in the last 12 months.

Data sources

Data on smoking are from the WHO's *Report on the Global Tobacco Epidemic 2009: Implementing Smoke-Free Environments.* Data on tuberculosis are from the WHO's *Global Tuberculosis Control Report 2009*. 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 *2008 Report on the Global AIDS Epidemic.* Data on condom use are from Demographic and Health Surveys by Macro International.

2.22 Mortality

	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	
							Male	Female	Male	Female	Male	Female
	1990	2008	1990	2008	1990	2008	2003–08[a,b]	2003–08[a,b]	2005–08[a]	2005–08[a]	2008	2008
Afghanistan	41	44	168	165	260	257	..	..	439	412	34	36
Albania	72	77	37	13	46	14	3	1	100	52	82	90
Algeria	67	72	52	36	64	41	..	..	120	101	78	82
Angola	42	47	154	130	260	220	..	..	409	353	37	44
Argentina	72	75	25	15	29	16	..	..	165	77	74	87
Armenia	68	74	48	21	56	23	8	3	165	80	72	85
Australia	77	81	8	5	9	6	..	..	82	47	88	93
Austria	76	80	8	3	9	4	..	..	111	55	85	93
Azerbaijan	65	70	78	32	98	36	9	5	181	110	69	79
Bangladesh	54	66	103	43	149	54	16	20	209	176	65	70
Belarus	71	71	20	11	24	13	..	..	330	115	53	83
Belgium	76	80	9	4	10	5	..	..	111	61	85	92
Benin	54	61	111	76	184	121	64	65	211	174	61	67
Bolivia	59	66	88	46	122	54	18	20	235	175	63	71
Bosnia and Herzegovina	67	75	21	13	23	15	..	..	135	62	78	89
Botswana	64	54	39	26	50	31	..	..	487	497	42	44
Brazil	66	72	46	18	56	22	..	..	230	120	67	80
Bulgaria	72	73	15	9	18	11	..	..	213	91	71	87
Burkina Faso	47	53	110	92	201	169	110	113	335	280	45	51
Burundi	46	50	113	102	189	168	65	65	387	353	41	46
Cambodia	55	61	85	69	117	90	20	20	294	223	55	63
Cameroon	55	51	92	82	149	131	73	72	406	402	42	45
Canada	77	81	7	6	8	6	..	..	92	56	86	92
Central African Republic	49	47	116	115	178	173	74	82	456	428	35	40
Chad	51	49	120	124	201	209	96	101	361	319	41	47
Chile	74	79	18	7	22	9	..	..	129	64	80	90
China	68[c]	73[c]	37	18	46	21	..	..	149[c]	89[c]	76[c]	83[c]
Hong Kong SAR, China	77	82	..	..	..	..	..	..	76	33	87	94
Colombia	68	73	28	16	35	20	4	3	200	93	71	84
Congo, Dem. Rep.	48	48	126	126	199	199	70	64	400	350	38	44
Congo, Rep.	59	54	67	80	104	127	49	43	377	354	45	49
Costa Rica	76	79	19	10	22	11	..	..	113	59	82	90
Côte d'Ivoire	58	57	104	81	150	114	..	..	313	278	52	58
Croatia	72	76	11	5	13	6	..	..	147	58	77	90
Cuba	75	79	11	5	14	6	..	..	109	68	83	89
Czech Republic	71	77	10	3	12	4	..	..	143	65	79	90
Denmark	75	79	7	4	9	4	..	..	116	69	83	89
Dominican Republic	68	73	48	27	62	33	6	4	206	136	70	79
Ecuador	69	75	41	21	53	25	5	5	166	87	76	85
Egypt, Arab Rep.	63	70	66	20	90	23	5	5	163	107	72	80
El Salvador	66	71	48	16	62	18	..	..	288	123	63	80
Eritrea	48	59	92	41	150	58	..	..	381	286	46	57
Estonia	69	74	14	4	18	6	..	..	283	92	64	87
Ethiopia	47	55	124	69	210	109	56	56	339	297	48	54
Finland	75	80	6	3	7	3	..	..	133	57	83	93
France[d]	77	82	7	3	9	4	..	..	121	55	85	93
Gabon	61	60	67	57	92	77	..	..	323	278	55	61
Gambia, The	51	56	104	80	153	106	46	39	329	269	47	55
Georgia	70	72	41	26	47	30	5	4	198	78	69	84
Germany	75	80	7	4	9	4	..	..	107	56	85	92
Ghana	57	57	75	51	118	76	38	28	327	289	51	55
Greece	77	80	9	3	11	4	..	..	93	38	85	93
Guatemala	62	70	58	29	77	35	..	..	234	128	67	79
Guinea	48	58	137	90	231	146	89	86	256	198	54	63
Guinea-Bissau	44	48	142	117	240	195	110	88	403	350	38	44
Haiti	55	61	105	54	151	72	33	36	287	225	56	64
Honduras	66	72	43	26	55	31	8	9	172	120	73	80

