



4.3

Structure of manufacturing

	Manufacturing value added		Food, beverages, and tobacco		Textiles and clothing		Machinery and transport equipment		Chemicals		Other manufacturing ^a	
	\$ millions		% of total		% of total		% of total		% of total		% of total	
	1995	2007	1995	2005	1995	2005	1995	2005	1995	2005	1995	2005
Afghanistan	..	1,053	..	..	..	..	..	..	..	..	..	..
Albania	405	1,830	..	20	..	..	..	..	..	..	..	80
Algeria	4,366	6,393	..	..	..	..	..	..	..	..	..	..
Angola	202	3,074	..	..	..	..	..	..	..	..	..	..
Argentina	44,502	51,305	30	..	6	..	10	..	9	..	54	..
Armenia	356	1,380	..	..	..	..	..	..	..	..	..	..
Australia	50,044	81,096	20	17	6	1	11	5	..	7	63	69
Austria	41,681	58,005	11	10	5	2	27	31	2	6	56	52
Azerbaijan	352	1,604	..	28	..	1	..	11	..	7	..	53
Bangladesh	5,586	11,755	28	..	44	..	4	..	11	..	13	..
Belarus	3,909	12,194	..	..	..	..	..	..	..	..	..	..
Belgium	51,721	59,893	13	13	6	4	22	21	8	20	51	42
Benin	174	322	..	..	..	..	..	..	..	..	..	..
Bolivia	1,123	1,498	36	..	5	..	1	..	3	..	55	..
Bosnia and Herzegovina	213	1,614	..	..	..	..	..	..	..	..	..	..
Botswana	242	381	44	23	1	0	15	..	5	..	55	77
Brazil	124,976	199,714	21	18	6	4	23	22	13	12	38	44
Bulgaria	2,015	5,395	23	17	12	15	20	18	15	7	30	44
Burkina Faso	336	775	..	..	..	..	..	..	..	..	..	..
Burundi	83	64	..	..	..	..	..	..	..	..	..	..
Cambodia	296	1,447	20	..	3	..	..	..	..	..	80	..
Cameroon	1,758	3,328	..	..	..	..	..	..	..	..	..	..
Canada	100,393	..	13	..	4	..	23	..	10	..	50	..
Central African Republic	108	129	..	..	..	..	..	..	..	..	..	..
Chad	159	398	..	..	..	..	..	..	..	..	..	..
Chile	10,594	21,488	..	16	..	2	..	3	..	8	..	72
China	245,002	1,341,337	4	4	2	2	2	3	..	..	93	93
Hong Kong, China	10,524	5,034	..	..	..	..	..	..	..	..	..	..
Colombia	13,506	33,565	..	27	..	9	..	7	..	13	..	44
Congo, Dem. Rep.	510	543	..	..	..	..	..	..	..	..	..	..
Congo, Rep.	172	456	..	..	..	..	..	..	..	..	..	..
Costa Rica	2,339	4,900	..	..	..	..	..	..	..	..	..	..
Côte d'Ivoire	1,655	3,471	..	..	..	..	..	..	..	..	..	..
Croatia	3,666	8,832	..	..	..	..	..	..	..	..	..	..
Cuba	..	..	..	..	..	..	..	..	..	..	..	..
Czech Republic	12,124	42,681	12	10	6	4	24	29	4	3	55	54
Denmark	26,924	31,100	20	14	2	2	25	18	1	2	52	64
Dominican Republic	2,286	4,852	..	..	..	..	..	..	..	..	..	..
Ecuador	2,830	4,063	26	30	7	4	4	3	4	5	59	58
Egypt, Arab Rep.	9,829	19,520	19	..	13	..	12	..	18	..	38	..
El Salvador	2,026	4,209	..	..	..	..	..	..	..	..	..	..
Eritrea	47	72	55	43	12	12	1	2	19	8	13	35
Estonia	804	3,193	..	13	..	6	..	14	..	5	..	63
Ethiopia	344	923	51	48	20	10	2	1	4	5	23	35
Finland	28,814	43,121	10	7	3	2	27	35	4	4	57	52
France	..	283,186	13	14	5	4	28	29	12	12	41	41
Gabon	224	470	..	..	..	..	..	..	..	..	..	..
Gambia, The	20	28	65	..	..	..	..	..	..	..	35	..
Georgia	523	1,080	..	41	..	2	..	5	..	13	..	39
Germany	516,542	595,045	..	9	..	2	..	42	..	10	..	38
Ghana	602	1,199	..	32	..	6	..	0	..	12	..	49
Greece	..	31,426	25	..	15	..	13	..	10	..	38	..
Guatemala	2,069	6,203	..	..	..	..	..	..	..	..	..	..
Guinea	142	178	..	..	..	..	..	..	..	..	..	..
Guinea-Bissau	19	26	..	..	..	..	..	..	..	..	..	..
Haiti	558	..	..	..	..	..	..	..	..	..	..	..

