

## Real GDP and real GDP per capita, by region and country/economy: Selected years, 1960–2003

Year	United States	Canada	Japan	South Korea	Europe	Austria	Belgium	Denmark	France	Germany	Former West Germany	Italy	Netherlands	Norway	Sweden	United Kingdom
GDP (billions of U.S. PPP dollars)																
1960	2,448.46	198.28	463.19	40.83	2,351.11	60.57	78.50	48.09	414.76	NA	590.23	387.77	113.48	31.69	80.75	545.26
1965	3,123.07	260.46	719.14	55.87	2,960.42	74.15	100.22	61.62	548.84	NA	746.75	499.60	143.88	39.61	103.93	641.81
1966	3,326.63	277.54	792.84	62.67	3,068.83	78.33	103.39	63.07	577.45	NA	767.59	529.50	147.91	41.11	106.10	654.37
1967	3,410.31	285.83	880.72	66.37	3,170.62	80.69	107.40	65.58	604.52	NA	765.23	567.51	155.75	43.68	109.68	670.58
1968	3,574.83	301.12	985.61	73.89	3,329.82	84.30	111.91	68.32	630.27	NA	806.96	604.65	166.18	44.67	113.67	698.90
1969	3,685.12	317.16	1,103.42	84.12	3,521.94	89.59	119.34	72.82	674.33	NA	867.16	641.52	177.48	46.68	119.36	713.65
1970	3,691.49	325.46	1,216.88	91.50	3,688.95	95.97	126.93	74.42	712.98	NA	910.84	675.59	187.69	47.61	127.09	729.83
1971	3,815.48	343.45	1,270.29	99.33	3,802.75	100.88	131.59	76.72	747.08	NA	938.70	688.66	196.04	50.06	128.29	744.73
1972	4,017.48	361.83	1,377.16	104.18	3,952.54	107.14	138.54	80.18	780.18	NA	978.59	710.38	202.13	52.59	131.22	771.59
1973	4,248.94	387.85	1,487.79	117.03	4,177.73	112.38	146.73	83.60	822.62	NA	1,025.22	756.90	212.33	54.89	136.43	826.63
1974	4,227.51	403.92	1,469.56	125.68	4,259.36	116.81	152.73	83.21	848.20	NA	1,027.23	796.84	220.93	57.19	140.79	815.42
1975	4,219.29	412.86	1,514.99	133.90	4,226.57	116.39	150.46	81.82	845.84	NA	1,014.36	780.51	221.27	60.52	144.39	811.02
1976	4,444.09	435.53	1,575.21	148.89	4,423.50	121.71	158.84	86.81	881.74	NA	1,068.37	831.47	231.81	64.07	145.92	832.77
1977	4,649.22	450.60	1,644.37	163.79	4,536.64	127.68	159.60	88.70	910.11	NA	1,098.76	851.08	237.22	66.77	143.59	853.13
1978	4,908.08	468.99	1,731.06	178.55	4,675.47	127.13	163.96	90.41	940.60	NA	1,131.70	882.15	243.12	69.01	146.10	881.28
1979	5,063.11	488.70	1,825.99	191.16	4,853.56	133.83	167.46	93.66	971.75	NA	1,179.51	930.95	247.58	72.05	151.71	905.06
1980	5,051.66	495.47	1,877.44	187.16	4,914.99	136.82	174.69	93.66	987.40	NA	1,191.08	963.33	251.75	75.62	154.24	886.42
1981	5,178.88	510.67	1,938.11	199.26	4,918.99	136.74	172.48	92.78	999.43	NA	1,192.26	970.85	250.46	76.34	153.99	873.65
1982	5,078.67	496.07	1,980.26	213.70	4,963.95	139.62	174.94	95.76	1,025.74	NA	1,181.04	976.97	247.24	76.48	155.79	890.36
1983	5,308.17	509.55	2,018.44	236.56	5,059.87	143.66	174.95	97.96	1,041.06	NA	1,201.82	989.05	251.59	79.19	158.72	921.88
1984	5,689.66	539.17	2,081.60	256.08	5,190.12	144.19	179.29	102.07	1,058.20	NA	1,235.64	1,016.34	259.44	83.84	165.54	945.58
1985	5,924.64	564.95	2,191.08	272.65	5,318.76	147.69	181.06	106.22	1,073.54	NA	1,260.72	1,046.57	266.33	88.21	169.15	979.27
1986	6,130.06	578.64	2,244.19	302.55	5,466.32	150.84	183.76	111.25	1,099.38	NA	1,290.29	1,073.00	274.65	91.37	173.79	1,017.98
1987	6,337.06	603.23	2,331.82	335.79	5,611.37	153.30	188.11	111.44	1,127.24	NA	1,309.36	1,105.03	279.74	93.22	179.60	1,064.33
1988	6,598.95	633.24	2,478.98	370.91	5,835.20	158.58	196.98	111.03	1,179.26	NA	1,358.11	1,148.67	288.07	93.12	184.25	1,117.13
1989	6,832.56	649.84	2,604.41	393.47	6,025.18	165.32	204.06	111.89	1,228.48	NA	1,407.33	1,181.65	301.86	93.98	189.20	1,141.40
1990	6,960.87	651.09	2,760.51	428.80	6,201.75	173.12	210.10	114.12	1,260.52	NA	1,487.61	1,204.98	314.12	95.83	191.27	1,150.07
1991	6,949.12	637.47	2,868.11	468.37	6,509.97	178.88	214.22	115.71	1,273.08	1,762.36	1,562.68	1,221.73	321.68	98.82	189.15	1,134.34
1992	7,180.19	643.04	2,890.71	493.84	6,594.60	183.00	217.64	117.87	1,292.07	1,801.81	1,590.25	1,231.02	326.47	102.28	185.85	1,136.57
