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		per 1,000 people	per 1,000 people
	1990	2009	2015	1990–2009	2009–15	Ages 0–14 2009	Ages 15–64 2009	Ages 65+ 2009	Young 2009	Old 2009	2009	2009
Afghanistan	18.6	29.8	35.0	2.5	2.7	46	52	2	89	4	19	46
Albania	3.3	3.2	3.3	–0.2	0.5	24	67	10	35	14	6	15
Algeria	25.3	34.9	38.1	1.7	1.4	27	68	5	40	7	5	21
Angola	10.7	18.5	21.7	2.9	2.6	45	53	2	86	5	16	42
Argentina	32.5	40.3	42.4	1.1	0.9	25	64	11	39	16	8	17
Armenia	3.5	3.1	3.1	–0.7	0.2	20	68	11	30	16	9	15
Australia	17.1	21.9	23.4	1.3	1.2	19	67	14	28	20	6	14
Austria	7.7	8.4	8.4	0.4	0.1	15	68	17	22	26	9	9
Azerbaijan	7.2	8.8	9.4	1.1	1.1	24	69	7	35	10	6	17
Bangladesh	115.6	162.2	176.3	1.8	1.4	31	65	4	49	6	6	21
Belarus	10.2	9.7	9.4	–0.3	–0.4	15	72	14	21	19	14	12
Belgium	10.0	10.8	11.0	0.4	0.3	17	66	17	25	26	10	12
Benin	4.8	8.9	10.6	3.3	2.9	43	54	3	80	6	9	39
Bolivia	6.7	9.9	10.8	2.1	1.6	36	59	5	61	8	7	27
Bosnia and Herzegovina	4.3	3.8	3.7	–0.7	–0.2	15	71	14	22	20	10	9
Botswana	1.4	1.9	2.1	1.9	1.3	33	63	4	53	6	12	24
Brazil	149.6	193.7	202.4	1.4	0.7	26	67	7	39	10	6	16
Bulgaria	8.7	7.6	7.3	–0.7	–0.6	13	69	17	19	25	14	11
Burkina Faso	8.8	15.8	19.0	3.1	3.1	46	52	2	90	4	13	47
Burundi	5.7	8.3	9.4	2.0	2.1	38	59	3	65	5	14	34
Cambodia	9.7	14.8	16.4	2.2	1.7	33	63	3	53	6	8	25
Cameroon	12.2	19.5	22.2	2.5	2.1	41	56	4	74	6	14	36
Canada	27.8	33.7	35.7	1.0	0.9	17	70	14	24	20	7	11
Central African Republic	2.9	4.4	4.9	2.2	1.8	41	55	4	73	7	17	35
Chad	6.1	11.2	13.1	3.2	2.6	46	51	3	89	6	16	45
Chile	13.2	17.0	17.9	1.3	0.9	23	68	9	33	13	5	15
China	1,135.2	1,331.5	1,377.7	0.8	0.6	20[a]	72[a]	8[a]	28[a]	11[a]	7	12
Hong Kong SAR, China	5.7	7.0	7.3	1.1	0.8	12	75	13	16	17	6	12
Colombia	33.2	45.7	49.3	1.7	1.3	29	65	5	45	8	6	20
Congo, Dem. Rep.	37.0	66.0	77.4	3.0	2.6	47	51	3	92	5	17	44
Congo, Rep.	2.4	3.7	4.2	2.2	2.3	40	56	4	73	7	13	34
Costa Rica	3.1	4.6	4.9	2.1	1.3	26	68	6	38	9	4	16
Côte d'Ivoire	12.6	21.1	24.2	2.7	2.3	41	55	4	73	7	11	34
Croatia	4.8	4.4	4.4	–0.4	–0.2	15	68	17	22	25	12	10
Cuba	10.6	11.2	11.2	0.3	0.0	18	70	12	25	17	7	10
Czech Republic	10.4	10.5	10.6	0.1	0.2	14	71	15	20	21	10	11
Denmark	5.1	5.5	5.6	0.4	0.2	18	65	16	28	25	10	11
Dominican Republic	7.4	10.1	10.8	1.7	1.1	31	63	6	50	10	6	22
Ecuador	10.3	13.6	14.6	1.5	1.1	31	62	7	50	10	5	20
Egypt, Arab Rep.	57.8	83.0	91.7	1.9	1.7	32	63	5	51	7	6	24
El Salvador	5.3	6.2	6.4	0.8	0.6	32	61	7	53	12	7	20
Eritrea	3.2	5.1	6.0	2.5	2.8	42	56	2	74	4	8	36
Estonia	1.6	1.3	1.3	–0.8	–0.1	15	68	17	22	25	12	12
Ethiopia	48.3	82.8	96.2	2.8	2.5	44	53	3	82	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	62.6	63.9	0.5	0.3	18	65	17	28	26	9	13
Gabon	0.9	1.5	1.6	2.4	1.8	36	60	4	61	7	10	27
Gambia, The	0.9	1.7	2.0	3.4	2.5	42	55	3	77	5	11	36
Georgia	5.5	4.3	4.1	–1.3	–0.7	17	69	14	24	21	12	12
Germany	79.4	81.9	80.6	0.2	–0.3	14	66	20	20	31	10	8
Ghana	15.0	23.8	26.6	2.4	1.8	38	58	4	66	6	11	32
Greece	10.2	11.3	11.4	0.6	0.2	14	68	18	21	27	10	11
Guatemala	8.9	14.0	16.2	2.4	2.4	42	54	4	78	8	6	32
Guinea	6.1	10.1	11.8	2.6	2.7	43	54	3	79	6	11	39
Guinea-Bissau	1.0	1.6	1.8	2.4	2.3	43	54	3	79	6	17	41
Haiti	7.1	10.0	10.7	1.8	1.1	36	59	4	61	7	9	27
Honduras	4.9	7.5	8.4	2.2	1.9	37	58	4	64	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	2009	2015	1990–2009	2009–15	2009	2009	2009	2009	2009	2009	2009
Hungary	10.4	10.0	9.9	–0.2	–0.2	15	69	16	22	24	13	10
India	849.5	1,155.3	1,246.9	1.6	1.3	31	64	5	49	8	7	22
Indonesia	177.4	230.0	247.5	1.4	1.2	27	67	6	40	9	6	18
Iran, Islamic Rep.	54.4	72.9	78.6	1.5	1.2	24	71	5	34	7	6	19
Iraq	18.9	31.5	36.3	2.7	2.4	41	56	3	74	6	6	31
Ireland	3.5	4.5	4.8	1.3	1.1	21	68	11	30	16	7	17
Israel	4.7	7.4	8.2	2.5	1.6	28	62	10	45	16	5	22
Italy	56.7	60.2	60.8	0.3	0.1	14	66	20	22	31	10	10
Jamaica	2.4	2.7	2.8	0.6	0.4	29	63	8	47	12	7	16
Japan	123.5	127.6	125.3	0.2	–0.3	13	65	22	21	34	9	9
Jordan	3.2	6.0	6.8	3.3	2.2	34	62	4	56	6	4	25
Kazakhstan	16.3	15.9	16.9	–0.2	1.0	24	69	7	34	10	9	22
Kenya	23.4	39.8	46.4	2.8	2.6	43	55	3	78	5	11	38
Korea, Dem. Rep.	20.1	23.9	24.4	0.9	0.3	22	69	10	32	14	10	14
Korea, Rep.	42.9	48.7	49.3	0.7	0.2	17	73	11	23	15	5	10
Kosovo	1.9	1.8	1.9	–0.2	0.6	..	..	..	..	..	7	19
Kuwait	2.1	2.8	3.2	1.4	2.1	23	74	2	31	3	2	17
Kyrgyz Republic	4.4	5.3	5.7	1.0	1.3	29	65	5	45	8	7	25
Lao PDR	4.2	6.3	7.0	2.1	1.8	38	59	4	64	6	7	27
Latvia	2.7	2.3	2.2	–0.9	–0.5	14	69	17	20	25	13	10
Lebanon	3.0	4.2	4.4	1.8	0.8	25	67	7	38	11	7	16
Lesotho	1.6	2.1	2.2	1.3	0.8	39	56	5	69	8	17	29
Liberia	2.2	4.0	4.8	3.2	3.2	43	54	3	79	6	10	38
Libya	4.4	6.4	7.2	2.0	1.8	30	66	4	46	6	4	23
Lithuania	3.7	3.3	3.2	–0.5	–0.7	15	69	16	22	23	13	11
Macedonia, FYR	1.9	2.0	2.0	0.4	0.0	18	70	12	26	17	9	11
Madagascar	11.3	19.6	22.8	2.9	2.5	43	54	3	79	6	9	35
Malawi	9.5	15.3	18.0	2.5	2.7	46	51	3	91	6	12	40
Malaysia	18.1	27.5	30.0	2.2	1.5	29	66	5	45	7	5	20
Mali	8.7	13.0	15.4	2.1	2.8	44	54	2	83	4	15	42
Mauritania	2.0	3.3	3.7	2.7	2.1	39	58	3	68	5	10	33
Mauritius	1.1	1.3	1.3	1.0	0.4	23	70	7	32	10	7	12
Mexico	83.2	107.4	113.1	1.3	0.9	28	65	6	44	10	5	18
Moldova	4.4	3.6	3.5	–1.0	–0.7	17	72	11	23	15	13	12
Mongolia	2.2	2.7	2.9	1.0	1.1	26	70	4	37	6	7	19
Morocco	24.8	32.0	34.3	1.3	1.2	28	66	5	43	8	6	20
Mozambique	13.5	22.9	25.9	2.8	2.1	44	53	3	83	6	16	38
Myanmar	40.8	50.0	53.0	1.1	1.0	27	68	5	40	8	10	20
Namibia	1.4	2.2	2.4	2.2	1.7	37	60	4	62	6	8	27
Nepal	19.1	29.3	32.5	2.3	1.7	37	59	4	62	7	6	25
Netherlands	15.0	16.5	16.8	0.5	0.3	18	67	15	26	22	8	11
New Zealand	3.4	4.3	4.6	1.2	1.0	20	67	13	31	19	7	15
Nicaragua	4.1	5.7	6.3	1.7	1.4	35	60	5	58	7	5	24
Niger	7.9	15.3	19.1	3.5	3.7	50	48	2	104	4	15	53
Nigeria	97.3	154.7	178.7	2.4	2.4	43	54	3	78	6	16	39
Norway	4.2	4.8	5.1	0.7	0.8	19	66	15	29	22	9	13
Oman	1.8	2.8	3.2	2.3	1.9	31	66	3	48	5	3	22
Pakistan	108.0	169.7	193.5	2.4	2.2	37	59	4	63	7	7	30
Panama	2.4	3.5	3.8	1.9	1.5	29	64	7	46	10	5	20
Papua New Guinea	4.1	6.7	7.7	2.6	2.2	40	58	2	69	4	8	31
Paraguay	4.2	6.3	7.0	2.1	1.6	34	61	5	56	8	6	24
Peru	21.8	29.2	31.2	1.5	1.1	30	64	6	48	9	5	21
Philippines	62.4	92.0	102.7	2.0	1.8	34	62	4	55	7	5	24
Poland	38.1	38.1	38.0	0.0	–0.1	15	72	13	21	19	10	11
Portugal	9.9	10.6	10.7	0.4	0.0	15	67	18	23	26	10	9
Puerto Rico	3.5	4.0	4.0	0.6	0.3	20	66	14	31	21	8	12
Qatar	0.5	1.4	1.6	5.8[c]	2.4	16	83	1	19	1	2	12

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	2009	2015	1990–2009	2009–15	Ages 0–14 2009	Ages 15–64 2009	Ages 65+ 2009	Young 2009	Old 2009	per 1,000 people 2009	per 1,000 people 2009
Romania	23.2	21.5	21.0	–0.4	–0.4	15	70	15	22	21	12	10
Russian Federation	148.3	141.9	139.0	–0.2	–0.3	15	72	13	21	18	14	12
Rwanda	7.2	10.0	11.7	1.8	2.7	42	55	2	77	5	14	41
Saudi Arabia	16.3	25.4	28.6	2.3	2.0	32	65	3	50	5	4	24
Senegal	7.5	12.5	14.5	2.7	2.4	44	54	2	81	4	11	38
Serbia	7.6	7.3	7.2	–0.2	–0.3	18[d]	68[d]	14[d]	26[d]	21[d]	14	10
Sierra Leone	4.1	5.7	6.6	1.8	2.3	43	55	2	79	3	15	40
Singapore	3.0	5.0	5.4	2.6	1.2	16	74	10	22	13	4	10
Slovak Republic	5.3	5.4	5.4	0.1	0.1	15	73	12	21	17	10	11
Slovenia	2.0	2.0	2.1	0.1	0.3	14	70	16	20	23	9	11
Somalia	6.6	9.1	10.7	1.7	2.7	45	52	3	86	5	16	44
South Africa	35.2	49.3	51.1	1.8	0.6	31	65	4	47	7	15	22
Spain	38.8	46.0	47.9	0.9	0.7	15	68	17	22	25	8	11
Sri Lanka	17.1	20.3	21.2	0.9	0.7	24	68	7	36	11	5	19
Sudan	27.1	42.3	47.7	2.3	2.0	39	57	4	68	6	10	31
Swaziland	0.9	1.2	1.3	1.7	1.4	39	57	3	69	6	15	30
Sweden	8.6	9.3	9.6	0.4	0.5	17	65	18	25	28	10	12
Switzerland	6.7	7.7	7.9	0.7	0.4	15	68	17	23	25	8	10
Syrian Arab Republic	12.7	21.1	24.1	2.7	2.2	35	62	3	57	5	3	27
Tajikistan	5.3	7.0	7.8	1.4	1.8	37	59	4	62	6	6	28
Tanzania	25.5	43.7	52.1	2.8	2.9	45	52	3	86	6	11	41
Thailand	56.7	67.8	69.9	0.9	0.5	22	71	8	31	11	9	14
Timor-Leste	0.7	1.1	1.4	2.2	3.3	45	52	3	86	6	8	40
Togo	3.9	6.6	7.6	2.7	2.3	40	57	4	71	6	8	32
Trinidad and Tobago	1.2	1.3	1.4	0.5	0.3	21	73	7	28	9	8	15
Tunisia	8.2	10.4	11.1	1.3	1.1	23	70	7	33	10	6	18
Turkey	56.1	74.8	79.9	1.5	1.1	27	67	6	40	9	6	18
Turkmenistan	3.7	5.1	5.5	1.7	1.2	29	66	4	45	6	8	22
Uganda	17.7	32.7	39.7	3.2	3.2	49	49	3	101	5	12	46
Ukraine	51.9	46.0	44.4	–0.6	–0.6	14	70	16	20	22	15	11
United Arab Emirates	1.9	4.6	5.2	4.7	2.0	19	80	1	24	1	2	14
United Kingdom	57.2	61.8	63.8	0.4	0.5	17	66	16	26	25	9	13
United States	249.6	307.0	323.5	1.1	0.9	20	67	13	30	19	8	14
Uruguay	3.1	3.3	3.4	0.4	0.2	23	63	14	36	22	9	15
Uzbekistan	20.5	27.8	30.2	1.6	1.4	29	66	4	44	7	5	22
Venezuela, RB	19.8	28.4	31.0	1.9	1.5	30	65	5	46	8	5	21
Vietnam	66.2	87.3	92.8	1.5	1.0	26	68	6	38	9	5	17
West Bank and Gaza	2.0	4.0	4.8	3.8	2.8	45	52	3	86	6	3	35
Yemen, Rep.	12.3	23.6	27.8	3.4	2.7	44	54	2	81	4	7	36
Zambia	7.9	12.9	15.0	2.6	2.4	46	51	3	91	6	17	42
Zimbabwe	10.5	12.5	14.0	0.9	1.9	40	56	4	71	7	15	30
World	**5,278.9 s**	**6,775.2 s**	**7,241.9 s**	**1.3 w**	**1.1 w**	**27 w**	**65 w**	**8 w**	**42 w**	**12 w**	**8 w**	**20 w**
Low income	547.3	846.1	962.6	2.3	2.1	39	57	4	69	6	11	34
Middle income	3,751.3	4,812.5	5,131.2	1.3	1.1	27	66	6	41	10	8	19
Lower middle income	2,930.9	3,810.8	4,084.9	1.4	1.2	28	66	6	42	9	8	20
Upper middle income	820.3	1,001.7	1,046.3	1.1	0.7	25	68	8	36	11	8	17
Low & middle income	4,298.6	5,658.7	6,093.8	1.4	1.2	29	65	6	45	9	8	21
East Asia & Pacific	1,599.6	1,943.8	2,035.8	1.0	0.8	23	70	7	32	11	7	14
Europe & Central Asia	392.4	404.2	409.0	0.2	0.2	19	70	11	28	16	11	15
Latin America & Carib.	435.6	572.5	606.9	1.4	1.0	28	65	7	43	10	6	18
Middle East & N. Africa	227.4	330.9	366.1	2.0	1.7	31	64	4	48	7	6	24
South Asia	1,128.7	1,567.7	1,706.5	1.7	1.4	32	63	5	51	7	7	24
Sub-Saharan Africa	514.9	839.6	969.5	2.6	2.4	43	54	3	78	6	14	38
High income	980.4	1,116.6	1,148.0	0.7	0.5	17	67	15	26	23	8	12
Euro area	301.6	327.3	332.3	0.4	0.3	15	66	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.

2.1 Population dynamics

About the data

Population estimates are usually based on national population censuses. 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 January 2011, 119 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 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 2009 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. Progress has been made over the past 60 years in some countries. But many countries still have deficiencies in civil registration systems. For example, only 60 percent of countries and areas register at least 90 percent of births, and only 47 percent register at least 90 percent of deaths. Some of the most populous developing countries—Bangladesh, Brazil, India, Indonesia, Nigeria, Pakistan—lack complete vital registration systems.

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 2009 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	2009	1990	2009	1990	2009	1990–2009	1990	2009
Afghanistan	84	85	32	33	5.9	9.6	2.5	26.2	26.6
Albania	74	70	51	49	1.4	1.4	0.2	39.9	42.5
Algeria	75	80	23	37	7.0	14.8	3.9	23.4	31.6
Angola	90	88	74	75	4.6	8.3	3.1	46.3	46.9
Argentina	78	78	43	52	13.5	19.6	1.9	36.9	41.6
Armenia	78	75	61	60	1.7	1.6	–0.2	46.3	49.6
Australia	76	72	52	58	8.5	11.5	1.6	41.3	45.4
Austria	70	68	43	53	3.5	4.3	1.0	40.9	45.5
Azerbaijan	74	67	59	60	3.1	4.2	1.5	46.8	49.5
Bangladesh	89	83	61	59	49.5	78.6	2.4	39.9	41.2
Belarus	75	67	60	55	5.3	5.0	–0.3	48.9	49.5
Belgium	61	61	36	47	3.9	4.8	1.0	39.0	44.9
Benin	89	78	57	67	1.9	3.7	3.5	41.1	46.2
Bolivia	82	82	59	62	2.8	4.5	2.6	43.1	43.8
Bosnia and Herzegovina	67	68	53	55	2.0	1.9	0.0	45.2	47.1
Botswana	82	81	64	72	0.5	1.0	3.2	45.5	47.4
Brazil	85	82	45	60	62.6	101.5	2.5	35.1	43.7
Bulgaria	63	61	55	48	4.1	3.6	–0.7	47.9	46.1
Burkina Faso	91	91	77	78	3.9	7.1	3.2	48.0	47.1
Burundi	90	88	91	91	2.8	4.6	2.6	52.5	52.6
Cambodia	84	86	78	74	4.3	7.8	3.1	52.8	48.3
Cameroon	83	81	48	54	4.4	7.7	3.0	37.5	40.1
Canada	76	73	58	63	14.7	19.1	1.4	44.1	47.0
Central African Republic	87	87	69	72	1.3	2.1	2.5	45.6	46.5
Chad	81	78	65	63	2.4	4.3	3.1	45.6	45.2
Chile	77	73	32	42	5.0	7.5	2.1	30.5	37.2
China	85	80	73	67	643.9	783.2	1.0	44.8	44.6
Hong Kong SAR, China	80	69	47	52	2.9	3.7	1.4	36.3	46.3
Colombia	78	78	29	41	11.2	19.0	2.8	28.2	35.8
Congo, Dem. Rep.	85	86	53	57	13.4	24.9	3.3	39.9	40.6
Congo, Rep.	84	83	59	63	1.0	1.6	2.6	42.1	43.6
Costa Rica	84	80	33	45	1.2	2.1	3.2	27.4	35.5
Côte d'Ivoire	88	82	43	51	4.7	8.4	3.1	30.1	36.9
Croatia	69	60	47	46	2.2	2.0	–0.4	42.7	45.8
Cuba	73	67	36	41	4.4	5.0	0.6	33.0	38.1
Czech Republic	71	68	52	49	4.9	5.2	0.3	44.4	43.2
Denmark	75	71	62	60	2.9	3.0	0.1	46.1	46.9
Dominican Republic	85	80	43	51	2.9	4.5	2.3	33.2	38.8
Ecuador	78	78	33	47	3.5	5.9	2.7	29.5	38.0
Egypt, Arab Rep.	74	75	27	22	16.8	27.4	2.6	26.6	23.0
El Salvador	83	77	41	46	1.9	2.5	1.4	35.2	41.9
Eritrea	84	83	55	63	1.2	2.2	3.2	41.4	44.5
Estonia	77	69	63	55	0.8	0.7	–1.0	49.5	49.1
Ethiopia	91	90	72	81	21.5	40.0	3.3	45.1	47.9
Finland	72	65	59	57	2.6	2.7	0.2	47.1	48.1
France	65	62	46	51	25.0	28.7	0.7	43.3	46.8
Gabon	83	81	63	70	0.4	0.7	3.1	44.2	46.7
Gambia, The	86	85	71	71	0.4	0.8	3.4	46.2	46.2
Georgia	78	74	60	55	2.8	2.3	–1.2	46.9	46.8
Germany	73	67	45	53	38.8	42.3	0.5	40.7	45.6
Ghana	73	75	70	74	6.0	11.0	3.2	48.9	49.1
Greece	67	65	36	43	4.2	5.2	1.1	36.2	40.5
Guatemala	88	88	39	48	3.1	5.5	3.0	31.0	37.9
Guinea	90	89	79	79	2.9	4.8	2.7	46.8	46.9
Guinea-Bissau	81	84	59	60	0.4	0.7	2.4	43.0	42.4
Haiti	81	83	57	58	2.8	4.5	2.5	43.0	42.3
Honduras	88	80	41	40	1.7	2.8	2.6	32.3	33.9

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	2009	1990	2009	1990	2009	1990–2009	1990	2009
Hungary	65	59	46	43	4.5	4.3	–0.3	44.5	45.1
India	84	81	34	33	317.8	457.5	1.9	27.1	27.6
Indonesia	81	86	50	52	74.9	115.6	2.3	38.4	38.1
Iran, Islamic Rep.	80	73	22	32	15.5	29.2	3.3	20.1	29.8
Iraq	73	69	11	14	4.3	7.7	3.0	13.1	16.7
Ireland	71	73	35	54	1.3	2.2	2.7	33.9	43.0
Israel	64	63	42	52	1.7	3.1	3.1	40.6	46.5
Italy	66	61	35	38	23.7	25.4	0.4	36.5	40.5
Jamaica	80	74	65	56	1.1	1.2	0.5	46.6	44.9
Japan	77	72	50	48	63.9	65.8	0.2	40.7	41.6
Jordan	71	74	15	23	0.7	1.9	5.0	16.2	23.0
Kazakhstan	78	76	62	66	7.8	8.6	0.5	47.0	49.8
Kenya	90	88	75	76	9.8	18.7	3.4	46.0	46.7
Korea, Dem. Rep.	80	78	55	55	10.0	12.4	1.1	42.6	42.7
Korea, Rep.	73	72	47	50	19.2	24.7	1.3	39.7	41.9
Kosovo	..	..	..	..	..	..	..	..	..
Kuwait	82	83	36	45	0.9	1.5	2.8	22.4	25.0
Kyrgyz Republic	74	79	58	55	1.8	2.5	1.7	46.1	42.3
Lao PDR	83	79	80	78	1.9	3.1	2.5	49.8	50.4
Latvia	77	70	63	54	1.4	1.2	–1.0	49.6	48.3
Lebanon	72	72	20	22	0.9	1.5	2.8	23.3	25.0
Lesotho	83	78	68	71	0.7	0.9	1.9	51.7	52.4
Liberia	78	76	65	67	0.8	1.6	3.4	46.7	47.6
Libya	75	79	15	25	1.2	2.4	3.7	14.8	22.5
Lithuania	74	62	59	50	1.9	1.6	–1.0	48.1	48.7
Macedonia, FYR	68	65	46	43	0.8	0.9	0.6	40.7	40.1
Madagascar	89	89	83	84	5.4	9.7	3.1	48.4	49.2
Malawi	80	79	76	75	3.9	6.3	2.5	50.7	49.8
Malaysia	80	79	43	44	7.0	12.0	2.8	34.5	35.4
Mali	68	67	37	38	2.5	3.8	2.2	36.1	37.3
Mauritania	82	81	53	59	0.7	1.4	3.3	39.8	42.0
Mauritius	81	75	38	41	0.4	0.6	1.3	32.1	36.1
Mexico	84	81	34	43	29.9	47.2	2.4	30.0	36.2
Moldova	74	53	61	47	2.1	1.5	–1.8	48.7	49.9
Mongolia	77	78	63	68	0.9	1.4	2.5	45.6	47.4
Morocco	81	80	25	26	7.8	12.0	2.2	23.7	25.8
Mozambique	88	87	85	85	6.3	11.0	3.0	53.2	52.0
Myanmar	89	85	71	63	20.7	27.0	1.4	45.3	44.2
Namibia	64	63	48	52	0.4	0.8	3.0	44.9	46.5
Nepal	85	80	52	63	7.5	13.3	3.0	38.0	45.4
Netherlands	70	73	43	60	6.9	9.0	1.4	38.8	45.7
New Zealand	74	76	54	62	1.7	2.4	1.7	43.0	46.1
Nicaragua	85	78	39	47	1.4	2.3	2.8	32.3	38.7
Niger	91	88	27	39	2.3	4.8	3.8	24.7	31.6
Nigeria	76	73	36	39	29.4	50.0	2.8	33.0	35.1
Norway	73	71	57	63	2.2	2.6	0.9	44.7	47.7
Oman	80	77	19	25	0.6	1.1	3.4	13.7	18.8
Pakistan	85	85	14	22	31.0	58.1	3.3	12.7	19.4
Panama	79	81	39	48	0.9	1.6	2.8	32.4	37.4
Papua New Guinea	74	74	71	72	1.8	3.0	2.8	46.9	48.9
Paraguay	87	87	47	57	1.7	3.0	3.1	34.9	39.4
Peru	75	76	49	58	8.3	13.6	2.6	39.7	43.6
Philippines	83	79	48	49	24.1	38.8	2.5	36.5	38.6
Poland	72	62	55	46	18.1	17.4	–0.2	45.4	45.0
Portugal	73	69	49	56	4.7	5.6	0.9	42.4	46.9
Puerto Rico	61	58	31	36	1.2	1.5	1.2	35.8	40.8
Qatar	94	93	40	50	0.3	1.0	6.9	13.5	11.9

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	2009	1990	2009	1990	2009	1990–2009	1990	2009
Romania	73	60	60	45	11.8	9.5	–1.1	46.3	45.0
Russian Federation	76	69	60	58	76.8	75.9	–0.1	48.6	50.1
Rwanda	89	85	87	87	3.2	5.0	2.3	52.1	52.8
Saudi Arabia	80	74	15	17	5.0	8.6	2.8	11.5	14.9
Senegal	90	89	62	65	3.0	5.4	3.0	40.8	43.3
Serbia	..	..	..	..	..	..	..	..	..
Sierra Leone	68	68	66	65	1.6	2.1	1.6	50.9	51.4
Singapore	79	76	51	54	1.6	2.7	2.9	39.1	41.5
Slovak Republic	72	69	59	51	2.6	2.7	0.3	46.8	44.7
Slovenia	59	65	47	53	0.8	1.0	1.2	46.8	46.2
Somalia	84	85	58	57	2.6	3.5	1.6	41.8	40.9
South Africa	62	63	36	47	10.4	18.8	3.1	37.5	43.7
Spain	67	69	34	49	15.6	22.9	2.0	34.8	42.8
Sri Lanka	79	75	37	34	6.8	8.3	1.1	31.8	32.4
Sudan	79	74	27	31	8.0	13.5	2.7	26.0	29.5
Swaziland	81	75	45	53	0.3	0.5	2.7	41.2	43.4
Sweden	72	69	63	61	4.7	5.0	0.3	47.7	47.4
Switzerland	81	74	57	61	3.8	4.4	0.7	42.9	46.8
Syrian Arab Republic	81	80	18	21	3.3	6.9	4.0	18.3	20.9
Tajikistan	80	78	59	57	2.1	2.9	1.8	43.3	43.9
Tanzania	91	91	87	86	12.3	21.4	2.9	49.8	49.4
Thailand	87	81	75	66	32.1	38.7	1.0	47.0	46.1
Timor-Leste	82	83	58	59	0.3	0.4	1.8	40.4	40.9
Togo	87	86	56	64	1.5	3.0	3.5	40.1	43.5
Trinidad and Tobago	76	78	39	55	0.5	0.7	2.3	35.0	43.3
Tunisia	76	71	21	26	2.4	3.8	2.4	21.6	26.7
Turkey	81	70	34	24	20.7	25.6	1.1	29.7	25.7
Turkmenistan	72	74	58	62	1.4	2.4	2.9	46.1	47.1
Uganda	91	91	81	78	7.9	14.1	3.0	47.7	46.5
Ukraine	71	65	56	52	25.5	23.0	–0.5	49.2	49.0
United Arab Emirates	92	92	25	42	1.0	2.9	5.8	9.8	15.7
United Kingdom	74	70	52	55	29.0	31.8	0.5	43.2	45.7
United States	76	72	57	58	129.2	159.0	1.1	44.4	46.0
Uruguay	76	76	48	54	1.4	1.7	0.9	40.8	44.1
Uzbekistan	68	71	53	58	7.3	12.7	2.9	45.5	45.9
Venezuela, RB	81	80	36	52	7.2	13.1	3.2	30.5	39.3
Vietnam	82	76	74	68	31.1	46.6	2.1	50.7	48.6
West Bank and Gaza	66	68	11	17	0.4	1.0	4.4	13.8	19.0
Yemen, Rep.	74	74	16	20	2.6	6.2	4.5	18.0	21.1
Zambia	79	79	61	60	3.0	4.8	2.5	44.3	43.4
Zimbabwe	80	74	67	60	4.1	5.0	1.0	46.3	47.5
World	**81 w**	**78 w**	**52 w**	**52 w**	**2,342.6 t**	**3,175.8 t**	**1.6 w**	**39.4 w**	**40.1 w**
Low income	86	84	65	66	232.9	384.5	2.6	43.8	44.6
Middle income	82	79	52	50	1,646.7	2,244.8	1.6	38.1	38.4
Lower middle income	83	80	54	50	1,317.1	1,786.5	1.6	38.2	37.7
Upper middle income	78	75	45	48	329.6	458.2	1.7	37.6	40.8
Low & middle income	83	80	53	52	1,879.5	2,629.2	1.8	38.8	39.3
East Asia & Pacific	84	80	69	64	853.5	1,090.7	1.3	44.2	43.9
Europe & Central Asia	75	69	56	50	180.3	187.2	0.2	45.8	45.5
Latin America & Carib.	82	80	40	52	169.1	269.3	2.4	33.8	40.5
Middle East & N. Africa	77	75	22	26	63.3	115.2	3.2	22.0	25.7
South Asia	85	82	35	35	418.8	625.9	2.1	27.8	29.0
Sub-Saharan Africa	82	81	57	61	194.6	341.0	3.0	42.0	43.6
High income	73	70	49	52	463.0	546.6	0.9	41.6	43.9
Euro area	69	65	42	49	135.2	158.5	0.8	39.8	44.4

Labor force structure 2.2

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.

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 engages actively in the labor market, either by working or looking for work during a reference period. • **Total labor force** is people ages 15 and older who engage actively in the labor market, either by working or looking for work during a reference period. 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 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]	2005–08[a]	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[a]
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..
Albania	..	..	..	..	..	..	..	..	..	..	..	..
Algeria	..	..	..	..	..	..	..	..	..	..	..	..
Angola	..	..	..	..	..	..	..	..	..	..	..	..
Argentina	0[b,c]	1[c]	0[b,c]	0[b,c]	40[c]	33[c]	18[c]	11[c]	59[c]	66[c]	81[c]	89[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	..	15	..	9	..	33	..	24	..	37	..	64
Belgium	3	2	2	1	41	36	16	11	56	61	81	88
Benin	..	..	..	..	..	..	..	..	..	..	..	..
Bolivia	..	..	..	..	..	..	..	..	..	..	..	..
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[c]	0[b,c]	0[b,c]	0[b,c]	37[c]	21[c]	27[c]	6[c]	63[c]	78[c]	73[c]	94[c]
Colombia	..	27	..	6	..	22	..	16	..	51	..	78
Congo, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Congo, Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Costa Rica	32	18	5	5	27	28	25	13	41	54	69	82
Côte d'Ivoire	..	..	..	..	..	..	..	..	..	..	..	..
Croatia	..	13[d]	..	15[d]	..	39[d]	..	15[d]	..	48[d]	..	69[d]
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	..	9[c,d]	..	10[c,d]	..	25[c,d]	..	20[c,d]	..	76[c,d]	..	64[c,d]
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	11	26	12	29	30	17	9	51	59	57	79
Guatemala	..	44	..	16	..	24	..	21	..	32	..	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]	2005–08[a]	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[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	..	..	..	..	..	..	..	..	..	..	..	..
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	..	..	..	..	..	..	..	..	..	..	..	..
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	..	..	..	..	..	..	..	..	..	..	..	..
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	..	35	..	60	..	24	..	15	..	41	..	25
Mozambique	..	..	..	..	..	..	..	..	..	..	..	..
Myanmar	..	..	..	..	..	..	..	..	..	..	..	..
Namibia	45	23	52	8	21	24	8	9	34	24	40	63
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	..	33	..	24	..	24	..	9	..	43	..	68
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[c]	42[d]	32[c]	23[d]	17[c]	18[d]	14[c]	10[d]	29[c]	41[d]	55[c]	68[d]
Poland	..	15[c]	..	14[c]	..	41[c]	..	18[c]	..	44[c]	..	68[c]
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]	2005–08[a]	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[a]	1990–92[a]	2005–08[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[d]	..	0[b,d]	..	23[d]	..	2[d]	..	72[d]	..	98[d]
Senegal	..	34	..	33	..	20	..	5	..	33	..	42
Serbia	..	22	..	20	..	37	..	20	..	42	..	61
Sierra Leone	..	..	..	..	..	..	..	..	..	..	..	..
Singapore	1	2	0[b]	1	36	26	32	18	63	72	68	82
Slovak Republic	..	6	..	2	..	52	..	24	..	43	..	74
Slovenia	..	10[c]	..	10[c]	..	44[c]	..	23[c]	..	45[c]	..	65[c]
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	..	5[d]	..	3[d]	..	31[d]	..	13[d]	..	57[d]	..	79[d]
Spain	11	6	8	3	41	40	17	11	49	55	75	86
Sri Lanka	..	28[c]	..	37[c]	..	26[c]	..	27[c]	..	41[c]	..	34[c]
Sudan	..	..	..	..	..	..	..	..	..	..	..	..
Swaziland	..	..	..	..	..	..	..	..	..	..	..	..
Sweden	5[c]	3[c]	2[c]	1[c]	40[c]	33[c]	12[c]	9[c]	55[c]	64[c]	86[c]	90[c]
Switzerland	5	5	4	3	39	34	15	12	57	62	81	86
Syrian Arab Republic	23	..	54	..	28	..	8	..	49	..	38	..
Tajikistan	..	..	..	..	..	..	..	..	..	..	..	..
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	18[d]	72	42[d]	26	21[d]	11	15[d]	41	53[d]	17	43[d]
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	..	16[c]	..	5[c]	..	29[c]	..	13[c]	..	56[c]	..	83[c]
Uzbekistan	..	..	..	..	..	..	..	..	..	..	..	..
Venezuela, RB	17	13	2	2	32	30	16	12	52	56	82	86
Vietnam	..	..	..	..	..	..	..	..	..	..	..	..
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	..	17	..	12	..	32	..	20	..	50	..	68
Low & middle income	..	..	..	..	..	..	..	..	..	..	..	..
East Asia & Pacific	..	..	..	..	..	..	..	..	..	..	..	..
Europe & Central Asia	..	18	..	18	..	34	..	20	..	48	..	63
Latin America & Carib.	..	20	..	9	..	29	..	16	..	51	..	75
Middle East & N. Africa	..	..	..	..	..	..	..	..	..	..	..	..
South Asia	..	..	..	..	..	..	..	..	..	..	..	..
Sub-Saharan Africa	..	..	..	..	..	..	..	..	..	..	..	..
High income	6	4	5	3	38	34	19	13	55	61	76	84
Euro area	7	5	6	3	42	38	20	13	50	57	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. d. Data are for 2009.