Structure of manufacturing

4.3

ECONOMY

	Manufacturing value added		Food, beverages, and tobacco		Textiles and clothing		Machinery and transport equipment		Chemicals		Other manufacturing ^a	
	\$ millions		% of total		% of total		% of total		% of total		% of total	
	1995	2007	1995	2005	1995	2005	1995	2005	1995	2005	1995	2005
Honduras	607	2,218	..	..	..	..	..	..	..	..	..	..
Hungary	8,839	25,977	19	13	3	4	10	41	13	10	55	33
India	57,917	175,691	..	9	..	9	..	20	..	16	..	46
Indonesia	48,781	116,894	..	23	..	13	..	18	..	9	..	36
Iran, Islamic Rep.	10,918	29,832	15	9	12	4	18	25	15	15	40	47
Iraq	67	..	12	..	7	..	2	..	..	..	80	..
Ireland	18,096	44,801	15	16	0	0	24	7	13	27	49	50
Israel	..	..	13	11	5	2	15	16	6	10	61	61
Italy	225,514	299,459	9	9	14	11	27	26	8	7	41	46
Jamaica	865	1,631	..	..	..	..	..	..	..	..	..	..
Japan	1,077,348	933,818	11	11	4	2	37	41	10	11	39	35
Jordan	866	2,665	30	23	7	11	5	6	15	16	44	43
Kazakhstan	2,976	12,049	..	..	..	..	..	..	..	..	..	..
Kenya	757	2,355	..	29	..	2	..	..	..	5	..	64
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	128,839	240,325	8	7	10	5	39	47	8	8	34	33
Kuwait	1,032	..	..	..	..	..	..	..	..	..	..	..
Kyrgyz Republic	142	367	..	14	..	5	..	5	..	1	..	74
Lao PDR	245	867	..	..	..	..	..	..	..	..	..	..
Latvia	965	2,589	39	20	9	8	18	10	4	4	30	58
Lebanon	1,577	2,284	..	..	..	..	..	..	..	..	..	..
Lesotho	129	272	..	..	..	..	..	..	..	..	..	..
Liberia	4	95	..	..	..	..	..	..	..	..	..	..
Libya	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	1,390	6,548	..	20	..	11	..	11	..	6	..	52
Macedonia, FYR	873	1,244	35	..	..	..	..	..	..	..	65	..
Madagascar	233	1,062	..	40	..	27	..	1	..	2	..	30
Malawi	195	442	..	..	..	..	..	..	..	..	..	..
Malaysia	23,432	52,223	..	8	..	3	..	37	..	12	..	40
Mali	174	195	..	..	..	..	..	..	..	..	..	..
Mauritania	107	84	..	..	..	..	..	..	..	..	..	..
Mauritius	765	1,198	25	30	..	..	..	..	..	..	75	70
Mexico	54,546	182,916	26	..	4	..	22	..	15	..	33	..
Moldova	400	517	..	50	..	..	..	0	..	..	..	50
Mongolia	143	158	23	..	62	..	1	..	1	..	12	..
Morocco	6,056	10,019	..	36	..	14	..	8	..	14	..	27
Mozambique	166	1,080	..	..	..	..	..	..	..	..	..	..
Myanmar	..	..	..	..	..	..	..	..	..	..	..	..
Namibia	403	728	..	..	..	..	..	..	..	..	..	..
Nepal	393	740	35	..	34	..	2	..	..	..	29	..
Netherlands	65,999	79,146	18	15	3	1	15	14	16	10	48	59
New Zealand	10,645	..	29	25	..	..	..	..	..	..	71	75
Nicaragua	533	946	..	..	..	..	..	..	..	..	..	..
Niger	120	..	..	..	..	..	..	..	..	..	..	..
Nigeria	..	3,760	..	..	..	..	..	..	..	..	..	..
Norway	17,018	34,306	17	19	2	1	24	23	9	9	48	47
Oman	643	..	15	7	8	1	3	3	6	13	68	76
Pakistan	8,864	25,654	..	..	..	..	..	..	..	..	..	..
Panama	694	1,290	54	..	7	..	..	..	7	..	32	..
Papua New Guinea	372	361	..	..	..	..	..	..	..	..	..	..
Paraguay	1,280	1,570	..	..	..	..	..	..	..	..	..	..
Peru	8,105	15,600	28	31	9	14	7	2	9	11	48	42
Philippines	17,043	31,718	29	23	1	1	3	6	2	2	66	68
Poland	25,885	64,821	18	22	8	4	0	19	3	7	81	47
Portugal	18,249	23,509	13	14	22	3	18	15	6	2	41	66
Puerto Rico	17,867	..	..	..	..	..	..	..	..	..	..	..