2.22 Mortality

	Life expectancy at birth		Infant mortality rate		Under-five mortality rate		Child mortality rate		Adult mortality rate		Survival to age 65	
	years		per 1,000 live births		per 1,000		per 1,000 Male	per 1,000 Female	per 1,000 Male	per 1,000 Female	% of cohort Male	% of cohort Female
	1990	2008	1990	2008	1990	2008	2003–08[a,b]	2003–08[a,b]	2005–08[a]	2005–08[a]	2008	2008
Hungary	69	74	15	5	17	7	..	..	250	104	67	86
India	58	64	83	52	116	69	9	12	261	174	58	68
Indonesia	62	71	56	31	86	41	13	12	166	116	72	80
Iran, Islamic Rep.	65	71	55	27	73	32	..	..	144	99	75	81
Iraq	65	68	42	36	53	44	6	7	226	107	64	81
Ireland	75	80	8	3	9	4	..	..	88	56	87	92
Israel	77	81	10	4	11	5	..	..	86	48	87	93
Italy	77	82	9	3	10	4	..	..	82	43	86	94
Jamaica	71	72	28	26	33	31	5	6	225	117	69	81
Japan	79	83	5	3	6	4	..	..	87	43	87	94
Jordan	67	73	31	17	38	20	2	3	162	112	73	81
Kazakhstan	68	66	51	27	60	30	5	4	405	153	46	75
Kenya	60	54	68	81	105	128	42	39	402	412	46	47
Korea, Dem. Rep.	70	67	42	42	55	55	..	..	172	120	66	76
Korea, Rep.	71	80	8	5	9	5	..	..	106	42	83	93
Kosovo	68	69	..	..	..	..	..	..	..	..	..	..
Kuwait	75	78	13	9	15	11	..	..	85	52	85	90
Kyrgyz Republic	68	67	63	33	75	38	8	4	262	125	61	77
Lao PDR	54	65	108	48	157	61	..	..	226	184	63	69
Latvia	69	72	13	8	17	9	..	..	311	114	63	85
Lebanon	69	72	33	12	40	13	..	..	152	100	74	82
Lesotho	59	45	80	63	101	79	22	19	674	630	24	30
Liberia	49	58	146	100	219	145	62	64	255	209	56	62
Libya	68	74	33	15	38	17	..	..	147	91	75	84
Lithuania	71	72	12	6	16	7	..	..	346	116	59	86
Macedonia, FYR	71	74	32	10	36	11	2	1	134	80	77	85
Madagascar	51	60	101	68	167	106	45	45	270	220	57	63
Malawi	49	53	133	65	225	100	52	54	448	403	42	48
Malaysia	70	74	16	6	18	6	..	..	150	86	76	85
Mali	43	48	139	103	250	194	117	114	389	358	38	42
Mauritania	56	57	81	75	129	118	53	44	308	241	49	58
Mauritius	69	73	21	15	24	17	..	..	228	113	67	81
Mexico	71	75	36	15	45	17	..	..	139	77	78	86
Moldova	67	68	30	15	37	17	7	4	283	127	59	78
Mongolia	61	67	71	34	98	41	11	10	291	184	57	71
Morocco	64	71	68	32	88	36	9	11	147	97	74	82
Mozambique	43	48	166	90	249	130	61	64	489	462	36	40
Myanmar	59	62	85	71	120	98	..	..	257	195	57	65
Namibia	62	61	49	31	72	42	24	19	346	327	54	59
Nepal	54	67	99	41	142	51	21	18	199	175	67	71
Netherlands	77	80	7	4	8	5	..	..	81	59	87	92
New Zealand	75	80	9	5	11	6	..	..	92	59	87	91
Nicaragua	64	73	51	23	68	27	..	..	205	116	71	81
Niger	42	51	144	79	305	167	138	135	351	302	43	48
Nigeria	45	48	120	96	230	186	91	93	406	382	39	42
Norway	77	81	7	3	9	4	..	..	81	53	87	92
Oman	70	76	23	10	31	12	..	..	98	73	82	87
Pakistan	61	67	101	72	130	89	14	22	165	133	68	71
Panama	72	76	24	19	31	23	..	..	137	73	79	87
Papua New Guinea	55	61	67	53	91	69	..	..	348	255	49	60
Paraguay	68	72	34	24	42	28	..	..	172	125	73	79
Peru	66	73	64	22	81	24	13	4	164	101	73	83
Philippines	65	72	42	26	61	32	10	9	156	102	73	82
Poland	71	76	15	6	17	7	..	..	209	80	72	89
Portugal	74	79	11	3	15	4	..	..	128	53	82	92
Puerto Rico	75	79	..	..	..	..	..	..	133	53	80	91
Qatar	70	76	17	9	20	10	..	..	111	102	81	83

