



4.2 Structure of output

	Gross domestic product		Agriculture value added		Industry value added		Manufacturing value added		Services value added	
	\$ millions		% of GDP		% of GDP		% of GDP		% of GDP	
	1980	1998	1980	1998	1980	1998	1980	1998	1980	1998
Albania	..	3,047	34	54	45	25	..	..	21	21
Algeria	42,345	47,347	10	12	54	47	9	11	36	41
Angola	..	7,472	..	12	..	51	..	6	..	36
Argentina	76,962	298,131	6	6	41	29	29	19	52	66
Armenia	..	1,900	..	33	..	32	..	22	..	35
Australia	160,109	361,722	5	3	36	26	19	14	58	71
Austria	78,539	211,858	4	1	36	30	25	20	60	68
Azerbaijan	..	3,926	..	20	..	39	..	22	..	41
Bangladesh	17,430	42,702	38	22	24	28	18	18	38	50
Belarus	..	22,555	..	13	..	46	..	39	..	40
Belgium	119,979	248,184	2	1	34	28	21	18	64	71
Benin	1,405	2,306	35	39	12	14	8	8	52	48
Bolivia	2,750	8,586	..	15	..	29	..	17	..	56
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..
Botswana	1,130	4,876	11	4	45	46	5	5	44	50
Brazil	235,025	778,209	11	8	44	29	33	23	45	63
Bulgaria	20,040	12,258	14	19	54	26	..	17	32	56
Burkina Faso	1,709	2,581	33	33	22	27	16	21	45	39
Burundi	920	885	62	54	13	16	7	8	25	29
Cambodia	..	2,871	..	51	..	15	..	6	..	35
Cameroon	6,741	8,701	31	42	26	22	10	11	43	36
Canada	266,003	580,623	4	..	38	..	19	..	58	..
Central African Republic	797	1,057	40	53	20	19	7	9	40	29
Chad	1,033	1,694	45	40	9	14	..	13	46	46
Chile	27,572	78,738	7	7	37	30	21	15	55	62
China	201,687	959,030	30	18	49	49	41	37	21	33
Hong Kong, China	28,496	166,440	1	0	32	15	24	7	67	85
Colombia	38,900	102,896	22	13	26	25	18	13	51	61
Congo, Dem. Rep.	14,922	6,964	25	58	33	17	14	..	42	25
Congo, Rep.	1,706	1,961	12	12	47	50	7	8	42	39
Costa Rica	4,831	10,479	18	15	27	24	19	19	55	61
Côte d'Ivoire	10,175	11,005	26	26	20	23	13	19	54	51
Croatia	..	21,752	..	9	..	32	..	21	..	59
Cuba	..	..	..	..	..	..	..	..	..	..
Czech Republic	29,123	56,379	7	4	63	39	..	..	30	57
Denmark	67,791	174,870	5	..	29	..	20	..	66	..
Dominican Republic	6,631	15,853	20	12	28	33	15	17	52	56
Ecuador	11,733	18,360	12	13	38	35	18	24	50	52
Egypt, Arab Rep.	22,912	82,710	18	17	37	32	12	26	45	50
El Salvador	3,574	11,870	38	12	22	28	16	22	40	60
Eritrea	..	650	..	9	..	30	..	16	..	61
Estonia	..	5,202	..	6	..	27	..	15	..	67
Ethiopia	5,179	6,544	56	50	12	7	8	..	32	44
Finland	51,306	123,502	10	4	40	34	28	25	51	62
France	664,596	1,426,967	4	2	34	26	24	19	62	72
Gabon	4,279	5,518	7	7	60	60	5	5	33	32
Gambia, The	241	416	31	27	15	14	6	6	54	59
Georgia	..	5,129	24	26	36	16	28	16	40	58
Germany	..	2,134,205	..	1	..	..	..	24	..	44
Ghana	4,445	7,501	58	10	12	7	8	2	30	83
Greece	48,613	120,724	14	..	25	..	16	..	61	..
Guatemala	7,879	18,942	25	23	22	20	17	14	53	57
Guinea	..	3,598	..	22	..	35	..	4	..	42
Guinea-Bissau	111	206	44	62	20	13	..	9	36	25
Haiti	1,462	3,871	..	30	..	20	..	7	..	50
Honduras	2,566	5,371	24	20	24	31	15	18	52	49