1993	7,372.11	658.08	2,895.76	520.96	6,579.59	183.76	215.51	118.33	1,280.61	1,782.24	1,557.67	1,220.14	328.60	104.91	182.44	1,163.05
1994	7,668.45	689.70	2,914.93	563.94	6,767.60	188.55	222.47	125.44	1,307.07	1,824.06	1,590.07	1,247.08	338.01	110.40	190.04	1,214.49
1995	7,860.47	709.07	2,963.25	614.24	6,927.60	191.61	227.75	129.77	1,328.90	1,855.59	1,604.35	1,283.54	348.26	115.47	197.74	1,248.98
1996	8,151.33	720.55	3,064.21	657.23	7,033.26	195.44	230.43	133.04	1,343.55	1,869.80	1,621.70	1,297.57	358.85	121.71	200.29	1,282.57
1997	8,517.95	750.99	3,124.74	687.79	7,193.22	198.56	238.39	136.94	1,369.14	1,895.86	1,658.24	1,323.86	372.62	127.89	205.18	1,324.78
1998	8,873.60	781.77	3,097.11	640.65	7,384.57	206.34	243.20	140.15	1,415.71	1,932.95	1,705.22	1,347.61	388.83	131.01	212.66	1,366.11
1999	9,268.40	825.02	3,110.34	701.42	7,575.21	211.83	250.99	143.69	1,461.20	1,972.51	1,740.12	1,370.03	404.37	133.87	222.39	1,404.34
2000	9,607.71	868.18	3,190.97	760.95	7,828.99	219.08	260.64	147.43	1,516.62	2,028.85	NA	1,411.50	418.38	137.08	232.02	1,457.39
2001	9,656.25	883.80	3,188.59	790.14	7,948.39	220.72	262.29	149.33	1,548.40	2,046.06	NA	1,436.40	423.47	139.06	234.16	1,488.49
2002	9,868.04	914.24	3,185.77	845.22	8,013.37	223.73	264.13	150.71	1,566.75	2,049.66	NA	1,441.57	424.50	140.38	239.07	1,512.86
2003	10,176.32	932.73	3,265.41	871.16	8,062.37	225.41	267.06	151.18	1,574.08	2,047.60	NA	1,445.28	421.45	140.97	242.92	1,546.42

Appendix table 6-1  
**Real GDP and real GDP per capita, by region and country/economy: Selected years, 1960–2003**

Year	United States	Canada	Japan	South Korea	Europe	Austria	Belgium	Denmark	France	Germany	Former West Germany	Italy	Netherlands	Norway	Sweden	United Kingdom
Real GDP per capita (U.S. PPP dollars)																
1960	13,545	11,104	4,912	1,632	NA	8,595	8,577	10,498	8,876	NA	10,648	7,764	9,883	8,848	10,795	10,411
1965	16,070	13,275	7,249	1,946	NA	10,198	10,590	12,953	11,005	NA	12,739	9,635	11,704	10,639	13,439	11,809
1966	16,921	13,884	8,006	2,129	NA	10,698	10,851	13,148	11,484	NA	12,977	10,135	11,875	10,954	13,590	11,975
1967	17,159	14,044	8,790	2,203	NA	10,938	11,209	13,563	11,929	NA	12,907	10,770	12,364	11,543	13,940	12,201
1968	17,808	14,569	9,727	2,396	NA	11,368	11,634	14,043	12,345	NA	13,562	11,392	13,058	11,705	14,366	12,658
1969	18,177	15,127	10,761	2,667	NA	12,040	12,372	14,885	13,103	NA	14,437	12,009	13,787	12,133	14,980	12,868
1970	17,999	15,307	11,626	2,838	NA	12,853	13,152	15,099	13,730	NA	15,018	12,552	14,402	12,285	15,801	13,119
1971	18,371	15,638	11,973	3,021	NA	13,450	13,604	15,458	14,252	NA	15,317	12,736	14,858	12,826	15,841	13,316
1972	19,138	16,285	12,800	3,109	NA	14,202	14,269	16,062	14,754	NA	15,868	13,063	15,163	13,371	16,156	13,754
1973	20,048	17,244	13,636	3,432	NA	14,814	15,066	16,647	15,432	NA	16,542	13,824	15,801	13,860	16,767	14,703
1974	19,764	17,709	13,290	3,623	NA	15,372	15,636	16,493	15,808	NA	16,554	14,459	16,313	14,349	17,253	14,500
1975	19,535	17,840	13,534	3,795	NA	15,357	15,361	16,169	15,693	NA	16,406	14,078	16,198	15,103	17,624	14,424
1976	20,378	18,573	13,928	4,153	NA	16,088	16,190	17,113	16,294	NA	17,363	14,923	16,831	15,912	17,746	14,814
1977	21,105	18,992	14,403	4,498	NA	16,870	16,249	17,430	16,743	NA	17,895	15,210	17,121	16,514	17,401	15,183
1978	22,046	19,571	15,028	4,830	NA	16,811	16,680	17,711	17,229	NA	18,454	15,709	17,442	17,003	17,654	15,687
1979	22,492	20,193	15,720	5,093	NA	17,727	17,024	18,301	17,723	NA	19,223	16,530	17,642	17,691	18,292	16,093
1980	22,183	20,210	16,038	4,909	NA	18,123	17,740	18,277	17,916	NA	19,346	17,070	17,794	18,508	18,560	15,736
1981	22,516	20,575	16,438	5,146	NA	18,067	17,506	18,115	18,032	NA	19,329	17,180	17,580	18,622	18,507	15,502
1982	21,870	19,750	16,679	5,434	NA	18,434	17,750	18,710	18,400	NA	19,161	17,278	17,275	18,586	18,713	15,817