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 reports 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	2009[a]	1990	2008	1990	2008	1990–92	2005–08
Afghanistan	54	55	45	47	16	44	..	..	..	..	..	..
Albania	49	46	37	36	89	72	..	..	..	..	–17.5	6.1
Algeria	39	49	25	31	60	..	..	..	..	..	–4.0	–0.7
Angola	77	76	71	69	12	..	..	..	..	..	–5.0	14.6
Argentina	53	57	42	36	74	*85*	..	*22*[b]	..	*17*[b]	9.0	3.7
Armenia	38	38	24	25	..	93	..	..	..	..	–24.8	12.2
Australia	56	59	58	64	*132*	*149*	12	*11*	9	*7*	3.3	0.7
Austria	52	55	61	53	102	*100*	..	9	..	9	0.7	0.4
Azerbaijan	57	60	38	39	88	99	..	*41*	..	*66*	–12.6	21.4
Bangladesh	74	68	66	56	*18*	*42*	..	..	..	..	1.9	4.0
Belarus	58	52	40	35	93	*95*	..	..	..	..	–4.0	8.7
Belgium	44	47	31	27	101	*108*	*17*	11	*15*	9	1.6	0.7
Benin	70	72	64	59	..	..	..	..	..	..	..	..
Bolivia	61	71	48	49	..	*81*	32[b]	..	50[b]	..	2.6	1.8
Bosnia and Herzegovina	42	42	17	18	..	91	..	..	..	..	–14.8	1.6
Botswana	47	46	34	27	49	*82*	..	..	..	..	..	..
Brazil	56	64	54	53	..	*101*	29[b]	*30*	30[b]	*24*	–0.3	3.2
Bulgaria	45	46	27	27	98	*89*	..	10	..	8	3.1	3.0
Burkina Faso	82	82	77	74	7	20	..	..	..	..	1.3	1.3
Burundi	85	84	74	73	5	21	..	..	..	..	..	..
Cambodia	77	75	66	68	25	*40*	..	..	..	..	4.0	6.5
Cameroon	59	59	37	33	26	41	..	..	..	..	–6.7	1.0
Canada	58	61	57	61	101	..	..	*12*[b]	..	*9*[b]	0.8	0.2
Central African Republic	73	73	59	58	12	14	..	..	..	..	..	..
Chad	67	70	51	50	*6*	24	..	..	..	..	..	..
Chile	51	50	34	24	*97*	*90*	..	*25*	..	*24*	6.6	0.2
China	75	71	71	55	41	*78*	..	..	..	..	6.8	10.6
Hong Kong SAR, China	62	57	54	38	..	82	..	*10*[b]	..	*4*[b]	5.3	3.0
Colombia	52	62	38	43	53	95	*30*[b]	*41*	*26*[b]	*41*	–0.7	4.8
Congo, Dem. Rep.	68	67	60	62	*21*	37	..	..	..	..	–12.9	2.9
Congo, Rep.	66	65	49	46	46	..	..	..	..	..	..	..
Costa Rica	56	57	48	43	45	96	26	*20*	21	*20*	2.4	1.9
Côte d'Ivoire	63	60	52	45	..	..	..	..	..	..	–3.6	–0.7
Croatia	50	46	27	29	*83*	90	..	*23*[c]	..	*20*[c]	–7.7	2.8
Cuba	52	54	40	32	94	90	..	..	..	..	..	..
Czech Republic	58	54	48	29	91	*95*	..	15	..	9	–5.2	3.4
Denmark	59	60	65	61	109	*119*	*7*	*7*	*6*	3	2.5	–0.7
Dominican Republic	44	53	28	34	..	77	*42*	*49*	*30*	*30*	0.7	5.4
Ecuador	52	61	39	40	*55*	*81*	33[b]	*29*[b]	41[b]	*41*[b]	–0.1	0.5
Egypt, Arab Rep.	43	43	22	23	69	..	..	*20*	..	*44*	2.1	4.4
El Salvador	59	54	42	39	38	*64*	..	29	..	*44*	..	..
Eritrea	66	66	60	54	*11*	32	..	..	..	..	..	..
Estonia	61	55	43	29	100	99	2[b]	*8*[b]	3[b]	*4*[b]	–9.4	2.4
Ethiopia	71	81	64	74	14	34	..	*48*[b]	..	*56*[b]	–8.4	7.4
Finland	57	55	45	44	116	*110*	..	11	..	7	1.4	1.5
France	47	48	28	29	100	*113*	*11*	7	*10*	5	1.4	0.6
Gabon	58	58	37	33	*40*	..	..	..	..	..	..	..
Gambia, The	73	72	59	55	19	51	..	..	..	..	..	..
Georgia	57	54	28	22	95	108	..	..	..	..	–25.3	10.1
Germany	54	52	58	44	98	*102*	..	7	..	6	*3.7*	0.9
Ghana	68	65	40	40	*35*	*57*	..	..	..	..	2.8	3.7
Greece	44	48	31	28	94	*102*	..	27	..	27	2.4	2.4
Guatemala	55	62	50	52	23	*57*	..	..	..	..	1.0	1.4
Guinea	82	81	75	73	11	37	..	..	..	..	..	..
Guinea-Bissau	66	67	57	63	*5*	..	..	..	..	..	..	..
Haiti	56	55	37	47	..	..	..	..	..	..	..	..
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	2009[a]	1990	2008	1990	2008	1990–92	2005–08
Hungary	48	45	37	20	86	*97*	*8*[b]	8	*7*[b]	6	0.3	2.0
India	58	56	46	40	*46*	*60*	..	..	..	..	1.0	5.9
Indonesia	63	62	46	41	46	79	..	*60*	..	*68*	6.2	3.8
Iran, Islamic Rep.	46	49	33	36	53	83	..	*40*	..	*56*	6.5	1.8
Iraq	37	37	27	23	*40*	*51*	..	..	..	..	–33.6	1.9
Ireland	44	58	38	44	100	*115*	25	17	9	5	2.4	0.7
Israel	45	50	25	27	92	*90*	..	*9*	..	*5*	0.0	1.3
Italy	43	44	30	25	79	*101*	*29*	21	*24*	15	0.6	–0.3
Jamaica	61	56	40	29	70	*91*	*46*	*38*	*37*	*31*	0.7	–2.2
Japan	61	54	43	40	97	*101*	15	*10*	26	*12*	0.7	1.2
Jordan	36	38	25	20	82	*88*	..	..	..	..	–5.5	2.5
Kazakhstan	63	64	46	42	98	99	..	..	..	..	–15.1	4.8
Kenya	73	73	62	59	..	59	..	..	..	..	–3.9	2.5
Korea, Dem. Rep.	62	64	46	39	..	..	..	..	..	..	..	..
Korea, Rep.	59	58	36	28	91	*97*	..	*23*	..	*28*	5.0	3.1
Kosovo	..	..	..	..	..	..	..	..	..	..	..	..
Kuwait	62	65	29	30	*53*	90	..	..	..	..	–0.2	3.2
Kyrgyz Republic	58	58	41	40	100	84	..	*47*	..	*47*	–13.1	4.3
Lao PDR	80	78	74	64	*21*	*44*	..	..	..	..	..	..
Latvia	58	55	43	35	92	*98*	..	8	..	6	–19.6	2.9
Lebanon	44	46	31	29	*61*	82	..	..	..	..	..	..
Lesotho	48	54	40	40	24	45	..	..	..	..	..	..
Liberia	66	66	57	57	..	..	..	..	..	..	..	..
Libya	45	49	28	27	..	..	..	..	..	..	..	..
Lithuania	54	50	36	18	92	99	..	11	..	8	–13.9	5.2
Macedonia, FYR	37	35	17	13	*76*	*84*	..	*24*	..	*20*	–5.6	1.2
Madagascar	79	83	65	71	*19*	32	..	..	..	..	–5.9	2.2
Malawi	72	72	48	49	17	30	..	..	..	..	–1.9	5.6
Malaysia	60	61	47	45	57	69	*31*	*23*	*25*	*21*	6.0	3.1
Mali	49	47	40	35	7	38	..	..	..	..	0.4	1.9
Mauritania	67	47	54	23	13	*24*	..	..	..	..	..	..
Mauritius	56	54	45	37	55	87	13	*18*	7	*15*	..	..
Mexico	57	57	50	42	54	*90*	29	*28*	15	*32*	1.0	1.0
Moldova	58	45	39	17	90	88	..	*35*	..	*30*	–22.0	6.9
Mongolia	50	52	39	35	82	92	..	..	..	..	..	..
Morocco	46	46	40	35	36	*56*	..	*46*	..	*65*	–1.7	2.8
Mozambique	80	78	67	66	7	23	..	..	..	..	–3.0	5.5
Myanmar	74	74	62	53	23	53	..	..	..	..	2.0	5.8
Namibia	45	43	24	14	43	66	..	..	..	..	..	..
Nepal	60	62	52	46	34	..	..	..	..	..	..	..
Netherlands	51	59	55	67	120	*121*	*7*	10	*10*	8	0.4	1.0
New Zealand	55	63	55	56	92	*119*	*15*	*14*	*10*	*10*	0.5	–0.3
Nicaragua	57	58	46	48	43	*68*	..	*45*	..	*46*	..	..
Niger	59	60	50	52	7	12	..	..	..	..	–5.7	2.3
Nigeria	53	52	29	24	*24*	*30*	..	..	..	..	–2.9	3.3
Norway	58	62	49	56	103	*112*	..	8	..	3	3.9	–1.1
Oman	53	51	30	29	45	91	..	..	..	..	0.2	3.7
Pakistan	48	52	38	44	23	33	..	*58*	..	*75*	6.5	2.5
Panama	50	59	33	40	62	73	*44*	*30*	*19*	*24*	..	..
Papua New Guinea	70	70	57	54	12	..	..	..	..	..	..	..
Paraguay	61	73	51	58	31	*67*	17[b]	*45*	31[b]	*50*	..	..
Peru	53	69	34	53	67	*89*	30[b]	*33*[b]	46[b]	*47*[b]	–0.8	0.2
Philippines	59	60	42	39	70	*82*	..	*44*[b]	..	*47*[b]	–3.3	3.9
Poland	53	48	31	27	87	*100*	..	20	..	18	2.8	1.9
Portugal	58	56	53	35	66	*104*	*22*	18	*30*	19	2.2	0.9
Puerto Rico	37	41	21	29	..	84	..	..	..	..	..	..
Qatar	73	77	35	47	84	85	..	..	..	..	0.1	13.3

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	2009[a]	1990	2008	1990	2008	1990–92	2005–08
Romania	56	48	42	24	92	*92*	*21*	31	*33*	32	–9.3	6.5
Russian Federation	57	57	34	33	93	*85*	*1*	*6*	*1*	*6*	–7.9	6.4
Rwanda	87	80	79	64	18	27	..	..	..	..	..	..
Saudi Arabia	50	48	26	13	..	97	..	..	..	..	4.9	0.7
Senegal	67	66	60	55	*15*	*30*	*77*	..	*91*	..	–1.0	0.9
Serbia	49[d]	44[d]	28[d]	21[d]	..	91	..	*25*	..	*20*	..	..
Sierra Leone	64	65	38	42	16	*35*	..	..	..	..	..	..
Singapore	64	62	56	38	..	..	*10*	*12*	*6*	*7*	1.5	–1.8
Slovak Republic	55	53	43	30	*88*	*92*	..	14	..	6	–0.8	6.1
Slovenia	55	54	38	32	89	*97*	..	12	..	10	–2.3	3.0
Somalia	66	67	59	58	..	*8*	..	..	..	..	..	..
South Africa	39	41	19	15	69	94	..	*2*	..	*3*	–4.5	3.7
Spain	41	49	36	37	105	*120*	20[b]	13	24[b]	10	2.4	0.7
Sri Lanka	51	55	31	36	72	..	..	*39*[b]	..	*44*[b]	5.5	9.3
Sudan	46	47	29	23	20	38	..	..	..	..	–1.3	7.5
Swaziland	54	50	34	26	*49*	*53*	..	..	..	..	..	..
Sweden	62	58	59	45	90	*103*	..	9	..	4	1.9	0.6
Switzerland	65	61	69	63	98	*96*	*8*	*10*	*11*	*11*	–0.6	1.0
Syrian Arab Republic	47	45	38	32	48	75	..	..	..	..	6.5	0.3
Tajikistan	54	55	36	38	102	84	..	..	..	..	–20.4	6.3
Tanzania	87	78	79	70	5	27	..	*82*[b]	..	*93*[b]	–2.4	4.5
Thailand	77	72	70	46	31	76	67	*51*	74	*56*	6.8	2.7
Timor-Leste	64	67	51	58	..	51	..	..	..	..	..	..
Togo	66	65	58	53	20	*41*	..	..	..	..	..	..
Trinidad and Tobago	45	61	33	46	82	*89*	22	..	21	..	–3.5	5.4
Tunisia	41	41	29	22	45	*92*	..	..	..	..	2.6	2.7
Turkey	53	42	48	31	48	*82*	..	30	..	49	1.0	2.6
Turkmenistan	56	58	35	34	..	..	..	..	..	..	–13.0	7.9
Uganda	82	83	73	75	*10*	27	..	..	..	..	–1.1	6.1
Ukraine	57	54	37	34	94	94	..	..	..	..	–7.9	5.9
United Arab Emirates	71	76	43	46	68	95	..	..	..	..	–3.9	0.7
United Kingdom	56	56	66	56	87	*99*	*13*	14	*6*	7	2.0	2.2
United States	59	59	56	51	92	*94*	..	..	..	..	1.7	1.4
Uruguay	53	56	42	39	84	*88*	..	*26*[b]	..	*24*[b]	5.2	4.9
Uzbekistan	54	58	36	39	99	*104*	..	..	..	..	–7.8	5.9
Venezuela, RB	51	61	35	40	56	82	..	*28*	..	*33*	4.5	4.3
Vietnam	75	69	75	51	*35*	..	..	..	..	..	4.6	5.6
West Bank and Gaza	30	30	19	15	..	*87*	..	*34*	..	*44*	..	..
Yemen, Rep.	38	39	23	22	..	..	..	..	..	..	0.9	–0.8
Zambia	57	61	40	46	*21*	49	56	..	81	..	–2.5	3.9
Zimbabwe	70	65	48	50	49	..	..	..	..	..	–4.7	–7.7
World	**62 w**	**60 w**	**52 w**	**45 w**	**50 w**	***67 w***	**.. w**	**.. w**	**.. w**	**.. w**	***0.7 w***	***3.1 w***
Low income	71	70	60	58	26	*38*	..	..	..	..	*–3.2*	4.4
Middle income	63	61	52	42	47	*68*	..	..	..	..	*1.3*	6.2
Lower middle income	65	62	55	44	42	*63*	..	..	..	..	*3.2*	7.4
Upper middle income	53	56	41	38	67	*88*	..	26	..	26	*–2.3*	3.6
Low & middle income	63	62	53	45	44	*63*	..	..	..	..	*1.1*	6.1
East Asia & Pacific	73	69	67	51	41	*74*	..	..	..	..	6.5	8.7
Europe & Central Asia	55	53	38	33	85	*89*	..	19	..	19	*–9.1*	5.8
Latin America & Carib.	55	61	46	45	57	*89*	..	30	..	30	*1.8*	2.6
Middle East & N. Africa	43	45	29	29	54	*73*	..	33	..	52	*1.4*	2.2
South Asia	59	57	48	42	37	*52*	..	..	..	..	*3.1*	5.5
Sub-Saharan Africa	64	64	50	49	22	*34*	..	..	..	..	*–5.3*	4.1
High income	55	55	47	43	91	*100*	..	13	..	11	*2.3*	1.2
Euro area	48	50	41	37	..	..	..	12	..	9	*2.4*	0.7

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 and reflects demographic, social, legal, and cultural trends and norms.

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 many 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 the number of people engaged in the production of goods and services.

Data sources

Data on employment to population ratio, vulnerable employment, and labor productivity are from the ILO'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]	2006–09[a]	1990–92[a]	2006–09[a]	1990–92[a]	2006–09[a]	Total 2006–09[a]	Male 2006–09[a]	Female 2006–09[a]	Primary 2006–09[a]	Secondary 2006–09[a]	Tertiary 2006–09[a]
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..
Albania	..	12.7	..	..	..	..	..	..	..	..	..	..
Algeria	23.0	11.3	24.2	11.0	20.3	10.1	..	..	..	..	..	..
Angola	..	..	..	..	..	..	..	..	..	..	..	..
Argentina	6.7[b]	8.6[b]	6.4[b]	7.8[b]	7.0[b]	9.8[b]	..	..	..	48.1[b]	36.7[b]	15.3[b]
Armenia	..	28.6[b]	..	21.9[b]	..	35.0[b]	..	..	..	5.2	83.0	11.9
Australia	10.8	5.6[b]	11.4	5.7[b]	10.0	5.4[b]	14.7[b]	15.0[b]	14.4[b]	48.0	34.1	17.9
Austria	3.6	4.8	3.5	5.0	3.8	4.5	20.3	19.7	21.0	37.9[b]	52.1[b]	10.0[b]
Azerbaijan	..	6.1	..	7.1	..	4.9	..	..	..	6.3	78.9	14.9
Bangladesh	1.9	..	2.0	..	1.9	..	..	..	..	..	..	..
Belarus	..	..	..	..	..	..	..	..	..	10.8	38.6	50.6
Belgium	6.7	7.9	4.8	7.7	9.5	8.1	44.2	43.5	45.0	42.1	38.2	19.7
Benin	1.5	..	2.2	..	0.6	..	..	..	..	..	..	..
Bolivia	5.5[b]	5.2[b]	5.5[b]	4.5[b]	5.6[b]	6.0[b]	..	..	..	..	..	..
Bosnia and Herzegovina	17.6	23.9	15.5	21.8	21.6	27.1	..	..	..	95.7	..	4.0
Botswana	13.8	17.6[b]	11.7	15.3[b]	17.2	19.9[b]	..	..	..	..	..	..
Brazil	6.4[b]	8.3	5.4[b]	6.1	7.9[b]	11.0	..	..	..	51.6	33.6	3.6
Bulgaria	..	6.8	..	7.0	..	6.6	43.3	40.7	46.4	41.8	49.7	8.6
Burkina Faso	..	..	..	..	..	..	..	..	..	..	..	..
Burundi	0.5	..	0.7	..	0.3	..	..	..	..	..	..	..
Cambodia	..	..	..	..	..	..	..	..	..	..	..	..
Cameroon	..	2.9	..	2.5	..	3.3	..	..	..	..	..	..
Canada	11.2[b]	8.3[b]	12.0[b]	9.4[b]	10.2[b]	7.0[b]	7.8[b]	8.1[b]	7.4[b]	27.7[b]	41.1[b]	31.2[b]
Central African Republic	..	..	..	..	..	..	..	..	..	..	..	..
Chad	..	..	..	..	..	..	..	..	..	..	..	..
Chile	4.4	9.7	3.9	9.1	5.3	10.7	..	..	..	17.8	58.5	23.5
China	2.3[b]	4.3	..	..	..	..	..	..	..	..	..	..
Hong Kong SAR, China	2.0[b]	5.2[b]	2.0[b]	6.0[b]	1.9[b]	4.3[b]	..	..	..	40.8[b]	41.4[b]	16.6[b]
Colombia	9.5[b]	12.0	6.8[b]	9.3	13.0[b]	15.8	..	..	..	76.6	..	20.6
Congo, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Congo, Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Costa Rica	4.1	4.9	3.5	4.1	5.4	6.2	..	..	..	65.2	27.3	6.4
Côte d'Ivoire	6.7	..	..	..	..	..	..	..	..	..	..	..
Croatia	11.1	9.1	11.1	8.0	11.2	10.2	56.2	50.8	61.0	16.0	70.4	11.6
Cuba	..	1.6	..	1.4	..	2.0	..	..	..	43.0	52.4	4.6
Czech Republic	2.3	6.7	2.4	5.8	2.1	7.7	31.2	29.0	33.4	26.8	68.8	4.3
Denmark	9.0	6.0	8.3	6.5	9.9	5.4	9.1	8.9	9.4	35.9	35.1	23.0
Dominican Republic	20.7	14.2	12.0	8.5	35.2	22.8	..	..	..	35.0	44.5	16.4
Ecuador	8.9[b]	6.5	6.0[b]	5.2	13.2[b]	8.4	..	..	..	74.0[b]	..	23.6[b]
Egypt, Arab Rep.	..	9.4	..	5.2	..	22.9	..	..	..	..	..	..
El Salvador	7.9[b]	5.9	8.4[b]	7.5	7.2[b]	3.6	..	..	..	..	..	..
Eritrea	..	..	..	..	..	..	..	..	..	..	..	..
Estonia	3.7[b]	13.7	3.9[b]	17.0	3.5[b]	10.8	27.4	26.8	28.4	23.1[b]	57.8[b]	16.6[b]
Ethiopia	1.3	20.5[b]	1.1	12.1[b]	1.6	29.9[b]	..	..	..	..	..	..
Finland	11.6	8.2	13.3	8.9	9.6	7.5	16.6	18.2	14.7	35.5	45.9	18.6
France	10.2	9.1	8.1	8.9	12.8	9.3	35.4	35.6	35.3	39.9	39.6	19.9
Gabon	..	..	..	..	..	..	..	..	..	..	..	..
Gambia, The	..	..	..	..	..	..	..	..	..	..	..	..
Georgia	..	16.5	..	16.8	..	16.1	..	..	..	5.1[b]	52.5[b]	42.3[b]
Germany	6.6	7.7	5.3	8.1	8.4	7.3	45.5	44.4	47.0	33.1	56.3	10.6
Ghana	4.7	..	3.7	..	5.5	..	..	..	..	..	..	..
Greece	7.8	9.5	4.9	6.9	12.9	13.1	40.8	34.4	45.6	29.3[b]	48.4[b]	21.8[b]
Guatemala	..	1.8	..	1.5	..	2.4	..	..	..	..	..	..
Guinea	..	..	..	..	..	..	..	..	..	..	..	..
Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	..	..
Haiti	12.7	..	11.9	..	13.8	..	..	..	..	..	..	..
Honduras	3.2[b]	2.9[b]	3.3[b]	2.9[b]	3.0[b]	2.9[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]	2006–09[a]	1990–92[a]	2006–09[a]	1990–92[a]	2006–09[a]	Total 2006–09[a]	Male 2006–09[a]	Female 2006–09[a]	Primary 2006–09[a]	Secondary 2006–09[a]	Tertiary 2006–09[a]
Hungary	9.9	10.0	11.0	10.3	8.7	9.7	42.6	42.4	42.8	33.1[b]	58.7[b]	8.1[b]
India	..	..	..	..	..	..	..	..	..	..	..	..
Indonesia	2.8	7.9	2.7	7.5	3.0	8.5	..	..	..	44.4	40.7	9.6
Iran, Islamic Rep.	11.1	10.5	9.5	9.1	24.4	16.8	..	..	..	..	..	..
Iraq	..	17.5	..	16.2	..	22.5	..	..	..	..	..	..
Ireland	15.0	11.7	14.9	14.7	15.2	8.0	29.0	32.1	21.7	39.8	37.2	18.2
Israel	11.2	7.6	9.2	7.6	13.9	7.6	28.6	32.3	25.0	12.2	12.8	72.5
Italy	9.3	7.8	6.7	6.8	13.9	9.3	44.4	42.0	46.9	46.5	40.6	11.3
Jamaica	15.4	11.4	9.4	8.5	22.2	14.8	..	..	..	9.7	4.3	8.4
Japan	2.2	5.0	2.1	5.3	2.2	4.7	28.5	34.8	18.8	67.2	..	32.8
Jordan	..	12.9	..	10.3	..	24.1	..	..	..	..	..	..
Kazakhstan	..	6.6	..	5.6	..	7.5	..	..	..	..	..	..
Kenya	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	2.5[b]	3.6[b]	2.8[b]	4.1[b]	2.1[b]	3.0[b]	0.5	0.6	0.3	15.2	49.7	35.2
Kosovo	..	45.4	..	40.7	..	56.4	81.7	82.8	79.8	64.0	46.0	15.0
Kuwait	..	..	..	..	..	..	..	..	..	19.4	41.4	9.6
Kyrgyz Republic	..	8.2	..	7.3	..	9.4	..	..	..	13.3	77.1	9.6
Lao PDR	..	..	..	..	..	..	..	..	..	..	..	..
Latvia	..	17.1	..	20.4	..	14.0	26.7	27.1	26.0	24.3[b]	59.9[b]	14.6[b]
Lebanon	..	9.0	..	8.6	..	10.1	..	..	..	..	..	..
Lesotho	..	..	..	..	..	..	..	..	..	..	..	..
Liberia	..	5.6	..	6.8	..	4.2	..	..	..	..	..	..
Libya	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	..	13.7	..	17.1	..	10.4	23.2	21.0	26.8	14.2[b]	70.4[b]	15.4[b]
Macedonia, FYR	..	32.2	..	31.7	..	33.0	81.6	82.2	80.6	..	..	..
Madagascar	..	..	..	..	..	..	..	..	..	..	..	..
Malawi	..	..	..	..	..	..	..	..	..	..	..	..
Malaysia	3.7	3.7	..	3.2	..	3.7	..	..	..	13.3	61.6	25.1
Mali	..	..	..	..	..	..	..	..	..	..	..	..
Mauritania	..	..	..	..	..	..	..	..	..	..	..	..
Mauritius	3.3	7.3	3.2	4.4	3.6	12.3	..	..	..	44.2	48.5	6.4
Mexico	3.1	5.2	2.7	5.4	4.0	4.8	1.9	1.8	2.1	50.7	24.5	22.9
Moldova	..	6.4	..	7.8	..	4.9	..	..	..	..	..	..
Mongolia	..	..	..	..	..	..	..	..	..	..	..	..
Morocco	16.0[b]	10.0	13.0[b]	9.8	25.3[b]	10.5	..	..	..	..	..	..
Mozambique	..	..	..	..	..	..	..	..	..	..	..	..
Myanmar	6.0	..	4.7	..	8.8	..	..	..	..	..	..	..
Namibia	19.0	37.6	20.0	32.5	19.0	43.0	..	..	..	..	..	..
Nepal	..	..	..	..	..	..	..	..	..	..	..	..
Netherlands	5.6	3.4	4.0	3.4	7.8	3.5	24.8	23.7	26.1	41.3	39.7	17.0
New Zealand	10.6[b]	6.1[b]	11.4[b]	6.1[b]	9.7[b]	6.1[b]	6.3[b]	6.3[b]	6.4[b]	30.6	38.8	26.9
Nicaragua	14.4	5.0	11.3	4.9	19.5	5.1	..	..	..	72.8	2.1	18.0
Niger	..	..	..	..	..	..	..	..	..	..	..	..
Nigeria	..	..	..	..	..	..	..	..	..	..	..	..
Norway	5.9	3.2	6.6	3.6	5.1	2.6	7.7	7.5	8.0	25.4	49.2	20.6
Oman	..	..	..	..	..	..	..	..	..	..	..	..
Pakistan	5.2	5.0	3.8	4.0	14.0	8.7	..	..	..	14.3	11.4	26.0
Panama	14.7	5.9	10.8	4.6	22.3	7.9	..	..	..	36.0	39.6	24.0
Papua New Guinea	7.7	..	9.0	..	5.9	..	..	..	..	..	..	..
Paraguay	5.0[b]	5.6	6.0[b]	4.4	3.7[b]	7.5	..	..	..	49.9	38.0	9.9
Peru	9.4[b]	6.8[b]	7.5[b]	5.4[b]	12.5[b]	8.3[b]	..	..	..	30.0[b]	31.9[b]	37.6[b]
Philippines	8.6[b]	7.5	7.9[b]	7.5	9.9[b]	7.4	..	..	..	13.8	45.2	41.1
Poland	13.3	8.2	12.2	7.8	14.7	8.7	25.2	23.3	27.3	16.4[b]	73.2[b]	10.4[b]
Portugal	4.1[b]	9.5	3.5[b]	8.9	5.0[b]	10.1	44.2	40.8	47.5	68.1[b]	15.4[b]	13.2[b]
Puerto Rico	16.9	13.4	19.1	14.9	13.3	11.6	..	..	..	..	..	..
Qatar	..	0.5	..	0.2	..	2.6	..	..	..	..	..	..

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]	2006–09[a]	1990–92[a]	2006–09[a]	1990–92[a]	2006–09[a]	Total 2006–09[a]	Male 2006–09[a]	Female 2006–09[a]	Primary 2006–09[a]	Secondary 2006–09[a]	Tertiary 2006–09[a]
Romania	..	6.9	..	7.7	..	5.8	31.6	32.2	30.6	25.8	66.3	6.1
Russian Federation	5.2	8.2	5.2	8.4	5.2	7.9	35.7	33.3	38.4	13.7	54.2	32.1
Rwanda	0.3	..	0.6	..	0.2	..	..	..	..	..	..	..
Saudi Arabia	..	5.4	..	3.5	..	15.9	..	..	..	7.5	48.6	43.6
Senegal	..	10.0	..	7.9	..	13.6	..	..	..	40.2	6.9	2.5
Serbia	..	16.6	..	15.3	..	18.4	71.1	70.1	72.1	20.3	68.4	11.2
Sierra Leone	..	..	..	..	..	..	..	..	..	..	..	..
Singapore	2.7[b]	5.9	2.7[b]	5.4	2.6[b]	6.5	..	..	..	31.0	25.6	43.2
Slovak Republic	..	12.1	..	11.4	..	12.9	50.9	47.8	54.4	29.2	65.3	5.3
Slovenia	7.1	5.9	8.1	5.9	6.0	5.8	30.1	28.3	32.1	25.0[b]	60.4[b]	12.5[b]
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	..	23.8	..	22.0	..	25.9	14.4	..	..	36.2	56.3	4.5
Spain	18.1	18.0	13.9	17.7	25.8	18.4	30.2	26.9	34.4	54.8[b]	23.6[b]	20.4[b]
Sri Lanka	14.2[b]	7.6	..	7.2	..	8.1	..	..	..	45.4[b]	22.0[b]	32.6[b]
Sudan	..	..	..	..	..	..	..	..	..	..	..	..
Swaziland	..	..	..	..	..	..	..	..	..	..	..	..
Sweden	5.7	8.3	6.7	8.6	4.6	8.0	12.8	13.1	12.4	32.2[b]	46.0[b]	17.1[b]
Switzerland	2.8	4.1	2.3	3.7	3.5	4.5	30.0	26.4	33.6	28.8	53.2	17.9
Syrian Arab Republic	6.8	8.4	5.2	5.2	14.0	25.7	..	..	..	..	..	..
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	1.2	1.3	1.2	1.5	1.1	..	..	..	40.5	45.5	0.1
Timor-Leste	..	..	..	..	..	..	..	..	..	..	..	..
Togo	..	..	..	..	..	..	..	..	..	..	..	..
Trinidad and Tobago	19.6	5.3	17.0	3.5	23.9	6.2	..	..	..	..	..	..
Tunisia	..	14.2	..	..	..	..	..	..	..	..	..	..
Turkey	8.5	14.0	8.8	13.9	7.8	14.3	25.3	22.6	32.2	52.3	28.2	12.7
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	1.0	..	1.3	..	0.6	..	..	..	..	..	..	..
Ukraine	..	8.8	..	6.6	..	6.1	..	..	..	8.5	52.2	39.3
United Arab Emirates	..	4.0	..	2.0	..	12.0	..	..	..	..	..	..
United Kingdom	9.7	7.7	11.5	8.8	7.3	6.4	24.6	26.5	21.5	37.3	47.7	14.3
United States	7.5[b]	9.3[b]	7.9[b]	10.3[b]	7.0[b]	8.1[b]	16.3[b]	16.4[b]	16.1[b]	18.7	35.5	45.7
Uruguay	9.0[b]	7.3	6.8[b]	5.3	11.8[b]	9.7	..	..	..	59.1[b]	27.0[b]	13.8[b]
Uzbekistan	..	..	..	..	..	..	..	..	..	..	..	..
Venezuela, RB	7.7	7.6	8.2	7.2	6.8	8.1	..	..	..	..	..	..
Vietnam	..	2.4	..	..	..	..	..	..	..	..	..	..
West Bank and Gaza	..	24.5	..	17.7	..	38.6	..	..	..	54.3	14.2	23.5
Yemen, Rep.	..	15.0	..	11.5	..	40.9	..	..	..	..	..	..
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	6.7	9.1	6.4	8.5	7.4	10.3	..	..	..	43.4	40.9	14.3
Low & middle income	..	..	..	..	..	..	..	..	..	..	..	..
East Asia & Pacific	2.5	4.6	..	..	..	..	..	..	..	..	..	..
Europe & Central Asia	..	9.2	..	9.9	..	8.6	..	..	..	26.7	50.2	24.1
Latin America & Carib.	6.6	7.9	5.4	6.6	8.4	9.8	..	..	..	50.8	34.9	12.3
Middle East & N. Africa	..	10.6	..	8.9	..	16.7	..	..	..	..	..	..
South Asia	..	..	..	..	..	..	..	..	..	..	..	..
Sub-Saharan Africa	..	..	..	..	..	..	..	..	..	..	..	..
High income	7.5	8.1	7.1	8.4	8.0	7.7	24.8	25.3	23.8	33.9	43.7	25.7
Euro area	9.1	9.4	7.2	9.2	11.9	9.6	38.2	36.7	39.8	41.3	43.0	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	2005	25.0	18.8	22.0	6.7	93.3	..	..	..	..	1.4	94.5
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	5.2	94.8	73.2	6.1	19.2	0.9	9.2	89.9
Bosnia and Herzegovina	2006	10.6	11.7	9.5	0.1	99.9	..	..	..	..	1.6	92.1
Botswana		..	..	..	..	..	..	..	..	..	..	..
Brazil	2008	5.2	6.9	3.5	4.8	95.2	54..7	7.6	34.6	5.5	24.7	69.8[c]
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[d]	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	43.4	43.5	43.4	21.9	78.1	88.5	3.1	8.2	2.5	9.5	87.6
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.[d]	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[d]	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[d]	2005	5.8	9.0	2.7	6.2	93.8	18.5	9.8	57.5	23.8	19.5	56.2[e]
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	2006	31.8	33.6	29.9	1.0	99.0	..	..	..	..	4.3	77.0
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	28.4	71.6	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	2007	8.7	13.3	4.1	45.1	54.9	61.6	10.4	25.1	3.5	23.0	73.5

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[e]
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[c]
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	26.0	27.7	24.2	40.9	59.1	87.6	2.9	8.2	0.1	10.0	89.9
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[f]	2009	12.2	16.5	7.6	22.6	77.4	38.2	11.7	47.0	2.7	34.3	63.1
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	5.1	0.1	94.7
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[d]	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[c]
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[c]
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	39.5	4.0	96.0	62.6	5.0	31.1	3.8	7.6	88.6
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[e]
Russian Federation		..	..	..	..	..	..	..	..	..	..	..
Rwanda	2008	7.5	8.0	7.0	18.5	81.5	85.5	0.7	10.5	14.8	12.8	72.3
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	2007	14.9	14.9	14.9	57.7	42.3	83.8	0.8	13.4	9.7	0.9	87.8
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[g]	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[h]	2005/06	31.1	35.0	27.1	28.2	71.8	85.3	0.7	14.0	56.3	0.9	42.8[e]
Thailand	2005	15.1	15.7	14.4	4.2	95.8	..	..	..	..	13.5	80.0
Timor-Leste		..	..	..	..	..	..	..	..	..	..	..
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[i]	2006	2.6	3.3	1.8	38.8	61.2	57.1	14.3	27.1	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	2005	5.1	5.3	4.9	1.0	99.0	..	..	..	..	3.8	78.6
Venezuela, RB[d]	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	2008	34.4	35.4	33.3	18.6	81.4	91.9	0.7	7.0	2.9	3.9	93.1
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. Refers to unpaid workers, regardless of whether they are family workers. d. Covers children ages 10–14. e. Refers to family workers, regardless of whether they are paid. f. Covers children ages 12–14. g. Northern Sudan only. h. Refers mainly to work on own shamba. i. Estimates are for 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: selfemployed workers, wage workers (also known as employees), and unpaid family workers. A residual category—which includes those not classifiable by status—is not presented.

In most countries more boys are involved in employment or the gender difference is small. However, girls are often more present in hidden or under-reported forms of employment such as domestic service, and in almost all societies girls bear greater responsibility for household chores in their own homes, work that lies outside the System of National Accounts production boundary and is thus not considered in estimates of children's employment.

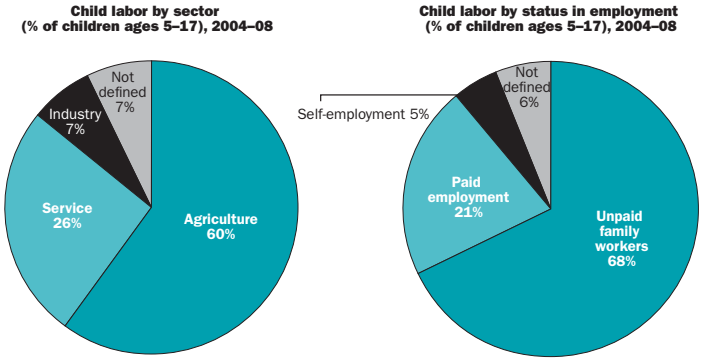
Definitions

• **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.

The largest sector for child labor remains agriculture, and the majority of children work as unpaid family members 2.6a



Source: Accelerating Action Against Child Labour, ILO, Geneva 2010.