4.3

Structure of manufacturing

	Manufacturing value added		Food, beverages, and tobacco		Textiles and clothing		Machinery and transport equipment		Chemicals		Other manufacturing ^a	
	\$ millions		% of total		% of total		% of total		% of total		% of total	
	1995	2007	1995	2005	1995	2005	1995	2005	1995	2005	1995	2005
Romania	9,387	32,925	28	15	7	16	10	19	7	6	48	44
Russian Federation	..	210,692	..	15	..	2	..	8	..	8	..	67
Rwanda	132	203	..	..	..	..	..	..	..	..	..	..
Saudi Arabia	13,714	36,349	..	..	..	..	..	..	..	..	..	..
Senegal	730	1,424	..	..	..	..	..	..	..	..	..	..
Serbia	..	..	..	..	..	..	..	..	..	..	..	..
Sierra Leone	75	..	..	..	..	..	..	..	..	..	..	..
Singapore	20,799	38,275	4	3	1	1	60	47	9	24	26	50
Slovak Republic	4,704	10,923	11	7	4	5	14	23	9	2	63	63
Slovenia	4,573	9,677	..	..	..	..	..	..	..	..	..	..
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	29,274	45,674	15	17	5	1	19	..	10	7	50	76
Spain	..	175,881	16	15	7	5	23	22	10	8	43	49
Sri Lanka	1,836	5,985	..	..	..	..	..	..	..	..	..	..
Sudan	640	2,679	..	..	..	..	..	..	..	..	..	..
Swaziland	557	1,095	..	..	..	..	..	..	..	..	..	..
Sweden	..	..	7	7	1	1	33	30	3	12	56	51
Switzerland	..	..	..	..	..	..	..	..	..	..	..	..
Syrian Arab Republic	1,574	5,145	..	..	..	..	..	..	..	..	..	..
Tajikistan	331	659	..	..	..	..	..	..	..	..	..	..
Tanzania ^b	349	819	..	..	..	..	..	..	..	..	..	..
Thailand	50,194	85,451	21	..	9	..	29	..	6	..	35	..
Timor-Leste	..	..	..	..	..	..	..	..	..	..	..	..
Togo	130	214	..	..	..	..	..	..	..	..	..	..
Trinidad and Tobago	439	1,157	..	13	..	1	..	2	..	35	..	50
Tunisia	3,419	6,009	..	..	..	..	..	..	..	..	..	..
Turkey	..	109,200	15	..	17	..	16	..	10	..	42	..
Turkmenistan	948	..	..	..	..	..	..	..	..	..	..	..
Uganda	359	851	..	..	..	..	..	..	..	..	..	..
Ukraine	14,922	29,003	..	..	..	..	..	..	..	..	..	..
United Arab Emirates	4,452	19,995	..	..	..	..	..	..	..	..	..	..
United Kingdom	219,282	269,610	13	15	5	3	28	27	11	11	42	45
United States	1,289,100	1,700,000	12	14	4	2	34	29	12	14	38	40
Uruguay	3,614	5,269	..	40	..	10	..	1	..	9	..	39
Uzbekistan	1,376	2,541	..	..	..	..	..	..	..	..	..	..
Venezuela, RB	10,668	21,941	..	..	..	..	..	..	..	..	..	..
Vietnam	3,109	14,673	..	..	..	..	..	..	..	..	..	..
West Bank and Gaza	..	..	..	..	..	..	..	..	..	..	..	..
Yemen, Rep.	599	..	..	55	..	..	..	..	..	..	..	45
Zambia	344	1,187	..	..	..	..	..	..	..	..	..	..
Zimbabwe	1,370	324	30	..	7	..	29	..	6	..	29	..
World	5,486,528 t	7,998,553 t										
Low income	35,085	90,319										
Middle income	1,002,230	2,355,279										
Lower middle income	514,247	1,409,173										
Upper middle income	499,190	1,100,621										
Low & middle income	1,037,197	2,434,141										
East Asia & Pacific	390,709	1,160,250										
Europe & Central Asia	..	..								
Latin America & Carib.	290,974	580,099										
Middle East & N. Africa	39,388	86,834										
South Asia	75,044	221,220										
Sub-Saharan Africa	45,959	82,642										
High income	4,467,711	5,544,426										
Euro Area	1,343,206	1,691,606										

a. Includes unallocated data. b. Covers mainland Tanzania only.