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	Gross domestic product		Agriculture value added		Industry value added		Manufacturing value added		Services value added	
	\$ millions		% of GDP		% of GDP		% of GDP		% of GDP	
	1980	1998	1980	1998	1980	1998	1980	1998	1980	1998
Hungary	22,164	47,807	19	6	47	34	..	25	34	60
India	186,392	430,024	38	29	24	25	16	16	38	46
Indonesia	78,013	94,156	24	20	42	45	13	25	34	35
Iran, Islamic Rep.	92,664	113,140	18	25	32	37	9	15	50	38
Iraq	47,562	..	..	..	..	..	..	..	..	..
Ireland	20,080	81,949	..	..	..	..	..	..	..	..
Israel	21,781	100,525	..	..	..	..	..	..	..	..
Italy	449,913	1,171,865	6	3	39	31	28	20	55	67
Jamaica	2,652	6,418	8	8	38	34	17	15	54	58
Japan	1,059,254	3,782,964	4	2	42	37	29	24	54	61
Jordan	3,962	7,393	8	3	28	26	13	14	64	71
Kazakhstan	..	21,979	..	9	..	31	..	..	..	60
Kenya	7,265	11,579	33	26	21	16	13	11	47	58
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	62,543	320,748	14	5	40	43	28	31	46	52
Kuwait	28,639	25,171	0	..	75	..	6	..	25	..
Kyrgyz Republic	..	1,704	..	46	..	24	..	18	..	30
Lao PDR	..	1,261	..	53	..	22	..	17	..	25
Latvia	..	6,396	12	5	51	29	46	20	37	66
Lebanon	..	17,229	..	12	..	27	..	17	..	61
Lesotho	368	792	24	11	29	42	7	17	47	47
Libya	35,545	..	2	..	76	..	2	..	22	..
Lithuania	..	10,736	..	10	..	33	..	19	..	57
Macedonia, FYR	..	2,492	..	11	..	28	..	..	..	60
Madagascar	4,042	3,749	30	31	16	14	..	11	54	56
Malawi	1,238	1,688	44	36	23	18	14	14	34	46
Malaysia	24,488	72,489	22	13	38	44	21	29	40	43
Mali	1,787	2,695	48	47	13	17	7	4	38	36
Mauritania	814	989	30	25	26	30	..	9	44	46
Mauritius	1,132	4,199	12	9	26	33	15	25	62	58
Mexico	223,510	393,508	8	5	31	27	21	20	61	68
Moldova	..	1,615	..	29	..	31	..	23	..	40
Mongolia	..	1,042	15	33	33	28	..	..	52	40
Morocco	18,821	35,546	18	17	31	32	17	17	51	51
Mozambique	3,526	3,893	37	34	34	21	..	11	28	45
Myanmar	..	..	47	53	13	9	10	6	41	38
Namibia	2,262	3,092	11	10	55	34	9	14	34	56
Nepal	1,946	4,783	62	40	12	22	4	10	26	37
Netherlands	171,861	381,819	3	..	32	..	18	..	64	..
New Zealand	22,395	52,845	11	..	31	..	22	..	58	..
Nicaragua	2,144	2,007	23	34	31	22	26	15	45	44
Niger	2,509	2,048	43	41	23	17	4	6	34	42
Nigeria	64,202	41,353	21	32	46	41	8	5	34	27
Norway	63,419	145,892	4	2	35	32	15	11	61	66
Oman	5,982	14,962	3	..	69	..	1	..	28	..
Pakistan	23,690	63,369	30	26	25	25	16	17	46	49
Panama	3,810	9,144	10	8	21	18	12	9	69	74
Papua New Guinea	2,548	3,746	33	24	27	42	10	9	40	33
Paraguay	4,579	8,608	29	25	27	26	16	15	44	49
Peru	20,661	62,745	10	7	42	37	20	23	48	56
Philippines	32,500	65,107	25	17	39	32	26	22	36	51
Poland	56,789	158,574	..	5	..	32	..	19	..	62
Portugal	28,730	106,697	..	..	..	..	..	..	..	..
Puerto Rico	14,436	..	3	..	39	..	37	..	58	..
Romania	..	38,158	..	16	..	40	..	30	..	43
Russian Federation	..	276,611	..	7	..	35	..	..	..	57