2.7 Poverty rates at national poverty lines

	Population below national poverty line[a]				Poverty gap at national poverty line[a]							
	Survey year[b]	Rural %	Urban %	National %	Survey year[b]	Rural %	Urban %	National %	Survey year[b]	Rural %	Urban %	National %
Afghanistan[c]		..	..	..	2008[d]	37.5	29.0	36.0	2008[d]	8.3	6.2	7.9
Albania[c]	2005	24.2	11.2	18.5	2008	14.6	10.1	12.4	2008	2.6	1.9	2.3
Angola		..	..	..	2000[d]	..	62.3	..		..	..	..
Argentina	2008[e]	..	15.3	..	2009[e]	..	13.2	..		..	..	..
Armenia[c]	2008	22.9	23.8	23.5	2009	25.5	26.9	26.5	2009	..	..	4.9
Azerbaijan[c]	2001	42.5	55.7	49.6	2008	18.5	14.8	15.8	2008	..	..	2.0
Bangladesh	2000	52.3	35.2	48.9	2005	43.8	28.4	40.0	2005	9.8	6.5	9.0
Belarus	2008	..	..	6.1	2009	..	..	5.4		..	..	..
Benin		..	..	..	2003[d]	46.0	29.0	39.0	2003[d]	14.0	8.0	12.0
Bhutan		..	..	..	2007[d]	30.9	1.7	23.2	2007[d]	8.1	0.4	6.1
Bolivia	2006[e]	76.5	50.3	59.9	2007[e]	77.3	50.9	60.1		..	..	..
Bosnia and Herzegovina[c]	2004	22.0	11.3	17.7	2007	17.8	8.2	14.0		..	..	..
Botswana	1993	40.4	24.7	32.9	2003	44.8	19.4	30.6	2003	18.4	6.5	11.7
Brazil	2008[e]	..	..	22.6	2009[e]	..	..	21.4		..	..	..
Bulgaria[c]	1997	..	..	36.0	2001	..	..	12.8	2001	..	..	4.2
Burkina Faso		..	..	..	2003[d]	52.4	19.2	46.4	2003[d]	17.6	5.1	15.3
Burundi		..	..	..	2006[d]	68.9	34.0	66.9	2006[d]	24.2	10.3	23.4
Cambodia[c]	2004	37.8	17.6	34.7	2007	34.5	11.8	30.1	2007	8.3	2.8	7.2
Cameroon		..	..	..	2007[d]	55.0	12.2	39.9	2007[d]	17.5	2.8	12.3
Cape Verde		..	..	..	2007[d]	44.3	13.2	26.6	2007[d]	14.3	3.3	8.1
Central African Republic		..	..	..	2008[d]	69.4	49.6	62.0	2008[d]	35.0	29.8	33.1
Chad		..	..	..	2003[d]	58.6	24.6	55.0	2003[d]	23.3	7.4	21.6
Chile	2006[e]	12.3	13.9	13.7	2009[e]	12.9	15.5	15.1		..	..	..
China	2004[e]	2.8	..	..	2005[e]	2.5	..	..		..	..	..
Colombia	2008[e]	65.2	39.8	46.0	2009[e]	64.3	39.6	45.5		..	..	..
Comoros		..	..	..	2004[d]	48.7	34.5	44.8	2004[d]	17.8	12.1	16.3
Congo, Dem. Rep.		..	..	..	2005	75.7	61.5	71.3	2005	34.9	26.2	32.2
Congo, Rep.		..	..	..	2005	57.7	..	50.1	2005	20.6	..	18.9
Costa Rica	2008[e]	22.2	19.5	20.7	2009[e]	..	..	21.7		..	..	..
Croatia	2002	..	..	11.2	2004	..	..	11.1	2004	..	..	2.6
Côte d'Ivoire[c]	2002	45.8	32.3	40.2	2008	54.2	29.4	42.7	2008	20.3	9.5	15.3
Dominican Republic	2005[e]	60.2	49.9	53.5	2006[e]	57.1	45.3	49.4		..	..	..
Ecuador	2008[e]	59.7	22.6	35.1	2009[e]	57.5	25.0	36.0		..	..	..
Egypt, Arab Rep.	2005	26.8	10.1	19.6	2008	30.0	10.6	22.0		..	..	..
El Salvador	2007[e,f]	43.8	29.8	34.6	2008[e,f]	49.0	35.7	40.0		..	..	..
Ethiopia	1999	45.4	36.9	44.2	2004	39.3	35.1	38.9	2004	8.5	7.7	8.3
Fiji	2003	40.0	28.0	35.0	2009	43.3	18.6	31.0	2009	14.8	5.4	10.1
Gabon		..	..	..	2005	44.6	29.8	32.7	2005	16.0	8.5	10.0
Gambia, The[c]		..	..	..	2003[d]	67.8	39.6	58.0	2003[d]	30.5	14.8	25.1
Georgia[c]		..	..	..	2007	29.7	18.3	23.6	2007	9.2	5.3	7.2
Ghana	1998	49.6	19.4	39.5	2006	39.2	10.8	28.5	2006	13.5	3.1	9.6
Guatemala	2000[e]	74.5	27.1	56.2	2006[e]	70.5	30.0	51.0		..	..	..
Guinea		..	..	..	2007[d]	63.0	30.5	53.0	2007[d]	22.0	7.7	17.6
Guinea-Bissau		..	..	..	2002	69.1	51.6	64.7	2002	27.8	16.9	25.0
Haiti		..	..	..	2001[e]	88.0	45.0	77.0		..	..	..
Honduras	2008[e,f]	64.1	55.0	59.6	2009[e,f]	64.4	52.8	58.8		..	..	..
India	1994	37.3	32.4	36.0	2005	28.3	25.7	27.5		..	..	..
Indonesia	2009	17.4	10.7	14.2	2010	16.6	9.9	13.3	2010	2.8	1.6	2.2
Iraq		..	..	..	2007	39.3	16.1	22.9	2007	9.0	2.7	4.5
Jamaica	2006[e]	..	..	14.3	2007[e]	..	..	9.9		..	..	..
Jordan	2002	18.7	12.9	14.2	2006	19.0	12.0	13.0	2006	..	..	2.8
Kazakhstan[c]	2001	23.2	13.0	17.6	2002	21.7	10.2	15.4	2002	4.5	2.0	3.1
Kenya		..	..	..	2005[d]	49.1	33.7	45.9	2005[d]	17.5	11.4	16.3
Kosovo[c]	2005	37.2	30.3	34.8	2006	49.2	37.4	45.0	2006	14.3	11.3	13.3
Kyrgyz Republic[c]	2003	57.5	35.7	49.9	2005	50.8	29.8	43.1	2005	12.0	7.0	10.0
Lao PDR[c]	2003	..	..	33.5	2008	31.7	17.4	27.6		..	..	..
Latvia[c]	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[a]				Poverty gap at national poverty line[a]							
	Survey year[b]	Rural %	Urban %	National %	Survey year[b]	Rural %	Urban %	National %	Survey year[b]	Rural %	Urban %	National %
Lesotho[c]	1994	68.9	36.7	66.6	2003	60.5	41.5	56.6		..	..	..
Liberia[c]		..	..	..	2007	67.7	55.1	63.8	2007	26.3	20.2	24.4
Macedonia, FYR[c]	2005	21.2	19.8	20.4	2006	21.3	17.7	19.0	2006	7.7	6.9	7.2
Madagascar	2004	77.3	53.7	72.1	2005	73.5	52.0	68.7	2005	28.9	19.3	26.8
Malawi	1998	58.1	18.5	54.1	2004	55.9	25.4	52.4	2004	19.2	7.1	17.8
Malaysia[c]	2007	7.1	2.0	3.6	2009	8.2	1.7	3.8	2009	1.8	0.3	0.8
Mali		..	..	..	2006[d]	57.6	25.5	47.4	2006[d]	..	..	16.7
Mauritania		..	..	..	2000[d]	61.2	25.4	46.3	2000[d]	24.1	6.3	17.0
Mexico	2006[e]	54.7	35.6	42.6	2008[e]	60.8	39.8	47.4		..	..	..
Moldova[c]	2004	..	..	26.5	2005	..	..	29.0		..	..	..
Mongolia		..	..	..	2008[d]	46.6	26.9	35.2	2008[d]	13.4	7.7	10.1
Montenegro	2007	12.0	5.5	8.0	2008	8.9	2.4	4.9	2008	1.4	0.6	0.9
Morocco		..	..	..	2001	25.1	7.6	15.3		..	..	..
Mozambique	2002	55.3	51.5	54.1	2008	56.9	49.6	54.7	2008	22.2	19.1	21.2
Namibia		..	..	..	2003[d]	49.0	17.0	38.0	2003[d]	16.0	6.0	13.0
Nepal	1996	43.3	21.6	41.8	2004	34.6	9.6	30.9	2004	8.5	2.2	7.5
Nicaragua	2001[e]	67.8	30.1	45.8	2005[e]	67.9	29.1	46.2		..	..	..
Niger		..	..	..	2007[d]	63.9	36.7	59.5	2007[d]	21.2	11.3	19.6
Nigeria		..	..	..	2004[d]	63.8	43.1	54.7	2004[d]	26.6	16.2	22.8
Pakistan	2005	28.1	14.9	23.9	2006	27.0	13.1	22.3		..	..	..
Panama	2003	62.7	20.0	36.8	2008	59.8	17.7	32.7		..	..	..
Paraguay	2008[e]	48.8	30.2	37.9	2009[e]	49.8	24.7	35.1		..	..	..
Peru	2008	59.8	23.5	36.2	2009	60.3	21.1	34.8		..	..	..
Philippines	2006	..	..	26.4	2009	..	..	26.5	2009	..	..	2.7
Poland[c]	2001	..	..	15.6	2002	..	..	16.6		..	..	..
Romania[c]	2005	23.5	8.1	15.1	2006	22.3	6.8	13.8	2006	5.3	1.4	3.2
Russian Federation[c]	2005	22.7	8.1	11.9	2006	21.2	7.4	11.1	2006	5.5	1.7	2.7
Rwanda		..	..	..	2006[d]	64.2	23.2	58.5	2006[d]	26.0	8.0	24.0
São Tomé and Príncipe		..	..	..	2001	64.9	45.0	53.8	2001	24.7	14.9	19.2
Senegal[c]		..	..	..	2005[d]	61.9	35.1	50.8	2005[d]	21.5	9.3	16.4
Serbia[c]	2006	13.9	5.2	9.0	2007	9.8	4.3	6.6	2007	2.0	0.8	1.3
Sierra Leone		..	..	..	2003[d]	78.5	47.0	66.4	2003[d]	34.6	16.3	27.5
South Africa	2000	..	..	38.0	2005	..	..	23.0	2005	..	..	7.0
Sri Lanka	2002	24.7	7.9	22.7	2007	15.7	6.7	15.2	2007	3.2	1.3	3.1
Swaziland		..	..	..	2001[d]	75.0	49.0	69.2	2001[d]	37.0	20.0	32.9
Tajikistan[c]	2007	54.4	49.3	53.1	2009	49.2	41.8	47.2		..	..	..
Tanzania	2000	38.6	23.1	35.6	2007	37.4	21.8	33.4	2007	11.0	6.5	9.9
Thailand	2008	11.5	3.0	9.0	2009	10.4	3.0	8.1		..	..	..
Timor-Leste	2001	..	..	39.7	2007	..	..	49.9		..	..	..
Togo		..	..	..	2006	74.3	36.8	61.7	2006	29.3	10.3	22.9
Turkey	2008	34.6	9.4	17.1	2009	38.7	8.9	18.1		..	..	..
Uganda	2005	34.2	13.7	31.1	2009	27.2	9.1	24.5	2009	7.6	1.8	6.8
Ukraine[c]	2004	18.1	12.0	14.0	2005	11.3	6.3	7.9	2005	2.3	1.1	1.5
Uruguay	2007[e]	29.4	25.5	26.0	2008[e]	22.2	20.3	20.5		..	..	..
Venezuela, RB	2008[e]	..	..	32.6	2009[e]	..	..	29.0		..	..	..
Vietnam	2006	20.4	3.9	16.0	2008	18.7	3.3	14.5	2008	4.6	0.5	3.5
West Bank and Gaza	2007	..	..	31.2	2009	..	..	21.9	2009	..	..	4.9
Yemen, Rep.	1998	42.5	32.3	40.1	2005	40.1	20.7	34.8	2005	10.6	4.5	8.9
Zambia	2004	77.3	29.1	58.4	2006	76.8	26.7	59.3	2006	38.8	9.4	28.5
Zimbabwe		..	..	..	2003[d]	..	..	72.0		..	..	..

a. Based on per capita consumption estimated from household survey data, unless otherwise noted. b. Refers to the year in which the underlying household survey data were collected; in cases for which the data collection period bridged two calender years, the year in which most of the data were collected is reported. c. World Bank estimates. d. Estimates based on survey data from earlier year(s) are available, but are not comparable with the most recent year reported here; these are available online at http://data.worldbank.org. e. Based on income per capita estimated from household survey data. f. Measured as a share of households.

2.7 Poverty rates at national poverty lines

About the data

Estimates of poverty rates and gaps at national poverty lines are useful for comparing poverty across time within but not across countries. Table 2.8 shows poverty indicators at international poverty lines that allow for comparisons across countries.

For countries with an active poverty monitoring program, the World Bank—in collaboration with national institutions, other development agencies, and civil society—periodically prepares poverty assessments and other analytical reports to assess the extent and causes of poverty. These reports review levels and changes in poverty indicators over time and across regions within countries, assess the impact of growth and public policy on poverty and inequality, review the adequacy of monitoring and evaluation, and contain detailed technical overviews of the underlying household survey data and poverty measurement methods used. The reports are a key source of comprehensive information on poverty indicators at national poverty lines and generally feed into country-owned processes to reduce poverty, build in-country capacity, and support joint work.

An increasing number of countries have their own national programs to monitor and disseminate official poverty estimates at national poverty lines along with well documented household survey data sources and estimation methodology. Estimates from national poverty monitoring programs and the underlying methods used are periodically reviewed by the World Bank and included in the table.

The complete online database of poverty estimates at national poverty lines (available at http://data.worldbank.org) is regularly updated and may contain more recent data or revisions not incorporated in the table. It is maintained by the Global Poverty Working Group, a team of poverty experts from the Poverty Reduction and Equity Network, the Development Research Group, and the Development Data Group, which recently updated the database to cover 115 countries and more than 575 sets of poverty estimates at national poverty lines for 1974–2010.

Data quality

Poverty estimates at national poverty lines are computed from household survey data collected from nationally representative samples of households. These data must contain sufficiently detailed information to compute a comprehensive estimate of total household income or consumption (including consumption or income from own production), from which it is possible to construct a correctly weighted distribution of per capita consumption or income.

As with any indicator measured from household surveys, data quality issues can affect the precision of poverty estimates and their comparability over time. These include selective survey nonresponse, seasonality effects, differences in the number of income or consumption items in the questionnaire, and the time period over which respondents are asked to recall their expenditures.

National poverty lines

National poverty lines are the benchmark for estimating poverty indicators that are consistent with the country's specific economic and social circumstances. National poverty lines reflect local perceptions of the level and composition of consumption or income needed to be nonpoor. The perceived boundary between poor and nonpoor typically rises with the average income of a country and thus does not provide a uniform measure for comparing poverty rates across countries. While poverty rates at national poverty lines should not be used for comparing poverty rates across countries, they are appropriate for guiding and monitoring the results of country-specific national poverty reduction strategies.

Almost all national poverty lines are anchored to the cost of a food bundle—based on the prevailing national diet of the poor—that provides adequate nutrition for good health and normal activity, plus an allowance for nonfood spending. National poverty lines must be adjusted for inflation between survey years to remain constant in real terms and thus allow for meaningful comparisons of poverty over time. Because diets and consumption baskets change over time, countries periodically recalculate the poverty line based on new survey data. In such cases the new poverty lines should be deflated to obtain comparable poverty estimates from earlier years. The table reports indicators based on the two most recent years for which survey data is available. Countries for which the most recent indicators reported are not comparable to those based on survey data from an earlier year are footnoted in the table.

Definitions

- **Survey year** is the year in which the underlying household survey data were collected; when the data collection period bridged two calendar years, the year in which most of the data were collected is reported.
- **Population below national poverty line** is the percentage of the rural, urban, and national population living below the corresponding rural, urban, national poverty line, based on consumption estimated from household survey data, unless otherwise noted.
- **Poverty gap at national poverty line** is the mean shortfall from the rural, urban, or national poverty line (counting the nonpoor as having zero shortfall) as a percentage of the corresponding rural, urban, or national poverty line, based on consumption estimated from household survey data, unless otherwise noted. This measure reflects the depth of poverty as well as its incidence.

Data sources

Poverty rates at national poverty lines are compiled by the Global Poverty Working Group, based on data from World Bank's country poverty assessments and analytical reports as well as country Poverty Reduction Strategies and official poverty estimates. Further documentation of the data, measurement methods and tools, and research, as well as poverty assessments and analytical reports, are available at http://data.worldbank.org, www.worldbank.org/poverty, and http://econ.worldbank.org.

Poverty rates at international poverty lines 2.8

	International poverty line in local currency		Population below International poverty line[a]									
	$1.25 a day 2005	$2 a day 2005	Survey year[b]	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[b]	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	75.5	120.8	2005	<2	<0.5	7.9	1.5	2008	<2	<0.5	4.3	0.9
Algeria	48.4[c]	77.5[c]	1988	6.6	1.8	23.8	6.6	1995	6.8	1.4	23.6	6.5
Angola	88.1	141.0		..	..	..	..	2000[d]	54.3	29.9	70.2	42.4
Argentina	1.7	2.7	2006[d,e]	2.8	0.6	8.0	2.4	2009[d,e]	<2	<0.5	<2	<0.5
Armenia	245.2	392.4	2003	10.6	1.9	43.5	11.3	2008	<2	<0.5	12.4	2.3
Azerbaijan	2,170.9	3,473.5	2005	<2	<0.5	<2	<0.5	2008	<2	<0.5	7.8	1.5
Bangladesh	31.9	51.0	2000[f]	57.8	17.3	85.4	38.8	2005[f]	49.6	13.1	81.3	33.8
Belarus	949.5	1,519.2	2005	<2	<0.5	<2	<0.5	2008	<2	<0.5	<2	<0.5
Belize	1.8[c]	2.9[c]	1995	14.0	5.4	23.6	10.5	1999[e]	12.1	4.7	23.9	9.7
Benin	344.0	550.4		..	..	..	..	2003	47.3	15.7	75.3	33.5
Bhutan	23.1	36.9		..	..	..	..	2003	26.2	7.0	49.5	18.8
Bolivia	3.2	5.1	2005[e]	19.6	9.7	30.4	15.5	2007[e]	14.0	5.8	24.7	10.9
Bosnia and Herzegovina	1.1	1.7	2004	<2	<0.5	<2	<0.5	2007	<2	<0.5	<2	<0.5
Botswana	4.2	6.8	1986	35.6	13.8	54.7	25.8	1994	31.2	11.0	49.4	22.3
Brazil	2.0	3.1	2008[e]	4.3	1.4	10.4	3.6	2009[e]	3.8	1.1	9.9	3.2
Bulgaria	0.9	1.5	2003	<2	<0.5	2.4	0.9	2007	<2	<0.5	7.3	1.5
Burkina Faso	303.0	484.8	1998	70.0	30.2	87.6	49.1	2003	56.5	20.3	81.2	39.3
Burundi	558.8	894.1	1998	86.4	47.3	95.4	64.1	2006	81.3	36.4	93.5	56.1
Cambodia	2,019.1	3,230.6	2004	40.2	11.3	68.2	28.0	2007	28.3	6.1	56.5	20.2
Cameroon	368.1	589.0	2001	32.8	10.2	57.7	23.7	2007	9.6	1.2	30.8	8.4
Cape Verde	97.7	156.3		..	..	..	..	2001	20.6	5.9	40.3	14.9
Central African Republic	384.3	614.9	1993	82.8	57.0	90.8	68.4	2003	62.4	28.3	81.9	45.3
Chad	409.5	655.1		..	..	..	..	2003	61.9	25.6	83.3	43.9
Chile	484.2	774.7	2006[e]	<2	<0.5	2.4	<0.5	2009[e]	<2	<0.5	<2	<0.5
China	5.1[g]	8.2[g]	2002[h]	28.4	8.7	51.1	20.6	2005[h]	15.9	4.0	36.3	12.2
Colombia	1,489.7	2,383.5	2003[e]	15.4	6.1	26.3	10.9	2006[e]	16.0	5.7	27.9	11.9
Comoros	368.0	588.8		..	..	..	..	2004	46.1	20.8	65.0	34.2
Congo, Dem. Rep.	395.3	632.5		..	..	..	..	2006	59.2	25.3	79.6	42.4
Congo, Rep.	469.5	751.1		..	..	..	..	2005	54.1	22.8	74.4	38.8
Costa Rica	348.7[c]	557.9[c]	2005[e]	2.4	<0.5	8.6	2.3	2009[e]	<2	<0.5	4.8	0.9
Croatia	5.6	8.9	2005	<2	<0.5	<2	<0.5	2008	<2	<0.5	<2	<0.5
Czech Republic	19.0	30.4	1993[e]	<2	<0.5	<2	<0.5	1996[e]	<2	<0.5	<2	<0.5
Côte d'Ivoire	407.3	651.6	2002	23.3	6.8	46.8	17.6	2008	23.8	7.5	46.0	17.9
Djibouti	134.8	215.6	1996	4.8	1.6	15.1	4.5	2002	18.8	5.3	41.2	14.6
Dominican Republic	25.5[c]	40.8[c]	2006[e]	4.0	0.7	13.5	3.7	2007[e]	4.3	0.9	13.6	3.9
Ecuador	0.6	1.0	2007[e]	4.7	1.2	12.8	4.0	2009[e]	5.1	1.6	13.4	4.4
Egypt, Arab Rep.	2.5	4.0	2000	<2	<0.5	19.4	3.5	2005	<2	<0.5	18.5	3.5
El Salvador	6.0[c]	9.6[c]	2005[e]	11.0	4.8	20.5	8.9	2008[e]	5.1	1.1	15.2	4.5
Estonia	11.0	17.7	2003	<2	<0.5	2.7	0.9	2004	<2	<0.5	<2	<0.5
Ethiopia	3.4	5.5	2000	55.6	16.2	86.4	37.9	2005	39.0	9.6	77.6	28.9
Gabon	554.7	887.5		..	..	..	..	2005	4.8	0.9	19.6	5.0
Gambia, The	12.9	20.7	1998	66.7	34.7	82.0	50.0	2003	34.3	12.1	56.7	24.9
Georgia	1.0	1.6	2005	13.4	4.4	30.4	10.9	2008	14.7	4.6	32.6	11.8
Ghana	5,594.8	8,951.6	1998	39.1	14.4	63.3	28.5	2006	30.0	10.5	53.6	22.3
Guatemala	5.7[c]	9.1[c]	2002[e]	16.9	6.5	29.8	12.9	2006[e]	12.7	3.8	25.7	9.6
Guinea	1,849.5	2,959.1	2003	70.1	32.2	87.2	50.3	2007	43.8	15.2	70.0	31.3
Guinea-Bissau	355.3	568.6	1993	52.1	20.6	75.7	37.4	2002	48.8	16.5	77.9	34.8
Guyana	131.5[c]	210.3[c]	1993[e]	5.8	2.6	15.0	5.4	1998[e]	7.7	3.9	16.8	6.9
Haiti	24.2[c]	38.7[c]		..	..	..	..	2001[e]	54.9	28.2	72.2	41.8
Honduras	12.1[c]	19.3[c]	2006[e]	18.2	8.2	29.7	14.2	2007[e]	23.2	11.3	35.6	18.1
Hungary	171.9	275.0	2004	<2	<0.5	<2	<0.5	2007	<2	<0.5	<2	<0.5
India	19.5[i]	31.2[i]	1994[h]	49.4	14.4	81.7	35.3	2005[h]	41.6	10.8	75.6	30.4
Indonesia	5,241.0[i]	8,385.7[i]	2005[h]	21.4	4.6	53.8	17.3	2009[h]	18.7	3.6	50.7	15.5
Iraq	799.8	1,279.7		..	..	..	..	2007	4.0	0.6	25.3	5.6
Jamaica	54.2[c]	86.7[c]	2002	<2	<0.5	8.7	1.6	2004	<2	<0.5	5.9	0.9
Jordan	0.6	1.0	2003	<2	<0.5	11.0	2.1	2006	<2	<0.5	3.5	0.6
Kazakhstan	81.2	129.9	2003	3.1	<0.5	17.2	3.9	2007	<2	<0.5	<2	<0.5

2.8 Poverty rates at international poverty lines

	International poverty line in local currency		Population below International poverty line[a]									
	$1.25 a day 2005	$2 a day 2005	Survey year[b]	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[b]	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	40.9	65.4	1997	19.6	4.6	42.7	14.7	2005	19.7	6.1	39.9	15.1
Kyrgyz Republic	16.2	26.0	2004	21.8	4.4	51.9	16.8	2007	<2	<0.5	29.4	5.5
Lao PDR	4,677.0	7,483.2	2002	44.0	12.1	76.9	31.1	2008	33.9	9.0	66.0	24.8
Latvia	0.4	0.7	2004	<2	<0.5	<2	<0.5	2008	<2	<0.5	<2	<0.5
Lesotho	4.3	6.9	1995	47.6	26.7	61.1	37.3	2003	43.4	20.8	62.3	33.1
Liberia	0.6	1.0		..	..	..	..	2007	83.7	40.8	94.8	59.5
Lithuania	2.1	3.3	2004	<2	<0.5	<2	<0.5	2008	<2	<0.5	<2	<0.5
Macedonia, FYR	29.5	47.2	2003	<2	<0.5	3.2	0.7	2008	<2	<0.5	4.3	0.7
Madagascar	945.5	1,512.8	2001	76.3	41.4	88.8	57.2	2005	67.8	26.5	89.6	46.9
Malawi	71.2	113.8	1998	83.1	46.0	93.5	62.3	2004	73.9	32.3	90.5	51.8
Malaysia	2.6	4.2	2004[e]	<2	<0.5	7.8	1.4	2009[e]	<2	<0.5	2.3	<0.5
Maldives	12.2	19.5		..	..	..	..	2004	<2	<0.5	12.2	2.5
Mali	362.1	579.4	2001	61.2	25.8	82.0	43.6	2006	51.4	18.8	77.1	36.5
Mauritania	157.1	251.3	1996	23.4	7.1	48.3	17.8	2000	21.2	5.7	44.1	15.9
Mexico	9.6	15.3	2006	<2	<0.5	4.8	1.0	2008	<2	<0.5	8.6	2.0
Micronesia, Fed. Sts.	0.8[c]	1.3[c]		..	..	..	..	2000	31.1	16.3	44.7	24.5
Moldova	6.0	9.7	2004	8.1	1.7	29.0	7.9	2008	<2	<0.5	12.5	2.6
Mongolia	653.1	1,045.0		..	..	..	..	2002	15.5	3.6	38.9	12.3
Montenegro	0.6	1.0		..	..	..	..	2008	<2	<0.5	<2	<0.5
Morocco	6.9	11.0	2001	6.3	0.9	24.3	6.3	2007	2.5	0.5	14.0	3.2
Mozambique	14,532.1	23,251.4	2003	74.7	35.4	90.0	53.6	2008	60.0	25.2	81.6	42.9
Namibia	6.3	10.1		..	..	..	..	1993[e]	49.1	24.6	62.2	36.5
Nepal	33.1	52.9	1996	68.4	26.7	88.1	46.8	2004	55.1	19.7	77.6	37.8
Nicaragua	9.1[c]	14.6[c]	2001[e]	19.4	6.7	37.5	14.5	2005[e]	15.8	5.2	31.9	12.3
Niger	334.2	534.7	2005	65.9	28.1	85.6	46.7	2007	43.1	11.9	75.9	30.6
Nigeria	98.2	157.2	1996	68.5	32.1	86.4	49.7	2004	64.4	29.6	83.9	46.9
Pakistan	25.9	41.4	2005	22.6	4.4	60.3	18.7	2006	22.6	4.1	61.0	18.8
Panama	0.8[c]	1.2[c]	2006[e]	9.5	3.1	17.9	7.1	2009[e]	2.4	<0.5	9.5	2.4
Papua New Guinea	2.1[c]	3.4[c]		..	..	..	..	1996	35.8	12.3	57.4	25.5
Paraguay	2,659.7	4,255.6	2007[e]	6.5	2.7	14.2	5.5	2008[e]	5.1	1.5	13.2	4.3
Peru	2.1	3.3	2006[e]	7.9	1.9	18.5	6.0	2009[e]	5.9	1.4	14.7	4.7
Philippines	30.2	48.4	2003	22.0	5.5	43.8	16.0	2006	22.6	5.5	45.0	16.4
Poland	2.7	4.3	2005	<2	<0.5	<2	<0.5	2008	<2	<0.5	<2	<0.5
Romania	2.1	3.4	2005	<2	<0.5	3.4	0.9	2008	<2	<0.5	<2	0.5
Russian Federation	16.7	26.8	2005	<2	<0.5	<2	<0.5	2008	<2	<0.5	<2	<0.5
Rwanda	295.9	473.5	2000	76.6	38.2	90.3	55.7	2005	76.8	40.9	89.6	57.2
São Tomé and Príncipe	7,953.9	12,726.3		..	..	..	..	2001	28.6	8.2	57.3	21.6
Senegal	372.8	596.5	2001	44.2	14.3	71.3	31.2	2005	33.5	10.8	60.4	24.7
Serbia	42.9	68.6		..	..	..	..	2008	<2	<0.5	<2	<0.5
Seychelles	5.6[c]	9.0[c]	2000	<2	<0.5	<2	<0.5	2007	<2	<0.5	<2	<0.5
Sierra Leone	1,745.3	2,792.4	1990	62.8	44.8	75.0	54.0	2003	53.4	20.3	76.1	37.5
Slovak Republic	23.5	37.7	1992[e]	<2	<0.5	<2	<0.5	1996[e]	<2	<0.5	<2	<0.5
Slovenia	198.2	317.2	2002	<2	<0.5	<2	<0.5	2004	<2	<0.5	<2	<0.5
South Africa	5.7	9.1	1995	21.4	5.2	39.9	15.0	2000	26.2	8.2	42.9	18.3
Sri Lanka	50.0	80.1	2002	14.0	2.6	39.7	11.9	2007	7.0	1.0	29.1	7.4
St. Lucia	2.4[c]	3.8[c]		..	..	..	..	1995[e]	20.9	7.2	40.6	15.5
Suriname	2.3[c]	3.7[c]		..	..	..	..	1999[e]	15.5	5.9	27.2	11.7
Swaziland	4.7	7.5	1995	78.6	47.7	89.3	61.7	2001	62.9	29.4	81.0	45.8
Syrian Arab Republic	30.8	49.3		..	..	..	..	2004	<2	<0.5	16.9	3.3
Tajikistan	1.2	1.9	2003	36.3	10.3	68.8	26.7	2004	21.5	5.1	50.9	16.8
Tanzania	603.1	964.9	2000	88.5	46.8	96.6	64.4	2007	67.9	28.1	87.9	47.5
Thailand	21.8	34.9	2004	<2	<0.5	11.5	2.0	2009	12.8	2.4	26.5	8.3
Timor-Leste	0.6[c]	1.0[c]	2001	52.9	19.1	77.5	37.1	2007	37.4	8.9	72.8	27.0
Togo	352.8	564.5		..	..	..	..	2006	38.7	11.4	69.3	27.9
Trinidad and Tobago	5.8[c]	9.2[c]	1988[e]	<2	<0.5	8.6	1.9	1992[e]	4.2	1.1	13.5	3.9
Tunisia	0.9	1.4	1995	6.5	1.3	20.4	5.8	2000	2.6	<0.5	12.8	3.0

Poverty rates at international poverty lines 2.8

	International poverty line in local currency		Population below International poverty line[a]									
	$1.25 a day 2005	$2 a day 2005	Survey year[b]	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[b]	Population below $1.25 a day %	Poverty gap at $1.25 a day %	Population below $2 a day %	Poverty gap at $2 a day %
Turkmenistan	5,961.1[c]	9,537.7[c]	1993[e]	63.5	25.8	85.7	44.9	1998	24.8	7.0	49.7	18.4
Uganda	930.8	1,489.2	2005	51.5	19.1	75.6	36.4	2009	37.7	12.1	64.5	27.2
Ukraine	2.1	3.4	2005	<2	<0.5	<2	<0.5	2008	<2	<0.5	<2	<0.5
Uruguay	19.1	30.6	2006[e]	<2	<0.5	4.2	0.6	2009[e]	<2	<0.5	<2	<0.5
Uzbekistan	470.1[c]	752.1[c]	2002	42.3	12.4	75.6	30.6	2003	46.3	15.0	76.7	33.2
Venezuela, RB	1,563.9	2,502.2	2005[e]	10.0	4.5	19.8	8.4	2006[e]	3.5	1.1	10.2	3.2
Vietnam	7,399.9	11,839.8	2006	21.5	4.6	48.4	16.2	2008	13.1	2.3	38.4	10.8
Yemen, Rep.	113.8	182.1	1998	12.9	3.0	36.4	11.1	2005	17.5	4.2	46.6	14.8
Zambia	3,537.9	5,660.7	2003	64.6	27.1	85.2	45.8	2004	64.3	32.8	81.5	48.3

a. Based on nominal per capita consumption averages and distributions estimated from household survey data, unless otherwise noted. b. Refers to the year in which the underlying household survey data were collected; in cases for which the data collection period bridged two calender years, the year in which most of the data were collected is reported. c. Based on purchasing power parity (PPP) dollars imputed using regression. d. Urban areas only. e. Based on per capita income averages and distribution data estimated from household survey data. f. Adjusted by spatial consumer price index data. g. PPP conversion factor based on urban prices. h. Population-weighted average of urban and rural estimates. i. Based on benchmark national PPP estimate rescaled to account for cost-of-living differences in urban and rural areas.

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.

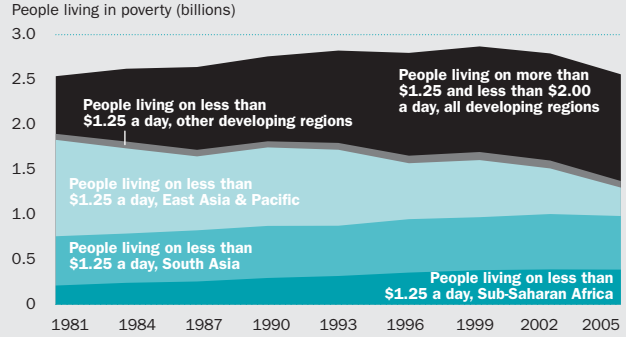
The greatest reduction in poverty occurred in East Asia and Pacific, where the poverty rate declined from 78 percent in 1981 to 17 percent in 2005 and the number of people living on less than $1.25 a day dropped more than 750 million (figure 2.8b). Much of this decline was in China, where poverty fell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

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.

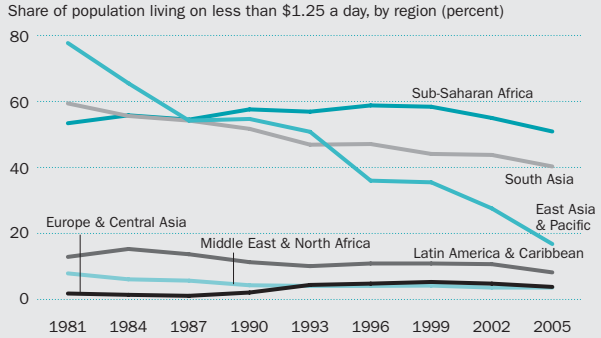
Once household survey data collected after 2005 in large countries—such as China and India, as well as some countries in Sub-Saharan Africa and the Middle East and North Africa—become available, the World Bank's Development Research Group will update regional poverty estimates at international poverty lines; see http://iresearch.worldbank.org/povcalnet/.

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: World Bank PovcalNet.

Poverty rates have begun to fall 2.8b



Source: World Bank PovcalNet.

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. A complete database of estimates, 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. The most recent estimates and a complete overview of data availability by year and country are 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 household survey data were collected; when the data collection period bridged two calendar years, the year in which most of the data were collected is reported. • **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 based on nominal per capita consumption averages and distributions estimated from household survey data, unless otherwise noted. 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 to derive the World Bank's latest estimates, further discussion of the results, and related publications, see http://iresearch.worldbank.org/povcalnet/ and 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	2008[b]	29.4	3.8	9.0	13.1	16.9	22.3	38.7	24.0
Albania	2008[b]	34.5	3.5	8.1	12.1	15.9	20.9	43.0	29.0
Algeria	1995[b]	35.3	2.8	6.9	11.5	16.3	22.8	42.4	26.9
Angola[c]	2000[b]	58.6	0.6	2.0	5.7	10.8	19.7	61.9	44.7
Argentina[c]	2009[d]	45.8	1.5	4.1	8.9	14.3	22.2	50.5	33.6
Armenia	2008[b]	30.9	3.7	8.8	12.8	16.7	21.9	39.8	25.4
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	2008[b]	33.7	3.4	8.0	12.1	16.2	21.7	42.1	27.4
Bangladesh	2005[b]	31.0	4.3	9.4	12.6	16.1	21.1	40.8	26.6
Belarus	2008[b]	27.2	3.8	9.2	13.8	17.8	22.9	36.4	21.9
Belgium	2000[d]	33.0	3.4	8.5	13.0	16.3	20.8	41.4	28.1
Belize	1999[d]	54.4	1.2	3.4	7.2	11.9	19.1	58.5	43.5
Benin	2003[b]	38.6	2.9	6.9	10.9	15.1	21.2	45.9	31.0
Bolivia	2007[d]	57.3	1.0	2.8	6.4	11.1	18.8	61.0	45.4
Bosnia and Herzegovina	2007[b]	36.2	2.7	6.7	11.3	16.1	22.7	43.2	27.3
Botswana	1994[b]	61.0	1.3	3.1	5.8	9.6	16.4	65.0	51.2
Brazil	2009[d]	53.9	1.2	3.3	7.2	11.9	19.5	58.1	42.5
Bulgaria	2007[b]	45.3	2.0	5.0	9.1	13.9	21.0	51.0	35.2
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]	44.4	3.0	6.6	9.4	13.1	19.2	51.7	37.3
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
Central African Republic	2003[b]	43.6	2.1	5.2	9.4	14.3	21.7	49.4	33.0
Chad	2003[b]	39.8	2.6	6.3	10.4	15.0	21.8	46.6	30.8
Chile	2009[d]	22.6	3.1	8.6	15.5	20.2	24.7	30.9	16.5
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	0.9	2.5	6.0	10.7	18.7	62.1	46.2
Congo, Dem. Rep.	2006[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	2009[d]	50.3	1.7	4.2	7.8	12.5	20.1	55.4	39.4
Côte d'Ivoire	2008[b]	41.5	2.2	5.6	10.1	14.9	21.8	47.6	31.8
Croatia	2008[b]	33.7	3.3	8.1	12.2	16.2	21.6	42.0	27.5
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
Dominican Republic	2007[d]	48.4	1.7	4.4	8.4	13.1	20.5	53.6	37.8
Ecuador	2009[d]	49.0	1.6	4.2	8.3	13.2	20.4	53.9	38.3
Egypt, Arab Rep.	2005[b]	32.1	3.9	9.0	12.6	16.1	20.9	41.5	27.6
El Salvador	2007[d]	46.9	1.6	4.3	9.0	13.9	20.9	51.9	36.3
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	2008[b]	41.3	2.0	5.3	10.3	15.2	22.1	47.2	31.3
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
Guatemala	2006[d]	53.7	1.3	3.4	7.2	12.0	19.5	57.8	42.4
Guinea	2007[b]	39.4	2.7	6.4	10.5	15.1	21.9	46.2	30.3
Guinea-Bissau	2002[b]	35.5	2.9	7.2	11.6	16.0	22.1	43.0	28.0
Haiti	2001[d]	59.5	0.9	2.5	5.9	10.5	18.1	63.0	47.8
Honduras	2007[d]	57.7	0.6	2.0	6.0	11.3	20.0	60.8	43.8

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%
Hungary	2007[b]	31.2	3.5	8.4	12.9	16.9	22.0	39.9	25.4
India	2005[b]	36.8	3.6	8.1	11.3	14.9	20.4	45.3	31.1
Indonesia	2009[b]	36.8	3.3	7.6	11.3	15.1	21.1	44.9	29.9
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	3.8	8.7	12.8	16.7	22.0	39.9	25.2
Kenya	2005[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]	33.4	4.1	8.8	11.8	15.5	21.2	42.8	27.9
Lao PDR	2008[b]	36.7	3.3	7.6	11.3	15.3	20.9	44.8	30.3
Latvia	2008[b]	35.7	2.7	6.8	11.7	16.3	22.4	42.9	27.6
Lebanon		..	..	..	..	..	..	..	..
Lesotho	2003[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	2008[b]	37.6	2.6	6.6	11.1	15.7	22.1	44.4	29.1
Macedonia, FYR	2008[b]	44.2	2.2	5.4	9.3	14.0	21.0	50.3	34.5
Madagascar	2005[b]	47.2	2.6	6.2	9.6	13.1	17.7	53.5	41.5
Malawi	2004[b]	39.0	2.9	7.0	10.8	14.9	20.9	46.4	31.7
Malaysia	2009[d]	46.2	1.8	4.5	8.7	13.7	21.6	51.5	34.7
Maldives	2004[b]	37.4	2.7	6.5	10.9	15.7	22.7	44.2	28.0
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]	51.7	1.5	3.9	7.9	12.5	19.4	56.2	41.4
Micronesia	2000[b]	61.1	0.4	1.6	5.2	10.2	19.1	64.0	47.1
Moldova	2008[b]	38.0	2.9	6.8	10.9	15.4	21.7	45.3	29.8
Mongolia	2008[b]	36.5	3.0	7.1	11.2	15.6	22.1	44.0	28.4
Montenegro	2008[b]	30.0	3.6	8.5	13.1	17.2	22.4	38.8	24.1
Morocco	2007[b]	40.9	2.7	6.5	10.5	14.5	20.6	47.9	33.2
Mozambique	2008[b]	45.6	1.9	5.2	9.5	13.7	20.1	51.5	36.7
Myanmar		..	..	..	..	..	..	..	..
Namibia	1993[d]	74.3	0.6	1.5	2.8	5.5	12.0	78.3	65.0
Nepal	2004[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	2007[b]	34.0	3.7	8.3	12.0	15.8	21.1	42.8	28.5
Nigeria	2004[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	2006[b]	32.7	4.0	9.0	12.4	15.8	20.7	42.1	28.3
Panama	2009[d]	52.3	1.3	3.6	7.4	12.2	20.1	56.8	40.6
Papua New Guinea	1996[b]	50.9	1.9	4.5	7.7	12.1	19.3	56.4	40.9
Paraguay	2008[d]	52.0	1.4	3.8	7.7	12.4	19.7	56.5	41.0
Peru	2009[d]	48.0	1.4	3.9	8.4	13.6	21.5	52.6	35.9
Philippines	2006[b]	44.0	2.4	5.6	9.1	13.7	21.2	50.4	33.9
Poland	2008[b]	34.2	3.2	7.6	12.0	16.3	22.0	42.2	27.2

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%
Portugal	1997[d]	38.5	2.0	5.8	11.0	15.5	21.9	45.9	29.8
Puerto Rico		..	..	..	..	..	..	..	..
Qatar	2007[b]	41.1	1.3	3.9	..	..	..	52.0	35.9
Romania	2008[b]	31.2	3.3	8.1	12.8	17.1	22.7	39.3	24.5
Russian Federation	2008[b]	42.3	2.6	6.0	9.8	14.3	20.9	48.9	33.5
Rwanda	2005[b]	53.1	1.7	4.2	7.7	11.7	18.2	58.2	44.0
São Tomé & Príncipe	2000[b]	50.8	2.2	5.2	8.5	12.2	17.7	56.4	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	3.9	9.1	13.5	17.5	22.5	37.4	22.8
Seychelles	2007[b]	19.0	4.7	10.8	15.7	19.9	24.2	29.4	15.4
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	2007[b]	40.3	3.1	6.9	10.4	14.4	20.5	47.8	32.9
Sudan		..	..	..	..	..	..	..	..
Swaziland	2001[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	2004[b]	35.8	3.4	7.7	11.4	15.5	21.4	43.9	28.9
Tajikistan	2007[b]	29.4	4.0	9.3	13.4	16.7	21.5	39.0	25.2
Tanzania	2007[b]	37.6	2.8	6.8	11.1	15.6	21.7	44.8	29.6
Thailand	2009[b]	53.6	1.6	3.9	7.0	11.4	19.2	58.6	42.6
Timor-Leste	2007[b]	31.9	4.0	9.0	12.5	16.1	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]	40.8	2.4	5.9	10.2	14.9	21.8	47.2	31.6
Turkey	2008[b]	39.7	2.1	5.7	10.8	15.6	22.1	45.8	30.3
Turkmenistan	1998[b]	40.8	2.5	6.0	10.2	14.9	21.7	47.2	31.8
Uganda	2009[b]	44.3	2.4	5.8	9.6	13.8	20.0	50.7	36.1
Ukraine	2008[b]	27.5	4.1	9.4	13.6	17.5	22.5	37.1	22.6
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	2009[d]	42.4	2.3	5.6	9.8	14.5	21.4	48.6	32.9
Uzbekistan	2003[b]	36.7	2.9	7.1	11.5	15.7	21.5	44.2	29.5
Venezuela, RB	2006[d]	43.5	1.9	4.9	9.6	14.7	21.8	49.0	33.0
Vietnam	2008[b]	37.6	3.2	7.3	10.9	15.1	21.3	45.4	30.2
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[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. Covers urban areas only. 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 non-comparability should be noted in particular. First, the surveys can differ in many respects, including whether they use income or consumption expenditure as the living standard indicator. The distribution of income is typically more unequal than the distribution of consumption. In addition, the definitions of income used differ more often among surveys. Consumption is usually a much better welfare indicator, particularly in developing countries. Second, households differ in size (number of members) and in the extent of income sharing among members. And individuals differ in age and consumption needs. Differences among countries in these respects may bias comparisons of distribution.