2.22 Mortality

	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	2008	1990	2008	1990	2008	Male 2003–08[a,b]	Female 2003–08[a,b]	Male 2005–08[a]	Female 2005–08[a]	Male 2008	Female 2008
Romania	70	73	25	12	32	14	..	..	196	83	70	85
Russian Federation	69	68	23	12	27	13	..	..	429	158	46	78
Rwanda	33	50	106	72	174	112	69	55	403	357	40	46
Saudi Arabia	68	73	35	18	43	21	3	4	139	89	76	84
Senegal	52	56	72	57	149	108	43	39	329	271	47	54
Serbia	71	74	25	6	29	7	4	3	155[e]	83[e]	74[e]	85[e]
Sierra Leone	40	48	163	123	278	194	134	124	503	470	29	33
Singapore	74	81	6	2	7	3	..	..	81	41	86	93
Slovak Republic	71	75	13	7	15	8	..	..	196	76	72	88
Slovenia	73	79	9	3	10	4	..	..	149	57	81	92
Somalia	45	50	119	119	200	200	53	54	371	318	41	47
South Africa	61	51	44	48	56	67	13	9	577	511	31	41
Spain	77	81	8	4	9	4	..	..	106	44	85	94
Sri Lanka	70	74	23	13	29	15	..	..	196	77	71	86
Sudan	53	58	78	70	124	109	38	30	306	261	53	59
Swaziland	60	46	62	59	84	83	32	30	615	639	29	29
Sweden	78	81	6	2	7	3	..	..	78	48	88	93
Switzerland	77	82	7	4	8	5	..	..	78	46	88	93
Syrian Arab Republic	68	74	30	14	37	16	5	3	122	83	78	85
Tajikistan	63	67	91	54	117	64	18	13	210	139	63	73
Tanzania	51	56	97	67	157	104	56	52	377	362	48	51
Thailand	69	69	26	13	32	14	..	..	297	172	62	77
Timor-Leste	46	61	138	75	184	93	..	..	264	229	57	62
Togo	58	63	89	64	150	98	55	43	242	199	61	68
Trinidad and Tobago	69	69	30	31	34	35	5	8	239	141	63	77
Tunisia	70	74	40	18	50	21	..	..	123	72	78	86
Turkey	65	72	69	20	84	22	9	9	151	84	74	84
Turkmenistan	63	65	81	43	99	48	..	..	303	154	54	73
Uganda	48	53	114	85	186	135	75	62	412	411	43	45
Ukraine	70	68	18	14	21	16	4	1	385	142	53	80
United Arab Emirates	73	78	15	7	17	8	..	..	77	64	86	88
United Kingdom	76	80	8	5	9	6	..	..	100	61	85	91
United States	75	78	9	7	11	8	..	..	141	81	83	89
Uruguay	73	76	21	12	24	14	..	..	141	64	77	89
Uzbekistan	67	68	61	34	74	38	11	7	240	137	62	75
Venezuela, RB	71	74	27	16	32	18	..	..	177	93	74	84
Vietnam	65	74	39	12	56	14	5	4	136	90	78	85
West Bank and Gaza	68	73	33	24	38	27	3	3	128	92	78	84
Yemen, Rep.	54	63	90	53	127	69	10	11	251	202	59	66
Zambia	51	45	105	92	172	148	66	55	542	530	31	34
Zimbabwe	61	44	51	62	79	96	21	21	718	681	21	26
World	**65 w**	**69 w**	**64 w**	**46 w**	**92 w**	**67 w**			**216[f] w**	**153[f] w**	**68 w**	**77 w**
Low income	54	59	102	76	160	118			295	254	55	61
Middle income	64	69	60	41	85	57			205	136	67	76
Lower middle income	63	68	65	45	93	64			204	138	67	75
Upper middle income	68	71	38	19	47	23			210	127	66	81
Low & middle income	63	67	69	50	101	73			219	156	65	74
East Asia & Pacific	67	72	42	23	55	29			161	101	74	81
Europe & Central Asia	69	70	41	19	50	22			305[g]	126[g]	59	81
Latin America & Carib.	68	73	42	20	53	23			192	104	72	83
Middle East & N. Africa	64	71	58	29	76	34			158	106	73	81
South Asia	58	64	89	58	125	76			246	173	60	68
Sub-Saharan Africa	50	52	109	86	185	144			395	362	43	48
High income	76	80	10	6	12	7			116[g]	62[g]	84	91
Euro area	76	81	8	3	9	4			107[g]	52[g]	85	93