4.2 Structure of output

	Gross domestic product		Agriculture value added		Industry value added		Manufacturing value added		Services value added	
	\$ millions		% of GDP		% of GDP		% of GDP		% of GDP	
	1980	1998	1980	1998	1980	1998	1980	1998	1980	1998
Rwanda	1,163	2,024	50	47	23	21	17	13	27	31
Saudi Arabia	156,487	128,892	1	7	81	48	5	10	18	45
Senegal	2,987	4,682	19	17	15	24	11	16	66	59
Sierra Leone	1,199	647	33	44	21	24	5	6	47	32
Singapore	11,718	84,379	1	0	38	35	29	23	61	65
Slovak Republic	..	20,362	..	4	..	32	..	23	..	64
Slovenia	..	19,524	..	4	..	39	..	28	..	57
South Africa	80,544	133,461	6	4	48	32	22	19	46	64
Spain	213,308	553,230	..	3	..	..	..	18	..	25
Sri Lanka	4,024	15,707	28	21	30	28	18	17	43	51
Sudan	7,617	10,366	33	39	14	18	7	9	53	43
Sweden	125,557	226,492	4	..	34	..	23	..	63	..
Switzerland	107,474	263,630	..	..	..	..	..	..	..	..
Syrian Arab Republic	13,062	17,412	20	..	23	..	..	..	56	..
Tajikistan	..	2,164	..	6	..	30	..	..	..	65
Tanzania ^a	..	8,016	..	46	..	15	..	7	..	39
Thailand	32,354	111,327	23	11	29	41	22	32	48	48
Togo	1,136	1,510	27	42	25	21	8	9	48	37
Trinidad and Tobago	6,236	6,382	2	2	60	48	9	10	38	51
Tunisia	8,743	19,956	14	12	31	28	12	18	55	59
Turkey	68,790	198,844	26	18	22	25	14	16	51	57
Turkmenistan	..	2,367	..	25	..	42	..	29	..	34
Uganda	1,245	6,775	72	45	4	18	4	9	23	38
Ukraine	..	43,615	..	14	..	34	..	29	..	51
United Arab Emirates	29,625	47,234	1	..	77	..	4	..	22	..
United Kingdom	537,383	1,357,197	2	2	43	31	27	21	55	67
United States	2,709,000	8,230,397	3	2	33	26	22	18	64	72
Uruguay	10,132	20,578	14	8	34	27	26	18	53	64
Uzbekistan	..	20,384	..	31	..	27	..	13	..	42
Venezuela, RB	69,377	95,023	5	5	46	34	16	15	49	61
Vietnam	..	27,184	..	26	..	33	..	..	..	42
West Bank and Gaza	..	3,589	..	7	..	26	..	15	..	67
Yemen, Rep.	..	4,318	..	18	..	49	..	11	..	34
Yugoslavia, FR (Serb./Mont.)	..	..	..	..	..	..	..	..	..	..
Zambia	3,884	3,352	14	17	41	26	18	11	44	56
Zimbabwe	6,679	6,338	16	19	29	24	22	17	55	56
World	10,960,147 t	28,736,978 t	7 w	4 w	38 w	32 w	25 w	21 w	55 w	62 w
Low income	811,234	1,880,673	31	23	38	39	27	27	30	38
Excl. China & India	451,833	463,829	29	26	32	33	13	19	39	41
Middle income	2,322,822	4,312,567	12	9	42	33	24	22	46	58
Lower middle income	..	1,477,327	15	11	41	34	..	22	44	54
Upper middle income	1,164,279	2,838,231	11	8	42	32	26	22	47	60
Low & middle income	3,137,067	6,193,861	18	13	41	35	25	23	42	52
East Asia & Pacific	503,584	1,693,340	24	15	42	45	30	32	33	41
Europe & Central Asia	..	1,003,000	..	12	..	33	..	..	..	55
Latin America & Carib.	787,863	2,028,359	10	8	40	29	28	21	50	64
Middle East & N. Africa	409,860	583,374	10	14	53	43	9	14	37	43
South Asia	237,289	565,131	37	28	24	25	16	16	39	47
Sub-Saharan Africa	271,814	333,865	18	17	38	29	16	15	44	54
High income	7,936,135	22,543,577	3	2	37	30	25	21	59	65
Europe EMU	..	6,457,663	..	2	21	..	58

a. Data cover mainland Tanzania only.



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About the data

A country's gross domestic product represents the sum of value added by all producers in that country. Value added is the value of gross output of producers less the value of intermediate goods and services consumed in production, excluding the consumption of fixed capital in the production process. Since 1968 the United Nations System of National Accounts has called for estimates of value added to be valued at either basic prices (excluding net taxes on products) or producer prices (including net taxes on products paid by the producers, but excluding sales or value added taxes). Both valuations exclude transport charges that are invoiced separately by the producers. Some countries, however, report such data at purchaser prices—the prices at which final sales are made (including transport charges)—which may affect estimates of the distribution of output. Total GDP as shown in the table and elsewhere in this book is measured at purchaser prices. Value added by industry is normally measured at basic prices. When value added is measured at producer prices, this is noted in *Primary data documentation*.