World Bank staff have made an effort to ensure that the data are as comparable as possible. Wherever possible, consumption has been used rather than income. Income distribution and Gini indexes for high-income economies are calculated directly from the Luxembourg Income Study database, using an estimation method consistent with that applied for developing countries.

Definitions

• **Survey year** is the year in which the underlying data were collected. • **Gini index** measures the extent to which the distribution of income (or consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Thus a Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality. • **Percentage share of income or consumption** is the share of total income or consumption that accrues to subgroups of population indicated by deciles or quintiles.

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 **2006–09[a]**	Female % of female labor force ages 15–24 **2006–09[a]**	% of total **2006–09[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	51.1	34.7	2009	6.1		..
Algeria	..	..	..	2002	36.7	22.1	2002	3.2		..
Angola	..	..	25		..	..		..		..
Argentina	19[b]	25[b]	34	2008	41.9	31.3	2007	8.0	2000	43.8
Armenia	47[b]	69[b]	..	2008	39.2	23.9	2008	4.3	2007	20.3
Australia	13[b]	10[b]	..	2005	92.6	69.6	2005	3.5		..
Austria	10	9	..	2005	96.4	68.7	2005	12.6		..
Azerbaijan	19	10	25	2007	35.4	24.7	2007	3.8	2006	24.3
Bangladesh	..	..	13	2004	2.8	2.1	2006	0.3		..
Belarus	..	..	..	2008	93.5	66.8	2008	10.2	2002	41.6
Belgium	21	22	..	2005	94.2	61.6	2005	9.0		..
Benin	..	..	23		..	..	2006	1.5		..
Bolivia	..	..	..	2008	11.4	8.9	2000	4.5		..
Bosnia and Herzegovina	45	52	..	2009	70.2	28.7	2009	9.4		..
Botswana	..	..	..	2006	9.0	7.3		..		..
Brazil	14	23	..	2008	53.8	41.7	2004	12.6		..
Bulgaria	18	14	..	2008	72.7	49.6	2007	9.8	2004	42.9
Burkina Faso	..	..	..	2004	1.2	1.0		..		..
Burundi	..	..	..		..	..		..		..
Cambodia	..	..	..		..	..		..		..
Cameroon	..	..	..		..	..	2001	0.8		..
Canada	18[b]	12[b]	..	2007	66.9	53.6	2005	4.1		..
Central African Republic	..	..	..	2004	1.5	1.3	2004	0.8		..
Chad	..	..	..		..	..		..		..
Chile	21	24	..	2008	53.8	36.2	2001	2.9	2006	53.5
China	..	..	..	2007	19.3	15.9		..		..
Hong Kong SAR, China	15[b]	10[b]	..	2008	..	55.6		..		..
Colombia	18	30	19	2008	31.3	20.0	2008	3.0		..
Congo, Dem. Rep.	..	..	21		..	..		..		..
Congo, Rep.	..	..	..		..	..	2004	0.9		..
Costa Rica	10	13	..	2004	55.3	37.6	2006	2.4		..
Côte d'Ivoire	..	..	..		..	..		..		..
Croatia	19	27	24	2010	82.9	52.6	2009	10.3	2005	32.4
Cuba	3	4	46		..	..		..		..
Czech Republic	17	17	..	2007	84.5	67.3	2007	8.5	2005	40.7
Denmark	12	10	..	2007	94.4	86.9	2005	5.4		..
Dominican Republic	21	45	35	2008	21.0	15.2	2000	0.8		..
Ecuador	12[b]	18[b]	..	2004	31.6	21.1	2002	2.5		..
Egypt, Arab Rep.	17	48	..	2009	57.0	31.0	2004	4.1		..
El Salvador	13	8	..	2008	23.9	16.2	2006	1.9		..
Eritrea	..	..	..		..	..	2001	0.3		..
Estonia	32	21	..	2004	95.2	68.6	2007	10.9	2007	35.4
Ethiopia	20[b]	29[b]	..		..	..	2006	0.3		..
Finland	22	19	..	2005	88.7	67.2	2005	8.4		..
France	23	22	..	2005	89.9	61.4	2005	12.4		..
Gabon	..	..	..		..	..		..		..
Gambia, The	..	..	..	2006	2.7	2.2		..		..
Georgia	32	41	..	2004	29.9	22.7	2004	3.0	2003	13.0
Germany	12	10	..	2005	88.2	65.5	2005	11.4		..
Ghana	..	..	34	2004	9.1	7.1	2002	1.3		..
Greece	19	34	..	2005	85.2	58.5	2005	11.5		..
Guatemala	..	..	..	2008	20.3	14.7	2005	1.0		..
Guinea	..	..	..	1993	1.5	1.8		..		..
Guinea-Bissau	..	..	..	2004	1.9	1.5	2005	2.1		..
Haiti	..	..	44		..	..		..		..
Honduras	..	..	26	2008	18.7	12.6		..		..

Assessing vulnerability and security

2.10

	Youth unemployment		Female-headed households	Pension contributors			Public expenditure on pensions			
	Male % of male labor force ages 15–24 **2006–09[a]**	Female % of female labor force ages 15–24 **2006–09[a]**	% of total **2006–09[a]**	Year	% of labor force	% of working-age population	Year	% of GDP	Year	Average pension % of average wage
Hungary	28	24	..	2008	92.0	56.7	2008	10.5	2005	39.8
India	..	..	14	2006	10.3	6.4	2007	2.2		..
Indonesia	22	23	13	2008	11.7	8.7		..		..
Iran, Islamic Rep.	20	34	..	2001	35.1	20.0	2000	1.1		..
Iraq	..	..	11	2009	16.8	15.2	2009	3.9		..
Ireland	31	17	..	2005	88.0	63.9	2005	3.4		..
Israel	16	14	..		..	..		..		..
Italy	23	29	..	2005	92.4	58.4	2005	14.0		..
Jamaica	22	33	..	2004	17.4	12.6		..		..
Japan	10	8	..	2005	95.3	75.0	2005	8.7		..
Jordan	23	46	10	2006	38.4	19.9	2001	2.2		..
Kazakhstan	7	8	..	2004	34.4	26.5	2009	3.2	2003	24.9
Kenya	..	..	..	2006	7.5	6.5	2003	1.1		..
Korea, Dem. Rep.	..	..	..		..	..		..		..
Korea, Rep.	12[b]	9[b]	..	2005	49.5	34.3	2005	1.6		..
Kosovo	..	..	..		..	..	2007	2.7[c]		..
Kuwait	..	..	..		..	..		..		..
Kyrgyz Republic	14	16	25	2006	42.2	28.9	2010	2.7	2003	27.5
Lao PDR	..	..	..		..	..		..		..
Latvia	38	28	..	2003	92.4	66.5	2009	8.5	2005	33.1
Lebanon	22	22	..	2003	33.1	19.9	2003	2.1		..
Lesotho	..	..	..	2005	5.7	3.6		..		..
Liberia	6[b]	4[b]	31		..	..		..		..
Libya	..	..	..	2004	65.5	38.1	2001	2.1		..
Lithuania	35	22	..	2007	99.3	68.7	2009	8.9	2005	30.9
Macedonia, FYR	53	59	8	2008	47.9	30.4	2008	9.4	2006	55.0
Madagascar	..	..	..		..	..		..		..
Malawi	..	..	..		..	..		..		..
Malaysia	10	12	..	2008	49.0	32.5		..		..
Mali	..	..	12		..	..		..		..
Mauritania	..	..	..		..	..		..		..
Mauritius	18	26	..	2000	51.4	33.6		..		..
Mexico	10	11	..	2008	30.3	20.6	2005	1.3		..
Moldova	16	15	..	2009	58.7	32.1	2009	9.1	2003	20.9
Mongolia	..	..	29	2005	27.9	21.3	2007	6.5[d]		..
Morocco	23	19	..	2007	23.8	13.6	2003	1.9		..
Mozambique	..	..	..		..	..		..		..
Myanmar	..	..	..		..	..		..		..
Namibia	..	..	44		..	..		..		..
Nepal	..	..	23	2008	3.4	2.6	2006	0.2		..
Netherlands	7	6	..	2005	90.7	70.7	2005	5.0[e]		..
New Zealand	16[b]	17[b]	..	2003	92.7	72.3	2005	4.4[e]		..
Nicaragua	8	10	..	2008	21.7	14.6		..		..
Niger	..	..	19	2006	1.9	1.2	2006	0.7		..
Nigeria	..	..	..	2004	1.9	1.1		..		..
Norway	10	8	..	2005	93.2	75.2	2005	4.8[e]		..
Oman	..	..	..		..	..		..		..
Pakistan	7	10	10	2008	3.9	2.2	2004	0.5		..
Panama	12	21	..		..	..		..		..
Papua New Guinea	..	..	..		..	..		..		..
Paraguay	9	17	..	2004	11.6	9.1	2001	1.2		..
Peru	13[b]	16[b]	22	2008	19.1	13.9	2000	2.6		..
Philippines	16	19	19	2007	25.0	17.0		..		..
Poland	20	21	..	2005	83.8	54.7	2009	10.0	2007	47.1
Portugal	19	22	..	2005	92.0	71.6	2005	10.2[e]		..
Puerto Rico	29[b]	22[b]	..		..	..		..		..
Qatar	1	7	..		..	..		..		..

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 **2006–09**[a]	Female % of female labor force ages 15–24 **2006–09**[a]	% of total **2006–09**[a]	Year	% of labor force	% of working-age population	Year	% of GDP	Year	Average pension % of average wage
Romania	21	20	..	2007	54.8	36.4	2009	8.3	2005	41.5
Russian Federation	18	19	..	2007	67.0	50.0	2007	4.7	2003	29.2
Rwanda	..	..	..	2004	4.6	4.1		..		..
Saudi Arabia	24	46	..		..	..		..		..
Senegal	12	20	..	2003	5.1	4.1	2003	1.3		..
Serbia	31	41	29	2003	45.0	35.4	2010	14.0		..
Sierra Leone	..	..	..	2004	5.5	3.8		..		..
Singapore	10	17	..	2008	61.7	45.3		..		..
Slovak Republic	28	27	..	2003	78.9	55.3	2007	9.3[e]	2005	44.7
Slovenia	14	13	..	2008	87.4	63.2	2007	12.7	2005	44.3
Somalia	..	..	..		..	..		..		..
South Africa	45	53	..	2007	6.5	3.7	2006	1.2		..
Spain	39	36	..	2005	69.4	48.7	2005	8.1[e]	2006	58.6
Sri Lanka	17	28	..	2006	24.1	14.9	2007	2.0		..
Sudan	..	..	19		..	..		..		..
Swaziland	..	..	48		..	..		..		..
Sweden	26	24	..	2005	88.8	72.2	2005	7.7[e]		..
Switzerland	8	9	..	2005	95.4	78.7	2005	6.8[e]	2000	40.0
Syrian Arab Republic	13	49	..	2008	26.8	13.8	2004	1.3		..
Tajikistan	..	..	..		..	..		..	2003	25.7
Tanzania	7	10	..	2006	4.3	4.0	2006	0.9		..
Thailand	4	5	30	2008	23.0	18.6		..		..
Timor-Leste	..	..	..		..	..		..		..
Togo	..	..	..		..	..		..		..
Trinidad and Tobago	9	13	..	2008	76.4	54.2		..		..
Tunisia	..	..	..	2004	48.6	25.5	2003	4.3		..
Turkey	25	25	..	2007	60.3	31.0	2008	6.2	2007	61.3
Turkmenistan	..	..	..		..	..		..		..
Uganda	..	..	30	2004	10.3	9.2	2003	0.3		..
Ukraine	..	..	49	2010	65.3	52.3	2010	17.8	2007	48.3
United Arab Emirates	8	22	..		..	..		..		..
United Kingdom	22	16	..	2005	93.2	71.5	2005	5.7		..
United States	20[b]	15[b]	..	2005	92.2	71.5	2005	6.0[e]	2006	29.2
Uruguay	16	25	..	2007	72.7	56.9	2007	10.0[e]		..
Uzbekistan	..	..	..	2005	86.1	57.5	2005	6.5	2005	40.0
Venezuela, RB	12	16	..	2008	32.1	22.7	2001	2.7		..
Vietnam	..	..	..	2008	19.3	15.2		..		..
West Bank and Gaza	39	47	..	2009	18.5	8.0	2009	4.0		..
Yemen, Rep.	..	..	..	2006	10.4	5.0		..		..
Zambia	..	..	24	2006	10.9	8.0	2008	1.0		..
Zimbabwe	..	..	38		..	..	2002	2.3		..
World	.. w	.. w								
Low income	..	..								
Middle income	..	..								
Lower middle income	..	..								
Upper middle income	19	23								
Low & middle income	..	..								
East Asia & Pacific	..	..								
Europe & Central Asia	17	18								
Latin America & Carib.	12	18								
Middle East & N. Africa	18	37								
South Asia	..	..								
Sub-Saharan Africa	..	..								
High income	19	16								
Euro area	21	21								

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

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 2011). 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 households are from Macro International Demographic and Health Surveys. Data on pension contributors and pension spending are from Hinz and others' *International Patterns of Pension Provision II: Facts and Figures of the 2000s* (2011).

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	2009[a]	1999	2009[a]	1999	2009[a]	2009[a]	2009[a]	2009[a]	2009[a]
Afghanistan	..	..	..	..	..	..	..	..	..	*43*
Albania	..	..	..	..	..	..	..	..	..	20
Algeria	12.0	..	..	..	..	..	*4.3*	*20.3*	..	23
Angola	..	..	..	..	..	..	..	..	..	..
Argentina	12.9	*14.7*	18.2	*21.9*	17.7	*15.6*	*4.9*	*13.5*	..	*16*
Armenia	..	*11.0*	..	*18.8*	..	6.8	*3.0*	*15.0*	..	*19*
Australia	16.4	16.4	15.0	*14.5*	26.6	*20.2*	*4.5*	..	..	..
Austria	25.1	*23.3*	30.2	*26.7*	52.1	*47.6*	*5.4*	*11.1*	..	*12*
Azerbaijan	6.9	..	17.0	..	19.1	15.6	2.8	9.1	99.9	11
Bangladesh	..	*10.7*	12.5	*14.9*	50.7	*39.8*	*2.4*	*14.0*	58.4	44
Belarus	..	..	..	..	..	15.0	4.5	10.6	99.9	15
Belgium	18.2	20.5	23.8	33.3	38.3	35.3	6.0	*12.4*	..	*11*
Benin	12.1	..	*24.6*	..	*212.7*	..	*3.5*	*15.9*	40.4	*45*
Bolivia	14.2	..	11.7	..	44.1	..	..	..	..	*24*
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..
Botswana	..	*12.4*	..	*37.6*	..	*251.5*	8.9	22.0	*97.4*	*25*
Brazil	10.8	17.3	9.5	*18.0*	57.1	*29.6*	*5.1*	*16.1*	..	*23*
Bulgaria	15.5	*23.5*	*18.8*	*22.3*	*17.9*	*20.1*	*4.1*	*10.0*	..	*16*
Burkina Faso	..	*29.0*	..	*30.2*	..	*307.1*	*4.6*	*21.8*	86.1	49
Burundi	14.7	21.1	..	59.4	1,051.5	520.4	8.3	23.4	91.2	51
Cambodia	5.9	..	*11.5*	..	*43.6*	..	2.1	*12.4*	99.5	49
Cameroon	..	7.4	..	30.7	..	35.8	3.7	19.2	..	46
Canada	..	..	..	..	*44.0*	..	*4.9*	..	..	..
Central African Republic	..	4.5	..	16.1	..	124.1	1.3	*11.7*	..	95
Chad	..	12.7	..	24.1	..	217.8	3.2	12.6	*34.6*	61
Chile	14.4	14.7	14.8	*16.0*	*19.4*	*12.1*	*4.0*	*18.2*	..	*25*
China	..	..	11.5	..	90.0	..	..	..	..	*18*
Hong Kong SAR, China	12.4	13.8	*17.7*	16.7	..	56.2	4.5	24.1	95.1	16
Colombia	15.2	15.9	16.1	15.4	37.7	27.4	4.8	*14.9*	100.0	29
Congo, Dem. Rep.	..	..	..	..	..	..	..	..	93.4	37
Congo, Rep.	..	..	..	..	..	..	..	..	..	64
Costa Rica	15.5	14.6	21.4	14.4	..	..	6.3	37.7	87.6	18
Côte d'Ivoire	14.8	..	42.8	..	146.3	*119.1*	*4.6*	*24.6*	100.0	42
Croatia	..	*21.8*	..	*25.2*	35.8	*26.2*	4.6	10.4	100.0	11
Cuba	27.8	*44.7*	41.2	*51.9*	86.2	*58.8*	*13.6*	17.5	100.0	9
Czech Republic	11.2	*13.0*	21.7	*22.0*	33.7	*30.5*	*4.2*	9.9	..	*18*
Denmark	24.6	24.5	38.1	*32.2*	65.9	*53.8*	*7.8*	*15.4*	..	..
Dominican Republic	7.2	7.3	..	7.4	..	..	2.3	12.0	83.6	25
Ecuador	4.4	..	9.6	..	..	..	..	..	82.6	17
Egypt, Arab Rep.	..	..	..	..	..	..	*3.8*	*11.9*	..	27
El Salvador	8.6	8.5	7.5	9.1	8.9	13.7	3.6	13.1	93.2	31
Eritrea	15.0	..	*37.3*	..	*429.6*	..	..	..	92.2	38
Estonia	20.9	*20.0*	27.2	*23.9*	31.8	*20.8*	*4.8*	*13.9*	..	*12*
Ethiopia	..	*12.4*	..	*8.9*	..	*642.9*	*5.5*	*23.3*	84.6	58
Finland	17.4	*17.5*	25.8	*30.8*	40.4	*31.7*	*5.9*	*12.5*	..	*14*
France	17.3	*17.7*	28.5	*26.4*	29.7	*34.8*	*5.6*	*10.7*	..	*19*
Gabon	..	..	..	..	..	..	..	..	..	..
Gambia, The	..	..	..	..	..	..	..	..	..	*34*
Georgia	..	*14.5*	..	*15.2*	..	*11.2*	3.2	7.7	94.6	9
Germany	..	*15.7*	..	*21.8*	..	..	*4.5*	*10.3*	..	13
Ghana	..	..	..	..	..	..	..	..	47.6	33
Greece	11.7	..	15.5	..	26.2	..	..	..	..	*10*
Guatemala	6.7	*10.5*	*4.3*	6.2	..	*19.0*	*3.2*	..	..	*29*
Guinea	..	*7.1*	..	*6.3*	..	*102.3*	*2.4*	*19.2*	73.1	*44*
Guinea-Bissau	..	..	..	..	..	..	..	..	..	..
Haiti	..	..	..	..	..	..	..	..	..	..
Honduras	..	..	..	..	..	..	..	..	*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	2009[a]	1999	2009[a]	1999	2009[a]	2009[a]	2009[a]	2009[a]	2009[a]
Hungary	18.0	*24.9*	19.1	*23.1*	34.2	*23.8*	*5.2*	*10.4*	..	*10*
India	11.9	..	24.7	..	*95.0*	..	..	..	..	..
Indonesia	..	*11.0*	..	*12.5*	..	*16.2*	*2.8*	*17.9*	..	17
Iran, Islamic Rep.	9.1	15.1	9.9	21.0	*34.8*	22.2	4.7	20.9	98.4	20
Iraq	..	..	..	..	..	..	..	..	..	*17*
Ireland	11.0	*15.7*	16.8	*23.2*	28.6	*26.2*	*4.9*	*13.8*	..	*16*
Israel	20.5	*19.4*	21.9	*19.0*	30.9	*22.7*	*5.9*	*13.1*	..	*13*
Italy	24.0	*22.6*	27.7	*25.2*	27.6	*22.1*	*4.3*	*9.0*	..	*10*
Jamaica	13.4	15.8	21.0	*26.8*	*70.4*	*42.4*	5.8	..	..	..
Japan	21.1	21.7	20.9	*22.4*	15.1	*20.1*	*3.5*	*9.4*	..	*18*
Jordan	13.7	*12.7*	15.8	*16.3*	..	..	..	..	..	..
Kazakhstan	..	..	..	..	..	*7.9*	*2.8*	..	..	16
Kenya	21.5	..	*14.5*	..	*209.0*	..	..	..	96.8	47
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	18.4	*17.0*	15.7	*22.2*	8.4	9.0	*4.2*	*14.8*	..	*24*
Kosovo	..	..	..	..	..	..	*4.3*	*17.4*	..	..
Kuwait	19.2	*10.9*	..	*14.9*	..	..	..	..	100.0	9
Kyrgyz Republic	..	..	..	..	24.3	*17.3*	5.9	*19.0*	65.7	24
Lao PDR	2.3	..	4.5	..	68.6	..	*2.3*	*12.2*	96.9	29
Latvia	19.5	23.3	23.7	*24.1*	27.9	*16.3*	*5.0*	*13.9*	..	*11*
Lebanon	..	..	..	..	13.9	10.2	1.8	7.2	..	14
Lesotho	34.5	*22.6*	76.7	*50.8*	*875.4*	..	*12.4*	*23.7*	57.6	*37*
Liberia	..	*5.7*	..	*8.4*	..	..	*2.8*	*12.1*	*40.2*	24
Libya	..	..	..	..	23.9	..	..	..	..	..
Lithuania	..	*15.8*	..	*20.1*	*34.2*	*17.1*	*4.7*	*13.4*	..	*13*
Macedonia, FYR	..	..	..	..	..	..	..	..	..	*17*
Madagascar	5.7	7.1	..	10.5	..	132.4	3.0	*13.4*	..	48
Malawi	14.0	..	10.0	..	2,613.3	..	..	..	..	..
Malaysia	12.5	14.3	21.7	*12.4*	*81.1*	*34.0*	*4.1*	*17.2*	..	*15*
Mali	14.3	13.0	56.1	32.6	241.3	117.7	4.4	22.3	50.0	50
Mauritania	11.4	..	35.9	..	79.0	..	..	..	100.0	39
Mauritius	9.3	9.3	*14.2*	15.1	*25.4*	*16.7*	3.2	11.4	100.0	22
Mexico	11.7	*13.3*	14.2	*13.4*	47.8	*37.0*	*4.8*	..	*95.4*	28
Moldova	..	42.4	..	40.3	..	46.1	9.6	21.0	..	16
Mongolia	..	16.2	..	..	..	..	5.6	14.6	100.0	30
Morocco	17.2	*16.1*	45.1	*38.7*	96.2	*71.1*	*5.6*	*25.7*	100.0	27
Mozambique	..	..	..	..	1,412.2	..	..	..	71.2	61
Myanmar	..	..	6.9	..	*28.0*	..	..	..	98.9	*29*
Namibia	21.4	*15.6*	35.2	*15.8*	152.2	..	*6.4*	*22.4*	95.6	30
Nepal	9.1	17.6	13.1	*11.3*	*141.6*	55.5	4.6	19.5	*66.4*	33
Netherlands	15.2	*16.9*	22.2	*24.5*	47.4	*40.2*	*5.3*	*11.7*	..	..
New Zealand	20.2	*17.6*	24.1	*19.6*	40.1	*28.6*	*6.1*	..	..	*15*
Nicaragua	..	..	..	..	..	..	..	..	*72.7*	29
Niger	..	28.3	..	56.6	..	429.3	4.5	19.3	98.0	39
Nigeria	..	..	..	..	..	..	..	..	..	*46*
Norway	21.8	*18.5*	*30.4*	*26.5*	45.8	*47.3*	*6.8*	*16.5*	..	..
Oman	11.2	..	21.8	..	..	..	..	..	100.0	*12*
Pakistan	..	..	..	..	..	..	2.7	11.2	85.2	40
Panama	13.7	*7.5*	19.1	9.9	33.6	*21.6*	*3.8*	..	91.5	*24*
Papua New Guinea	..	..	..	..	..	..	..	..	..	..
Paraguay	13.6	*10.8*	*18.5*	*16.3*	*58.9*	*26.0*	*4.0*	*11.9*	..	*26*
Peru	7.6	*8.1*	*10.8*	9.9	*21.2*	..	*2.7*	*20.7*	..	*21*
Philippines	12.8	*9.0*	*11.0*	*9.1*	*15.4*	9.6	*2.8*	*16.9*	..	34
Poland	..	*24.3*	*10.9*	*22.0*	21.1	*16.6*	*4.9*	*11.7*	..	*10*
Portugal	19.5	..	27.5	..	28.1	..	..	..	..	*11*
Puerto Rico	..	..	..	..	..	..	..	..	6.6	12
Qatar	..	9.2	..	9.8	..	337.7	..	..	48.9	11

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	2009[a]	1999	2009[a]	1999	2009[a]	2009[a]	2009[a]	2009[a]	2009[a]
Romania	..	*20.0*	..	*16.6*	*32.6*	*26.2*	*4.3*	*11.8*	..	*16*
Russian Federation	..	..	..	..	*10.9*	..	..	..	..	*17*
Rwanda	11.0	8.2	*41.9*	*34.3*	*1,206.8*	*222.8*	*4.1*	*20.4*	93.9	68
Saudi Arabia	..	*18.4*	..	*18.3*	..	..	*5.6*	*19.3*	*91.5*	11
Senegal	14.1	20.9	..	*25.7*	..	191.5	5.8	*19.0*	..	35
Serbia	..	56.9	..	*13.6*	..	*40.1*	*4.7*	*9.3*	94.2	16
Sierra Leone	..	*7.1*	..	*18.0*	..	..	4.3	18.1	49.4	44
Singapore	..	10.5	..	15.7	..	27.3	3.0	11.6	94.3	*19*
Slovak Republic	10.2	15.6	18.4	*14.7*	32.9	*19.5*	*3.6*	*10.5*	..	*17*
Slovenia	26.3	..	25.7	..	*27.9*	..	..	..	..	*17*
Somalia	..	..	..	..	..	..	..	..	..	*36*
South Africa	14.2	15.1	20.0	17.7	..	..	5.4	16.9	87.4	*31*
Spain	18.0	19.4	24.4	*24.1*	19.6	*25.1*	*4.3*	*11.1*	..	*12*
Sri Lanka	..	..	..	..	..	..	..	..	..	*23*
Sudan	..	..	..	..	..	..	..	..	59.7	38
Swaziland	8.5	13.0	23.7	*36.2*	*444.5*	..	*7.8*	*21.6*	*94.0*	32
Sweden	22.5	25.0	26.2	*30.6*	52.1	*38.3*	6.6	*12.7*	..	*10*
Switzerland	22.7	22.5	27.3	*25.2*	53.8	*46.7*	*5.2*	*16.1*	..	..
Syrian Arab Republic	11.2	18.3	21.7	15.5	..	..	*4.9*	*16.7*	..	*18*
Tajikistan	..	..	..	..	..	21.8	3.5	18.7	88.3	23
Tanzania	..	22.1	..	18.8	..	..	*6.8*	*27.5*	100.0	54
Thailand	17.8	24.0	15.9	9.1	*36.0*	22.3	4.1	20.3	..	*16*
Timor-Leste	..	27.6	..	..	..	92.7	16.8	15.5	..	29
Togo	8.5	13.0	30.3	*19.1*	..	*155.2*	4.6	17.6	*14.6*	41
Trinidad and Tobago	11.5	9.0	12.2	9.9	148.7	..	..	..	88.0	*17*
Tunisia	15.6	..	27.1	..	89.4	*54.5*	*7.1*	*22.4*	..	17
Turkey	9.8	..	9.6	..	*33.5*	..	..	..	..	..
Turkmenistan	..	..	..	..	..	..	..	..	..	..
Uganda	..	7.3	..	21.2	..	105.4	3.2	15.0	*89.4*	49
Ukraine	..	..	..	..	*36.5*	*25.1*	*5.3*	*20.2*	99.9	16
United Arab Emirates	8.7	4.9	11.6	6.7	*41.4*	15.5	1.2	23.4	100.0	16
United Kingdom	13.9	23.0	23.8	*28.2*	25.6	*24.4*	*5.5*	*11.7*	..	*18*
United States	17.9	22.0	22.5	*24.2*	27.0	*21.7*	*5.5*	*14.1*	..	*14*
Uruguay	7.2	..	9.9	..	..	..	..	..	..	*15*
Uzbekistan	..	..	..	..	..	..	..	..	100.0	17
Venezuela, RB	..	9.2	..	*8.2*	..	..	*3.7*	..	86.3	16
Vietnam	..	19.7	..	*17.3*	..	61.7	*5.3*	*19.8*	99.6	20
West Bank and Gaza	..	..	..	..	..	..	..	..	100.0	28
Yemen, Rep.	..	..	..	..	..	..	*5.2*	*16.0*	..	..
Zambia	7.2	..	19.4	..	*164.6*	..	*1.3*	..	..	*61*
Zimbabwe	12.7	..	19.3	..	*193.0*	..	..	..	..	..
World	**.. m**	**.. m**	**.. m**	**.. m**	**.. m**	**.. m**	**4.5 m**	**.. m**	**.. m**	**24 w**
Low income	..	..	..	..	..	..	*3.7*	..	80.4	*46*
Middle income	..	..	..	..	..	..	*4.1*	..	..	*23*
Lower middle income	..	..	..	..	..	..	..	..	..	*23*
Upper middle income	12.0	*13.8*	*16.4*	*17.0*	..	..	*4.5*	*13.5*	..	21
Low & middle income	..	..	..	..	..	..	..	..	..	*26*
East Asia & Pacific	..	..	..	..	*38.2*	..	*3.5*	*15.9*	..	*18*
Europe & Central Asia	..	..	..	..	..	..	*4.2*	*13.4*	..	*17*
Latin America & Carib.	12.7	*12.2*	*13.7*	*13.4*	..	..	*4.0*	..	..	*24*
Middle East & N. Africa	..	..	..	..	..	..	*4.6*	*18.0*	..	*23*
South Asia	..	..	13.6	..	*90.8*	..	*2.9*	..	..	..
Sub-Saharan Africa	..	..	..	..	..	..	*3.8*	..	..	*45*
High income	18.0	*19.4*	22.5	*23.9*	31.4	*25.2*	*5.1*	*12.5*	..	*15*
Euro area	17.4	*17.6*	25.1	*24.8*	29.1	*28.9*	*5.2*	*11.1*	..	*15*

a. Provisional data.

Education inputs 2.11

About the data

Data on education are collected by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics from official responses to its annual education survey. The data are used for monitoring, policymaking, and resource allocation. While international standards ensure comparable datasets, data collection methods may vary by country and within countries over time.

For most countries the data on education spending in the table refer to public spending—total government spending on education at all levels plus subsidies provided to households and other private entities—and generally exclude the part of foreign aid for education that is not included in the government budget. The data may also exclude spending by religious schools, which play a significant role in many developing countries. Data are gathered from ministries of education and from other ministries or agencies involved in education spending.

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. 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).

High-quality data on education finance are scarce. Improving the quality of education finance data is a priority of the UNESCO Institute for Statistics. Additional resources are being allocated for technical assistance to countries in need, especially those in Sub-Saharan Africa. Interagency partnerships and collaborations with national ministries in charge of education finance data are improving, and actual expenditure data are increasingly being collected. Tracking private educational spending is still a challenge for all countries.

The share of trained teachers in primary education reveals a country's commitment to invest in the development of its human capital engaged in teaching, but it does not take into account differences in teachers' experiences and status, teaching methods, teaching materials, and classroom conditions—all factors that affect the quality of teaching and learning. Some teachers without this formal training may have acquired equivalent pedagogical skills through professional experience.

The primary school pupil–teacher ratio reflects the average number of pupils per teacher at the specified level of education. 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 student learning and quality of education.

All education data published by the UNESCO Institute for Statistics are mapped to the *International Standard Classification of Education 1997* (ISCED 1997). This classification system ensures the comparability of education programs at the international level. UNESCO developed the ISCED to facilitate comparisons of education statistics and indicators of different countries on the basis of uniform and internationally agreed definitions. First developed in the 1970s, the current version was formally adopted in November 1997.

The reference years shown in the table reflect the school year for which the data are presented. In some countries the school year spans two calendar years (for example, from September 2009 to June 2010); in these cases the reference year refers to the year in which the school year ended (2010 in the previous example).

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 expenditures on education by local, regional, and national governments, including municipalities. • **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 at the specified level of education 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 (www.uis.unesco.org).