1983	22,652	20,087	16,886	5,927	NA	18,997	17,752	19,154	18,577	NA	19,566	17,486	17,510	19,181	19,056	16,370
1984	24,069	21,055	17,303	6,338	NA	19,069	18,193	19,970	18,792	NA	20,198	17,964	17,988	20,250	19,857	16,763
1985	24,841	21,861	18,101	6,682	NA	19,523	18,367	20,774	18,972	NA	20,659	18,493	18,383	21,242	20,256	17,316
1986	25,469	22,169	18,446	7,341	NA	19,927	18,633	21,730	19,334	NA	21,129	18,959	18,854	21,925	20,764	17,959
1987	26,095	22,808	19,076	8,068	NA	20,239	19,059	21,733	19,716	NA	21,438	19,523	19,076	22,265	21,387	18,737
1988	26,928	23,633	20,196	8,825	NA	20,907	19,854	21,646	20,501	NA	22,101	20,284	19,517	22,121	21,840	19,628
1989	27,619	23,819	21,139	9,269	NA	21,697	20,534	21,809	21,230	NA	22,676	20,851	20,332	22,233	22,277	19,998
1990	27,823	23,507	22,332	10,003	NA	22,548	21,079	22,213	21,669	NA	23,518	21,245	21,016	22,593	22,348	20,093
1991	27,409	22,741	23,111	10,818	NA	23,066	21,413	22,467	21,775	22,034	24,389	21,528	21,349	23,187	21,950	19,749
1992	27,947	22,669	23,206	11,288	NA	23,339	21,667	22,815	21,991	22,357	24,516	21,650	21,504	23,862	21,441	19,745
1993	28,324	22,944	23,178	11,788	NA	23,244	21,371	22,822	21,705	21,954	23,768	21,387	21,491	24,330	20,925	20,167
1994	29,107	23,784	23,270	12,633	NA	23,758	21,992	24,118	22,075	22,403	24,144	21,801	21,976	25,458	21,643	21,013
1995	29,485	24,198	23,598	13,622	NA	24,107	22,467	24,811	22,365	22,723	24,251	22,400	22,527	26,489	22,402	21,561
1996	30,222	24,334	24,345	14,437	NA	24,556	22,688	25,281	22,534	22,831	24,407	22,607	23,113	27,779	22,655	22,097
1997	31,206	25,111	24,767	14,967	NA	24,919	23,415	25,911	22,884	23,106	24,881	23,019	23,875	29,032	23,194	22,776
1998	32,133	25,923	24,486	13,841	NA	25,868	23,836	26,427	23,577	23,564	25,573	23,401	24,761	29,563	24,026	23,430
1999	33,181	27,135	24,552	15,047	NA	26,504	24,543	27,006	24,234	24,029	NA	23,766	25,578	30,003	25,107	24,014
2000	34,019	28,290	25,140	16,188	NA	27,345	25,425	27,616	25,029	24,686	NA	24,437	26,277	30,524	26,151	24,852
2001	33,839	28,490	25,050	16,690	NA	27,481	25,499	27,874	25,419	24,849	NA	24,797	26,396	30,809	26,322	25,215
2002	34,235	29,151	24,999	17,742	NA	27,786	25,563	28,036	25,585	24,850	NA	24,831	26,288	30,934	26,787	25,552
2003	34,960	29,489	25,587	18,177	NA	27,902	25,769	28,050	25,578	24,813	NA	24,894	25,938	30,882	27,118	26,039

NA = not available; PPP = purchasing power parity; GDP = gross domestic product

NOTES: Real GDP converted to U.S. dollars using 1999 PPP. Europe includes Austria, Belgium, Denmark, France, Germany, Italy, the Netherlands, Norway, Sweden, and the United Kingdom.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, special tabulations (December 2004).

**World industry production, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>All manufacturing industries</b>												
Total production.....	10,242,264.2	11,543,145.5	13,933,999.4	15,360,229.7	15,846,379.5	16,762,321.6	17,090,343.5	17,767,037.6	18,927,124.5	18,686,294.4	18,960,218.2	19,592,527.0
United States.....	2,266,543.8	2,532,227.2	2,930,602.0	3,482,405.6	3,652,539.4	3,963,208.5	4,226,603.1	4,450,771.9	4,661,545.0	4,468,193.5	4,464,973.4	4,465,452.3
Canada.....	221,166.0	252,991.0	274,842.5	308,875.8	312,251.5	332,622.9	349,239.8	377,611.0	413,151.7	392,823.6	400,462.4	400,828.2
Mexico.....	157,769.0	164,826.0	190,358.9	197,552.0	218,936.4	240,703.6	258,460.2	269,343.8	287,932.4	276,932.3	274,952.0	269,443.6
Brazil.....	414,831.0	403,548.7	401,313.7	445,537.8	450,543.8	466,814.1	451,604.2	444,321.3	471,255.8	477,646.3	480,163.3	479,231.0
Chile.....	15,802.7	13,788.0	23,829.5	34,511.3	34,265.0	35,634.8	34,815.2	32,946.1	34,825.4	36,195.9	37,127.8	39,054.7
Costa Rica.....	3,466.6	4,301.6	5,532.8	7,941.6	7,332.7	7,712.3	9,475.3	10,707.5	10,293.5	9,995.8	10,285.9	10,918.1
Argentina.....	115,107.2	102,718.7	97,887.3	120,544.3	126,425.1	137,865.0	140,828.4	131,605.2	130,285.6	120,400.4	107,699.1	125,109.3