While GDP estimated by the production approach is generally more reliable than estimates compiled from the income or expenditure side, different countries use different definitions, methods, and reporting standards. World Bank staff review the quality of national accounts data and sometimes make adjustments to increase consistency with international guidelines. Nevertheless, significant discrepancies remain between international standards and actual practice. Many statistical offices, especially those in developing countries, face severe limits in the resources, time, training, and budgets required to produce reliable and comprehensive series of national accounts.

Data problems in measuring output

Among the difficulties faced by compilers of national accounts is the extent of unreported economic activity in the informal or secondary economy. In developing countries a large share of agricultural output is either not exchanged (because it is consumed within the household) or not exchanged for money.

Agricultural production often must be estimated indirectly, using a combination of methods involving estimates of inputs, yields, and area under cultivation. This approach sometimes leads to crude approximations that can differ from the true values over time and across crops for reasons other than climatic conditions or farming techniques. Similarly, agricultural inputs, which cannot easily be allocated to specific outputs, are frequently “netted out” using equally crude and

ad hoc approximations. For further discussion of the measurement of agricultural production see *About the data* for table 3.3.

Industrial output ideally should be measured through regular censuses and surveys of firms. But in most developing countries such surveys are infrequent, so survey results must be extrapolated using an appropriate indicator. The choice of sampling unit, which may be the enterprise (where responses may be based on financial records) or the establishment (where production units may be recorded separately), also affects the quality of the data. Moreover, much industrial production is organized in unincorporated or owner-operated ventures that are not captured by surveys aimed at the formal sector. Even in large industries, where regular surveys are more likely, evasion of excise and other taxes lowers the estimates of value added. Such problems become more acute as countries move from state control of industry to private enterprise, because new firms enter business and growing numbers of established firms fail to report. In accordance with the System of National Accounts, output should include all such unreported activity as well as the value of illegal activities and other unrecorded, informal, or small-scale operations. Data on these activities need to be collected using techniques other than conventional surveys.

In industries dominated by large organizations and enterprises, such as public utilities, data on output, employment, and wages are usually readily available and reasonably reliable. But in the service industry the many self-employed workers and one-person businesses are sometimes difficult to locate, and their owners have little incentive to respond to surveys, let alone report their full earnings. Compounding these problems are the many forms of economic activity that go unrecorded, including the work that women and children do for little or no pay. For further discussion of the problems of using national accounts data see Srinivasan (1994) and Heston (1994).

Dollar conversion

To produce national accounts aggregates that are internationally comparable, the value of output must be converted to a common currency. The World Bank conventionally uses the U.S. dollar and applies the average official exchange rate reported by the International Monetary Fund for the year shown. An alternative conversion factor is applied if the official exchange rate is judged to diverge by an exceptionally large margin from the rate effectively applied to transactions in foreign currencies and traded products.

Definitions

- **Gross domestic product** at purchaser prices is the sum of the gross value added by all resident institutional units engaged in production plus indirect taxes and minus any subsidies not included in the value of their products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. The residency of an institution is determined on the basis of economic interest in the territory for more than a year.
- **Value added** is the net output of an industry after adding up all outputs and subtracting intermediate inputs. The origin of value added is determined by the International Standard Industrial Classification (ISIC) revision 3.
- **Agriculture** corresponds to ISIC divisions 1–5 and includes forestry and fishing.
- **Industry** comprises value added in mining, manufacturing (also reported as a separate subgroup), construction, electricity, water, and gas (ISIC divisions 10–45).
- **Manufacturing** refers to industries belonging to divisions 15–37.
- **Services** correspond to ISIC divisions 50–99.

Data sources

The national accounts indicators for most developing countries are collected from national statistical organizations and central banks by visiting and resident World Bank missions. The data for high-income economies come from Organisation for Economic Co-operation and Development (OECD) data files; see the OECD's *Main Economic Indicators* (monthly). The United Nations Statistics Division publishes detailed national accounts for United Nations member countries in *National Accounts Statistics: Main Aggregates and Detailed Tables*; updates are published in the *Monthly Bulletin of Statistics*.