2.12 Participation in education

	Gross enrollment ratio				Net enrollment rate				Adjusted net enrollment rate, 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
	2009[a]	2009[a]	2009[a]	2009[a]	1991	2009[a]	1999	2009[a]	2009[a]	2009[a]	2009[a]	2009[a]
Afghanistan	..	104	44	4	*28*	..	..	*27*	..	..	..	..
Albania	58	119	72	..	..	85	70	..	86	84	15	16
Algeria	*23*	108	..	31	89	94	..	..	96	94	59	82
Angola	*40*	*128*	..	..	..	..	..	..	..	..	..	..
Argentina	*69*	*116*	*85*	*68*	..	..	76	*79*	..	..	..	..
Armenia	33	99	93	50	..	*84*	*86*	87	*92*	*94*	*5*	*3*
Australia	*82*	*106*	*149*	*77*	98	*97*	*90*	*88*	*97*	*98*	*33*	*22*
Austria	*95*	*100*	*100*	*55*	*90*	..	..	..	..	..	..	..
Azerbaijan	24	95	99	19	89	85	75	93	86	85	38	37
Bangladesh	10	95	*42*	8	*64*	86	40	*41*	86	93	1,234	575
Belarus	*102*	*99*	*95*	77	..	*94*	*82*	*87*	*94*	*96*	*12*	*7*
Belgium	*122*	*103*	*108*	*63*	96	*98*	..	..	*98*	*99*	6	*4*
Benin	14	122	..	..	*51*	95	18	..	*99*	*86*	*7*	*91*
Bolivia	*47*	*107*	*81*	*38*	..	*91*	*68*	69	*92*	*92*	*58*	*53*
Bosnia and Herzegovina	15	109	91	37	..	87	..	..	86	88	11	9
Botswana	*17*	*109*	*82*	..	89	*87*	54	*60*	*86*	*88*	*21*	*18*
Brazil	65	120	90	38	..	95	66	52	96	*94*	*289*	*393*
Bulgaria	*81*	*101*	*89*	*51*	..	*96*	85	*83*	*97*	*98*	*4*	*3*
Burkina Faso	3	78	20	3	27	63	9	15	68	60	392	473
Burundi	10	147	21	3	*50*	99	..	*9*	98	100	9	1
Cambodia	19	116	*40*	10	..	95	15	*34*	*90*	*87*	99	*131*
Cameroon	26	114	41	9	69	92	..	..	97	86	38	210
Canada	*71*	*98*	..	..	98	..	*95*	..	..	..	..	..
Central African Republic	5	89	14	2	53	67	..	10	77	57	78	149
Chad	1	90	24	2	..	..	7	..	..	..	..	..
Chile	*55*	*106*	*90*	*55*	..	*95*	..	*85*	*96*	*95*	*35*	*41*
China	47	113	78	25	97	..	..	..	..	..	..	..
Hong Kong SAR, China	121	104	82	57	..	94	*74*	75	97	100	6	0[b]
Colombia	51	120	95	37	71	90	56	74	93	93	155	152
Congo, Dem. Rep.	4	90	37	6	56	..	..	..	..	..	..	..
Congo, Rep.	13	120	..	6	..	..	..	..	..	..	..	..
Costa Rica	70	110	96	..	87	..	..	..	..	..	..	..
Côte d'Ivoire	4	74	..	*8*	46	57	*19*	..	62	52	609	774
Croatia	60	94	90	51	..	*91*	81	..	*91*	*92*	*8*	*8*
Cuba	105	104	90	118	94	99	73	83	*100*	*99*	*2*	*2*
Czech Republic	*111*	*103*	*95*	*58*	..	..	*81*	..	..	..	..	..
Denmark	*96*	*98*	*119*	*78*	98	*95*	*88*	*90*	*94*	*97*	*12*	*7*
Dominican Republic	37	106	77	..	..	87	38	61	96	89	23	70
Ecuador	131	117	81	*42*	..	97	46	*59*	..	..	..	..
Egypt, Arab Rep.	*16*	*100*	..	*28*	..	*94*	*71*	..	*97*	*93*	*137*	*324*
El Salvador	*60*	*115*	*64*	*25*	..	*94*	*47*	*55*	*95*	*96*	*23*	*15*
Eritrea	13	48	32	2	*20*	36	17	27	39	34	190	202
Estonia	*95*	*100*	*99*	*64*	..	*94*	*84*	*89*	*96*	*97*	*1*	*1*
Ethiopia	4	102	34	*4*	*30*	83	12	..	86	81	929	1,255
Finland	*65*	*97*	*110*	*94*	*99*	*96*	95	*96*	*96*	*96*	*7*	*7*
France	*110*	*110*	*113*	*55*	100	*98*	94	*98*	*99*	*99*	*18*	*15*
Gabon	..	..	..	..	..	..	..	..	..	..	..	..
Gambia, The	*22*	*86*	*51*	*5*	*50*	*69*	26	*42*	69	*74*	*40*	*33*
Georgia	*63*	108	108	25	..	100	76	*81*	*96*	*93*	6	*10*
Germany	*109*	*105*	*102*	..	*84*	*98*	..	..	..	..	..	..
Ghana	70	105	57	9	..	76	33	46	76	77	430	398
Greece	*69*	*101*	*102*	*91*	95	*99*	82	*91*	*99*	*100*	*2*	0[b]
Guatemala	*29*	*114*	*57*	*18*	..	*95*	24	*40*	*98*	*95*	*23*	*55*
Guinea	12	90	37	*9*	27	73	12	*29*	78	68	174	244
Guinea-Bissau	..	..	..	..	..	..	*10*	..	..	..	..	..
Haiti	..	..	..	..	21	..	..	..	..	..	..	..
Honduras	*40*	*116*	*65*	*19*	88	*97*	..	..	*96*	*96*	*22*	*9*

2.12 Participation in education

	Gross enrollment ratio				Net enrollment rate				Adjusted net enrollment rate, 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
	2009[a]	2009[a]	2009[a]	2009[a]	1991	2009[a]	1999	2009[a]	2009[a]	2009[a]	2009[a]	2009[a]
Hungary	*87*	99	97	*65*	..	*90*	82	*91*	*95*	95	9	9
India	*54*	*117*	*60*	*13*	..	*91*	..	..	*91*	*88*	*5,543*	*7,112*
Indonesia	50	121	79	24	95	95	*50*	69	..	..	..	..
Iran, Islamic Rep.	40	103	83	36	*97*	*99*	..	..	..	..	..	..
Iraq	*6*	*103*	*51*	..	*76*	*88*	30	*43*	*93*	*82*	*176*	*415*
Ireland	..	*105*	*115*	*58*	90	*97*	84	*88*	*96*	*98*	9	5
Israel	*97*	*111*	*90*	*60*	..	*97*	86	*86*	*97*	*98*	*13*	9
Italy	*100*	*103*	*101*	*67*	..	*98*	*88*	*95*	*100*	99	5	*15*
Jamaica	*86*	*93*	*91*	*24*	97	*80*	83	*77*	*82*	*79*	*31*	*35*
Japan	*89*	*102*	*101*	*58*	100	*100*	99	*98*	..	..	..	..
Jordan	*36*	*97*	*88*	*41*	..	*89*	79	*82*	*93*	*94*	*30*	*23*
Kazakhstan	52	108	99	41	..	89	*87*	89	89	90	52	42
Kenya	51	113	59	4	..	83	*33*	50	83	84	532	497
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	*111*	*105*	*97*	*98*	*99*	*99*	*97*	*95*	*100*	*98*	*4*	*31*
Kosovo	..	..	..	..	..	..	..	..	..	..	..	..
Kuwait	*76*	95	90	29	*47*	*88*	89	*80*	*94*	*93*	*6*	*8*
Kyrgyz Republic	18	95	84	51	..	84	..	79	91	91	19	18
Lao PDR	22	121	*44*	*13*	*59*	93[c]	26	*36*	*84*	*81*	*65*	*76*
Latvia	*89*	*98*	*98*	*69*	..	..	..	..	..	..	..	..
Lebanon	77	103	82	53	..	90	..	75	92	90	19	21
Lesotho	..	104	45	..	72	73	17	29	71	76	54	45
Liberia	*145*	*91*	..	..	..	..	*20*	..	..	..	..	..
Libya	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	*72*	*96*	*99*	*77*	..	*92*	90	*92*	*96*	*96*	*3*	*3*
Macedonia, FYR	*23*	*88*	*84*	*40*	..	*86*	79	..	*91*	*92*	*6*	*5*
Madagascar	10	160	32	4	72	*98*	..	26	*99*	*100*	*16*	*3*
Malawi	..	119	30	*0*	..	91	29	25	89	94	152	85
Malaysia	*71*	*95*	*69*	*36*	..	*94*	65	*68*	*94*	*94*	*97*	*95*
Mali	4	95	38	6	..	73	..	30	84	70	165	304
Mauritania	..	104	*24*	4	..	76	*14*	*16*	74	79	66	51
Mauritius	98	100	87	*26*	93	94	67	..	93	95	4	3
Mexico	*114*	*114*	*90*	*27*	98	*98*	56	*72*	*99*	*100*	*39*	*23*
Moldova	74	94	88	38	..	88	79	80	91	90	8	8
Mongolia	59	110	92	53	..	90	58	82	99	99	*1*	*1*
Morocco	*57*	107	*56*	13	56	90	*30*	..	92	88	154	203
Mozambique	..	114	23	..	42	91	3	15	93	88	149	264
Myanmar	7	116	53	*11*	..	..	31	50	..	..	..	..
Namibia	..	112	*66*	*9*	*82*	89	39	*54*	88	92	22	14
Nepal	..	..	..	..	..	..	..	..	..	..	..	..
Netherlands	*100*	*107*	*121*	*61*	95	99	91	*88*	99	99	*4*	9
New Zealand	*94*	*101*	*119*	*78*	100	99	*90*	..	*99*	*100*	*1*	*0*[b]
Nicaragua	*56*	*117*	*68*	..	70	*92*	*35*	*45*	*93*	*94*	*29*	*24*
Niger	3	62	12	1	23	54	6	*9*	60	48	511	637
Nigeria	*16*	*93*	*30*	..	..	*61*	..	*26*	*66*	*60*	*4,023*	*4,626*
Norway	*95*	*99*	*112*	*73*	100	*99*	96	*96*	*99*	*99*	*3*	*3*
Oman	38	84	91	26	69	77	65	82	82	81	33	34
Pakistan	..	85	33	6	..	66	..	33	72	60	3,108	4,191
Panama	66	109	73	*45*	*92*	97	59	66	98	97	4	6
Papua New Guinea	..	..	..	..	*65*	..	..	..	..	..	..	..
Paraguay	*109*	*102*	*67*	*29*	94	*87*	46	*59*	*88*	*88*	*52*	*50*
Peru	*72*	*109*	*89*	..	*86*	*94*	62	*71*	*97*	*98*	*54*	*43*
Philippines	*49*	*110*	*82*	*29*	96	*92*	50	*61*	*91*	*93*	*555*	*407*
Poland	*62*	*97*	*100*	*69*	..	*95*	*90*	*94*	*95*	*95*	*62*	*55*
Portugal	*81*	*115*	*104*	*60*	98	*99*	82	*88*	*99*	*99*	*2*	*4*
Puerto Rico	154	91	84	*78*	..	..	..	..	..	..	..	..
Qatar	53	106	85	10	89	93	74	77	98	98	1	1

2.12 Participation in education

	Gross enrollment ratio				Net enrollment rate				Adjusted net enrollment rate, 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
	2009[a]	2009[a]	2009[a]	2009[a]	1991	2009[a]	1999	2009[a]	2009[a]	2009[a]	2009[a]	2009[a]
Romania	*73*	*100*	*92*	*66*	*73*	*90*	75	*73*	*96*	*97*	*16*	*14*
Russian Federation	*90*	*97*	*85*	*77*	..	..	..	..	..	..	..	..
Rwanda	17	151	27	5	..	*96*	..	..	*95*	*97*	*38*	*22*
Saudi Arabia	11	99	97	37	..	86	..	72	88	85	205	244
Senegal	12	84	*30*	8	*45*	73	..	..	74	76	262	232
Serbia	51	98	91	50	..	94	..	90	96	96	5	6
Sierra Leone	*5*	*158*	*35*	..	..	..	..	*25*	..	..	..	..
Singapore	..	..	..	..	..	..	..	..	..	..	..	..
Slovak Republic	*94*	*103*	*92*	*54*	..	..	..	..	..	..	..	..
Slovenia	*83*	*97*	*97*	*87*	..	*97*	90	*91*	*98*	*97*	*1*	*1*
Somalia	..	*33*	*8*	..	..	..	..	..	..	..	..	..
South Africa	64	101	94	..	90	85	63	*72*	89	91	385	331
Spain	*126*	*107*	*120*	*71*	100	*100*	88	*95*	*100*	*100*	*1*	*3*
Sri Lanka	..	97	..	..	..	95	..	..	95	96	45	36
Sudan	28	74	38	..	..	..	..	..	..	..	..	..
Swaziland	..	*108*	*53*	..	74	*83*	32	*29*	*82*	*84*	*19*	*18*
Sweden	*102*	*95*	*103*	*71*	100	*95*	96	*99*	*95*	*94*	*16*	*17*
Switzerland	*102*	*103*	*96*	*49*	84	*94*	84	*85*	*99*	*99*	*3*	*1*
Syrian Arab Republic	9	122	75	..	91	..	36	69	..	..	..	..
Tajikistan	*9*	*102*	*84*	20	..	*97*	63	*83*	*99*	*96*	*2*	*15*
Tanzania	33	105	27	..	51	96	*5*	..	96	97	160	107
Thailand	92	91	76	45	..	90	..	*71*	91	89	281	305
Timor-Leste	..	113	51	15	..	82	*23*	..	84	82	15	17
Togo	7	115	*41*	*5*	65	94	20	..	98	89	10	56
Trinidad and Tobago	81	104	*89*	..	90	93	70	*74*	97	94	2	4
Tunisia	..	*107*	*92*	*34*	94	*98*	*63*	*71*	*99*	*100*	*6*	*0*[b]
Turkey	*18*	*99*	*82*	*38*	89	*95*	*62*	*74*	*96*	*94*	*147*	*214*
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	*12*	122	27	4	..	92	8	*22*	91	94	310	213
Ukraine	101	98	94	*79*	..	89	*91*	*85*	*89*	*90*	*89*	*81*
United Arab Emirates	94	105	95	30	97	90	69	83	98	97	2	4
United Kingdom	*81*	*106*	99	*57*	97	*100*	95	*93*	*100*	*100*	*5*	*1*
United States	*58*	99	*94*	*83*	97	*92*	88	*88*	*93*	*94*	*944*	*770*
Uruguay	*86*	*114*	*88*	*65*	91	99	..	*70*	99	99	*1*	*2*
Uzbekistan	26	92	104	10	..	87	..	92	91	89	101	119
Venezuela, RB	77	103	82	*79*	..	92	47	71	94	94	108	96
Vietnam	..	..	..	..	..	..	59	..	..	..	..	..
West Bank and Gaza	34	79	87	46	..	75	77	85	78	77	57	55
Yemen, Rep.	..	*85*	..	*10*	..	*73*	32	..	*80*	66	*395*	*641*
Zambia	..	113	49	..	..	91	17	46	91	94	112	78
Zimbabwe	..	..	..	3	..	..	40	..	..	..	..	..
World	***44*** **w**	***107*** **w**	***67*** **w**	***26*** **w**	***..*** **w**	***88*** **w**	***52*** **w**	***59*** **w**	***91*** **w**	***89*** **w**		
Low income	*15*	*104*	*38*	*6*	..	*80*	..	..	*83*	*79*		
Middle income	*46*	*109*	*68*	*24*	..	*88*	..	..	*92*	*90*		
Lower middle income	*42*	*107*	*63*	*19*	..	*87*	..	..	*91*	*88*		
Upper middle income	*63*	*111*	*88*	*42*	..	*93*	67	*75*	*94*	*94*		
Low & middle income	*40*	*107*	*63*	*21*	..	*87*	..	*55*	*90*	*88*		
East Asia & Pacific	*44*	*111*	*74*	..	96	..	..	..	..	..		
Europe & Central Asia	55	99	*89*	*55*	90	*92*	*79*	*81*	*94*	*94*		
Latin America & Carib.	68	*116*	*89*	*35*	..	*94*	59	*73*	*95*	*95*		
Middle East & N. Africa	*20*	*105*	*73*	*27*	..	*89*	*60*	*64*	*92*	*89*		
South Asia	..	*108*	*52*	*11*	68	*86*	..	..	*92*	*88*		
Sub-Saharan Africa	*17*	*100*	*34*	*6*	..	*75*	..	..	*78*	*75*		
High income	*77*	*101*	*100*	67	95	*95*	88	*90*	*95*	*96*		
Euro area	*110*	..	..	..	..	..	..	..	..	..		

a. Provisional data. b. Less than 0.5. c. Data are for 2010.

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 indicators 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.

Enrollment indicators are based on annual school surveys but do not necessarily reflect actual attendance or dropout rates during the year. Also, the length of primary education differs across countries and can influence enrollment rates and ratios, although the International Standard Classification of Education (ISCED) 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 older children are more at risk of dropping out).

Over- or under-age 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.

Population data used to calculate population-based indicators are drawn from the United Nations Population Division. Using a single source for population data standardizes definitions, estimations, and interpolation methods, ensuring a consistent methodology across countries and minimizing potential enumeration problems in national censuses.

Gross enrollment ratios indicate the capacity of each level of the education system, but a high ratio may reflect a substantial number of over-age children enrolled in each grade because of repetition or late entry, rather than a successful education system. The net enrollment rate excludes over- and under-age students and more accurately captures the system's coverage and internal efficiency. Differences between the gross enrollment ratio and net enrollment rate show the incidence of over- and under-age enrollments.

The adjusted net enrollment rate in primary education captures primary-school-age children who have progressed to secondary education faster than their peers and who would not be counted in the traditional net enrollment rate.

Data on children out of school (primary-school-age children not enrolled in primary or secondary 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.

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** (ISCED 0) refers to programs at the initial stage of organized instruction, designed primarily to introduce very young children, usually from age 3, to a school-type environment and to provide a bridge between the home and school. On completing these programs, children continue their education at the primary level. • **Primary education** (ISCED 1) refers to programs normally designed to give students a sound basic education in reading, writing, and mathematics along with an elementary understanding of other subjects such as history, geography, natural science, social science, art, and music. Religious instruction may also be featured. It is sometimes called elementary education. • **Secondary education** refers to programs of lower (ISCED 2) and upper (ISCED 3) secondary education. Lower secondary education continues the basic programs of the primary level, but the teaching is typically more subject focused, requiring more specialized teachers for each subject area. In upper secondary education, instruction is often organized even more along subject lines, and teachers typically need a higher or more subject-specific qualification. • **Tertiary education** refers to a wide range of programs with more advanced educational content. The first stage of tertiary education (ISECD 5) refers to theoretically based programs intended to provide sufficient qualifications to enter advanced research programs or professions with high-skill requirements and programs that are practical, technical, or occupationally specific. The second stage of tertiary education (ISCED 6) refers to programs devoted to advanced study and original research and leading to the award of an advanced research qualification. • **Net enrollment rate** is the ratio of total enrollment of children of official school age to the population of the age group that officially corresponds to the level of education shown. • **Adjusted net enrollment rate, 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 participation in education are from the UNESCO Institute for Statistics, www.uis.unesco.org.

2.13 Education efficiency

	Gross intake ratio in first grade of primary education		Cohort survival rate						Repeaters in primary education		Transition rate to secondary education	
	% 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
	2009[a]	2009[a]	1991	2008[a]	1991	2008[a]	2008[a]	2008[a]	2009[a]	2009[a]	2008[a]	2008[a]
Afghanistan	129	93	*89*	..	*89*	..	..	..	..	..	..	..
Albania	89	82	..	..	..	..	..	..	2	1	..	..
Algeria	101	99	82	94	79	95	*91*	*95*	13	8	*90*	*92*
Angola	..	..	..	..	..	..	..	..	..	..	..	..
Argentina	*111*	*111*	..	*95*	..	*98*	*93*	97	*7*	*5*	*93*	96
Armenia	86	89	..	..	..	..	*98*	97	0[b]	0[b]	*100*	*98*
Australia	..	..	98	..	99	..	..	..	..	..	..	..
Austria	*104*	*100*	..	..	..	..	*96*	99	*0*	*0*	*100*	99
Azerbaijan	95	94	..	..	..	..	100	97	0[b]	0[b]	100	98
Bangladesh	101	105	..	67	..	66	67	66	14	13	..	..
Belarus	*97*	*102*	..	..	..	..	99	99	0[b]	0[b]	*100*	*100*
Belgium	97	98	87	*90*	90	*92*	*86*	*88*	*4*	*3*	*100*	99
Benin	161	152	30	..	31	..	..	..	14	14	..	..
Bolivia	*114*	*113*	*57*	*86*	*51*	*85*	*85*	*82*	*1*	*1*	*96*	*94*
Bosnia and Herzegovina	*89*	*92*	..	..	..	..	..	..	0[b]	0[b]	..	..
Botswana	*114*	*112*	73	..	81	..	..	..	6	*4*	*98*	97
Brazil	..	..	..	..	..	..	..	..	..	..	..	..
Bulgaria	*107*	*108*	..	..	..	..	*93*	*94*	*2*	*1*	*95*	95
Burkina Faso	90	83	61	73[c]	58	78[c]	61[c]	67[c]	11	11	56[c]	51[c]
Burundi	152	146	66	*62*	61	*68*	*56*	*64*	32	32	48	23
Cambodia	158	157	..	68	..	71	60	63	10	8	80	81
Cameroon	134	117	67	76	66	79	68	69	15	14	42	45
Canada	..	..	..	..	..	..	..	..	..	..	..	..
Central African Republic	110	86	52	58	39	48	51	41	24	24	45	45
Chad	131	98	*43*	..	*22*	..	..	..	22	24	*64*	*65*
Chile	*101*	*98*	..	96	..	*97*	..	..	*3*	*2*	*86*	*100*
China	94	98	..	..	..	..	..	..	0[b]	0[b]	..	..
Hong Kong SAR, China	117	124	..	*100*	..	*100*	*100*	*100*	1	1	100	100
Colombia	118	114	53	*82*	59	*89*	*82*	*89*	2	2	100	100
Congo, Dem. Rep.	119	106	66	*78*	55	*77*	*78*	*73*	15	16	*83*	*76*
Congo, Rep.	115	112	66	*75*	68	*79*	*71*	*71*	21	19	65	62
Costa Rica	98	96	70	95	73	97	93	96	6	4	97	91
Côte d'Ivoire	77	67	68	66	61	66	62	59	19	19	47	45
Croatia	*95*	*94*	..	..	..	..	*97*	99	0[b]	0[b]	*100*	99
Cuba	100	102	..	96	..	96	96	95	1	0[b]	99	98
Czech Republic	*109*	*107*	..	*99*	..	*99*	*99*	*99*	*1*	*1*	*99*	*99*
Denmark	*98*	*99*	*98*	*100*	*99*	*99*	*99*	*99*	*0*	*0*	*95*	*98*
Dominican Republic	109	90	..	..	..	..	..	..	9	5	88	92
Ecuador	119	124	..	*80*	..	*83*	*79*	*82*	6	5	*81*	*77*
Egypt, Arab Rep.	*98*	*96*	..	..	..	..	..	..	*4*	*2*	..	..
El Salvador	*123*	*119*	54	*78*	57	*82*	*74*	*78*	*7*	*5*	*92*	*92*
Eritrea	45	39	..	74	..	72	74	72	14	13	85	81
Estonia	*102*	*102*	..	99	..	*98*	99	*98*	*1*	0[b]	*97*	99
Ethiopia	158	141	..	43	..	49	35	41	6	5	84	87
Finland	*100*	*98*	96	99	97	*100*	*99*	*100*	*1*	0[b]	*100*	*100*
France	..	..	..	..	..	..	..	..	..	..	..	..
Gabon	..	..	*47*	..	*46*	..	..	..	..	..	..	..
Gambia, The	*91*	96	*59*	*71*	*53*	*72*	68	*72*	6	*5*	*83*	*83*
Georgia	107	112	..	96	..	95	95	94	0[b]	0[b]	99	99
Germany	*100*	99	..	..	..	..	*95*	*96*	*1*	*1*	99	99
Ghana	109	111	72	80	65	78	75	71	7	6	91	92
Greece	*102*	*103*	..	*98*	..	*97*	*98*	*97*	*1*	*1*	..	..
Guatemala	*123*	*121*	..	*71*	..	*70*	*65*	*64*	*13*	*11*	*93*	*90*
Guinea	106	96	43	72	35	64	68	57	15	16	50	40
Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	..	..
Haiti	..	..	47	..	46	..	..	..	..	..	..	..
Honduras	*126*	*122*	50	*75*	43	*80*	*74*	*79*	*6*	*5*	*82*	*86*

2.13 Education efficiency

	Gross intake ratio in first grade of primary education		Cohort survival rate						Repeaters in primary education		Transition rate to secondary education	
	% 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
	2009[a]	2009[a]	1991	2008[a]	1991	2008[a]	2008[a]	2008[a]	2009[a]	2009[a]	2008[a]	2008[a]
Hungary	*103*	*103*	..	..	..	..	99	99	*2*	*1*	99	99
India	*132*	*124*	..	*67*	..	*70*	67	*70*	*3*	*3*	*81*	*81*
Indonesia	125	122	..	*83*	..	*89*	*77*	*83*	4	3	91	93
Iran, Islamic Rep.	100	100	75	94	67	94	94	95	*2*	2	96	97
Iraq	*105*	*103*	*75*	..	*70*	..	..	..	*19*	*14*	..	..
Ireland	*99*	*101*	..	*98*	..	*100*	..	..	*1*	*1*	..	..
Israel	*96*	98	..	*100*	..	*98*	99	*98*	*2*	*1*	*71*	*70*
Italy	*102*	*101*	..	*99*	..	*100*	99	*100*	*0*[b]	*0*[b]	*100*	*100*
Jamaica	*90*	*86*	*92*	..	*94*	..	..	..	*3*	*3*	..	..
Japan	*102*	*102*	100	*100*	100	*100*	*100*	*100*	*0*	*0*	..	..
Jordan	99	99	93	..	89	..	..	..	*1*	*1*	99	*98*
Kazakhstan	105	106	..	..	..	..	98[c]	99[c]	0[b]	0[b]	100[c]	100[c]
Kenya	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	*106*	*104*	*92*	*98*	*92*	99	*98*	99	*0*[b]	*0*[b]	*100*	*100*
Kosovo	..	..	..	..	..	..	..	..	..	..	..	..
Kuwait	*95*	*93*	..	95	..	96	95	96	*1*	*1*	99	100
Kyrgyz Republic	97	97	..	..	..	..	96	97	0[b]	0[b]	99	100
Lao PDR	*124*	*115*	*34*	*66*	*32*	*68*	*66*	*68*	15[d]	13[d]	*80*	*77*
Latvia	*104*	*105*	..	*98*	..	*94*	*97*	*94*	*5*	*2*	*92*	*97*
Lebanon	100	105	..	94	..	96	90	93	11	7	84	89
Lesotho	106	98	53	*56*	77	*69*	*38*	*56*	23	16	*68*	*66*
Liberia	*117*	*107*	..	*64*	..	*56*	*49*	*43*	*6*	*7*	*64*	*60*
Libya	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	*97*	*94*	..	..	..	..	*98*	*98*	*1*	*1*	99	99
Macedonia, FYR	*92*	*93*	..	..	..	..	*98*	*97*	*0*[b]	*0*[b]	*99*	*100*
Madagascar	198	196	31	48	31	50	48	50	21	20	57	55
Malawi	136	144	37	51	33	50	42	42	19	18	75	74
Malaysia	*89*	*89*	86	96	87	97	96	96	..	..	*100*	99
Mali	102	89	*48*	88	*42*	85	81	77	13	14	72	68
Mauritania	112	119	52	*48*	47	*51*	*40*	*42*	*2*	*2*	38	31
Mauritius	99	99	..	96	..	99	94	98	4	3	64	75
Mexico	*122*	*122*	*81*	*93*	*82*	*95*	*90*	*93*	*4*	*3*	*94*	*93*
Moldova	94	93	..	..	..	..	95	96	0[b]	0[b]	99	98
Mongolia	147	142	..	*94*	..	*95*	*94*	*95*	0[b]	0[b]	96	99
Morocco	107	106	70	84	64	85	78	78	13	9	*80*	*78*
Mozambique	163	156	42	56[c]	34	51[c]	37[c]	34[c]	7	7	52[c]	55[c]
Myanmar	140	135	..	70	..	69	70	69	0[b]	0[b]	74	73
Namibia	98	99	*52*	90	*57*	93	80	85	18	14	80	83
Nepal	..	..	*44*	*60*	*32*	*64*	*60*	*64*	*17*	*17*	*81*	*81*
Netherlands	*101*	*101*	..	99	..	*100*	..	..	..	..	..	..
New Zealand	..	..	96	..	95	..	..	..	..	..	..	..
Nicaragua	*158*	*148*	*39*	*48*	*48*	*55*	*45*	*52*	*13*	9	..	..
Niger	97	83	68	66[c]	65	62[c]	63[c]	60[c]	5	5	56[c]	62[c]
Nigeria	*102*	*83*	..	..	..	..	..	..	..	..	*44*	*44*
Norway	*97*	*99*	99	*99*	100	*100*	99	99	..	..	*100*	*100*
Oman	88	86	*77*	..	*78*	..	..	..	1	2	..	..
Pakistan	111	96	..	61	..	60	61	60	3	3	73	72
Panama	105	103	..	88	..	91	86	88	6	4	96	97
Papua New Guinea	..	..	55	..	52	..	..	..	..	..	..	..
Paraguay	*101*	*97*	58	*82*	60	*85*	*77*	*81*	*5*	*3*	*88*	*89*
Peru	*100*	*100*	..	*87*	..	*88*	*82*	*84*	*7*	*7*	*94*	*93*
Philippines	*139*	*130*	..	*75*	..	*82*	*71*	*80*	*3*	*2*	*100*	*98*
Poland	..	..	..	..	..	..	..	..	*2*	*1*	..	..
Portugal	*107*	*103*	..	..	..	..	..	..	..	..	..	..
Puerto Rico	97	94	..	..	..	..	..	..	..	..	..	..
Qatar	103	108	*98*	*92*	*99*	99	*91*	97	0[b]	0[b]	100	100

2.13 Education efficiency

	Gross intake ratio in first grade of primary education		Cohort survival rate						Repeaters in primary education		Transition rate to secondary education	
	% 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
	2009[a]	2009[a]	1991	2008[a]	1991	2008[a]	2008[a]	2008[a]	2009[a]	2009[a]	2008[a]	2008[a]
Romania	*101*	99	..	..	..	..	*93*	*94*	*2*	*1*	97	97
Russian Federation	..	..	..	..	..	..	..	..	..	..	..	..
Rwanda	194	189	49	46	51	51	..	..	15	14	..	..
Saudi Arabia	102	101	80	99	76	93	98	91	4	4	93	100
Senegal	96	102	*78*	69	*68*	71	56	59	8	7	62	57
Serbia	95	94	..	..	..	..	99	97	1	1	100	99
Sierra Leone	*201*	*182*	..	..	..	..	..	..	*10*	*10*	..	..
Singapore	..	..	..	99	..	99	99	99	0[b]	0[b]	86	92
Slovak Republic	*100*	99	..	..	..	..	*97*	*98*	*3*	*3*	97	97
Slovenia	*97*	*97*	..	..	..	..	..	..	*1*	0[b]	..	..
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	92	87	61	..	67	..	..	..	8	8	90	91
Spain	*105*	*106*	..	99	..	*100*	*99*	*100*	*3*	*2*	..	..
Sri Lanka	92	93	97	88	98	89	88	89	1	1	95	97
Sudan	*86*	*76*	..	*89*	..	*100*	*86*	*98*	4	4	*90*	*98*
Swaziland	*105*	*101*	58	*75*	64	*86*	*70*	*74*	*21*	*15*	..	..
Sweden	*104*	*103*	*99*	*100*	*99*	*100*	*100*	*100*	*0*	*0*	*100*	*100*
Switzerland	*93*	*96*	72	..	72	..	..	..	*2*	*1*	99	*100*
Syrian Arab Republic	117	113	87	..	85	..	93	94	9	7	94	96
Tajikistan	*106*	*101*	..	..	..	..	..	..	0[b]	0[b]	*98*	*98*
Tanzania	99	100	69	79	*71*	83	71	77	2	2	40	32
Thailand	..	..	..	..	..	..	..	..	*12*	*6*	*85*	*89*
Timor-Leste	142	134	..	72	..	80	68	78	21	18	86	88
Togo	*105*	*102*	55	*80*	38	*71*	*76*	*62*	23	22	*66*	*58*
Trinidad and Tobago	102	100	98	97	99	95	93	93	7	5	86	92
Tunisia	*106*	*107*	76	96	70	*96*	*94*	*95*	*10*	*6*	79	*86*
Turkey	*101*	*98*	*93*	*94*	*92*	*94*	*94*	*94*	*2*	*2*	..	..
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..
Uganda	140	143	..	57	..	58	54	53	14	14	58	55
Ukraine	*100*	*100*	..	..	..	..	*96*	*98*	0[b]	0[b]	*100*	*100*
United Arab Emirates	113	113	78	97	80	97	97	97	2	2	*98*	*99*
United Kingdom	..	..	..	..	..	..	..	..	*0*	*0*	..	..
United States	*103*	*109*	..	..	..	..	..	..	*0*	*0*	..	..
Uruguay	*101*	*111*	98	*93*	100	*96*	*93*	*96*	*8*	*5*	*81*	*93*
Uzbekistan	94	91	..	..	..	..	98	99	0[b]	0[b]	100	99
Venezuela, RB	101	98	69	92	80	96	89	95	4	3	97	97
Vietnam	..	..	..	..	..	..	..	..	..	..	..	..
West Bank and Gaza	77	77	..	..	..	..	99	97	0	0	97	97
Yemen, Rep.	*110*	*98*	..	..	..	..	..	..	*6*	*5*	..	..
Zambia	116	119	..	71	..	70	55	52	6	6	66	67
Zimbabwe	..	..	70	..	72	..	..	..	..	..	..	..
World	***114*** **w**	***110*** **w**	**.. w**	**.. w**	**.. w**	**.. w**	**.. w**	**.. w**	***5*** **w**	***4*** **w**	**.. w**	**.. w**
Low income	*133*	*126*	..	..	..	..	..	..	*11*	*11*	..	..
Middle income	*114*	*110*	..	..	..	..	..	..	*4*	*3*	..	..
Lower middle income	*115*	*110*	..	..	..	..	..	..	*4*	*3*	..	..
Upper middle income	..	..	..	..	..	..	..	..	..	..	..	..
Low & middle income	*115*	*111*	..	..	..	..	..	..	*5*	*4*	..	..
East Asia & Pacific	*105*	*107*	..	..	..	..	..	..	*1*	*1*	..	..
Europe & Central Asia	..	..	..	..	..	..	..	..	..	..	..	..
Latin America & Carib.	..	..	..	..	..	..	..	..	..	..	..	..
Middle East & N. Africa	*104*	*101*	..	..	..	..	..	..	*9*	*5*	..	..
South Asia	*126*	*117*	..	*68*	..	*70*	*68*	*70*	*4*	*4*	*80*	*80*
Sub-Saharan Africa	*121*	*113*	..	..	..	..	..	..	*10*	*10*	*66*	*65*
High income	*102*	*104*	..	..	..	..	..	..	*1*	*1*	..	..
Euro area	*102*	*101*	..	..	..	..	*98*	99	*2*	*1*	..	..

a. Provisional data. b. Less than 0.5. c. Data are for 2009. d. Data are for 2010.

Education efficiency 2.13

About the data

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

The gross intake ratio to the first grade of primary education indicates the level of access to primary education and the education system's capacity to provide access to primary education. A low gross intake ratio in grade 1 reflects the fact that many children do not enter primary school even though school attendance, at least through the primary level, is mandatory in most countries. Because the gross intake ratio 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 indicator is not calculated when new entrants and repeaters are not correctly distinguished in grade 1.

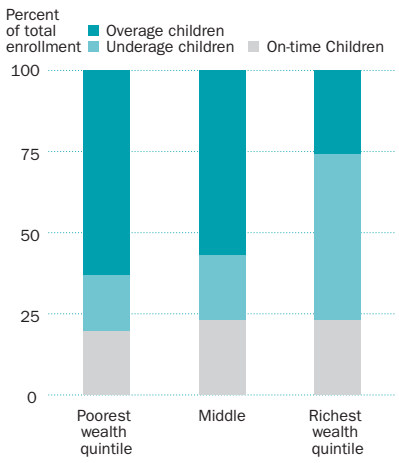
The survival rate to grade 5 and to the last grade of primary education shows the percentage of students entering primary school who are expected to reach the specified grade. It measures an education system's holding power and internal efficiency. Survival rates are calculated based on the reconstructed cohort method, which uses data on enrollment by grade for the two most recent consecutive years and data on repeaters by grade for the most recent of those two years to reflect current patterns of grade transition. Rates approaching 100 percent indicate high retention and low dropout levels.

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.

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.

There are more overage children among the poor in primary school in Zambia **2.13a**



Source: World Bank, EdStats.

Definitions

• **Gross intake ratio in first grade of primary education** is the number of new entrants in grade 1, regardless of age, expressed as a percentage of the population of the official school age. • **Cohort survival rate** is the percentage of children enrolled in the first grade of primary education 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 education** 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 rate to secondary education** is the number of new entrants to the first grade of secondary education (general programs only) in a given year as a percentage of the number of pupils enrolled in the final grade of primary education in the previous year.

Data sources

Data on education efficiency are from the UNESCO Institute for Statistics, www.uis.unesco.org.

2.14 Education completion and outcomes

	Primary completion rate						Youth literacy rate				Adult literacy rate	PISA mathematics literacy
	% of relevant age group						% ages 15–24				% ages 15 and older	Mean score
	Total		Male		Female		Male		Female		Total	
	1991	2009[a]	1991	2009[a]	1991	2009[a]	1990	2005–09[b]	1990	2005–09[b]	2005–09[b]	2009
Afghanistan	*28*	..	*41*	..	*14*	..	..	..	..	..	..	..
Albania	..	90	..	90	..	89	..	99	..	99	96	377
Algeria	80	91	86	90	73	91	*86*	94	*62*	89	73	..
Angola	33	..	..	..	..	..	..	81	..	66	70	..
Argentina	*100*	*102*	..	*100*	..	*104*	..	99	..	99	98	388
Armenia	*105*	*98*	..	*96*	..	*100*	*100*	100	*100*	100	100	..
Australia	..	..	..	..	..	..	..	..	..	..	..	514
Austria	..	99	..	99	..	98	..	..	..	..	..	496
Azerbaijan	*95*	92	*96*	92	*94*	91	..	100	..	100	100	431
Bangladesh	*41*	61	..	58	..	63	..	74	..	77	56	..
Belarus	94	*96*	*95*	*93*	*95*	*92*	*100*	100	*100*	100	100	..
Belgium	79	*86*	76	*84*	82	*88*	..	..	..	..	..	515
Benin	22	62	30	71	14	53	..	65	..	43	42	..
Bolivia	71	99	78	99	64	98	..	99	..	99	91	..
Bosnia and Herzegovina	..	..	..	..	..	..	..	100	..	100	98	..
Botswana	90	*95*	83	*93*	98	*97*	..	94	..	97	84	..
Brazil	*93*	..	..	..	..	..	..	97	..	99	90	386
Bulgaria	90	*90*	88	*91*	92	*89*	..	98	..	97	98	428
Burkina Faso	20	43	25	46	15	40	..	47	..	33	29	..
Burundi	46	52	49	54	43	51	59	77	48	76	67	..
Cambodia	*45*	83	..	83	..	84	..	89	..	86	78	..
Cameroon	53	73	57	80	49	67	..	89	..	77	71	..
Canada	..	..	..	..	..	..	..	..	..	..	..	527
Central African Republic	28	38	37	47	20	29	*63*	72	*35*	57	55	..
Chad	18	33	29	42	7	24	26	54	9	39	34	..
Chile	..	*95*	..	*101*	..	*88*	..	99	..	99	99	421
China	107	..	..	..	..	..	97	99	91	99	94	..
Hong Kong SAR, China	102	93	..	92	..	93	..	..	..	..	..	555
Colombia	73	115	70	113	76	117	..	97	..	98	93	381
Congo, Dem. Rep.	48	56	61	66	36	46	..	73	..	62	67	..
Congo, Rep.	54	74	59	77	49	72	..	87	..	78	..	..
Costa Rica	79	96	77	95	81	97	..	98	..	99	96	..
Côte d'Ivoire	42	46	53	54	32	39	*60*	72	*38*	61	55	..
Croatia	*85*	*100*	..	*99*	..	*100*	..	100	..	100	99	460
Cuba	99	98	..	98	..	98	..	100	..	100	100	..
Czech Republic	*92*	*95*	*91*	*95*	*93*	*95*	..	..	..	..	..	493
Denmark	98	*101*	98	*100*	98	*101*	..	..	..	..	..	503
Dominican Republic	*61*	90	..	90	..	89	..	95	..	97	88	..
Ecuador	*91*	103	*91*	101	*92*	104	97	97	96	97	84	..
Egypt, Arab Rep.	..	*95*	..	*97*	..	*93*	*71*	88	*54*	82	66	..
El Salvador	65	*89*	64	*88*	66	*91*	..	95	..	95	84	..
Eritrea	*18*	48	*21*	52	*15*	43	..	92	..	86	67	..
Estonia	..	*100*	..	*100*	..	*101*	*100*	100	*100*	100	100	512
Ethiopia	*23*	55	*28*	57	*18*	53	..	56	..	33	30	..
Finland	97	*98*	98	*99*	97	*97*	..	..	..	..	..	541
France	106	..	..	..	..	..	..	..	..	..	..	497
Gabon	*62*	..	*59*	..	*65*	..	..	99	..	97	88	..
Gambia, The	*45*	*79*	56	*76*	*34*	*83*	..	71	..	60	46	..
Georgia	..	107	..	110	..	104	..	100	..	100	100	..
Germany	100	104	99	103	100	104	..	..	..	..	..	513
Ghana	64	83	71	85	56	81	..	81	..	79	67	..
Greece	*99*	*101*	*99*	*102*	*98*	*101*	..	99	..	99	97	466
Guatemala	..	*80*	..	*83*	..	*77*	..	89	..	84	74	..
Guinea	17	62	24	71	9	53	..	68	..	54	39	..
Guinea-Bissau	*5*	..	7	..	*3*	..	..	78	..	64	52	..
Haiti	27	..	29	..	26	..	..	..	..	..	49	..
Honduras	64	*90*	67	*87*	61	*93*	..	93	..	95	84	..