Peru.....	22,270.2	20,416.9	19,293.1	24,810.2	25,176.6	26,515.0	25,662.6	25,523.5	26,643.2	26,333.5	27,458.1	28,120.4
Austria.....	61,038.3	65,495.1	81,427.9	91,747.0	92,259.0	98,946.0	107,884.9	114,411.6	126,200.5	128,311.7	128,248.7	131,179.2
Belgium.....	128,433.5	133,869.7	153,674.2	156,837.5	157,566.3	165,294.2	170,087.3	172,035.3	182,187.9	183,801.0	185,402.9	186,276.7
Denmark.....	42,320.2	52,688.5	56,849.6	64,450.6	65,345.1	68,563.0	70,588.1	71,094.7	74,915.4	76,332.6	77,112.9	76,763.3
France.....	605,961.0	644,368.2	737,004.7	717,674.4	708,779.6	748,771.0	778,957.2	800,318.6	841,010.4	848,224.3	830,504.8	825,882.3
Finland.....	49,882.3	58,040.9	65,754.0	75,580.3	77,696.6	84,642.1	93,349.7	99,017.9	111,883.5	111,324.1	113,598.9	113,580.2
Germany.....	967,428.6	1,006,889.5	1,190,751.3	1,186,517.5	1,183,874.4	1,224,784.8	1,283,852.1	1,304,537.2	1,379,233.2	1,383,022.6	1,366,437.4	1,369,547.2
Greece.....	36,103.6	34,853.0	37,072.4	36,213.9	36,071.6	36,912.4	39,905.5	39,555.0	41,678.1	41,621.9	41,570.0	41,403.1
Ireland.....	13,929.2	18,269.5	27,283.9	44,621.6	48,325.2	57,665.7	69,964.4	80,500.6	93,164.3	102,885.2	110,533.1	115,774.0
Italy.....	586,159.0	575,767.6	676,192.0	719,658.3	711,400.4	735,150.0	747,825.0	745,456.4	768,245.8	763,636.7	746,352.6	733,933.7
Netherlands.....	169,364.3	162,047.1	184,674.0	191,401.6	192,560.7	197,360.2	203,282.6	208,172.7	217,355.2	216,673.9	214,946.6	208,910.2
Portugal.....	36,947.7	42,480.5	57,477.0	58,568.0	61,864.6	64,005.2	66,024.4	65,556.1	64,911.5	66,442.4	66,669.5	66,263.8
Spain.....	249,857.1	252,770.7	297,807.6	310,918.8	308,749.1	331,283.0	351,926.2	359,923.1	371,918.5	364,665.5	365,967.3	371,515.6
Sweden.....	95,229.8	105,697.9	125,701.0	139,635.6	140,672.4	148,317.0	153,860.4	156,321.1	166,689.0	165,914.9	167,132.5	170,810.8
United Kingdom.....	527,540.9	540,561.7	640,259.7	655,068.0	660,118.9	672,000.0	676,534.3	681,413.1	698,058.1	688,817.2	667,580.5	670,565.1
European Union-15.....	3,570,195.4	3,693,799.9	4,331,929.3	4,448,892.9	4,445,283.8	4,633,694.7	4,814,042.2	4,898,313.5	5,137,451.4	5,141,674.1	5,082,057.8	5,082,405.2
Czech Republic.....	47,402.3	55,070.8	45,570.3	48,395.9	50,023.3	52,788.3	53,885.3	52,246.9	51,883.1	58,646.9	61,699.3	65,217.3
Hungary.....	33,389.4	36,659.2	32,045.8	27,373.8	28,286.2	32,400.6	37,544.3	41,981.3	51,208.8	53,312.3	55,364.8	58,954.4
Poland.....	91,091.5	82,107.7	67,613.4	81,994.9	90,719.9	94,403.3	100,569.2	106,209.8	114,609.0	114,521.1	116,594.0	128,830.3
Slovakia.....	14,995.7	17,517.9	18,178.7	16,368.7	16,463.2	17,173.3	18,406.6	17,804.9	19,462.4	21,570.9	23,457.1	25,280.1
Expanded European Union countries.....	186,878.9	191,355.6	163,408.2	174,133.3	185,492.6	196,765.4	210,405.4	218,242.9	237,163.4	248,051.3	257,115.1	278,282.1
Japan.....	1,800,308.3	2,135,213.2	2,664,571.8	2,549,233.0	2,606,791.3	2,701,684.7	2,516,120.3	2,521,898.3	2,666,571.9	2,484,563.2	2,454,339.5	2,532,787.7
China.....	174,234.5	288,257.2	438,771.7	959,256.1	1,085,585.1	1,205,980.1	1,318,218.3	1,456,364.0	1,654,461.2	1,817,051.0	2,048,239.6	2,389,190.2
South Korea.....	90,965.1	151,594.5	284,088.4	427,261.0	462,104.7	483,957.6	450,490.1	562,507.2	661,753.7	661,698.6	716,798.9	752,523.3
Taiwan.....	105,091.7	142,785.5	194,904.8	247,730.1	254,323.5	272,722.1	281,398.2	303,338.8	327,767.6	300,387.5	328,601.2	352,829.8
Singapore.....	19,219.8	20,766.7	37,762.8	56,025.4	57,847.0	60,453.4	60,253.3	68,294.9	78,757.5	69,610.0	75,472.9	77,746.9
Hong Kong.....	26,626.8	25,299.1	35,657.4	36,274.8	34,926.7	34,639.4	30,886.5	28,378.2	28,222.9	26,974.1	23,856.3	21,658.1
India.....	83,845.4	117,053.3	172,788.1	224,453.7	248,297.9	262,801.0	274,606.1	292,524.4	311,362.7	320,438.8	336,719.6	360,641.8
Malaysia.....	13,221.8	18,268.5	33,107.6	62,296.7	69,923.6	78,606.7	70,548.6	79,666.8	98,220.6	91,744.6	95,882.4	105,898.8