About the data

The data on the distribution of manufacturing value added by industry are provided by the United Nations Industrial Development Organization (UNIDO). UNIDO obtains the data from a variety of national and international sources, including the United Nations Statistics Division, the World Bank, the Organisation for Economic Co-operation and Development, and the International Monetary Fund. To improve comparability over time and across countries, UNIDO supplements these data with information from industrial censuses, statistics from national and international organizations, unpublished data that it collects in the field, and estimates by the UNIDO Secretariat. Nevertheless, coverage may be incomplete, particularly for the informal sector. When direct information on inputs and outputs is not available, estimates may be used, which may result in errors in industry totals. Moreover, countries use different reference periods (calendar or fiscal year) and valuation methods (basic or producer prices) to estimate value added. (See also *About the data* for table 4.2.)

The data on manufacturing value added in U.S. dollars are from the World Bank's national accounts files and may differ from those UNIDO uses to calculate shares of value added by industry, in part because of differences in exchange rates. Thus value added in a particular industry estimated by applying the shares to total manufacturing value added will not match those from UNIDO sources. Classification of manufacturing industries in the table accords with the United Nations International Standard Industrial Classification (ISIC) revision 3 for the first time. Previous editions of *World Development Indicators* used revision 2, first published in 1948. Revision 3 was completed in 1989, and many countries now use it. But revision 2 is still widely used for compiling cross-country data. UNIDO has converted these data to

accord with revision 3. Concordances matching ISIC categories to national classification systems and to related systems such as the Standard International Trade Classification are available.

In establishing classifications systems compilers must define both the types of activities to be described and the units whose activities are to be reported. There are many possibilities, and the choices affect how the statistics can be interpreted and how useful they are in analyzing economic behavior. The ISIC emphasizes commonalities in the production process and is explicitly not intended to measure outputs (for which there is a newly developed Central Product Classification). Nevertheless, the ISIC views an activity as defined by "a process resulting in a homogeneous set of products" (UN 1990 [ISIC, series M, no. 4, rev. 3], p. 9).

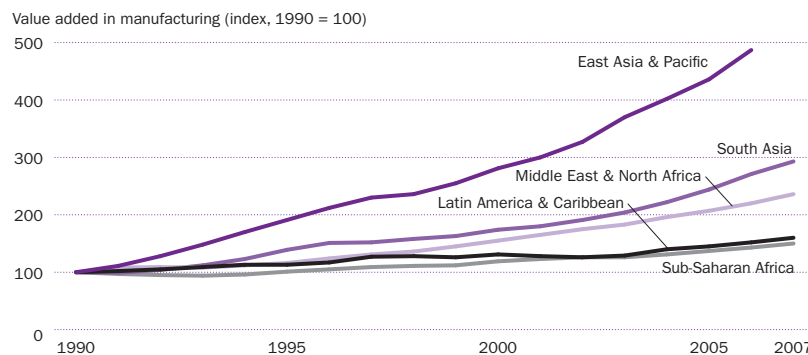
Firms typically use multiple processes to produce a product. For example, an automobile manufacturer engages in forging, welding, and painting as well as advertising, accounting, and other service activities. Collecting data at such a detailed level is not practical, nor is it useful to record production data at the highest level of a large, multiplant, multiproduct firm. The ISIC has therefore adopted as the definition of an establishment "an enterprise or part of an enterprise which independently engages in one, or predominantly one, kind of economic activity at or from one location . . . for which data are available . . ." (UN 1990, p. 25). By design, this definition matches the reporting unit required for the production accounts of the United Nations System of National Accounts. The ISIC system is described in the United Nations' *International Standard Industrial Classification of All Economic Activities, Third Revision* (1990). The discussion of the ISIC draws on Jacob Ryten's "Fifty Years of ISIC: Historical Origins and Future Perspectives" (1998).

Definitions

• **Manufacturing value added** is the sum of gross output less the value of intermediate inputs used in production for industries classified in ISIC major division 3. • **Food, beverages, and tobacco** correspond to ISIC divisions 15 and 16. • **Textiles and clothing** correspond to ISIC divisions 17–19. • **Machinery and transport equipment** correspond to ISIC divisions 29, 30, 32, 34, and 35. • **Chemicals** correspond to ISIC division 24. • **Other manufacturing**, a residual, covers wood and related products (ISIC division 20), paper and related products (ISIC divisions 21 and 22), petroleum and related products (ISIC division 23), basic metals and mineral products (ISIC division 27), fabricated metal products and professional goods (ISIC division 28), and other industries (ISIC divisions 25, 26, 31, 33, 36, and 37).

Manufacturing continues to show strong growth in East Asia through 2007

4.3a



Manufacturing continues to be the dominant sector in East Asia and Pacific, growing an average of about 10 percent a year between 1990 and 2007.

Source: *World Development Indicators* data files.

Data sources

Data on manufacturing value added are from the World Bank's national accounts files. Data used to calculate shares of industry value added are provided to the World Bank in electronic files by UNIDO. The most recent published source is UNIDO's *International Yearbook of Industrial Statistics 2008*.