Education completion and outcomes

2.14

	Primary completion rate						Youth literacy rate				Adult literacy rate	PISA mathematics literacy
	% of relevant age group						% ages 15–24				% ages 15 and older	Mean score
	Total		Male		Female		Male		Female		Total	
	1991	2009[a]	1991	2009[a]	1991	2009[a]	1990	2005–09[b]	1990	2005–09[b]	2005–09[b]	2009
Hungary	82	*95*	*89*	*97*	*90*	*94*	..	99	..	99	99	490
India	*64*	*95*	*76*	*95*	*52*	*94*	..	88	..	74	63	..
Indonesia	93	109	..	109	..	110	97	100	95	99	92	371
Iran, Islamic Rep.	88	101	93	101	82	101	*85*	99	*66*	99	85	..
Iraq	58	64	63	73	52	54	..	85	..	80	78	..
Ireland	*103*	*99*	*103*	*99*	*103*	*99*	..	..	..	..	..	487
Israel	..	*99*	..	*99*	..	*100*	..	..	..	..	..	447
Italy	98	*104*	98	*104*	97	*104*	..	100	..	100	99	483
Jamaica	94	*89*	90	*88*	98	*90*	..	92	..	98	86	..
Japan	102	*101*	102	*100*	102	*101*	..	..	..	..	..	529
Jordan	101	*100*	101	*99*	101	*100*	..	99	..	99	92	387
Kazakhstan	*103*	106	*103*	106	*103*	106	*100*	100	*100*	100	100	405
Kenya	..	..	..	..	..	..	..	92	..	94	87	..
Korea, Dem. Rep.	..	..	..	..	..	..	..	100	..	100	100	..
Korea, Rep.	99	*99*	99	*100*	100	*97*	..	..	..	..	..	546
Kosovo	..	..	..	..	..	..	..	..	..	..	..	..
Kuwait	*57*	93	*58*	94	*56*	93	*91*	99	*84*	99	94	..
Kyrgyz Republic	..	94	..	94	..	95	..	100	..	100	99	331
Lao PDR	*41*	*75*	*46*	*78*	*36*	*71*	..	89	..	79	73	..
Latvia	..	*95*	..	*97*	..	*93*	*100*	100	*100*	100	100	482
Lebanon	..	85	..	83	..	87	..	98	..	99	90	..
Lesotho	59	70	42	60	76	81	..	86	..	98	90	..
Liberia	..	*58*	..	*63*	..	*53*	..	70	..	81	59	..
Libya	..	..	..	..	..	..	..	100	..	100	89	..
Lithuania	..	*92*	..	*92*	..	*92*	*100*	100	*100*	100	100	477
Macedonia, FYR	*98*	*92*	..	*91*	..	*93*	..	99	..	99	97	..
Madagascar	36	79	35	79	37	79	..	66	..	64	64	..
Malawi	31	59	35	58	27	60	*70*	87	*49*	86	74	..
Malaysia	91	*97*	91	*97*	91	*97*	..	98	..	99	92	..
Mali	9	59	*12*	67	7	52	..	47	..	31	26	..
Mauritania	33	*64*	39	*63*	26	*66*	..	71	..	64	57	..
Mauritius	115	89	115	89	115	90	91	96	92	98	88	..
Mexico	88	*104*	*91*	*104*	*92*	*105*	96	99	95	98	93	419
Moldova	..	93	..	94	..	91	*100*	99	*100*	100	98	..
Mongolia	..	*93*	..	*94*	..	*92*	..	95	..	97	97	..
Morocco	48	80	57	84	39	77	..	87	..	72	56	..
Mozambique	26	57	32	63	21	51	..	78	..	64	55	..
Myanmar	..	99	..	98	..	100	..	96	..	95	92	..
Namibia	*74*	87	*67*	83	*81*	91	..	91	..	95	89	..
Nepal	51	..	*70*	..	*41*	..	..	87	..	77	59	..
Netherlands	..	..	..	..	..	..	..	..	..	..	..	526
New Zealand	..	..	..	..	..	..	..	..	..	..	..	519
Nicaragua	42	*75*	*43*	*71*	*53*	*78*	..	85	..	89	78	..
Niger	17	40	21	47	13	34	..	52	..	23	29	..
Nigeria	..	*79*	..	*84*	..	*74*	..	78	..	65	61	..
Norway	100	*98*	100	*98*	100	97	..	..	..	..	..	498
Oman	*74*	80	*78*	80	*70*	79	..	98	..	98	87	..
Pakistan	..	61	..	68	..	54	..	79	..	61	56	..
Panama	*86*	102	*86*	102	*86*	101	95	97	95	96	94	360
Papua New Guinea	46	..	51	..	42	..	..	65	..	70	60	..
Paraguay	68	*94*	68	*93*	69	95	..	99	..	99	95	..
Peru	..	*101*	..	*101*	..	*101*	..	98	..	97	90	365
Philippines	88	94	85	91	86	97	96	97	97	98	95	..
Poland	96	*96*	..	..	..	..	..	100	..	100	100	495
Portugal	..	..	..	..	..	..	..	100	..	100	95	487
Puerto Rico	..	..	..	..	..	..	92	87	94	88	90	..
Qatar	71	108	71	109	72	106	*89*	98	*91*	98	95	368

2.14 Education completion and outcomes

	Primary completion rate						Youth literacy rate				Adult literacy rate	PISA mathematics literacy
	% of relevant age group						% ages 15–24				% ages 15 and older	Mean score
	Total		Male		Female		Male		Female		Total	
	1991	2009[a]	1991	2009[a]	1991	2009[a]	1990	2005–09[b]	1990	2005–09[b]	2005–09[b]	2009
Romania	96	96	96	96	96	96	..	97	..	98	98	427
Russian Federation	92	95	92	..	93	..	100	100	100	100	100	468
Rwanda	50	54	51	52	50	56	..	77	..	77	71	..
Saudi Arabia	..	93	..	95	..	90	..	99	..	97	86	..
Senegal	39	57	48	56	31	57	49	74	28	56	50	..
Serbia	..	96	..	97	..	96	..	..	..	..	..	442
Sierra Leone	..	88	..	101	..	75	..	68	..	48	41	..
Singapore	..	..	..	..	..	..	99	100	99	100	95	562
Slovak Republic	95	96	95	96	96	96	..	..	..	..	..	497
Slovenia	95	96	..	97	..	96	..	100	..	100	100	501
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	76	93	72	93	80	94	..	97	..	98	89	..
Spain	104	100	104	100	103	100	..	100	..	100	98	483
Sri Lanka	101	97	101	97	101	98	..	97	..	99	91	..
Sudan	..	57	..	53	..	47	..	89	..	83	70	..
Swaziland	61	72	57	75	64	69	83	92	84	95	87	..
Sweden	96	94	96	95	96	94	..	..	..	..	..	494
Switzerland	53	94	53	93	54	95	..	..	..	..	..	534
Syrian Arab Republic	89	112	94	113	84	111	..	96	..	93	84	..
Tajikistan	..	98	..	97	..	93	100	100	100	100	100	..
Tanzania	55	102	56	102	55	102	86	78	78	76	73	..
Thailand	..	..	..	..	..	..	..	98	..	98	94	419
Timor-Leste	..	80	..	80	..	79	..	..	..	..	51	..
Togo	35	61	48	71	22	52	..	85	..	68	57	..
Trinidad and Tobago	102	93	99	93	105	93	99	100	99	100	99	414
Tunisia	74	93	79	93	70	93	..	98	..	96	78	371
Turkey	90	93	93	95	86	92	97	99	88	97	91	445
Turkmenistan	..	..	..	..	..	..	..	100	..	100	100	..
Uganda	..	72	..	72	..	73	..	90[c]	..	85[c]	73[c]	..
Ukraine	92	95	99	98	99	99	..	100	..	100	100	..
United Arab Emirates	103	99	104	100	103	98	81	94	85	97	90	..
United Kingdom	..	..	..	..	..	..	..	..	..	..	..	492
United States	..	95	..	94	..	97	..	..	..	..	..	487
Uruguay	94	106	91	104	96	108	98	98	99	100	98	427
Uzbekistan	80	92	..	93	..	91	..	100	..	100	99	..
Venezuela, RB	81	95	76	94	86	96	95	98	96	99	95	..
Vietnam	..	..	..	..	..	..	94	97	93	96	93	..
West Bank and Gaza	..	82	..	82	..	81	..	99	..	99	95	..
Yemen, Rep.	..	61	..	72	..	49	..	96	..	72	62	..
Zambia	..	87	..	92	..	82	67	82	66	67	71	..
Zimbabwe	97	..	99	..	96	..	..	98	..	99	92	..
World	**79 w**	**88 w**	**86 w**	**90 w**	**75 w**	**87 w**	**87 w**	**92 w**	**78 w**	**87 w**	**84 w**	
Low income	44	63	..	66	..	60	66	76	52	69	62	
Middle income	83	92	89	93	77	91	88	94	78	88	83	
Lower middle income	82	90	89	92	74	89	87	93	74	86	80	
Upper middle income	88	100	89	100	88	100	94	98	92	97	92	
Low & middle income	78	87	85	89	73	85	86	91	75	85	80	
East Asia & Pacific	101	99	105	98	97	100	96	99	91	99	94	
Europe & Central Asia	92	96	93	97	92	95	99	99	98	99	98	
Latin America & Carib.	84	101	84	100	85	102	91	97	92	97	91	
Middle East & N. Africa	..	95	..	97	..	92	84	93	67	87	74	
South Asia	62	79	75	82	52	76	71	85	47	72	61	
Sub-Saharan Africa	51	64	57	69	47	60	73	77	58	67	62	
High income	..	98	..	98	..	98	99	99	99	99	98	
Euro area	101	..	100	..	100	..	..	..	..	..	..	

a. Provisional data. b. Data are for the most recent year available. c. Data are for 2010.

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, 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 (ISCED 97),* 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 primary completion rate, also called the gross intake ratio to last grade of primary education. It is the total number of new entrants in the last grade of primary education, regardless of age, expressed as a percentage of the population at the entrance age to the last grade of primary education. Data limitations preclude adjusting for students who drop out during the final year of primary education. Thus, this rate is a proxy that 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 education as well as children who entered school early, while the denominator is the number of children at the entrance age to the last grade of primary education.

Basic student outcomes include achievements in reading and mathematics judged against established standards. 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 the population 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 1985–2009. For countries without recent literacy data, the UNESCO Institute for Statistics estimates literacy rates with the Global Age-specific Literacy Projections Model (GALP). For detailed information on sources, definitions, and methodology, consult www.uis.unesco.org.

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 youth literacy rate for ages 15–24 reflects recent progress in education: it 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. Generally, literacy also encompasses numeracy, the ability to make simple arithmetic calculations.

In many countries national assessments enable ministries of education to monitor progress in learning outcomes. Of the handful of internationally or regionally comparable assessments, one of the largest is the Programme for International Student Assessment (PISA). Coordinated by the Organisation for Economic Co-operation and Development (OECD), it measures the knowledge and skills of 15-year-olds, the age at which students in most countries are nearing the end of their compulsory time in school. The assessment tests reading, mathematical, and scientific literacy in terms of general competencies—that is, how well students can apply the knowledge and skills they have learned at school to real-life challenges. It does not test how well a student has mastered a school's specific curriculum.

The table presents the mean PISA mathematical literacy score, as demonstrated through students' ability to analyze, reason, and communicate effectively while posing, solving, and interpreting mathematical problems that involve quantitative, spatial, probabilistic, or other mathematical concepts. The average score in 2009 was 496. Because the figures are derived from samples, the scores reflect a small measure of statistical uncertainty.

Definitions

• **Primary completion rate** is approximated by the gross intake ratio to last grade of primary education, which is the total number of new entrants in the last grade of primary education, regardless of age, expressed as a percentage of the population at the entrance age to the last grade of primary. • **Youth literacy rate** is the percentage of the population ages 15–24 that can, with understanding, both read and write a short simple statement on their everyday life. • **Adult literacy rate** is the percentage of the population ages 15 and older that can, with understanding, both read and write a short simple statement on their everyday life. • **PISA mathematics literacy** is the country's mean mathematics score from the Programme for International Student Assessment (PISA).

Data sources

Data on education completion and outcomes are from the UNESCO Institute for Statistics. Data on PISA mathematics literacy are from the OECD.

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	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	0
Madagascar	2003/04	250	153	118	145	3	8	42	141	77	77	33	3
Malawi	2004	235	145	98	122	5	8	24	81	47	35	23	4
Malawi	2006	234	207	133	169	5	7	30	80	49	52	0	0
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
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	0
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	..	..	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

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 (DHS) conducted by Macro International with the support of the U.S. Agency for International Development, Multiple Indicator Cluster Surveys (MICS) conducted by the United Nations Children's Fund (UNICEF), and Living Standards Measurement Study conducted by the World Bank 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 detailed questionnaires. The data presented here draw on responses to individual and household questionnaires.

Typically, those surveys collect basic information on educational attainment and enrollment levels from every household member ages 5 or 6 and older as part of the household's socioeconomic characteristics. The surveys are not intended for the collection of detailed education data. As a result, the education section of the surveys does not replace education flows, nor are as detailed as, for instance, the health section for the case of the DHS and MICS. Still, the education data are very useful for providing micro-level information on education that cannot be obtained from administrative data, such as information on children not attending school.

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 was then 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 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 around 80 countries. The table only shows the estimates for the poorest and richest quintiles, gender, and latest data; the full set of estimates for all indicators, other subgroups including urban and rural areas, and older data are 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 total number of students regardless of age in the last grade of primary school, minus the number of repeaters in that grade, divided by the total number of children of official graduation age. These data differ from those in table 2.14 because the source is different. • **Children out of school** are the number of children in the official primary school ages who are not attending primary or secondary education, expressed as a percentage of children of the official primary school ages. Children in the official primary school age, who are attending pre-primary education, are considered out-of-school. These data differ from those in table 2.12 because the source is different.

Data sources

Data on education gaps by income and gender are from an analysis of Demographic and Health Surveys by Macro International, Multiple Indicators Cluster surveys by UNICEF, and Living Standards Measurement Study by World Bank, and these sources are analyzed by the EdStats team of the World Bank Human Development Network Education using ADePT Education. Country reports, further updates, and ADePT Education software are available at www.worldbank.org/education/edstats/.

2.16 Health systems

	Health expenditure						Health workers		Hospital beds	Outpatient visits
	Total % of GDP	Public % of total	Out of pocket % of total	External resources % of total	Per capita $	Per capita PPP $	per 1,000 people Physicians	per 1,000 people Nurses and midwives	per 1,000 people	per capita
	2008	2008	2008	2008	2008	2008	2004–09[a]	2004–09[a]	2004–09[a]	2000–09[a]
Afghanistan	7.4[b]	21.5[b]	77.7[b]	17.3[b]	47[b]	57[b]	0.2	0.5	0.4	..
Albania	6.8	39.4	58.6	2.1	281	569	1.1	4.0	2.9	1.5
Algeria	5.4	86.1	13.2	0.0	272	437	1.2	2.0	1.7	..
Angola	3.3[c]	85.0[c]	15.0[c]	3.0[c]	148[c]	183[c]	0.1	1.4	0.8	..
Argentina	8.4	62.6	22.2	0.0	695	1,062	3.2	0.5	4.0	..
Armenia	3.8	44.5	51.8	10.4	143	224	3.7	4.9	4.1	2.8
Australia	8.5[d]	65.4[d]	17.9[d]	0.0[d]	4,180[d]	3,365[d]	3.0	9.6	3.8	6.2
Austria	10.5	73.7	15.1	0.0	5,201	4,150	4.7	7.8	7.7	6.7
Azerbaijan	4.3	19.3	73.3	0.6	240	395	3.8	8.4	7.9	4.6
Bangladesh	3.3	31.4	66.2	5.8	17	44	0.3	0.3	0.4	..
Belarus	5.6	72.2	19.9	0.2	351	688	5.1	12.6	11.2	13.2
Belgium	11.1	66.8	20.5	0.0	5,243	4,096	3.0	0.3	6.6	7.0
Benin	4.1	51.7	44.7	17.7	32	61	0.1	0.8	0.5	..
Bolivia	4.4	63.1	30.1	9.1	75	187	..	..	1.1	..
Bosnia and Herzegovina	10.3	58.2	41.8	1.3	506	937	1.4	4.7	3.0	3.3
Botswana	7.6	78.2	7.2	4.2	530	1,053	0.3	2.8	1.8	..
Brazil	8.4	44.0	31.9	0.0	721	875	1.7	6.5	2.4	..
Bulgaria	7.1	57.8	36.5	0.0	482	974	3.6	4.7	6.5	..
Burkina Faso	5.9	59.1	38.1	29.2	37	82	0.1	0.7	0.9	..
Burundi	13.0[c]	40.0[c]	38.1[c]	34.5[c]	19[c]	50[c]	0.0	0.2	0.7	..
Cambodia	5.7	23.8	64.4	17.1	43	118	0.2	0.8	0.1	..
Cameroon	5.3[c]	22.7[c]	73.5[c]	5.5[c]	65[c]	117[c]	0.2	1.6	1.5	..
Canada	9.8	69.5	15.5	0.0	4,445	3,867	1.9	10.1	3.4	6.3
Central African Republic	4.3	39.3	57.7	31.5	20	32	0.1	0.4	1.2	..
Chad	6.4	50.6	47.8	5.3	49	86	0.0	0.3	0.4	..
Chile	7.5	44.0	36.5	0.0	762	1,088	1.3	..	2.1	..
China	4.3	47.3	43.5	0.2	146	265	1.4	1.4	4.1	..
Hong Kong SAR, China	..	..	..	..	..	..	..	..	..	..
Colombia	5.9	83.9	7.9	0.1	317	517	1.4	..	1.0	..
Congo, Dem. Rep.	7.3	54.2	39.2	18.8	13	23	0.1	0.5	0.8	..
Congo, Rep.	2.7	49.9	50.1	4.7	81	108	0.1	0.8	1.6	..
Costa Rica	9.4	66.9	29.3	0.1	618	1,059	..	..	1.2	..
Côte d'Ivoire	5.4	16.9	75.6	5.9	61	88	0.1	0.5	0.4	..
Croatia	7.8	84.9	14.5	0.0	1,230	1,553	2.7	5.6	5.5	6.4
Cuba	12.0	95.5	4.1	0.2	672	495	6.4	8.6	5.9	..
Czech Republic	7.1	80.1	15.7	0.0	1,469	1,830	3.6	8.6	7.2	15.0
Denmark	9.9	80.1	13.6	0.0	6,133	3,814	3.4	14.5	3.6	4.1
Dominican Republic	5.7	37.1	41.8	1.6	261	465	..	..	1.0	..
Ecuador	5.3	42.3	50.4	1.1	216	466	..	..	1.5	..
Egypt, Arab Rep.	4.8	42.2	56.5	0.6	97	261	2.8	3.5	1.7	..
El Salvador	6.0	59.6	35.8	3.5	217	410	1.6	0.4	1.1	..
Eritrea	3.1[c]	44.9[c]	55.1[c]	60.8[c]	10[c]	18[c]	0.1	0.6	1.2	..
Estonia	6.1	77.8	19.7	1.5	1,074	1,325	3.4	6.8	5.7	6.9
Ethiopia	4.3	51.9	38.5	40.7	14	37	0.0	0.2	0.2	..
Finland	8.8	70.7	18.5	0.0	4,481	3,299	2.7	15.5	6.5	4.3
France	11.2	75.9	7.4	0.0	4,966	3,851	3.5	8.9	7.1	6.9
Gabon	2.6[c]	43.7[c]	56.3[c]	2.3[c]	264[c]	384[c]	0.3	5.0	1.3	..
Gambia, The	5.5	48.1	25.1	38.0	27	75	0.0	0.6	1.1	..
Georgia	8.7	30.9	66.5	10.5	258	433	4.5	3.9	3.3	2.2
Germany	10.5	74.6	11.8	0.0	4,720	3,922	3.5	10.8	8.2	7.0
Ghana	7.8	50.0	39.4	14.0	55	114	0.1	1.1	0.9	..
Greece	10.1	60.9	37.0	0.0	3,110	3,010	6.0	3.7	4.8	..
Guatemala	6.5	35.7	57.4	1.8	184	308	..	..	0.6	..
Guinea	5.5	13.6	85.9	10.1	21	58	0.1	0.0	0.3	..
Guinea-Bissau	6.0[c]	26.0[c]	40.7[c]	77.3[c]	17[c]	32[c]	0.0	0.6	1.0	..
Haiti	6.1	22.1	47.4	34.7	40	69	..	..	1.3	..
Honduras	6.3	58.6	34.5	10.4	121	248	..	..	0.8	..

2.16 Health systems

	Health expenditure						Health workers		Hospital beds	Outpatient visits
	Total % of GDP	Public % of total	Out of pocket % of total	External resources % of total	Per capita $	Per capita PPP $	per 1,000 people Physicians	per 1,000 people Nurses and midwives	per 1,000 people	per capita
	2008	2008	2008	2008	2008	2008	2004–09[a]	2004–09[a]	2004–09[a]	2000–09[a]
Hungary	7.2	68.9	23.9	0.0	1,119	1,506	3.1	6.3	7.0	12.9
India	4.2	32.4	50.3	1.6	45	122	0.6	1.3	0.9	..
Indonesia	2.3	54.4	32.1	1.7	51	91	0.3	2.0	..	..
Iran, Islamic Rep.	5.5	42.4	55.6	0.0	254	613	0.9	1.6	1.4	..
Iraq	3.2[c,e]	70.2[c,e]	29.8[c,e]	8.2[c,e]	109[c,e]	107[c,e]	0.7	1.4	1.3	..
Ireland	8.7	76.9	14.4	0.0	5,253	3,796	3.2	15.7	5.2	..
Israel	7.6	58.4	30.5	0.0	2,093	2,093	3.6	6.2	5.8	7.1
Italy	8.7	76.3	20.2	0.0	3,343	2,836	4.2	6.5	3.7	6.1
Jamaica	4.8	50.4	35.2	1.5	256	364	..	..	1.7	..
Japan	8.3	80.5	14.5	0.0	3,190	2,817	2.1	4.1	13.8	14.4
Jordan	9.4[f]	62.7[f]	30.8[f]	1.8[f]	325[f]	496[f]	2.5	4.0	1.8	..
Kazakhstan	3.9	58.5	41.0	0.2	333	444	3.8	7.8	7.6	6.7
Kenya	4.2	36.3	49.2	26.8	33	66	0.1	..	1.4	..
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	6.5	53.9	35.0	0.0	1,245	1,806	2.0	5.3	12.3	..
Kosovo	..	..	..	..	..	..	..	..	..	..
Kuwait	2.0	76.3	21.7	0.0	990	932	1.8	4.6	1.8	..
Kyrgyz Republic	5.7	48.4	45.0	12.6	54	123	2.3	5.7	5.1	3.6
Lao PDR	4.0	17.6	62.6	16.1	34	84	0.3	1.0	1.2	..
Latvia	6.6	60.0	38.7	0.0	979	1,206	3.0	4.8	6.4	5.5
Lebanon	8.5	48.3	40.7	4.8	604	1,009	3.5	2.2	3.5	..
Lesotho	7.6	63.3	25.3	19.3	60	119	..	..	1.3	..
Liberia	11.9	33.0	35.0	47.0	26	46	0.0	0.3	0.7	..
Libya	3.0[c]	70.3[c]	29.7[c]	0.1[c]	458[c]	502[c]	1.9	6.8	3.7	..
Lithuania	6.6	68.3	26.8	1.1	931	1,318	3.7	7.3	6.8	6.6
Macedonia, FYR	6.8	68.2	31.6	1.8	328	738	2.5	4.3	4.6	6.0
Madagascar	4.4	70.2	20.2	16.1	22	46	0.2	0.3	0.3	0.5
Malawi	6.5	59.4	11.6	87.0	18	50	0.0	0.3	1.1	..
Malaysia	4.3	44.1	40.9	0.0	353	621	0.9	2.7	1.8	..
Mali	5.6	47.1	52.6	22.2	39	65	0.0	0.3	0.6	..
Mauritania	2.6[c]	61.4[c]	38.6[c]	27.4[c]	27[c]	54[c]	0.1	0.7	0.4	..
Mauritius	5.5	34.8	57.8	2.0	402	681	1.1	3.7	3.3	..
Mexico	5.9	46.9	49.3	0.0	588	837	2.9	4.0	1.6	2.5
Moldova	10.7[g]	50.6[g]	48.3[g]	4.7[g]	181[g]	320[g]	2.7	6.7	6.1	6.0
Mongolia	3.8	81.4	14.6	7.5	73	131	2.8	3.5	5.9	..
Morocco	5.3	36.3	55.0	0.2	149	231	0.6	0.9	1.1	..
Mozambique	4.7	75.2	7.0	80.8	21	39	0.0	0.3	0.8	..
Myanmar	2.0	8.8	87.1	10.7	10	23	0.5	0.8	0.6	..
Namibia	6.9	54.6	8.1	21.4	284	440	0.4	2.8	2.7	..
Nepal	6.0	37.7	45.1	11.0	24	66	0.2	0.5	5.0	..
Netherlands	9.9	75.3	5.7	0.0	5,243	4,233	3.9	0.2	4.3	5.4
New Zealand	9.7	80.2	14.0	0.0	2,917	2,655	2.4	10.9	..	4.4
Nicaragua	9.4	54.6	41.8	10.3	105	251	..	..	0.9	..
Niger	5.9	57.7	40.7	26.3	21	40	0.0	0.1	0.3	..
Nigeria	5.2[c]	36.7[c]	60.4[c]	4.6[c]	73[c]	113[c]	0.4	1.6	0.5	..
Norway	8.5	78.6	15.5	0.0	8,019	5,207	4.1	14.8	3.5	..
Oman	2.1	76.4	14.4	0.0	454	593	1.9	4.1	1.9	..
Pakistan	2.6	32.3	53.7	4.8	22	62	0.8	0.6	0.6	..
Panama	7.2	69.3	25.7	0.2	493	924	..	..	2.2	..
Papua New Guinea	3.2	80.1	8.2	20.6	39	70	0.1	0.5	..	..
Paraguay	6.0	40.1	52.8	1.6	161	281	..	..	1.3	..
Peru	4.5	59.4	30.6	0.8	200	381	0.9	1.3	1.5	..
Philippines	3.7	34.7	53.9	1.5	68	129	1.2	6.0	0.5	..
Poland	7.0	67.4	22.4	0.0	971	1,271	2.1	5.7	6.6	6.1
Portugal	10.6	67.4	22.1	0.0	2,434	2,578	3.8	5.3	3.4	3.9
Puerto Rico	..	..	..	..	..	..	..	..	..	..
Qatar	2.1	79.8	14.8	0.0	1,775	1,689	2.8	7.4	1.4	..

2.16 Health systems

	Health expenditure						Health workers		Hospital beds	Outpatient visits
	Total % of GDP	Public % of total	Out of pocket % of total	External resources % of total	Per capita $	Per capita PPP $	per 1,000 people Physicians	per 1,000 people Nurses and midwives	per 1,000 people	per capita
	2008	2008	2008	2008	2008	2008	2004–09[a]	2004–09[a]	2004–09[a]	2000–09[a]
Romania	5.4	78.9	17.6	0.0	517	840	1.9	4.2	6.5	5.6
Russian Federation	4.8	64.3	29.1	0.0	568	985	4.3	8.5	9.7	9.0
Rwanda	9.4	47.8	23.2	42.6	45	102	0.0	0.5	1.6	..
Saudi Arabia	3.6	68.2	17.0	0.0	676	831	0.9	2.1	2.2	..
Senegal	5.7	55.4	35.0	11.4	62	102	0.1	0.4	0.3	..
Serbia	10.0	62.5	35.5	0.4	499	867	2.0	4.4	5.4	..
Sierra Leone	13.3	6.5	83.7	17.0	47	104	0.0	0.2	0.4	..
Singapore	3.3	34.1	62.1	0.0	1,404	1,833	1.8	5.9	3.1	..
Slovak Republic	8.0	67.1	24.9	0.0	1,395	1,849	3.0	6.6	6.6	12.5
Slovenia	8.3	68.6	12.8	0.0	2,238	2,420	2.5	8.2	4.7	6.6
Somalia	..	..	..	..	..	..	0.0	0.1	..	..
South Africa	8.2	39.7	17.9	1.2	459	843	0.8	4.1	2.8	..
Spain	9.0	69.7	20.7	0.0	3,132	2,941	3.7	5.2	3.2	9.5
Sri Lanka	4.1	43.7	48.8	1.8	83	187	0.5	1.9	3.1	..
Sudan	6.9	33.1	64.1	4.3	97	147	0.3	0.8	0.7	..
Swaziland	5.8	60.8	16.6	11.1	141	287	0.2	6.3	2.1	..
Sweden	9.4	78.1	15.6	0.0	4,858	3,622	3.6	11.6	..	2.8
Switzerland	10.7	59.1	30.8	0.0	6,988	4,815	4.1	16.0	5.3	..
Syrian Arab Republic	3.1	38.8	61.2	0.5	71	123	1.5	1.9	1.5	..
Tajikistan	5.0	27.7	68.8	10.5	37	95	2.0	5.0	5.4	8.3
Tanzania	4.5	71.9	18.3	59.2	22	57	0.0	0.2	1.1	..
Thailand	4.1	74.3	17.5	0.3	164	328	0.3	1.5	..	..
Timor-Leste	13.8	73.4	6.8	21.8	71	126	0.1	2.2	..	..
Togo	5.9	24.5	63.5	14.1	38	70	0.1	0.3	0.9	..
Trinidad and Tobago	4.7	48.9	41.8	0.3	908	1,237	1.2	3.6	2.5	..
Tunisia	6.2	54.1	40.0	0.5	248	501	1.2	3.3	2.1	..
Turkey	6.1	73.1	17.4	0.0	623	845	1.6	1.9	2.4	3.1
Turkmenistan	2.2[c]	49.1[c]	50.9[c]	0.3[c]	82[c]	146[c]	2.4	4.5	4.1	3.7
Uganda	8.4	17.4	54.0	27.9	44	112	0.1	1.3	0.4	..
Ukraine	6.8	55.9	40.9	0.4	268	502	3.1	8.5	8.7	10.8
United Arab Emirates	2.5	67.1	21.7	0.0	1,427	868	1.9	4.1	1.9	..
United Kingdom	8.7	82.6	11.1	0.0	3,771	3,222	2.7	10.3	3.4	4.9
United States	15.2	47.8	12.7	0.0	7,164	7,164	2.7	9.8	3.1	9.0
Uruguay	7.8	63.1	12.1	0.2	725	982	3.7	5.6	2.9	..
Uzbekistan	4.9	50.5	48.5	2.4	51	134	2.6	10.8	4.8	8.7
Venezuela, RB	5.4	44.9	49.3	0.0	597	683	..	..	1.3	..
Vietnam	7.2	38.5	55.5	1.7	76	201	1.2	1.0	2.9	..
West Bank and Gaza	..	..	..	..	..	..	..	..	..	..
Yemen, Rep.	5.3	30.1	68.9	4.6	67	137	0.3	0.7	0.7	..
Zambia	5.9	62.0	28.3	38.4	68	80	0.1	0.7	1.9	..
Zimbabwe	..	..	..	..	..	..	0.2	0.7	3.0	..
World	**9.4 w**	**60.5 w**	**17.9 w**	**0.2 w**	**857 w**	**901 w**	**1.4 w**	**3.0 w**	**2.9 w**	**.. w**
Low income	5.3	41.9	47.9	24.2	25	55	0.2	0.5	..	..
Middle income	5.3	51.4	37.0	0.6	186	314	1.3	2.3	2.4	..
Lower middle income	4.3	45.5	45.0	1.1	95	188	1.0	1.7	1.9	..
Upper middle income	6.3	55.4	31.4	0.2	531	792	2.3	4.8	4.5	..
Low & middle income	5.3	51.2	37.2	1.1	163	277	1.1	2.0	2.3	..
East Asia & Pacific	4.2	48.2	42.2	0.5	125	231	1.2	1.7	4.0	..
Europe & Central Asia	5.4	65.4	28.2	0.3	448	738	3.2	6.8	7.3	7.6
Latin America & Carib.	7.2	50.3	34.3	0.2	542	733	2.2	4.8	..	..
Middle East & N. Africa	5.0	53.0	44.3	1.0	176	350	1.5	2.2	1.6	..
South Asia	4.0	32.6	51.5	2.4	40	106	0.6	1.1	0.9	..
Sub-Saharan Africa	6.1	42.9	36.5	9.3	74	132	0.2	1.0	..	..
High income	11.0	62.2	14.2	0.0	4,455	4,136	2.9	7.9	6.1	8.5
Euro area	10.0	73.7	14.2	0.0	4,132	3,458	3.8	7.5	5.8	6.8

a. Data are for the most recent year available. b. GDP includes measures of illicit activities such as opium production. Government expenditures include external assistance (external budget). c. Derived from incomplete data. d. Excludes expenditure in residential facilities for care of the aged. e. Excludes northern Iraq. f. Includes contributions from the United Nations Relief and Works Agency for Palestine. g. Excludes Transdniestria.

2.16 Health systems

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 *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 2007). 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. In general, low-income economies have a higher share of private health expenditure than do middle- and high-income countries, and out-of-pocket expenditure (direct payments by households to providers) makes up the largest proportion of private expenditure. 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.

This year's table presents out-of-pocket expenditure as a percentage of total health expenditure; previous editions presented out-of-pocket expenditure as a percentage of private health expenditure. For this reason, data for this indicator should not be compared across editions.

External resources for health are disbursements to recipient countries as reported by donors, lagged one year to account for the delay between disbursement and expenditure. Disbursement data are not available before 2002, so commitments are used. Except where a reliable full national health account study has been done, most data are from the Organisation for Economic Co-operation and Development Development Assistance Committee's Creditor Reporting System database, which compiles data from government expenditure accounts, government records on external assistance, routine surveys of external financing assistance, and special services. Because of the variety of sources, care should be taken in interpreting the data.

In countries where the fiscal year spans two calendar years, expenditure data have been allocated to the later year (for example, 2008 data cover fiscal year 2007/08). 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 show 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** is the percentage of total expenditure that 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. • **External resources for health** are funds or services in kind that are provided by entities not part of the country in question. The resources may come from international organizations, other countries through bilateral arrangements, or foreign nongovernmental organizations and are part of public and private health expenditure. • **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 from the World Bank's International Comparison Project. • **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 (latest updates are available at www.who.int/nha/), supplemented by country data. Data on physicians, and nurses and midwives, are from WHO's *Global Atlas of the Health Workforce*. For the latest updates and metadata, see http://apps.who.int/globalatlas/. Data on hospital beds and outpatient visits are from the WHO, 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
		1995–2009		2001–11	2004–09[a]	2004–09[a]	2004–09[a]
Afghanistan		0	2003		..	..	..
Albania	2009	3	2008/09	2001	99	28	76
Algeria	2003	3	2006	2008	99	..	90
Angola		0	2006/07		..	..	..
Argentina	1997	1		2010	91	100	100
Armenia	2009	6	2005	2001	96	38	100
Australia	2007	13		2006	..	100	96
Austria	2008	14		2001	..	90	100
Azerbaijan		0	2006	2009	94	24	100
Bangladesh	2008	13	2007	2001	10	..	..
Belarus		0	2005	2009	..	55	96
Belgium	2008	6		2001	..	100	97
Benin	2008	4	2006	2002	60	..	..
Bolivia	2007	13	2008	2001	..	..	30
Bosnia and Herzegovina	2009	6	2006		100	54	92
Botswana	2002	3	2000	2001	72	35	47
Brazil	2006	7	1996	2010	91	48	87
Bulgaria	2007	6		2001	..	79	100
Burkina Faso	2008	6	2006	2006	64	29	88
Burundi	2007	1	2005	2008	60	..	..
Cambodia		0	2005	2008	66	0	100
Cameroon	1995	1	2006	2005	70	..	..
Canada	2009	15		2006	..	100	98
Central African Republic		0	2006	2003	49	..	..
Chad		0	2004	2009	9	..	..
Chile	2008	5		2002	99	100	100
China	2007	13		2010	..	..	99
Hong Kong SAR, China		0		2006	..	66	91
Colombia	2003	9	2005	2006	90	52	71
Congo, Dem. Rep.	2009	7	2010		31	..	..
Congo, Rep.	2005	1	2009	2007	81	..	..
Costa Rica	2003	2	1993	2000	..	90	98
Côte d'Ivoire	2008	2	2006		55	..	..
Croatia		0		2001	..	75	100
Cuba		0	2006	2002	100	99	100
Czech Republic	2008	14	1993	2001	..	84	94
Denmark	2007	13		2001	..	97	97
Dominican Republic	2008	8	2007	2010	78	1	54
Ecuador	2008	7	2004	2010	85	58	86
Egypt, Arab Rep.	2008	3	2008	2006	99	47	97
El Salvador	2009	14	2008	2007	99	36	75
Eritrea		0	2002		..	..	..
Estonia	2008	10		2000	..	68	94
Ethiopia	2008	4	2005	2007	7	..	88
Finland	2008	14		2010	..	84	98
France	2008	14		2006	..	95	100
Gabon		0	2000	2003	..	..	..
Gambia, The	2004	3	2005/06	2003	55	..	..
Georgia	2009	9	2005	2002	92	54	83
Germany	2008	14			..	96	99
Ghana	2002	1	2008	2010	71	95	..
Greece		0		2001	..	78	95
Guatemala	2008	14	2002	2002	..	62	93
Guinea		0	2005		43	..	..
Guinea-Bissau		0	2010	2009	39	..	..
Haiti	2006	1	2005/06	2003	81	..	..
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
		1995–2009		2001–11	2004–09[a]	2004–09[a]	2004–09[a]
Hungary	2008	14		2001	..	84	97
India	2004	2	2005/06	2001	41	..	..
Indonesia	2008	8	2007	2010	53	..	..
Iran, Islamic Rep.	2007	4	2000	2006	..	..	99
Iraq		0	2006		95	100	100
Ireland	2008	14		2006	..	75	99
Israel	2006	1		2009	..	90	99
Italy	2008	4		2001	..	99	98
Jamaica	2000	1	2005	2001	89	76	68
Japan	2007	13		2010	..	88	98
Jordan	2008	5	2009	2004	..	..	76
Kazakhstan	2007	1	2006	2009	99	95	82
Kenya	2006	2	2008/09	2009	60	37	39
Korea, Dem. Rep.		0	2010	2008	..	43	91
Korea, Rep.	2008	14		2005	..	80	92
Kosovo		0			..	..	..
Kuwait		0	1996	2010	..	100	100
Kyrgyz Republic	2009	5	2005/06	2009	94	78	95
Lao PDR		0	2006	2005	72	..	..
Latvia	2007	5		2000	..	79	96
Lebanon	2005	4	2000		..	..	72
Lesotho		0	2009/10	2006	26	..	..
Liberia	2008	1	2009	2008	4	..	..
Libya		0	2000	2006	..	..	..
Lithuania	2008	7		2001	..	68	95
Macedonia, FYR		0	2005	2002	94	87	99
Madagascar	2007	2	2008/09		75	..	..
Malawi	2006	5	2006	2008	..	..	75
Malaysia	2006	10		2010	..	62	100
Mali	2004	6	2006	2009	53	..	..
Mauritania		0	2007	2000	56	..	..
Mauritius	2004	2		2000	..	80	97
Mexico	2009	15	1995	2010	..	89	100
Moldova		0	2005	2004	..	62	89
Mongolia	2003	5	2005	2010	98	60	96
Morocco	2006	3	2006	2004	..	..	..
Mozambique	2006	4	2009	2007	31	..	..
Myanmar	2007	10	2000		..	56	55
Namibia	2008	11	2006/07	2001	67	..	100
Nepal	2005	5	2006	2001	35	..	..
Netherlands	2008	14		2001	..	84	97
New Zealand	2008	14		2006	..	100	98
Nicaragua	2008	14	2006/07	2005	..	66	68
Niger	2006	4	2006	2001	32	..	..
Nigeria	2005	8	2008	2006	30	..	1
Norway	2008	12		2001	..	97	100
Oman	1998	1	1995	2010	..	100	97
Pakistan	2006	1	2006/07		27	85	84
Panama	2003	1	2003	2010	..	70	88
Papua New Guinea	2000	3	1996	2000	..	..	..
Paraguay	2008	13	2004	2002	..	34	71
Peru	2005	11	2008	2007	93	41	70
Philippines	2007	13	2008	2010	..	39	100
Poland	2008	14		2002	..	95	100
Portugal	2007	8		2001	..	85	95
Puerto Rico		0	1996	2010	..	100	95
Qatar		0		2010	..	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
		1995–2009		2001–11	2004–09[a]	2004–09[a]	2004–09[a]
Romania	2006	9	1999	2002	..	76	96
Russian Federation	2007	13	1996	2010	..	80	95
Rwanda	2006	5	2007	2002	82	..	..
Saudi Arabia		0	2007	2010	..	94	100
Senegal	2005	2	2008/09	2002	55	..	..
Serbia	2009	7	2005/06	2002	99	38	90
Sierra Leone	2006	3	2008	2004	51	..	..
Singapore		0	2005	2010	..	93	72
Slovak Republic	2008	12		2001	..	93	98
Slovenia	2008	14		2002	..	72	96
Somalia		0	2006		3	..	..
South Africa	1998	3	2003	2001	92	81	81
Spain	2008	14		2001	..	99	100
Sri Lanka	2006	12	2006/07	2001	97	63	91
Sudan	2008	1	2006	2008	33	..	..
Swaziland		0	2006/07	2007	30	..	..
Sweden	2008	8			..	83	99
Switzerland	2009	15		2010	..	100	99
Syrian Arab Republic		0	2006	2004	95	..	100
Tajikistan	2008	2	2005	2010	88	19	69
Tanzania	2006	3	2007/08	2002	22	..	..
Thailand	2007	13	2005/06	2010	99	86	65
Timor-Leste		0	2009	2010	..	..	..
Togo	2002	1	2006	2010	78	..	..
Trinidad and Tobago	2000	1	2006	2000	96	50	94
Tunisia	2005	5	2006	2004	..	..	98
Turkey	2005	8	2003	2000	94	56	100
Turkmenistan		0	2006		96	..	..
Uganda	2006	6	2009/10	2002	21	..	..
Ukraine	2008	6	2007	2001	100	90	100
United Arab Emirates		0		2010	..	75	100
United Kingdom	2008	12		2001	..	100	95
United States	2009	15	2009	2010	..	100	100
Uruguay	2008	13		2004	..	78	100
Uzbekistan		0	2006		100	..	..
Venezuela, RB		0	2000	2001	..	62	84
Vietnam	2007	10	2006	2009	88	72	83
West Bank and Gaza		1	2006	2007	96	31	66
Yemen, Rep.	2007	4	2006	2004	22	..	15
Zambia	2006	11	2007	2000	14	..	..
Zimbabwe	2001	3	2005/06	2002	74	..	..

a. Data are for the most recent year available.