Thailand.....	33,229.5	40,534.6	74,464.9	112,546.5	121,328.0	119,972.6	107,978.1	121,445.1	125,378.0	127,046.2	137,838.5	154,800.3
Philippines.....	35,034.6	29,946.5	38,289.0	42,316.4	44,677.5	46,563.4	46,038.6	49,806.7	57,453.7	62,278.0	61,189.4	66,143.3
Indonesia.....	19,250.5	49,168.7	90,238.8	152,588.0	153,493.8	161,806.7	128,438.3	130,897.3	135,592.0	134,126.0	122,599.1	127,439.1
South Africa.....	82,585.7	82,032.8	79,314.8	85,128.8	87,916.9	90,416.1	87,700.2	87,421.0	90,553.4	93,119.7	97,323.9	95,384.1

**World industry production, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>High technology industries</b>												
Total production.....	831,516.4	1,091,922.9	1,478,901.7	1,723,297.7	1,889,615.6	2,141,130.5	2,308,467.9	2,663,934.5	3,128,829.8	3,100,920.5	3,206,425.5	3,471,644.0
United States.....	232,226.8	284,177.4	364,424.9	424,950.4	498,905.0	619,519.4	771,618.3	956,202.2	1,182,069.7	1,199,482.0	1,266,610.7	1,351,048.7
Canada.....	10,527.6	13,042.8	20,058.9	26,885.5	26,835.3	30,576.9	33,179.3	41,405.8	52,256.4	39,684.4	36,382.1	36,572.1
Mexico.....	16,117.2	14,697.6	19,870.4	21,761.2	24,574.8	33,182.6	45,409.1	52,672.9	56,593.6	53,005.4	47,468.8	45,263.0
Brazil.....	66,496.5	45,579.1	51,655.2	47,228.5	50,176.5	54,171.5	47,510.2	42,974.5	42,296.7	43,738.8	43,183.9	41,746.4
Chile.....	186.0	216.8	480.7	752.0	672.1	783.0	1,015.1	746.0	757.7	718.1	746.0	746.0
Costa Rica.....	246.0	220.2	296.3	319.4	266.4	160.8	180.7	157.4	168.2	159.4	159.1	168.0
Argentina.....	5,941.0	4,873.6	4,568.8	4,747.1	5,265.6	5,497.5	5,517.0	5,065.2	5,342.0	5,006.1	5,223.2	6,123.0
Peru.....	857.8	556.3	431.4	550.3	574.6	636.0	548.7	532.6	545.5	542.3	553.5	587.9
Austria.....	3,185.5	4,357.2	6,298.6	8,263.6	8,386.1	8,856.5	9,959.0	11,008.4	12,804.4	11,810.3	11,511.0	11,075.9
Belgium.....	7,390.9	9,925.7	10,716.6	11,150.9	10,766.7	11,828.3	12,649.4	13,666.9	16,218.3	16,262.2	15,875.8	19,808.6
Denmark.....	2,110.9	3,201.3	3,863.5	5,244.8	6,143.0	6,509.7	7,240.7	8,345.9	9,645.7	10,349.2	10,544.1	10,281.6
France.....	72,558.3	86,801.5	91,231.9	96,370.1	95,495.7	107,727.8	113,272.6	123,664.7	128,975.7	130,615.3	133,284.1	136,665.7
Finland.....	1,442.3	2,527.6	3,926.1	8,642.1	9,716.8	11,521.6	16,289.6	20,234.6	26,517.5	25,486.8	28,022.4	27,506.7
Germany.....	63,683.5	78,716.1	93,682.9	100,128.2	102,219.8	105,191.4	113,562.8	119,987.5	140,204.5	142,909.4	139,601.5	146,494.0
Greece.....	799.0	859.6	937.5	972.6	1,029.3	1,186.1	1,629.1	1,605.9	2,038.9	2,406.9	2,385.2	2,433.5
Ireland.....	1,237.3	2,351.2	4,346.0	10,416.5	11,954.7	14,655.6	17,079.3	20,836.3	30,957.1	36,023.3	34,514.1	34,516.6
Italy.....	36,424.2	50,106.2	52,576.2	52,940.9	55,067.6	54,941.9	54,584.7	53,669.3	54,817.9	52,444.1	49,904.9	47,136.8
Netherlands.....	10,085.4	10,683.9	15,623.7	17,996.4	17,770.0	19,272.1	20,005.1	21,021.6	23,696.6	23,752.9	18,777.2	18,574.9
Portugal.....	2,397.8	2,683.3	3,229.0	3,744.0	3,735.8	3,684.2	3,988.8	4,076.8	4,460.8	4,704.3	4,542.6	5,617.8
Spain.....	21,898.3	17,803.1	19,868.1	19,637.4	19,294.9	19,778.2	20,857.8	20,827.7	22,306.6	20,703.0	19,288.2	19,410.9
Sweden.....	6,266.6	9,173.3	13,042.3	20,813.2	22,862.3	24,394.3	26,962.8	29,544.4	32,951.0	33,196.0	31,537.6	30,222.4
United Kingdom.....	44,595.7	53,853.8	75,761.9	93,221.1	98,175.6	103,975.4	111,083.9	116,055.9	126,648.7	128,034.3	113,137.1	116,200.2
European Union-15.....	274,075.6	333,044.0	395,104.4	449,541.9	462,618.5	493,522.9	529,165.4	564,545.7	632,243.7	638,698.0	612,925.9	625,945.6
Czech Republic.....	943.9	1,107.0	997.2	1,922.4	2,057.6	2,386.0	3,620.7	4,390.3	3,625.5	5,682.6	7,959.1	8,240.0
Hungary.....	2,327.7	3,055.3	2,650.7	1,803.4	2,652.6	4,622.6	1,670.4	1,822.0	2,431.7	2,411.6	2,512.6	2,730.6
Poland.....	3,176.9	3,219.1	3,047.7	3,069.8	3,582.3	3,797.3	4,182.1	4,433.7	4,833.4	5,054.2	5,328.0	5,804.2