a. Data are for the most recent year available. b. Refers to a survey year. Values were estimated directly from surveys and cover the 5 or 10 years preceding the survey. c. Includes Taiwan, China. d. Excludes the French overseas departments of French Guiana, Guadeloupe, Martinique, and Réunion. e. Includes Kosovo. f. These world aggregates for 2008 do not include data for many lower mortality countries because recent estimates are unavailable. The world aggregates for 2006 are 213 for men and 143 for women. g. Data are for 2006.

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 health status in a country. Because data on the incidence and prevalence of diseases are frequently unavailable, mortality rates are often used to identify vulnerable populations. And 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 from 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 table 2.17 and *Primary data documentation*). Survey data are subject to recall error, and surveys estimating infant deaths require large samples because households in which a birth has occurred during a given year cannot ordinarily be preselected for sampling. Indirect estimates rely on model 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.

Estimates of infant and under-five mortality tend to vary by source and method for a given time and place. Years for available estimates also vary by country, making comparison across countries and over time difficult. To make infant and under-five mortality estimates comparable and to ensure consistency across estimates by different agencies, the United Nations Children's Fund (UNICEF) and the World Bank (now working together with the World Health Organization (WHO), the United Nations Population Division, and other universities and research institutes as the Inter-agency Group for Child Mortality Estimation) developed and adopted a statistical method that uses all available information to reconcile differences. The method uses the weighted least squares method to fit a regression line to the relationship between mortality rates and their reference dates and then extrapolate the trend to the present. (For further discussion of childhood mortality estimates, see UNICEF, WHO, World Bank, and United Nations Population Division 2007; for a graphic presentation and detailed background data, see www.childmortality.org).

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 infant mortality does, 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 methodology and reference year. Child mortality data were estimated directly from surveys and cover the 10 years preceding the survey. In addition to estimates from Demographic Health Surveys, estimates derived from Multiple Indicator Cluster Surveys have been added to the table; they cover the 5 years preceding the survey.

Rates for adult mortality and survival to age 65 come from life tables. Adult mortality rates increased notably in a dozen countries in Sub-Saharan Africa between 1995–2000 and 2000–05 and in several countries in Europe and Central Asia during the first half of the 1990s. In Sub-Saharan Africa the increase stems from AIDS-related mortality and affects both sexes, though women are more affected. 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 hypothetical 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.

Annual data series from the United Nations are interpolated based on five-year estimates and thus may not reflect actual events.

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 hypothetical 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 are estimates by the Inter-agency Group for Child Mortality Estimation based mainly on household surveys, censuses, and vital registration data, supplemented by the World Bank's Human Development Network estimates based on vital registration and sample registration data. Data on child mortality are from Demographic and Health Surveys by Macro International (Measure DHS) and World Bank calculations based on infant and under-five mortality from Multiple Indicator Cluster Surveys by UNICEF. Data on survival to age 65 and most data on adult mortality are linear interpolations of five-year data from *World Population Prospects: The 2008 Revision.* Remaining data on adult mortality are from the Human Mortality Database by the University of California, Berkeley, and the Max Planck Institute for Demographic Research (www.mortality.org). Data on life expectancy at birth are World Bank calculations based on male and female data from *World Population Prospects: The 2008 Revision* (for more than half of countries, most of them developing countries), census reports and other statistical publications from national statistical offices, Eurostat's *Demographic Statistics,* and the U.S. Bureau of the Census International Data Base.