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).

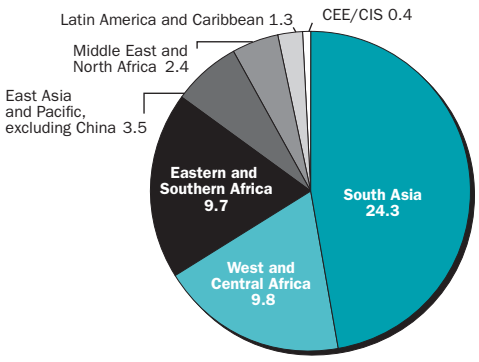
Numerous indicators have been proposed to assess a country's health information system. They can be grouped into two broad types: indicators related to data generation using core sources and methods (health surveys, civil registration, censuses, facility reporting, health system resource tracking) and 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 2009. 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.

South Asia has the highest number of unregistered births 2.17a

Number of unregistered births, 2007 (millions)



Too many people, especially poor, are never counted. They are born, live, and die uncounted and ignored. Around 50 million, or 40 percent of children born in 2007, have not been registered.

Source: United Nations Children's Fund Childinfo.

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 from civil registration system 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 Health Organization's Health Financing Department and 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 2011 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	2008	1990	2008	Measles 2009	DTP3 2009	2004–09[c]	2004–09[c]	2004–09[c]	2004–09[c]	2008	2009
Afghanistan	..	48	..	37	76	83	..	..	..	..	88	48
Albania	..	97	..	98	97	98	70	63	..	..	91	94
Algeria	94	83	88	95	88	93	53	24	..	..	90	100
Angola	36	50	25	57	77	73	..	..	17.7	29.3	70	75
Argentina	94	97	90	90	99	94	..	..	..	..	44	67
Armenia	..	96	..	90	96	93	36	59	..	..	73	70
Australia	100	100	100	100	94	92	..	..	..	..	80	89
Austria	100	100	100	100	83	83	..	..	..	..	47	48
Azerbaijan	70	80	..	45	67	73	33	31	..	..	56	75
Bangladesh	78	80	39	53	89	94	37	68	..	..	91	44
Belarus	100	100	..	93	99	96	90	54	..	..	71	140
Belgium	100	100	100	100	94	99	..	..	..	..	76	88
Benin	56	75	5	12	72	83	36	42	20.1	54.0	89	47
Bolivia	70	86	19	25	86	85	51	..	..	..	84	64
Bosnia and Herzegovina	..	99	..	95	93	90	91	53	..	..	92	91
Botswana	93	95	36	60	94	96	..	..	..	..	65	62
Brazil	88	97	69	80	99	99	50	..	..	..	71	86
Bulgaria	100	100	99	100	96	94	..	..	..	..	85	86
Burkina Faso	41	76	6	11	75	82	39	42	9.6	48.0	76	14
Burundi	70	72	44	46	91	92	38	23	8.3	30.0	90	25
Cambodia	35	61	9	29	92	94	48	50	4.2	0.2	95	60
Cameroon	50	74	47	47	74	80	35	22	13.1	57.8	76	70
Canada	100	100	100	100	93	80	..	..	..	..	78	93
Central African Republic	58	67	11	34	62	54	32	47	15.1	57.0	71	60
Chad	38	50	6	9	23	23	12	27	..	53.0	54	26
Chile	90	96	84	96	96	97	..	..	..	..	72	130
China	67	89	41	55	94	97	..	..	..	..	94	75
Hong Kong SAR, China	..	..	..	..	..	..	..	..	..	..	68	89
Colombia	88	92	68	74	95	92	62	39	..	..	76	70
Congo, Dem. Rep.	45	46	9	23	76	77	42	42	5.8	29.8	87	46
Congo, Rep.	..	71	..	30	76	91	48	39	6.1	48.0	76	69
Costa Rica	93	97	93	95	81	86	..	..	..	..	89	93
Côte d'Ivoire	76	80	20	23	67	81	35	45	3.0	36.0	76	27
Croatia	..	99	..	99	98	96	..	..	..	..	58	76
Cuba	82	94	80	91	96	96	..	..	..	..	88	120
Czech Republic	100	100	100	98	98	99	..	..	..	..	68	70
Denmark	100	100	100	100	84	89	..	..	..	..	41	79
Dominican Republic	88	86	73	83	79	82	70	55	..	0.6	75	60
Ecuador	72	94	69	92	66	75	..	..	..	..	78	51
Egypt, Arab Rep.	90	99	72	94	95	97	73	19	..	..	89	63
El Salvador	74	87	75	87	95	91	67	..	..	..	91	92
Eritrea	43	61	9	14	95	99	..	..	..	..	76	58
Estonia	98	98	..	95	95	95	..	..	..	..	60	89
Ethiopia	17	38	4	12	75	79	19	15	33.1	9.5	84	50
Finland	100	100	100	100	98	99	..	..	..	..	72	110
France	100	100	100	100	90	99	..	..	..	..	..	77
Gabon	..	87	..	33	55	45	..	..	..	..	53	42
Gambia, The	74	92	..	67	96	98	69	38	49.0	62.6	84	47
Georgia	81	98	96	95	83	88	74	37	..	..	73	100
Germany	100	100	100	100	96	93	..	..	..	..	68	91
Ghana	54	82	7	13	93	94	51	45	28.2	43.0	86	31
Greece	96	100	97	98	99	99	..	..	..	..	..	92
Guatemala	82	94	65	81	92	92	..	..	..	..	83	33
Guinea	52	71	9	19	51	57	42	38	4.5	43.5	78	26
Guinea-Bissau	..	61	..	21	76	68	57	25	39.0	45.7	70	59
Haiti	47	63	26	17	59	59	31	43	..	5.1	82	60
Honduras	72	86	44	71	99	98	56	49	..	0.5	85	68

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	2008	1990	2008	2009	2009	2004–09[c]	2004–09[c]	2004–09[c]	2004–09[c]	2008	2009
Hungary	96	100	100	100	99	99	..	..	..	..	53	82
India	72	88	18	31	71	66	69	33	..	8.2	87	67
Indonesia	71	80	33	52	82	82	66	54	3.3	0.8	91	67
Iran, Islamic Rep.	91	..	83	..	99	99	..	..	..	..	83	74
Iraq	81	79	..	73	69	65	82	64	..	..	88	48
Ireland	100	100	99	99	89	93	..	..	..	..	76	89
Israel	100	100	100	100	96	93	..	..	..	..	81	89
Italy	100	100	..	..	91	96	..	..	..	..	..	66
Jamaica	93	94	83	83	88	90	75	39	..	..	64	78
Japan	100	100	100	100	94	98	..	..	..	..	48	89
Jordan	97	96	..	98	95	98	75	32	..	..	84	100
Kazakhstan	96	95	96	97	99	98	71	48	..	..	64	80
Kenya	43	59	26	31	74	75	56	..	46.1	23.2	85	85
Korea, Dem. Rep.	100	100	..	..	98	93	93	..	..	..	89	93
Korea, Rep.	..	98	100	100	93	94	..	..	..	..	84	89
Kosovo	..	..	..	..	..	..	..	..	..	..	..	..
Kuwait	99	99	100	100	97	98	..	..	..	..	80	89
Kyrgyz Republic	..	90	..	93	99	95	62	22	..	..	84	66
Lao PDR	..	57	..	53	59	57	32	49	40.5	8.2	93	68
Latvia	99	99	..	78	96	95	..	..	..	..	33	94
Lebanon	100	100	..	..	53	74	..	..	..	..	77	78
Lesotho	61	85	32	29	85	83	66	53	..	..	73	93
Liberia	58	68	11	17	64	64	62	47	26.4	67.2	79	52
Libya	54	..	97	97	98	98	..	..	..	..	69	82
Lithuania	..	..	..	..	96	98	..	..	..	..	82	81
Macedonia, FYR	..	100	..	89	96	96	93	45	..	..	89	98
Madagascar	31	41	8	11	64	78	42	47	45.8	19.7	81	44
Malawi	40	80	42	56	92	93	52	27	24.7	24.9	87	49
Malaysia	88	100	84	96	95	95	..	..	..	..	78	76
Mali	29	56	26	36	71	74	38	38	27.1	31.7	82	16
Mauritania	30	49	16	26	59	64	45	32	2.1	20.7	68	24
Mauritius	99	99	91	91	99	99	..	..	..	..	87	41
Mexico	85	94	66	85	95	89	..	..	..	..	85	99
Moldova	..	90	..	79	90	85	60	48	..	..	62	68
Mongolia	58	76	..	50	94	95	63	47	..	..	87	75
Morocco	74	81	53	69	98	99	38	46	..	..	85	93
Mozambique	36	47	11	17	77	76	65	47	22.8	36.7	84	46
Myanmar	57	71	..	81	87	90	..	..	..	..	85	64
Namibia	64	92	25	33	76	83	72	48	10.5	9.8	82	76
Nepal	76	88	11	31	79	82	43	37	..	0.1	89	73
Netherlands	100	100	100	100	96	97	..	..	..	..	85	89
New Zealand	100	100	..	..	89	92	..	..	..	..	73	89
Nicaragua	74	85	43	52	99	98	..	..	..	..	89	90
Niger	35	48	5	9	73	70	47	34	42.8	33.0	81	36
Nigeria	47	58	37	32	41	42	45	25	5.5	33.2	78	19
Norway	100	100	100	100	92	92	..	..	..	..	84	91
Oman	80	88	85	..	97	98	..	..	..	..	98	89
Pakistan	86	90	28	45	80	85	69	37	..	3.3	90	63
Panama	84	93	58	69	85	84	..	..	..	..	79	94
Papua New Guinea	41	40	47	45	58	64	63	..	..	..	64	73
Paraguay	52	86	37	70	91	92	..	..	..	..	81	78
Peru	75	82	54	68	91	93	72	60	..	..	82	97
Philippines	84	91	58	76	88	87	50	60	..	0.0	88	57
Poland	100	100	..	90	98	99	..	..	..	..	74	84
Portugal	96	99	92	100	95	96	..	..	..	..	87	86
Puerto Rico	..	..	..	..	..	..	..	..	..	..	63	89
Qatar	100	100	100	100	99	99	..	..	..	..	73	89

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		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	2008	1990	2008	2009	2009	2004–09[c]	2004–09[c]	2004–09[c]	2004–09[c]	2008	2009
Romania	..	..	71	72	97	97	..	..	..	..	37	79
Russian Federation	93	96	87	87	98	98	..	..	..	..	57	84
Rwanda	68	65	23	54	92	97	28	24	55.7	5.6	87	19
Saudi Arabia	89	..	..	..	98	98	..	..	..	..	61	89
Senegal	61	69	38	51	79	86	47	43	29.2	9.1	84	31
Serbia	..	99	..	92	95	95	93	71	..	..	86	89
Sierra Leone	..	49	..	13	71	75	46	57	25.8	30.1	86	31
Singapore	100	100	99	100	95	97	..	..	..	..	81	89
Slovak Republic	..	100	100	100	99	99	..	..	..	..	93	89
Slovenia	100	99	100	100	95	96	..	..	..	..	80	80
Somalia	..	30	..	23	24	31	13	7	11.4	7.9	81	42
South Africa	83	91	69	77	62	69	..	..	..	..	76	74
Spain	100	100	100	100	98	96	..	..	..	..	..	89
Sri Lanka	67	90	70	91	96	97	58	67	2.9	0.3	85	70
Sudan	65	57	34	34	82	84	90	56	27.6	54.2	81	52
Swaziland	..	69	..	55	95	95	73	22	0.6	0.6	68	67
Sweden	100	100	100	100	97	98	..	..	..	..	87	89
Switzerland	100	100	100	100	90	95	..	..	..	..	..	89
Syrian Arab Republic	85	89	83	96	81	80	77	34	..	..	86	88
Tajikistan	..	70	..	94	89	93	64	22	1.3	1.9	82	44
Tanzania	55	54	24	24	91	85	59	53	63.8[d]	59.1[d]	88	77
Thailand	91	98	80	96	98	99	84	46	..	..	82	69
Timor-Leste	..	69	..	50	70	72	71	..	..	..	85	84
Togo	49	60	13	12	84	89	23	22	38.4	47.7	79	10
Trinidad and Tobago	88	94	93	92	94	90	74	32	..	..	67	89
Tunisia	81	94	74	85	98	99	59	62	..	..	86	86
Turkey	85	99	84	90	97	96	..	22	..	..	92	77
Turkmenistan	..	..	98	98	99	96	83	25	..	..	83	92
Uganda	43	67	39	48	68	64	73	39	9.7	61.3	70	44
Ukraine	..	98	95	95	94	90	..	..	..	..	62	78
United Arab Emirates	100	100	97	97	92	92	..	..	..	..	68	61
United Kingdom	100	100	100	100	86	93	..	..	..	..	78	94
United States	99	99	100	100	92	95	..	..	..	..	85	89
Uruguay	96	100	94	100	94	95	..	..	..	..	83	96
Uzbekistan	90	87	84	100	95	98	68	28	..	..	81	50
Venezuela, RB	90	..	82	..	83	83	..	..	..	..	83	68
Vietnam	58	94	35	75	97	96	83	65	5.0	2.6	92	54
West Bank and Gaza	..	91	..	89	..	..	..	..	..	..	94	4
Yemen, Rep.	..	62	18	52	58	66	..	48	..	..	85	67
Zambia	49	60	46	49	85	81	68	56	41.1	43.3	88	80
Zimbabwe	78	82	43	44	76	73	25	35	17.3	23.6	74	46
World	**77 w**	**87 w**	**52 w**	**61 w**	**82 w**	**82 w**	**.. w**	**.. w**	**.. w**	**.. w**	**86 w**	**62 w**
Low income	55	64	23	35	78	80	45	39	..	30.6	86	50
Middle income	74	88	45	57	82	81	..	..	..	..	..	..
Lower middle income	70	86	37	50	79	79	..	..	..	..	89	63
Upper middle income	89	95	78	84	93	93	..	..	..	..	72	79
Low & middle income	72	84	43	54	81	81	..	..	..	..	..	..
East Asia & Pacific	69	88	42	59	91	93	..	..	..	..	92	70
Europe & Central Asia	91	95	87	89	96	95	..	..	..	..	67	78
Latin America & Carib.	85	93	69	79	93	92	..	..	..	..	77	73
Middle East & N. Africa	87	87	73	84	87	88	..	..	..	..	86	78
South Asia	74	87	22	36	75	72	67	37	..	7.2	88	64
Sub-Saharan Africa	49	60	27	31	68	70	..	33	20.2	34.4	79	48
High income	99	100	100	99	93	95	..	..	..	..	69	87
Euro area	100	100	100	100	94	96	..	..	..	..	..	..

a. For malaria prevention only. b. Refers to children who were immunized before 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 2010.

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.

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. Uncertainty bounds for the case detection rate, not shown in the table, are available at http://data.worldbank.org or the original source.

Editions before 2010 included the tuberculosis detection rates by DOTS, the internationally recommended strategy for tuberculosis control. This year's edition, like last year's, 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 Sanitation and Drinking Water* (2010). 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 2010*, 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 2010 Report.*

2.19 Reproductive health

	Total 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			Lifetime risk of maternal death
	births per woman		births per 1,000 women ages 15–19	% of married women ages 15–49	any method % of married women ages 15–49	%	% of total		per 100,000 live births			Probability 1 woman in:
	1990	2009	2009	2004–09[a]	2004–09[a]	2004–09[a]	1990	2004–09[a]	National estimates 2004–09[a]	Modeled estimates 1990	2008	2008
Afghanistan	8.0	6.5	117	..	15	36	..	24	..	1,700	1,400	11
Albania	2.9	1.9	14	..	69	97	..	99	21	48	31	1,700
Algeria	4.7	2.3	7	11	61	89	*77*	95	..	250	120	340
Angola	7.2	5.6	121	..	..	80	..	47	..	1,000	610	29
Argentina	3.0	2.2	56	..	78	99	*96*	95	40	72	70	600
Armenia	2.5	1.7	35	13	53	93	..	100	27	51	29	1,900
Australia	1.9	1.9	14	..	..	..	*100*	..	..	10	8	7,400
Austria	1.5	1.4	12	..	..	..	..	..	..	10	5	14,300
Azerbaijan	2.7	2.3	33	23	51	77	..	88	26	64	38	1,200
Bangladesh	4.4	2.3	68	17	53	51	..	24	348	870	340	110
Belarus	1.9	1.5	20	..	73	99	..	100	3	37	15	5,100
Belgium	1.6	1.9	7	..	75	..	..	..	..	7	5	10,900
Benin	6.7	5.4	108	30	17	84	..	74	397	790	410	43
Bolivia	4.9	3.4	76	..	61	86	*43*	71	310	510	180	150
Bosnia and Herzegovina	1.7	1.2	15	23	36	99	*97*	100	3	18	9	9,300
Botswana	4.7	2.8	50	..	53	94	*77*	95	198	83	190	180
Brazil	2.8	1.8	74	..	81	97	*72*	97	75	120	58	860
Bulgaria	1.8	1.6	40	..	..	..	..	100	6	24	13	5,800
Burkina Faso	6.8	5.8	125	31	17	85	..	54	307	770	560	28
Burundi	6.6	4.5	18	..	9	92	..	34	615	1,200	970	25
Cambodia	5.8	2.9	37	25	51[b]	83[b]	..	71[b]	461	690	290	110
Cameroon	5.9	4.5	122	3	29	82	*58*	63	669	680	600	35
Canada	1.8	1.6	12	..	..	..	..	100	..	6	12	5,600
Central African Republic	5.8	4.7	96	..	19	69	..	44	543	880	850	27
Chad	6.7	6.1	155	21	3	39	..	14	1,099	1,300	1,200	14
Chile	2.6	1.9	59	..	58	..	..	100	18	56	26	2,000
China	2.3	1.8	10	..	85	91	*50*	99	34	110	38	1,500
Hong Kong SAR, China	1.3	1.0	6	..	..	..	..	100	..	..	..	..
Colombia	3.1	2.4	72	6	78	94	82	96	76	140	85	460
Congo, Dem. Rep.	7.1	5.9	191	24	21	85	..	74	549	900	670	24
Congo, Rep.	5.4	4.3	106	16	44	86	..	83	781	460	580	39
Costa Rica	3.2	1.9	67	..	80	90	*98*	99	27	35	44	1,100
Côte d'Ivoire	6.3	4.5	122	29	13	85	..	57	543	690	470	44
Croatia	1.6	1.5	14	..	..	100[b]	100	100[b]	13[b]	8	14	5,200
Cuba	1.8	1.5	46	8	78	100	..	100	47	63	53	1,400
Czech Republic	1.9	1.5	10	..	..	..	..	100	6	15	8	8,500
Denmark	1.7	1.8	6	..	..	..	..	..	..	7	5	10,900
Dominican Republic	3.5	2.6	107	11	73	99	*93*	98	159	220	100	320
Ecuador	3.7	2.5	82	..	73	84	..	98	60	230	140	270
Egypt, Arab Rep.	4.6	2.8	37	9	60	74	*37*	79	55	220	82	380
El Salvador	4.0	2.3	81	..	73	94	*52*	96	59	200	110	350
Eritrea	6.2	4.5	62	..	..	..	..	..	..	930	280	72
Estonia	2.0	1.6	20	..	..	..	..	100	7	48	12	5,300
Ethiopia	7.1	5.2	94	34	15	28	..	6	673	990	470	40
Finland	1.8	1.9	11	..	..	..	..	..	..	7	8	7,600
France	1.8	2.0	6	..	71	..	..	..	..	13	8	6,600
Gabon	5.2	3.2	85	..	..	..	..	..	..	260	260	110
Gambia, The	6.1	5.0	87	..	..	98	44	57	..	750	400	49
Georgia	2.2	1.6	44	..	47	94	..	98	14	58	48	1,300
Germany	1.5	1.4	7	..	..	..	..	100	..	13	7	11,100
Ghana	5.6	3.9	61	35	24	90	*40*	57	451	630	350	66
Greece	1.4	1.5	8	..	..	..	..	..	..	6	2	31,800
Guatemala	5.6	4.0	104	..	54	..	..	51	133	140	110	210
Guinea	6.7	5.3	147	21	9	88	*31*	46	980	1,200	680	26
Guinea-Bissau	5.9	5.7	125	25	10	78	..	39	405	1,200	1,000	18
Haiti	5.4	3.4	45	38	32	85	*23*	26	630	670	300	93
Honduras	5.1	3.2	90	17	65	92	*45*	67	..	210	110	240

2.19 Reproductive health

	Total 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			Lifetime risk of maternal death
	births per woman		births per 1,000 women ages 15–19	% of married women ages 15–49	any method % of married women ages 15–49	%	% of total		per 100,000 live births			Probability 1 woman in:
	1990	2009	2009	2004–09[a]	2004–09[a]	2004–09[a]	1990	2004–09[a]	National estimates 2004–09[a]	Modeled estimates 1990	Modeled estimates 2008	2008
Hungary	1.8	1.3	19	..	..	..	..	100	17	23	13	5,500
India	4.0	2.7	64	13	54	75	..	53	254	570	230	140
Indonesia	3.1	2.1	37	9	57	93	*32*	75	228	620	240	190
Iran, Islamic Rep.	4.8	1.8	17	..	79	98	..	97	25	150	30	1,500
Iraq	6.0	3.9	80	..	50	84	*54*	80	84	93	75	300
Ireland	2.1	2.1	15	..	89	..	..	..	..	6	3	17,800
Israel	2.8	3.0	14	..	..	..	..	..	..	12	7	5,100
Italy	1.3	1.4	5	..	..	..	..	..	..	10	5	15,200
Jamaica	2.9	2.4	75	..	..	91	*79*	95	..	66	89	450
Japan	1.5	1.4	5	..	54	..	100	100	..	12	6	12,200
Jordan	5.5	3.4	24	11	59	99	87	99	19	110	59	510
Kazakhstan	2.7	2.6	29	..	51	100	..	100	37	78	45	950
Kenya	6.0	4.9	101	..	46	92	*50*	44	488	380	530	38
Korea, Dem. Rep.	2.4	1.9	0	..	..	..	..	..	77	270	250	230
Korea, Rep.	1.6	1.3	6	..	80	..	98	..	..	18	18	4,700
Kosovo	3.9	2.3	..	..	..	..	..	..	..	..	..	..
Kuwait	3.5	2.2	13	..	..	..	..	..	..	10	9	4,500
Kyrgyz Republic	3.7	2.8	32	1	48	97	..	98	55	77	81	450
Lao PDR	6.0	3.4	34	..	38	35	..	20	405	1,200	580	49
Latvia	2.0	1.3	14	..	..	..	..	100	8	57	20	3,600
Lebanon	3.1	1.8	16	..	58	96	..	98	..	52	26	2,000
Lesotho	4.9	3.3	69	31	47	92	..	62	762	370	530	62
Liberia	6.5	5.8	136	36	11	79	..	46	994	1,100	990	20
Libya	4.8	2.6	3	..	..	..	..	..	..	100	64	540
Lithuania	2.0	1.5	20	..	..	..	..	100	9	34	13	5,800
Macedonia, FYR	2.1	1.4	21	34	14	94	..	100	4	16	9	7,300
Madagascar	6.3	4.6	127	24	40	86	*57*	44	498	710	440	45
Malawi	7.0	5.5	127	28	41	92	*55*	54	807	910	510	36
Malaysia	3.7	2.5	12	..	..	79	..	99	29	56	31	1,200
Mali	6.7	6.5	155	31	8	70	..	49	464	1,200	830	22
Mauritania	5.9	4.4	82	25	9	75	*40*	61	686	780	550	41
Mauritius	2.3	1.5	41	..	..	..	91	99	..	72	36	1,600
Mexico	3.4	2.1	63	..	73	94	..	93	63	93	85	500
Moldova	2.4	1.5	33	7	68	98	..	100	38	62	32	2,000
Mongolia	4.2	2.0	15	14	55	100	..	99	81	130	65	730
Morocco	4.0	2.3	19	10	63	68	*31*	63	132	270	110	360
Mozambique	6.2	5.0	139	..	16	89	..	55	..	1,000	550	37
Myanmar	3.4	2.3	18	..	41	80	..	64	316	420	240	180
Namibia	5.2	3.3	67	7	55	95	*68*	81	449	180	180	160
Nepal	5.2	2.8	91	25	48	44	*7*	19	281	870	380	80
Netherlands	1.6	1.8	4	..	69	..	..	..	..	10	9	7,100
New Zealand	2.2	2.1	21	..	..	..	..	..	..	18	14	3,800
Nicaragua	4.8	2.7	111	8	72	90	..	74	77	190	100	300
Niger	7.9	7.1	152	16	11	46	*15*	33	648	1,400	820	16
Nigeria	6.6	5.6	118	..	15	58	33	39	545	1,100	840	23
Norway	1.9	2.0	8	..	88	..	*100*	..	..	9	7	7,600
Oman	6.6	3.0	10	..	..	..	..	99	17	49	20	1,600
Pakistan	6.1	3.9	42	25	30	61	*19*	39	276	490	260	93
Panama	3.0	2.5	80	..	..	..	..	92	60	86	71	520
Papua New Guinea	4.8	4.0	50	..	32	79	..	53	733	340	250	94
Paraguay	4.5	3.0	69	..	79	96	66	82	118	130	95	310
Peru	3.8	2.5	52	8	73	94	*80*	83	..	250	98	370
Philippines	4.3	3.0	43	22	51	91	..	62	162	180	94	320
Poland	2.0	1.4	13	..	..	..	..	100	5	17	6	13,300
Portugal	1.4	1.3	15	..	67	..	*98*	..	..	15	7	9,800
Puerto Rico	2.2	1.7	50	..	..	..	..	100	..	29	18	3,000
Qatar	4.4	2.4	15	..	..	..	..	..	..	15	8	4,400

2.19 Reproductive health

	Total 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			Lifetime risk of maternal death
	births per woman		births per 1,000 women ages 15–19	% of married women ages 15–49	any method % of married women ages 15–49	%	% of total		per 100,000 live births			Probability 1 woman in:
	1990	2009	2009	2004–09[a]	2004–09[a]	2004–09[a]	1990	2004–09[a]	National estimates 2004–09[a]	Modeled estimates 1990	2008	2008
Romania	1.8	1.4	29	..	70	94	..	99	14	170	27	2,700
Russian Federation	1.9	1.6	24	..	80	..	..	100	32[b]	74	39	1,900
Rwanda	6.8	5.3	35	38	36	96	*26*	52	750	1,100	540	35
Saudi Arabia	5.8	3.0	25	..	24	..	..	96	14	41	24	1,300
Senegal	6.7	4.7	97	32	12	94	..	52	401	750	410	46
Serbia	*1.8*	1.4	21	29	41	98	..	99	6	13	8	7,500
Sierra Leone	5.5	5.2	124	..	8	87	..	42	857	1,300	970	21
Singapore	1.9	1.2	4	..	..	..	..	100	..	6	9	10,000
Slovak Republic	2.1	1.4	20	..	..	..	..	100	4	15	6	13,300
Slovenia	1.5	1.5	5	..	..	..	*100*	100	26	11	18	4,100
Somalia	6.6	6.4	69	26	15	26	..	33	1,044	1,100	1,200	14
South Africa	3.7	2.5	56	..	..	..	..	..	..	230	410	100
Spain	1.3	1.4	12	..	66	..	..	..	..	7	6	11,400
Sri Lanka	2.5	2.3	29	..	68	99	..	99	39	91	39	1,100
Sudan	6.0	4.1	53	6	8	64	69	49	1,107	830	750	32
Swaziland	5.7	3.5	78	24	51	85	..	69	589	260	420	75
Sweden	2.1	1.9	7	..	..	..	..	..	..	7	5	11,400
Switzerland	1.6	1.5	5	..	..	..	..	100	..	8	10	7,600
Syrian Arab Republic	5.5	3.1	55	11	58	84	..	93	..	120	46	610
Tajikistan	5.2	3.4	27	24	37	80	..	88	38	120	64	430
Tanzania	6.2	5.5	128	22	26	76	*53*	43	578	880	790	23
Thailand	2.1	1.8	36	..	77	98	..	97	12	50	48	1,200
Timor-Leste	5.3	6.4	52	..	22[b]	..	..	..	..	650	370	44
Togo	6.3	4.2	62	41	17	84	*31*	62	..	650	350	67
Trinidad and Tobago	2.4	1.6	34	27	43	96	..	98	..	86	55	1,100
Tunisia	3.5	2.1	7	..	60	96	69	95	..	130	60	860
Turkey	3.1	2.1	36	18	73	95	..	95	29	68	23	1,900
Turkmenistan	4.3	2.4	18	..	48	99	..	100	15	91	77	500
Uganda	7.1	6.3	142	41	24	94	*38*	42	435	670	430	35
Ukraine	1.8	1.5	27	10	67	99	..	99	16	49	26	3,000
United Arab Emirates	4.4	1.9	15	..	..	..	..	..	..	28	10	4,200
United Kingdom	1.8	2.0	22	..	..	..	..	..	..	10	12	4,700
United States	2.1	2.1	33	..	..	..	99	..	13	12	24	2,100
Uruguay	2.5	2.0	60	..	78	96	..	99	34	39	27	1,700
Uzbekistan	4.1	2.7	13	8	65	99	..	100	21	53	30	1,400
Venezuela, RB	3.4	2.5	89	..	..	..	..	..	61	84	68	540
Vietnam	3.7	2.0	16	..	80	91	..	88	75	170	56	850
West Bank and Gaza	6.4	4.9	73	..	50	99	..	99	..	..	..	..
Yemen, Rep.	8.1	5.1	64	24	28	47	*16*	36	..	540	210	91
Zambia	6.5	5.7	133	27	41	94	*51*	47	591	390	470	38
Zimbabwe	5.2	3.4	61	13	65	93	*70*	60	555	390	790	42
World	**3.3 w**	**2.5 w**	**50 w**	**.. w**	**61 w**	**82 w**	**50 w**	**65 w**		**400 w**	**260 w**	**140 w**
Low income	5.6	4.2	97	25	33	67	..	41		850	580	39
Middle income	3.3	2.4	46	..	66	85	46	71		350	200	190
Lower middle income	3.4	2.5	45	..	63	83	41	66		400	230	160
Upper middle income	3.0	2.0	49	..	75	95	..	96		120	82	570
Low & middle income	3.6	2.7	54	..	61	82	46	64		440	290	120
East Asia & Pacific	2.6	1.9	17	..	77	91	48	89		200	89	580
Europe & Central Asia	2.3	1.8	27	..	69	..	..	97		69	32	1,700
Latin America & Carib.	3.2	2.2	71	..	75	95	72	89		140	86	480
Middle East & N. Africa	4.9	2.7	34	..	62	83	47	80		210	88	380
South Asia	4.3	2.8	63	15	51	70	32	47		610	290	110
Sub-Saharan Africa	6.3	5.1	112	24	21	71	..	44		870	650	31
High income	1.8	1.7	18	..	..	..	..	..		15	15	3,900
Euro area	1.5	1.6	8	..	..	..	..	..		11	7	10,100

a. Data are for the most recent year available. b. Data are for 2010.

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.

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 and year). Unmarried women are often excluded from such surveys, which may bias the estimates.

Good prenatal and postnatal care improves maternal health and reduces maternal and infant mortality. Indicators on use of antenatal care services, however, provide no information on the content or quality of the services. Data on antenatal care are obtained mostly from household surveys, which ask women who have had a live birth whether and from whom they received antenatal care. 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. This year's estimates of maternal mortality include country-level time-series data for the first time. For countries with complete vital registration systems with good attribution of cause of death, the data are used to directly estimate maternal mortality. For countries without complete registration data but with other types of data and for countries with no empirical national data, maternal mortality is estimated with a multilevel regression model using available national-level maternal mortality data and socioeconomic information, including fertility, birth attendants, and GDP. The methodology of this year's interagency estimates differs from previous years', so the data should not be compared with data in previous editions. For further information on methodology, see the original source.

Neither set of ratios can be assumed to provide an exact estimate of maternal mortality for any of the countries in the table.

In countries with a high risk of maternal death, many girls die before reaching reproductive age. Lifetime risk of maternal mortality refers to the probability that a 15-year-old girl will eventually die from a maternal cause.

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

Definitions

• **Total fertility rate** is the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current age-specific fertility rates. • **Adolescent** fertility rate is the number of births per 1,000 women ages 15–19. • **Unmet need for contraception** is the percentage of fertile, married women of reproductive age who do not want to become pregnant and are not using contraception. • **Contraceptive prevalence rate** is the percentage of women married or in union ages 15–49 who are practicing, or whose sexual partners are practicing, any form of contraception. • **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. • **Lifetime risk of maternal death** refers to the probability that a 15-year-old girl will eventually die from a maternal cause if throughout her lifetime she experiences the risks of maternal death and the overall level of fertility and mortality that are observed for a given population. Data are presented as 1 in the number of women who are likely to die from a maternal cause.

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 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 2011 and Childinfo and Demographic and Health Surveys by Macro International. Modeled estimates of maternal mortality ratios and lifetime risk of maternal death are from WHO, UNICEF, UNFPA and the World Bank's Trends in *Maternal Mortality: 1990–2008* (2010).