Slovakia.....	513.0	570.8	582.9	599.6	675.3	871.6	891.5	854.4	983.6	1,167.1	1,355.4	1,541.8
<b>Expanded European</b>												
Union countries.....	6,961.4	7,952.2	7,278.5	7,395.2	8,967.8	11,677.5	10,364.7	11,500.3	11,874.3	14,315.5	17,155.2	18,316.6
Japan.....	122,900.7	251,672.8	374,449.2	375,219.0	405,181.1	435,736.3	402,642.1	408,919.4	435,083.9	392,104.0	350,982.9	376,250.1
China.....	7,301.0	16,670.2	27,757.1	65,206.5	92,368.0	109,614.4	127,407.1	170,141.2	213,530.0	246,789.5	323,557.6	423,825.9
South Korea.....	6,165.8	12,622.9	37,406.0	70,656.1	80,502.8	86,175.9	78,737.5	110,665.9	148,748.1	147,695.5	166,477.1	175,393.3
Taiwan.....	9,397.3	17,324.7	33,807.9	54,014.0	56,756.9	65,317.5	71,656.4	86,744.2	98,342.6	88,826.4	104,130.2	122,806.6
Singapore.....	5,319.4	8,848.5	24,113.1	40,601.9	43,040.6	47,089.0	46,284.1	58,135.2	67,062.0	54,755.4	53,840.6	57,014.4
Hong Kong.....	4,281.2	4,284.1	7,158.2	7,818.5	7,527.8	7,013.2	6,697.7	6,503.1	5,791.0	5,276.5	4,171.6	3,274.1
India.....	1,675.9	2,334.0	6,452.1	10,814.0	11,235.4	13,097.4	12,637.7	15,562.5	15,178.4	15,795.6	16,573.9	17,592.2
Malaysia.....	1,795.6	2,521.7	9,357.2	32,306.0	32,550.9	36,033.7	32,401.9	41,887.9	57,291.9	48,527.2	52,520.4	59,552.4
Thailand.....	444.1	903.6	3,865.2	4,794.0	5,588.7	5,599.4	4,622.2	5,328.3	6,449.1	5,345.3	6,175.2	6,991.0
Philippines.....	1,113.0	1,139.5	1,782.4	3,319.0	2,863.2	5,939.2	4,866.6	5,683.8	8,461.1	9,320.2	9,969.4	11,129.6
Indonesia.....	398.1	1,201.8	3,501.5	6,029.9	5,826.5	6,944.8	4,686.7	4,915.5	6,205.4	6,514.6	5,858.3	6,059.6
South Africa.....	2,848.7	2,468.3	2,921.7	2,956.5	2,965.9	2,943.8	2,776.3	2,649.7	2,658.9	2,500.4	2,525.2	2,468.2

**World industry production, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Aircraft</b>												
Total production .....	196,719.3	202,305.7	261,346.3	201,089.1	214,314.9	246,760.6	273,912.7	273,552.4	252,248.3	280,410.1	273,896.0	273,746.7
United States.....	91,647.6	100,328.0	135,230.3	88,924.2	95,352.8	110,244.4	132,950.9	122,207.4	99,624.8	110,976.3	96,044.2	89,905.4
Canada.....	3,990.4	3,241.6	5,938.0	5,202.9	5,929.2	6,980.4	6,558.2	6,950.3	8,405.8	8,256.2	7,453.9	6,997.3
Mexico.....	29.5	54.6	89.6	295.1	243.7	172.1	179.4	257.0	227.7	288.2	323.7	411.1
Brazil.....	31,521.0	18,011.0	23,998.7	19,588.3	21,032.5	23,648.6	19,444.3	18,504.9	16,173.1	17,635.7	18,488.0	18,028.7
Chile.....	38.4	21.7	39.7	40.1	29.0	34.4	154.7	99.5	129.0	104.0	109.6	109.9
Costa Rica.....	72.5	47.8	102.3	118.7	121.8	18.5	20.6	24.3	26.5	18.2	18.1	18.6
Argentina.....	126.8	114.1	100.4	55.8	69.4	51.6	56.9	34.2	19.3	16.2	10.6	10.5
Peru.....	0.3	0.2	0.2	0.8	0.6	0.6	0.6	0.2	0.4	0.3	0.3	0.3
Austria.....	142.2	67.5	67.5	47.2	50.7	56.9	58.2	63.7	58.6	61.6	70.7	85.1
Belgium.....	837.8	974.1	1,206.1	636.3	600.1	758.9	889.6	1,146.5	1,253.7	1,319.6	1,061.5	962.3
Denmark.....	5.5	3.6	10.9	20.0	31.9	42.0	33.3	35.1	44.5	42.5	37.2	37.6
France.....	26,978.4	28,626.9	23,659.2	20,843.2	20,198.6	26,447.0	28,096.7	30,681.0	25,571.8	28,419.2	34,369.3	34,343.3
Finland.....	48.3	110.0	153.7	177.4	204.6	225.8	235.5	225.2	224.5	206.7	197.5	202.8
Germany.....	12,001.0	13,670.1	17,165.8	14,273.5	13,322.2	13,120.3	13,730.4	15,084.4	16,098.7	17,770.9	19,103.6	20,833.0
Greece.....	74.5	97.0	123.0	142.7	196.6	230.5	180.9	183.4	174.8	197.2	221.5	215.3
Ireland.....	76.5	99.4	137.0	152.2	211.1	226.1	280.8	296.7	457.5	490.7	396.8	444.2
Italy.....	4,303.8	5,621.2	7,294.3	4,285.8	4,573.2	5,331.5	5,420.6	5,379.2	5,574.8	6,471.2	5,802.3	5,584.2
Netherlands.....	1,027.2	1,088.7	1,613.3	1,194.0	1,192.7	1,713.7	1,703.1	1,654.2	1,764.5	1,733.1	1,708.5	1,684.1
Portugal.....	14.1	9.5	4.7	52.7	41.4	53.0	53.0	40.8	49.4	44.6	40.8	39.4
Spain.....	1,469.7	1,681.7	1,589.0	1,271.5	1,202.5	1,375.3	1,604.7	1,846.8	2,249.0	2,532.0	2,320.9	2,489.8
Sweden.....	1,105.2	1,715.6	1,864.6	1,597.7	1,525.0	1,686.7	1,737.5	1,364.1	1,298.8	1,314.9	1,187.1	1,062.3
United Kingdom.....	10,264.6	10,719.7	19,443.1	15,243.6	16,995.7	19,621.3	22,419.7	23,940.1	24,645.9	24,244.7	18,944.1	21,263.9
European Union-15.....	58,348.9	64,485.3	74,332.3	59,937.9	60,346.2	70,889.0	76,444.0	81,941.1	79,466.4	84,848.9	85,462.0	89,247.4
Czech Republic.....	142.2	179.6	139.2	181.2	142.8	159.4	231.5	184.4	198.7	212.1	211.1	253.7
Hungary.....	82.6	96.1	58.6	11.5	10.6	12.9	185.1	263.2	267.7	234.0	233.1	225.6
Poland.....	576.8	499.7	422.3	437.6	385.9	284.2	264.4	273.3	321.7	333.9	243.5	199.0
Slovakia.....	4.2	4.9	5.1	10.1	11.3	10.2	11.1	20.9	87.4	92.1	31.7	109.1
<b>Expanded European</b>												
Union countries.....	805.8	780.3	625.2	640.4	550.6	466.7	692.1	741.8	875.4	872.0	719.3	787.4
Japan.....	1,897.5	3,306.7	4,552.7	6,061.0	6,236.6	7,048.8	7,466.2	9,347.6	9,271.4	11,254.6	13,987.0	13,908.7
China.....	827.1	1,757.4	2,720.1	9,235.0	13,410.4	15,288.6	18,251.5	20,881.4	25,491.0	30,784.2	35,723.3	39,206.3
South Korea.....	34.5	117.6	522.5	567.3	759.7	1,136.4	2,066.4	1,959.3	2,647.4	3,085.3	2,630.5	2,192.1
Taiwan.....	354.8	384.3	390.8	494.8	527.9	859.4	764.4	849.6	952.3	1,474.0	1,840.3	2,006.5
Singapore.....	161.5	538.2	653.4	955.9	909.4	1,005.7	1,135.5	1,320.9	1,323.6	1,491.3	1,624.6	1,561.6
Hong Kong.....	158.5	237.4	317.4	283.8	341.8	371.3	349.6	493.6	571.2	639.5	722.7	559.6
India.....	68.9	118.8	151.3	266.4	209.4	288.5	296.3	314.7	298.3	277.9	299.5	321.9
Malaysia.....	3.7	4.5	9.7	8.8	7.7	14.7	3.1	12.7	16.0	18.5	17.9	18.9
Thailand.....	16.3	25.5	84.4	61.2	74.8	54.3	45.4	67.5	96.2	95.7	109.6	98.9
Philippines.....	158.1	12.7	9.0	11.7	9.2	13.7	7.3	9.4	12.9	13.7	14.7	16.9
Indonesia.....	62.0	86.6	76.1	93.4	156.6	64.3	35.1	32.0	52.9	58.2	54.0	50.3
South Africa.....	794.5	546.6	589.6	543.6	600.6	533.5	489.5	493.3	583.4	594.1	543.7	536.4

**World industry production, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Pharmaceuticals</b>												
Total production .....	160,258.7	194,791.6	267,300.4	322,967.1	337,735.3	354,851.6	369,486.8	391,446.4	415,973.7	443,204.3	466,758.2	489,500.4
United States.....	37,122.2	45,505.8	64,426.5	79,032.2	85,390.4	91,217.6	100,932.2	105,113.9	109,603.0	119,855.1	124,284.1	120,641.5
Canada.....	1,906.1	2,553.8	3,438.7	4,004.3	3,904.5	4,039.4	3,878.5	4,498.1	5,513.2	7,033.8	8,297.7	8,620.1
Mexico.....	2,574.5	2,188.2	2,940.7	3,671.9	3,849.5	4,393.3	5,008.3	5,338.7	5,793.7	6,042.2	6,309.1	6,420.5
Brazil.....	13,819.2	11,898.0	12,360.4	11,037.6	11,229.5	12,128.5	12,608.0	11,473.5	10,748.3	10,834.1	11,068.2	10,227.1
Chile.....	114.9	162.5	384.1	610.1	533.6	633.4	740.5	587.9	567.5	566.1	591.3	597.2
Costa Rica.....	65.2	117.3	93.7	114.2	79.3	83.7	87.1	90.5	103.1	102.8	101.2	104.8
Argentina.....	3,879.6	3,189.2	3,233.7	3,431.3	3,698.8	3,735.0	3,759.3	3,598.3	3,812.4	3,827.8	3,025.3	3,496.5
Peru.....	652.1	427.8	353.0	472.3	501.9	556.5	469.6	465.1	471.7	471.1	487.5	520.3
Austria.....	535.4	749.4	1,199.8	1,878.2	1,898.6	1,925.1	2,409.7	2,468.4	2,983.4	2,483.8	2,605.9	2,715.5
Belgium.....	1,931.3	3,848.9	4,806.1	5,950.8	5,633.2	6,173.0	6,136.8	7,057.6	7,883.9	8,384.1	9,233.3	13,058.6
Denmark.....	571.9	1,197.2	1,484.8	2,091.7	2,487.4	2,759.7	3,213.5	3,866.9	4,540.9	5,058.4	5,332.8	5,085.0
France.....	12,243.0	17,491.8	21,613.4	24,407.1	25,020.6	26,443.2	29,050.7	31,904.2	34,393.6	34,981.7	34,864.0	37,384.0
Finland.....	421.1	562.3	630.4	529.8	505.3	559.8	564.7	478.5	490.0	475.6	422.5	433.4
Germany.....	12,640.9	14,205.3	16,863.3	22,239.5	23,609.3	22,439.9	22,771.4	23,124.9	23,341.4	24,818.8	26,630.6	27,772.0
Greece.....	251.6	301.1	444.5	438.7	493.3	561.0	710.5	777.4	1,005.7	1,327.9	1,529.6	1,648.9
Ireland.....	208.9	421.5	730.1	2,597.7	3,056.5	4,174.1	5,367.1	6,286.3	8,093.6	10,642.0	12,853.6	12,279.8