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	2005–09	Underweight 2004–09[a]	Stunting 2004–09[a]	2004–09[a]	2004–09[a]	2004–09[a]	2004–09[a]	2009	2004–09[a]	2004–09[a]
Afghanistan	..	..	32.9	59.3	4.6	..	83	28	95	38	61
Albania	10	<5	6.6	27.0	25.2	7	39	76	..	31	34
Algeria	<5	<5	3.7	15.9	12.9	6	7	61	..	43	43
Angola	67	41	..	..	..	..	..	45	28	..	57
Argentina	<5	<5	2.3	8.2	9.9	7	..	..	..	17	31
Armenia	45	22	4.2	18.2	11.7	7	33	97	..	37	..
Australia	<5	<5	..	..	..	..	..	..	..	8	12
Austria	<5	<5	..	..	..	..	..	..	..	11	15
Azerbaijan	27	<5	8.4	26.8	13.9	10	12	54	79[b]	..	..
Bangladesh	38	27	41.3	43.2	1.1	22	43	84	91	58	39
Belarus	<5	<5	1.3	4.5	9.7	4	9	55	..	27	26
Belgium	<5	<5	..	..	..	..	..	..	..	9	13
Benin	20	12	20.2	44.7	11.4	15	43	67	56	78	75
Bolivia	29	27	4.5	27.2	8.7	6	60	89	45	52	37
Bosnia and Herzegovina	8	<5	1.6	11.8	25.6	5	18	62	..	27	35
Botswana	19	25	..	..	..	13	20	..	89	..	21
Brazil	11	6	2.2	7.1	7.3	8	40	96	..	55	29
Bulgaria	<5	10	1.6	8.8	13.6	9	..	100	..	27	30
Burkina Faso	14	9	26.0	35.1	7.7	16	16	34	100	..	..
Burundi	44	62	..	..	..	11	45	98	90	56	47
Cambodia	38	22	28.8	39.5	2.0	9	66	73	98	62	57
Cameroon	33	21	16.6	36.4	9.6	11	21	49	..	68	51
Canada	<5	<5	..	..	..	..	..	..	..	8	12
Central African Republic	44	40	..	..	..	13	23	62	87	..	..
Chad	60	37	33.9	44.8	4.4	22	2	56	71	71	60
Chile	7	<5	0.5	2.0	9.5	6	85	..	..	24	28
China	18[c]	10[c]	4.5	11.7	5.9	3	28	96	..	..	..
Hong Kong SAR, China	..	..	..	..	..	..	..	..	..	..	..
Colombia	15	10	5.1	16.2	4.2	6	47	..	..	28	31
Congo, Dem. Rep.	26	69	28.2	45.8	6.8	10	36	79	89	71	67
Congo, Rep.	42	15	11.8	31.2	8.5	13	19	82	8	66	55
Costa Rica	<5	<5	..	..	..	7	15	..	..	..	..
Côte d'Ivoire	15	14	16.7	40.1	9.0	17	4	84	88	69	55
Croatia	18	<5	1.0	0.6	8.1	5	98	88	..	23	28
Cuba	6	<5	..	..	..	5	26	88	..	27	39
Czech Republic	<5	<5	..	..	..	..	..	..	..	18	22
Denmark	<5	<5	..	..	..	..	..	..	..	9	12
Dominican Republic	28	24	3.4	10.1	8.3	11	9	19	..	35	40
Ecuador	23	15	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	13	9	..	..	..	..	31	..	20	..	..
Eritrea	67	64	..	..	..	..	..	..	44	70	55
Estonia	10	<5	..	..	..	..	..	..	..	23	23
Ethiopia	69	41	34.6	50.7	5.1	20	49	20	84	75	63
Finland	<5	<5	..	..	..	..	..	..	..	11	15
France	<5	<5	..	..	..	..	..	..	..	8	11
Gabon	6	<5	..	..	..	..	..	..	0	44	46
Gambia, The	14	19	15.8	27.6	2.7	20	41	7	28	..	..
Georgia	58	<5	2.3	14.7	21.0	5	11	100	..	41	42
Germany	<5	<5	1.1	1.3	3.5	..	..	..	..	8	12
Ghana	27	5	14.3	28.6	5.9	13	63	32	90	..	..
Greece	<5	<5	..	..	..	..	..	..	..	12	19
Guatemala	15	21	..	..	..	..	50	76	43	..	..
Guinea	20	17	20.8	40.0	5.1	12	48	41	94	76	..
Guinea-Bissau	22	22	17.4	47.7	17.0	24	16	1	80	75	58
Haiti	63	57	18.9	29.7	3.9	25	41	3	..	..	50
Honduras	19	12	8.6	29.9	5.8	10	30	..	..	..	21

	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	2005–09	Underweight 2004–09[a]	Stunting 2004–09[a]	2004–09[a]	2004–09[a]	2004–09[a]	2004–09[a]	2009	2004–09[a]	2004–09[a]
Hungary	<5	<5	..	..	..	..	..	..	..	19	21
India	20	21	43.5	47.9	1.9	28	46	51	66	74	50
Indonesia	16	13	17.5[d]	35.6[d]	11.2	11[d]	15[d]	62[d]	84	44	44
Iran, Islamic Rep.	<5	<5	..	..	..	7	23	99	..	35	..
Iraq	..	..	7.1	27.5	15.0	15	25	28	..	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	1.9	8.3	6.6	13	22	..	..	..	..
Kazakhstan	<5	<5	4.9	17.5	14.8	6	17	92	..	..	26
Kenya	33	31	16.4	35.2	5.0	8	32	98	51	..	..
Korea, Dem. Rep.	21	33	20.6	43.1	..	..	65	40	99	..	..
Korea, Rep.	<5	<5	..	..	..	..	..	..	..	..	23
Kosovo	..	..	..	..	..	..	..	..	..	..	..
Kuwait	20	5	1.7	3.8	9.0	..	..	..	..	..	31
Kyrgyz Republic	17	10	2.7	18.1	10.7	5	32	76	99	..	34
Lao PDR	31	23	31.6	47.6	1.3	11	26	84	88	..	56
Latvia	<5	<5	..	..	..	..	..	..	..	27	25
Lebanon	<5	<5	4.2	16.5	16.7	..	..	92	..	..	32
Lesotho	15	14	16.6	45.2	6.8	13	54	91	85	49	25
Liberia	30	33	20.4	39.4	4.2	14	29	..	92	..	..
Libya	<5	<5	5.6	21.0	22.4	..	..	..	..	34	34
Lithuania	<5	<5	..	..	..	..	..	..	..	24	24
Macedonia, FYR	11	<5	1.8	11.5	16.2	6	16	94	..	..	32
Madagascar	21	25	36.8	49.2	6.2	16	51	53	95	68	50
Malawi	43	28	15.5	53.2	11.3	13	57	50	95	73	47
Malaysia	<5	<5	..	..	..	11	..	..	..	32	38
Mali	27	12	27.9	38.5	4.7	19	38	79	100	..	..
Mauritania	12	7	16.7	24.2	2.3	34	35	23	89	68	53
Mauritius	7	5	..	..	..	..	..	..	..	..	..
Mexico	<5	<5	3.4	15.5	7.6	8	..	..	..	24	21
Moldova	5	6	3.2	11.3	9.1	6	46	60	..	41	36
Mongolia	28	26	5.3	27.5	14.2	5	57	83	95	21	37
Morocco	6	<5	9.9	23.1	13.3	..	31	21	..	..	..
Mozambique	59	38	..	..	..	15	37	25	97	..	52
Myanmar	47	16	..	..	..	..	..	93	95	63	50
Namibia	32	19	17.5	29.6	4.6	16	24	..	..	41	31
Nepal	21	16	38.8	49.3	0.6	21	53	..	95	48	42
Netherlands	<5	<5	..	..	..	..	..	..	..	9	13
New Zealand	<5	<5	..	..	..	..	..	..	..	11	18
Nicaragua	50	19	4.3	18.8	5.2	8	31	..	6	17	..
Niger	37	20	39.9	54.8	3.5	27	10	46	95	81	61
Nigeria	16	6	26.7	41.0	10.5	12	13	..	78	..	..
Norway	<5	<5	..	..	..	..	..	..	..	6	9
Oman	..	..	..	..	..	9	..	..	..	42	..
Pakistan	25	26	..	..	..	32	37	..	91	..	..
Panama	18	15	..	..	..	..	..	..	..	..	..
Papua New Guinea	..	..	18.1	43.9	3.4	10	56	92	12	60	55
Paraguay	16	11	..	..	..	9	22	94	..	30	39
Peru	27	15	5.4	29.8	9.1	8	70	91	..	50	43
Philippines	24	15	..	..	..	21	34	45	91	21	43
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	% Children under age 5	% Pregnant women
	1990–92	2005–09	Underweight 2004–09[a]	Stunting 2004–09[a]	2004–09[a]	2004–09[a]	2004–09[a]	2004–09[a]	2009	2004–09[a]	2004–09[a]
Romania	<5	<5	..	..	..	8	16	74	..	40	30
Russian Federation	<5	<5	..	..	..	6	..	..	..	27	21
Rwanda	44	34	18.0	51.7	6.7	6	88	88	94	56	..
Saudi Arabia	<5	<5	5.3	9.3	6.1	..	..	..	..	33	32
Senegal	22	17	14.5	20.1	2.4	19	34	41	97	70	58
Serbia	<5[e]	8[e]	1.8	8.1	19.3	6	15	32	..	..	..
Sierra Leone	45	35	21.3	37.4	10.1	14	11	58	99	83	60
Singapore	..	..	..	..	..	..	..	..	..	19	24
Slovak Republic	<5	<5	..	..	..	..	..	..	..	23	25
Slovenia	<5	<5	..	..	..	..	..	..	..	14	19
Somalia	..	..	32.8	42.1	4.7	11	9	1	62	..	..
South Africa	<5	<5	..	..	..	..	..	..	39	..	22
Spain	<5	<5	..	..	..	..	..	..	..	13	18
Sri Lanka	28	19	21.6	19.2	0.8	17	76	92	..	..	..
Sudan	39	22	31.7	37.9	5.3	..	34	11	84	85	58
Swaziland	12	18	6.1	29.5	11.4	9	33	80	27	47	24
Sweden	<5	<5	..	..	..	..	..	..	..	9	13
Switzerland	<5	<5	..	..	..	..	..	..	..	6	..
Syrian Arab Republic	<5	<5	10.0	28.6	18.7	9	29	..	..	41	39
Tajikistan	34	30	14.9	33.1	6.7	10	25	62	87	..	45
Tanzania	28	34	16.7	44.4	4.9	10	50[d]	43	94	72	58
Thailand	26	16	7.0	15.7	8.0	9	5	47	..	..	..
Timor-Leste	39	31	..	..	..	..	52[d]	60	45	..	..
Togo	43	30	22.3	27.8	4.7	12	48	25	100	52	50
Trinidad and Tobago	11	11	..	..	..	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	11	42	69	..	33	40
Turkmenistan	9	6	..	..	..	4	11	87	..	..	30
Uganda	19	21	16.4	38.7	4.9	14	60	96	64	73	64
Ukraine	<5	<5	..	..	..	4	18	18	..	..	27
United Arab Emirates	<5	<5	..	..	..	..	..	..	..	28	28
United Kingdom	<5	<5	..	..	..	..	..	..	..	..	15
United States	<5	<5	1.3	3.9	8.0	..	..	..	..	..	6
Uruguay	5	<5	6.0	13.9	9.4	8	57	..	..	19	27
Uzbekistan	5	11	4.4	19.6	12.8	5	26	53	65	..	..
Venezuela, RB	10	8	3.7	15.6	6.1	8	..	..	..	33	40
Vietnam	31	11	20.2	30.5	3.0	5	17	93	99[b]	..	..
West Bank and Gaza	10	18	2.2	11.8	11.4	7	27	86	..	..	..
Yemen, Rep.	30	31	..	..	..	..	..	..	47[b]	68	58
Zambia	35	43	14.9	45.8	8.4	11	61	..	91	..	..
Zimbabwe	40	30	14.0	35.8	9.1	11	26	91	77	58	47
World	**17 w**	**14 w**	**21.3 w**	**31.7 w**	**6.1 w**	**15 w**	**37 w**	**71 w**	**.. w**	**.. w**	**.. w**
Low income	38	31	27.7	44.0	4.9	15	44	62	86	66	56
Middle income	17	13	20.8	30.0	6.3	15	35	73	..	..	..
Lower middle income	19	15	24.0	33.1	5.9	17	34	71	..	..	..
Upper middle income	8	6	..	..	..	8	..	..	..	36	31
Low & middle income	19	16	22.4	33.3	6.0	15	37	71	..	..	..
East Asia & Pacific	20	11	8.8	19.0	6.6	6	29	87	..	..	..
Europe & Central Asia	7	6	..	..	..	7	..	..	..	30	31
Latin America & Carib.	13	9	3.8	14.1	7.2	8	44	89	..	38	33
Middle East & N. Africa	7	7	6.8	25.0	16.6	10	31	69	..	48	..
South Asia	23	22	42.5	47.5	1.9	27	46	55	73	71	49
Sub-Saharan Africa	31	26	24.7	42.0	7.0	14	33	52	81	..	..
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; Macao SAR, China; and Taiwan, China. d. Data are for 2010. e. 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 prevalence of underweight and 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. Stunting, or being below median height for age, 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. 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. 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. 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 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, 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 based on 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 who received at least two doses of vitamin A in the previous year. • **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 2011* and Childinfo. Data on anemia are from the WHO's *Worldwide Prevalence of Anemia 1993–2005* (2008c) 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[a]					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	2009	2010	1990	2009	2009	Male 2009	Female 2009	Male 2004–09[b]	Female 2004–09[b]
Afghanistan	..	..	189	8.6	..	..	..	..	..	..	..
Albania	43	4	15	4.5	..	..	..	..	..	..	..
Algeria	26	0	59	8.5	<0.1	0.1	30	0.1	<0.1	..	..
Angola	..	..	298	3.5	0.5	2.0	60	0.6	1.6	..	..
Argentina	34	24	28	5.7	0.3	0.5	32	0.3	0.2	..	..
Armenia	61	3	73	7.8	<0.1	0.1	<43	<0.1	<0.1	68	5
Australia	22	19	6	5.7	0.1	0.1	31	0.1	0.1	..	..
Austria	47	41	11	8.9	<0.1	0.3	29	0.3	0.2	..	..
Azerbaijan	..	..	110	7.5	<0.1	0.1	60	<0.1	0.1	25	1
Bangladesh	43	1	225	6.6	<0.1	<0.1	30	<0.1	<0.1	..	..
Belarus	64	22	39	7.6	<0.1	0.3	50	<0.1	0.1	..	..
Belgium	30	24	9	5.3	<0.1	0.2	31	<0.1	<0.1	..	..
Benin	13	1	93	4.6	0.2	1.2	58	0.3	0.7	39	10
Bolivia	34	26	140	6.0	0.1	0.2	32	0.1	0.1	..	..
Bosnia and Herzegovina	49	35	50	7.1	..	..	..	..	..	..	..
Botswana	..	..	694	5.4	3.5	24.8	57	5.2	11.8	..	..
Brazil	19	12	45	6.4	..	..	..	..	..	..	..
Bulgaria	49	38	41	6.5	<0.1	0.1	29	<0.1	<0.1	..	..
Burkina Faso	13	1	215	3.8	3.9	1.2	60	0.5	0.8	..	..
Burundi	..	..	348	1.8	3.9	3.3	60	1.0	2.1	..	..
Cambodia	55[c]	20[c]	442	5.2	0.5	0.5	63	0.1	0.1	31	3
Cameroon	9	1	182	3.9	0.6	5.3	58	1.6	3.9	52	24
Canada	21	18	5	9.2	0.1	0.2	21	0.1	0.1	..	..
Central African Republic	..	..	327	4.5	3.1	4.7	61	1.0	2.2	..	..
Chad	12	1	283	3.7	1.1	3.4	59	1.0	2.5	18	2
Chile	42	31	11	5.7	<0.1	0.4	31	0.2	0.1	..	..
China	59	4	96	4.2	..	0.1[d]	..	..	..	..	..
Hong Kong SAR, China	..	..	82	8.5	..	..	..	..	..	..	..
Colombia	..	..	35	5.2	0.2	0.5	33	0.2	0.1	..	24
Congo, Dem. Rep.	10	1	372	3.2	..	..	..	..	..	16	26
Congo, Rep.	9	0	382	5.1	5.2	3.4	59	1.2	2.6	36	16
Costa Rica	26	7	10	9.3	<0.1	0.3	29	0.2	0.1	..	..
Côte d'Ivoire	11	1	399	4.7	2.4	3.4	58	0.7	1.5	..	..
Croatia	34[e]	27[e]	25	6.9	<0.1	<0.1	<33	<0.1	<0.1	..	..
Cuba	36	28	6	9.5	<0.1	0.1	31	0.1	0.1	..	..
Czech Republic	35	27	9	6.4	<0.1	<0.1	<42	<0.1	<0.1	..	..
Denmark	35	30	7	5.6	<0.1	0.2	27	0.1	0.1	..	..
Dominican Republic	15	11	70	11.2	0.4	0.9	59	0.3	0.7	58	19
Ecuador	23	5	68	5.9	0.3	0.4	31	0.2	0.2	..	..
Egypt, Arab Rep.	24	1	19	11.4	<0.1	<0.1	23	<0.1	<0.1	..	..
El Salvador	..	..	30	9.0	0.1	0.8	34	0.4	0.3	..	..
Eritrea	15	1	99	2.5	0.3	0.8	60	0.2	0.4	..	..
Estonia	48	25	30	7.6	<0.1	1.2	31	0.3	0.2	..	..
Ethiopia	8	1	359	2.5	..	..	..	..	..	18	2
Finland	33	23	9	5.7	<0.1	0.1	<36	0.1	<0.1	..	..
France	36	27	6	6.7	0.3	0.4	32	0.2	0.1	..	..
Gabon	..	..	501	5.0	0.9	5.2	58	1.4	3.5	..	..
Gambia, The	17	1	269	4.3	0.1	2.0	58	0.9	2.4	..	..
Georgia	57	6	107	7.5	<0.1	0.1	43	<0.1	<0.1	..	..
Germany	37	26	5	8.9	0.1	0.1	18	0.1	<0.1	..	..
Ghana	7	1	201	4.3	0.3	1.8	59	0.5	1.3	..	..
Greece	63	39	5	6.0	0.1	0.1	31	0.1	0.1	..	..
Guatemala	24	4	62	8.6	0.1	0.8	33	0.5	0.3	..	..
Guinea	..	..	318	4.3	1.1	1.3	59	0.4	0.9	35	10
Guinea-Bissau	..	..	229	3.9	0.3	2.5	60	0.8	2.0	..	..
Haiti	..	..	238	7.2	1.3	1.9	60	0.6	1.3	42	37
Honduras	..	..	58	9.1	1.1	0.8	32	0.3	0.2	..	7

Health risk factors and future challenges

2.21

	Prevalence of smoking		Incidence of tuberculosis	Prevalence of diabetes	Prevalence of HIV[a]					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	2009	2010	1990	2009	2009	Male 2009	Female 2009	Male 2004–09[b]	Female 2004–09[b]
Hungary	45	35	16	6.4	0.1	<0.1	<33	<0.1	<0.1	..	..
India	28	1	168	7.8	0.1	0.3	39	0.1	0.1	15	6
Indonesia	66[f]	5[f]	189	4.8	<0.1	0.2	30	0.1	<0.1	..	..
Iran, Islamic Rep.	24	2	19	8.0	<0.1	0.2	29	<0.1	<0.1	..	..
Iraq	29	3	64	10.2	..	..	..	..	..	..	..
Ireland	34	28	9	5.2	<0.1	0.2	29	0.1	0.1	..	..
Israel	31	18	5	6.5	<0.1	0.2	29	0.1	<0.1	..	..
Italy	34	19	6	5.9	0.3	0.3	33	<0.1	<0.1	..	..
Jamaica	18	8	7	10.6	2.1	1.7	33	1.0	0.7	74	66
Japan	42	13	21	5.0	<0.1	<0.1	34	<0.1	<0.1	..	..
Jordan	59	10	6	10.1	..	..	..	..	..	..	..
Kazakhstan	43	9	163	5.8	<0.1	0.1	60	0.1	0.2	..	..
Kenya	23	1	305	3.5	3.9	6.3	59	1.8	4.1	64	40
Korea, Dem. Rep.	58	..	345	5.3	..	..	..	..	..	..	..
Korea, Rep.	53	6	90	7.9	<0.1	<0.1	31	<0.1	<0.1	..	..
Kosovo	..	..	..	..	..	..	..	..	..	..	..
Kuwait	36	4	35	14.6	..	..	..	..	..	..	..
Kyrgyz Republic	46	2	159	5.2	<0.1	0.3	29	0.1	0.1	..	..
Lao PDR	60	13	89	5.6	<0.1	0.2	42	0.1	0.2	..	..
Latvia	53	24	45	7.6	<0.1	0.7	30	0.2	0.1	..	..
Lebanon	31	7	15	7.8	<0.1	0.1	31	0.1	<0.1	..	..
Lesotho	..	..	634	3.9	0.8	23.6	62	5.4	14.2	44	26
Liberia	10	..	288	4.7	0.3	1.5	61	0.3	0.7	19	9
Libya	..	..	40	9.0	..	..	..	..	..	..	..
Lithuania	50	22	71	7.6	<0.1	0.1	<33	<0.1	<0.1	..	..
Macedonia, FYR	..	..	23	6.9	..	..	..	..	..	..	..
Madagascar	..	..	261	3.2	0.2	0.2	31	0.1	0.1	6	3
Malawi	17	2	304	2.3	7.2	11.0	59	3.1	6.8	32	9
Malaysia	49	2	83	11.6	0.1	0.5	11	0.1	<0.1	..	..
Mali	13	1	324	4.2	0.4	1.0	62	0.2	0.5	29	4
Mauritania	24	1	330	4.8	0.2	0.7	31	0.4	0.3	..	..
Mauritius	34	1	22	16.2	<0.1	1.0	29	0.3	0.2	..	..
Mexico	36	12	17	10.8	0.4	0.3	27	0.2	0.1	..	..
Moldova	45	5	178	7.6	<0.1	0.4	42	0.1	0.1	55	22
Mongolia	46	6	224	1.6	<0.1	<0.1	<29	<0.1	<0.1	..	..
Morocco	27	0	92	8.3	<0.1	0.1	32	0.1	0.1	..	..
Mozambique	19	1	409	4.0	1.2	11.5	61	3.1	8.6	..	..
Myanmar	40	13	404	3.2	0.2	0.6	35	0.3	0.3	..	..
Namibia	22	8	727	4.4	1.6	13.1	59	2.3	5.8	78	55
Nepal	30	28	163	3.9	0.2	0.4	33	0.2	0.1	24	8
Netherlands	33	28	8	5.3	0.1	0.2	30	0.1	<0.1	..	..
New Zealand	22	20	8	5.2	0.1	0.1	<37	<0.1	<0.1	..	..
Nicaragua	..	..	44	10.0	<0.1	0.2	31	0.1	0.1	..	..
Niger	..	..	181	3.9	0.1	0.8	53	0.2	0.5	14	1
Nigeria	8	0	295	4.7	1.3	3.6	59	1.2	2.9	50	36
Norway	30	30	6	3.6	<0.1	0.1	30	<0.1	<0.1	..	..
Oman	20	0	13	13.4	<0.1	0.1	<33	<0.1	<0.1	..	..
Pakistan	30	3	231	9.1	<0.1	0.1	29	0.1	<0.1	..	..
Panama	..	..	48	9.6	0.2	0.9	31	0.4	0.3	..	..
Papua New Guinea	..	..	250	3.0	<0.1	0.9	58	0.3	0.8	..	..
Paraguay	33	14	47	4.9	<0.1	0.3	31	0.2	0.1	..	..
Peru	..	..	113	6.2	0.4	0.4	25	0.2	0.1	..	..
Philippines	50	11	280	7.7	<0.1	<0.1	30	<0.1	<0.1	..	..
Poland	30	38	24	7.6	<0.1	0.1	31	<0.1	<0.1	..	..
Portugal	34	15	30	9.7	0.1	0.6	31	0.3	0.2	..	..
Puerto Rico	..	..	2	10.6	..	..	..	..	..	..	..
Qatar	..	..	49	15.4	<0.1	0.1	<50	<0.1	<0.1	..	..

2.21 Health risk factors and future challenges

	Prevalence of smoking		Incidence of tuberculosis	Prevalence of diabetes	Prevalence of HIV[a]					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	2009	2010	1990	2009	2009	Male 2009	Female 2009	Male 2004–09[b]	Female 2004–09[b]
Romania	46	24	125	6.9	<0.1	0.1	30	0.1	<0.1	..	..
Russian Federation	60[g]	22[g]	106	7.6	<0.1	1.0	49	0.2	0.3	..	..
Rwanda	..	..	376	1.6	5.2	2.9	61	1.3	1.9	19	5
Saudi Arabia	22	3	18	16.8	..	..	..	..	..	..	..
Senegal	13	1	282	4.7	0.2	0.9	59	0.3	0.7	48	5
Serbia	40	27	21	6.9	0.1	0.1	24	0.1	0.1	..	..
Sierra Leone	..	..	644	4.4	<0.1	1.6	60	0.6	1.5	20	9
Singapore	34	5	36	10.2	<0.1	0.1	30	<0.1	<0.1	..	..
Slovak Republic	41	20	9	6.4	<0.1	<0.1	<17	<0.1	<0.1	..	..
Slovenia	32	21	12	7.7	<0.1	<0.1	<29	<0.1	<0.1	..	..
Somalia	..	..	285	3.0	0.1	0.7	47	0.4	0.6	..	..
South Africa	27	8	971	4.5	0.7	17.8	62	4.5	13.6	..	..
Spain	37	27	17	6.6	0.4	0.4	24	0.2	0.1	..	..
Sri Lanka	27	0	66	10.9	<0.1	<0.1	<32	<0.1	<0.1	..	..
Sudan	25	2	119	4.2	0.1	1.1	58	0.5	1.3	..	..
Swaziland	21	2	1,257	4.2	2.3	25.9	58	6.5	15.6	66	44
Sweden	17	23	6	5.2	0.1	0.1	31	<0.1	<0.1	..	..
Switzerland	32	23	5	8.9	0.2	0.4	32	0.2	0.1	..	..
Syrian Arab Republic	40	..	21	10.8	..	..	..	..	..	..	..
Tajikistan	..	..	202	5.0	<0.1	0.2	30	<0.1	<0.1	..	..
Tanzania	20	2	183	3.2	4.8	5.6	59	1.7	3.9	36	13
Thailand	40	2	137	7.1	1.0	1.3	40	..	..	..	..
Timor-Leste	..	..	498	3.5	..	..	..	..	..	..	..
Togo	..	..	446	4.3	0.6	3.2	59	0.9	2.2	..	..
Trinidad and Tobago	..	..	23	11.7	0.2	1.5	33	1.0	0.7	..	..
Tunisia	53	6	24	9.3	<0.1	<0.1	<37	<0.1	<0.1	..	..
Turkey	48[e]	15[e]	29	8.0	<0.1	<0.1	30	<0.1	<0.1	..	..
Turkmenistan	..	..	67	5.3	..	..	..	..	..	..	..
Uganda	17	2	293	2.2	10.2	6.5	58	2.3	4.8	36	13
Ukraine	65	24	101	7.6	0.1	1.1	49	0.2	0.3	64	43
United Arab Emirates	24	2	4	18.7	..	..	..	..	..	..	..
United Kingdom	26	24	12	3.6	0.1	0.2	31	0.2	0.1	..	..
United States	25	19	4	10.3	0.5	0.6	25	0.3	0.2	..	..
Uruguay	39	29	22	5.7	0.1	0.5	32	0.3	0.2	..	..
Uzbekistan	23	3	128	5.2	<0.1	0.1	29	<0.1	<0.1	..	..
Venezuela, RB	32	27	33	6.5	..	..	..	..	..	..	..
Vietnam	41	2	200	3.5	<0.1	0.4	30	0.1	0.1	16	8
West Bank and Gaza	..	..	19	8.6	..	..	..	..	..	..	..
Yemen, Rep.	28	6	54	3.0	..	..	..	..	..	..	..
Zambia	17	2	433	4.0	12.7	13.5	57	4.2	8.9	39	17
Zimbabwe	28	2	742	4.1	10.1	14.3	60	3.3	6.9	52	9
World	**39 w**	**8 w**	**137 w**	**6.4 w**	**0.3**	**0.8 w**	**37 w**	**0.4 w**	**0.7 w**	**.. w**	**.. w**
Low income	28	4	294	4.4	2.0	2.7	46	0.9	2.0	..	..
Middle income	42	6	138	6.3	0.2	0.6	..	..	..	..	..
Lower middle income	43	3	147	6.0	0.2	0.4	..	..	..	..	..
Upper middle income	38	16	101	7.5	0.3	1.4	36	0.5	1.2	..	..
Low & middle income	40	6	161	6.1	0.3	0.9	39	..	..	..	..
East Asia & Pacific	56	4	136	4.6	0.1	0.2	..	0.1	0.1	..	..
Europe & Central Asia	58	22	89	7.3	0.1	0.6	42	0.1	0.2	..	..
Latin America & Carib.	27	15	45	7.4	0.4	0.5	..	0.2	0.2	..	..
Middle East & N. Africa	28	2	39	9.1	0.1	0.1	28	0.1	0.1	..	..
South Asia	30	2	180	7.8	0.1	0.3	36	0.1	0.1	15	6
Sub-Saharan Africa	14	2	342	3.8	2.4	5.4	58	1.5	3.8	36	19
High income	33	21	14	7.9	0.2	0.3	28	0.2	0.1	..	..
Euro area	37	25	9	7.1	0.2	0.3	27	0.1	0.1	..	..

a. See plausible bounds in the database and original source. b. Data are for the most recent year available. c. Data are for 2010. d. Includes Hong Kong SAR, China. e. Data are for 2008. f. Data are for 2007. g. Data are for 2009.

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, which are available at http://data.worldbank.org or from the original source.

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.

Data on HIV are from the Joint United Nations Programme on HIV/AIDS (UNAIDS) *Global Report*: *UNAIDS Report Global AIDS Epidemic 2010.* Changes in procedures and assumptions for estimating the data and better coordination with countries have resulted in improved estimates of HIV and AIDS. For example, improved software was used to model the course of HIV epidemics and their impacts, making full use of information on HIV prevalence trends from surveillance data as well as survey data. The software explicitly includes the effect of antiretroviral therapy (ART) when calculating HIV incidence and models reducted infectivity among people receiving ART, which is having an increasing impact on HIV prevalence, with HIV-positive people living longer lives. The software also allows for changes in urbanization over time—important because prevalence is higher in urban areas and because many countries have seen rapid urbanization over the past two decades.

The estimates include plausible bounds, not shown in the table, which reflect the certainty associated with each of the estimates. The bounds are available at http://data.worldbank.org or from the original source.

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 number of new and relapse cases of tuberculosis (all types) per 100,000 people. • **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 living 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 2010.* Data on diabetes are from the International Diabetes Federation's *Diabetes Atlas,* 3rd edition. Data on prevalence of HIV are from UNAIDS's Global Report: UNAIDS *Report on the Global AIDS Epidemic 2010.* 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 Male	per 1,000 Female	per 1,000 Male	per 1,000 Female	% of cohort Male	% of cohort Female
	1990	2009	1990	2009	1990	2009	2004–09[a,b]	2004–09[a,b]	2005–09[a]	2005–09[a]	2009	2009
Afghanistan	41	44	167	134	250	199	..	..	435	409	34	36
Albania	72	77	41	14	51	15	3	1	98	51	82	90
Algeria	67	73	51	29	61	32	..	..	118	98	78	82
Angola	42	48	153	98	258	161	..	..	406	350	37	44
Argentina	72	76	25	13	28	14	..	..	163	75	75	87
Armenia	68	74	48	20	56	22	8	3	162	79	73	85
Australia	77	82	8	4	9	5	..	..	82	47	88	93
Austria	76	80	8	3	9	4	..	..	99	50	85	93
Azerbaijan	65	70	78	30	98	34	9	5	178	108	69	79
Bangladesh	54	67	102	41	148	52	16	20	206	172	66	71
Belarus	71	70	20	11	24	12	..	..	330	115	54	83
Belgium	76	81	9	4	10	5	..	..	108	62	85	92
Benin	54	62	111	75	184	118	64	65	207	170	62	67
Bolivia	59	66	84	40	122	51	18	20	232	172	64	72
Bosnia and Herzegovina	67	75	21	13	23	14	..	..	132	61	79	89
Botswana	64	55	46	43	60	57	..	..	487	505	42	43
Brazil	66	73	46	17	56	21	..	..	226	118	67	81
Bulgaria	72	73	14	8	18	10	..	..	213	91	72	87
Burkina Faso	47	53	110	91	201	166	..	..	331	277	46	52
Burundi	46	51	114	101	189	166	65	65	382	346	42	47
Cambodia	55	62	85	68	117	88	20	20	288	218	56	64
Cameroon	55	51	91	95	148	154	73	72	401	398	43	45
Canada	77	81	7	5	8	6	..	..	92	55	87	92
Central African Republic	49	47	115	112	175	171	74	82	452	426	36	41
Chad	51	49	120	124	201	209	96	101	358	317	42	47
Chile	74	79	18	7	22	9	..	..	129	64	81	90
China	68[c]	73[c]	37	17	46	19	..	..	147	88	76	83
Hong Kong SAR, China	77	83	..	..	..	..	..	..	198	92	72	84
Colombia	68	73	28	16	35	19	4	3	397	348	38	44
Congo, Dem. Rep.	48	48	126	126	199	199	70	64	373	350	46	50
Congo, Rep.	59	54	67	81	104	128	49	43	111	59	82	90
Costa Rica	76	79	16	10	18	11	..	..	305	271	53	59
Côte d'Ivoire	58	58	105	83	152	119	..	..	144	57	77	90
Croatia	72	76	11	5	13	5	1	1	108	68	83	89
Cuba	75	79	10	4	14	6	..	..	143	65	79	90
Czech Republic	71	77	10	3	12	4	..	..	107	67	83	89
Denmark	75	79	8	3	9	4	..	..	206	134	70	79
Dominican Republic	68	73	48	27	62	32	6	4	164	86	76	86
Ecuador	69	75	41	20	53	24	5	5	161	105	72	80
Egypt, Arab Rep.	63	70	66	18	90	21	5	5	285	121	63	81
El Salvador	66	71	48	15	62	17	..	..	374	281	46	58
Eritrea	48	60	92	39	150	55	..	..	283	92	64	87
Estonia	69	75	13	4	17	6	..	..	334	293	49	54
Ethiopia	47	56	124	67	210	104	56	56	129	57	84	93
Finland	75	80	6	3	7	3	..	..	121	55	85	93
France[d]	77	81	7	3	9	4	..	..	317	276	56	61
Gabon	61	61	68	52	93	69	..	..	324	264	48	55
Gambia, The	51	56	104	78	153	103	46	39	195	77	70	84
Georgia	70	72	41	26	47	29	5	4	102	54	85	92
Germany	75	80	7	4	9	4	..	..	323	286	51	56
Ghana	57	57	76	47	120	69	38	28	92	37	86	94
Greece	77	80	9	3	11	3	..	..	232	127	68	80
Guatemala	62	71	57	33	76	40	..	..	252	195	55	63
Guinea	48	58	137	88	231	142	89	86	398	347	39	45
Guinea-Bissau	44	48	142	115	240	193	110	88	284	223	57	64
Haiti	55	61	105	64	152	87	33	36	170	119	73	80
Honduras	66	72	43	25	55	30	8	9	75	33	88	94

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	2009	1990	2009	1990	2009	2004–09[a,b]	2004–09[a,b]	2005–09[a]	2005–09[a]	2009	2009
Hungary	69	74	15	5	17	6	..	..	250	104	68	86
India	58	64	84	50	118	66	9	12	256	170	59	68
Indonesia	62	71	56	30	86	39	13	12	162	113	72	81
Iran, Islamic Rep.	65	72	55	26	73	31	..	..	142	96	75	82
Iraq	65	68	42	35	53	44	6	7	211	105	66	81
Ireland	75	80	8	4	9	4	..	..	88	56	87	92
Israel	77	82	10	3	11	4	..	..	86	48	87	93
Italy	77	81	8	3	10	4	..	..	82	43	86	94
Jamaica	71	72	28	26	33	31	5	6	221	116	70	81
Japan	79	83	5	2	6	3	..	..	86	43	88	95
Jordan	67	73	32	22	39	25	3	7	159	109	74	82
Kazakhstan	68	68	51	26	60	29	5	4	400	151	47	76
Kenya	60	55	64	55	99	84	27	25	392	403	47	48
Korea, Dem. Rep.	70	67	23	26	45	33	..	..	169	117	67	77
Korea, Rep.	71	80	8	5	9	5	..	..	105	41	83	93
Kosovo	68	70	..	..	..	..	..	..	..	..	..	..
Kuwait	75	78	14	8	17	10	..	..	84	51	85	90
Kyrgyz Republic	68	67	63	32	75	37	8	4	257	122	61	78
Lao PDR	54	65	108	46	157	59	..	..	222	180	63	70
Latvia	69	73	12	7	16	8	..	..	311	114	64	86
Lebanon	69	72	33	11	40	12	..	..	150	98	74	83
Lesotho	59	45	74	61	93	84	22	19	666	633	25	29
Liberia	49	59	165	80	247	112	62	64	251	206	56	63
Libya	68	75	32	17	36	19	..	..	144	89	75	84
Lithuania	71	73	12	5	15	6	..	..	346	116	60	86
Macedonia, FYR	71	74	32	10	36	11	2	1	132	79	77	85
Madagascar	51	61	102	41	167	58	30	31	266	216	57	63
Malawi	49	54	129	69	218	110	52	54	434	395	44	49
Malaysia	70	75	16	6	18	6	..	..	147	84	76	85
Mali	43	49	139	101	250	191	117	114	386	355	39	42
Mauritania	56	57	81	74	129	117	53	44	304	236	50	59
Mauritius	69	73	21	15	24	17	..	..	230	114	67	81
Mexico	71	75	36	15	45	17	..	..	137	76	79	87
Moldova	67	69	30	15	37	17	7	4	279	125	60	78
Mongolia	61	67	73	24	101	29	11	10	284	180	58	71
Morocco	64	72	69	33	89	38	9	11	144	94	74	83
Mozambique	43	48	155	96	232	142	..	..	489	469	36	40
Myanmar	59	62	84	54	118	71	..	..	250	188	58	66
Namibia	62	62	49	34	73	48	24	19	346	334	55	59
Nepal	54	67	99	39	142	48	21	18	196	171	67	71
Netherlands	77	81	7	4	8	4	..	..	81	59	87	92
New Zealand	75	80	9	5	11	6	..	..	87	58	87	91
Nicaragua	64	73	52	22	68	26	..	..	201	113	71	81
Niger	42	52	144	76	305	160	138	135	344	295	44	49
Nigeria	45	48	126	86	212	138	91	93	404	380	40	42
Norway	77	81	7	3	9	3	..	..	82	50	88	92
Oman	70	76	37	9	48	12	..	..	96	71	83	87
Pakistan	61	67	101	71	130	87	14	22	162	131	68	72
Panama	72	76	25	16	31	23	..	..	136	72	79	87
Papua New Guinea	55	61	67	52	91	68	..	..	344	251	50	61
Paraguay	68	72	34	19	42	23	..	..	170	123	73	80
Peru	66	73	62	19	78	21	13	4	162	100	74	83
Philippines	65	72	41	26	59	33	10	9	153	99	74	83
Poland	71	76	15	6	17	7	..	..	209	80	73	89
Portugal	74	79	12	3	15	4	..	..	124	53	83	92
Puerto Rico	75	79	..	..	..	..	..	..	130	52	80	91
Qatar	70	76	17	10	19	11	..	..	109	100	82	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 Male	per 1,000 Female	per 1,000 Male	per 1,000 Female	% of cohort Male	% of cohort Female
	1990	2009	1990	2009	1990	2009	2004–09[a,b]	2004–09[a,b]	2005–09[a]	2005–09[a]	2009	2009
Romania	70	73	25	10	32	12	..	..	192	82	70	86
Russian Federation	69	69	23	11	27	12	..	..	396	147	47	78
Rwanda	33	51	103	70	171	111	69	55	397	351	40	47
Saudi Arabia	68	73	35	18	43	21	3	4	137	88	76	85
Senegal	52	56	73	51	151	93	43	39	325	266	48	55
Serbia	71	74	25	6	29	7	4	3	153[e]	82[e]	75	86
Sierra Leone	40	48	166	123	285	192	67	61	498	464	30	34
Singapore	74	81	6	2	8	3	..	..	80	41	86	93
Slovak Republic	71	75	13	6	15	7	..	..	195	73	72	88
Slovenia	73	79	9	2	10	3	..	..	149	57	81	92
Somalia	45	50	109	109	180	180	53	54	368	315	42	47
South Africa	61	52	48	43	62	62	..	..	575	517	32	41
Spain	77	82	8	4	9	4	..	..	106	44	86	94
Sri Lanka	70	74	23	13	28	15	..	..	192	76	71	86
Sudan	53	58	78	69	124	108	38	30	302	257	53	59
Swaziland	60	46	67	52	92	73	32	30	605	638	30	29
Sweden	78	81	6	2	7	3	..	..	78	48	88	93
Switzerland	77	82	7	4	8	4	..	..	78	46	88	93
Syrian Arab Republic	68	74	30	14	36	16	5	3	120	81	79	86
Tajikistan	63	67	91	52	117	61	18	13	208	137	64	74
Tanzania	51	56	99	68	162	108	56	52	369	355	49	52
Thailand	69	69	27	12	32	14	..	..	291	170	63	77
Timor-Leste	46	62	138	48	184	56	..	..	259	224	58	63
Togo	58	63	89	64	150	98	55	43	238	197	61	68
Trinidad and Tobago	69	70	30	31	34	35	5	8	236	139	63	78
Tunisia	70	74	40	18	50	21	..	..	122	70	78	87
Turkey	65	72	69	19	84	20	6	6	149	83	74	84
Turkmenistan	63	65	81	42	99	45	..	..	298	151	55	73
Uganda	48	53	111	79	184	128	75	62	401	399	44	47
Ukraine	70	69	18	13	21	15	4	1	385	142	53	80
United Arab Emirates	73	78	15	7	17	7	..	..	76	63	86	89
United Kingdom	76	80	8	5	10	6	..	..	100	61	86	91
United States	75	79	9	7	11	8	..	..	141	81	84	89
Uruguay	73	76	21	11	24	13	..	..	139	63	77	89
Uzbekistan	67	68	61	32	74	36	11	7	237	135	62	75
Venezuela, RB	71	74	27	15	32	18	..	..	175	91	74	84
Vietnam	65	75	39	20	55	24	5	4	134	88	78	85
West Bank and Gaza	68	74	35	25	43	30	3	3	125	90	78	84
Yemen, Rep.	54	63	88	51	125	66	10	11	247	198	60	67
Zambia	51	46	108	86	179	141	66	55	528	518	33	35
Zimbabwe	61	45	54	56	81	90	21	21	687	664	24	27
World	**65 w**	**69 w**	**64 w**	**43 w**	**92 w**	**61 w**	**.. w**	**.. w**	**213 w**	**151 w**	**68 w**	**77 w**
Low income	52	57	108	76	171	118	52	49	312	275	52	58
Middle income	64	69	61	38	85	51	..	..	201	134	67	77
Lower middle income	63	68	66	43	93	57	..	..	201	136	67	75
Upper middle income	68	72	41	19	51	22	..	..	201	122	67	81
Low & middle income	63	67	70	47	100	66	..	..	216	153	65	74
East Asia & Pacific	67	72	41	21	55	26	..	..	158	99	74	82
Europe & Central Asia	68	70	43	19	52	21	..	..	286	123	59	80
Latin America & Carib.	68	74	42	19	52	23	..	..	190	103	72	83
Middle East & N. Africa	64	71	57	27	76	33	..	..	155	104	73	81
South Asia	58	64	89	55	125	71	11	15	242	169	61	69
Sub-Saharan Africa	50	53	109	81	181	130	68	65	390	358	44	48
High income	75	80	10	6	12	7	..	..	120	63	84	91
Euro area	76	81	8	3	9	4	..	..	107	52	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.

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 Inter-agency Group for Child Mortality Estimation, comprising the United Nations Children's Fund (UNICEF), the United Nations Population Division, the World Health Organization (WHO), the World Bank, and other universities and research institutes, 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 2010; 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 from *Levels and Trends in Child Mortality, Report 2010* by the Inter-agency Group for Child Mortality Estimation, covered in *About the data*, 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 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.