Italy.....	7,727.3	11,082.1	14,662.3	15,797.4	16,563.9	16,997.6	17,585.1	18,494.0	17,825.4	17,075.4	18,174.1	18,031.3
Netherlands.....	2,212.0	2,667.6	3,343.4	5,001.9	4,927.1	5,507.9	5,670.2	6,200.8	6,790.8	7,371.7	8,115.7	8,456.0
Portugal.....	1,068.3	776.3	1,359.6	1,127.7	1,135.9	1,180.4	1,249.8	1,221.1	1,253.3	1,132.3	1,127.8	1,152.4
Spain.....	4,688.0	4,365.9	5,289.9	7,142.8	6,939.5	7,351.5	7,658.8	8,491.7	8,718.6	8,908.8	9,929.6	10,508.2
Sweden.....	930.8	1,231.2	1,743.2	3,564.3	3,854.6	4,093.7	4,375.1	4,754.7	5,079.7	5,762.3	6,449.3	7,389.3
United Kingdom.....	3,775.2	4,765.6	8,394.7	16,902.2	16,789.3	17,795.1	18,427.1	15,250.8	16,125.3	19,445.6	21,279.6	22,253.7
European Union-15.....	49,205.7	63,666.3	82,565.6	109,669.6	112,914.4	117,962.0	125,190.5	130,377.2	138,525.6	147,868.5	158,548.5	168,168.1
Czech Republic.....	410.6	425.0	318.5	325.9	313.4	334.9	283.6	252.7	273.4	279.9	267.7	286.2
Hungary.....	898.9	1,260.2	1,166.0	771.8	769.9	804.8	835.4	755.2	1,137.1	1,026.7	1,107.2	1,102.2
Poland.....	762.3	759.5	552.8	577.2	606.6	594.3	535.7	522.7	560.3	591.3	658.7	674.1
Slovakia.....	145.1	146.1	141.1	168.2	189.3	240.9	234.8	246.6	247.4	255.0	266.6	255.3
<b>Expanded European</b>												
Union countries.....	2,216.8	2,590.7	2,178.4	1,843.2	1,879.2	1,974.9	1,889.5	1,777.2	2,218.2	2,152.9	2,300.2	2,317.7
Japan.....	24,290.0	30,605.7	47,453.9	55,718.9	55,988.3	57,290.4	54,151.8	59,276.4	61,985.1	62,386.1	62,584.2	62,772.6
China.....	2,777.6	4,045.5	6,737.6	12,035.4	14,632.9	15,226.4	16,512.4	19,272.0	23,929.6	26,758.9	29,503.4	40,077.5
South Korea.....	1,572.3	2,929.5	6,768.3	9,717.7	11,438.8	11,836.2	10,401.4	12,862.7	14,817.1	16,209.9	17,856.8	20,402.9
Taiwan.....	370.9	557.9	1,158.6	1,568.3	1,643.6	1,763.0	1,828.2	1,929.7	2,188.3	1,922.0	1,899.0	2,154.6
Singapore.....	331.0	744.9	1,873.2	1,443.2	1,478.3	1,456.1	2,764.5	4,457.2	4,188.9	4,567.3	6,108.4	6,927.5
Hong Kong.....	140.9	73.2	107.9	226.3	264.0	214.0	193.0	206.6	212.7	222.5	171.2	177.9
India.....	1,217.5	1,445.3	2,862.2	5,506.5	5,771.2	6,012.5	5,785.5	6,286.9	5,786.8	5,940.9	6,244.9	6,487.8
Malaysia.....	15.4	64.8	96.6	152.3	166.3	177.7	160.0	199.0	231.6	208.6	209.9	240.0
Thailand.....	275.5	430.5	559.4	800.8	942.0	1,091.1	948.2	1,069.1	1,207.7	1,268.6	1,375.1	1,542.7
Philippines.....	483.0	524.9	653.5	907.9	716.3	1,275.9	938.3	1,114.8	1,383.8	1,538.1	1,388.5	1,467.5
Indonesia.....	72.1	454.5	829.0	1,432.8	1,556.2	1,330.5	884.1	910.7	1,126.8	1,145.7	1,298.9	1,460.1
South Africa.....	1,137.8	887.2	1,278.5	1,319.9	1,384.0	1,300.4	1,156.6	1,035.2	960.6	992.4	1,035.4	927.3

**World industry production, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Office and computing machinery</b>												
Total production .....	69,231.2	126,031.1	195,097.1	274,433.4	324,020.7	388,086.8	430,798.9	515,199.6	601,085.9	575,787.2	564,794.5	647,814.0
United States .....	2,487.4	9,297.2	18,852.1	54,494.8	77,428.4	110,867.1	148,982.9	187,796.4	214,370.9	204,321.9	187,325.0	211,782.0
Canada .....	41.3	227.6	770.3	3,276.9	3,147.3	3,712.3	5,188.0	5,766.4	7,897.5	6,700.6	5,683.2	5,516.1
Mexico .....	317.1	425.0	994.5	3,337.9	4,632.7	5,945.8	6,573.8	6,943.2	8,440.0	8,303.5	7,482.8	7,042.2
Brazil .....	2,034.5	1,300.1	2,062.8	2,848.2	3,038.9	3,643.1	3,883.2	3,698.8	4,430.5	4,642.2	4,472.0	4,436.4
Chile .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Costa Rica .....	0.1	0.1	0.2	0.7	0.7	1.3	1.6	1.8	2.2	2.3	2.6	3.4
Argentina .....	121.3	161.3	154.2	178.4	213.0	249.6	249.3	177.8	225.7	190.9	162.5	194.3
Peru .....	6.9	7.5	12.8	17.0	12.3	17.6	22.7	17.2	21.0	23.2	19.7	20.2
Austria .....	106.6	100.9	118.6	75.6	79.9	89.7	106.6	226.3	355.6	550.1	526.1	547.8
Belgium .....	131.2	141.1	164.4	239.4	299.5	324.2	324.4	346.4	588.0	495.7	358.9	259.3
Denmark .....	130.2	172.5	202.1	282.1	346.4	219.1	168.7	263.3	409.9	524.3	413.5	582.3
France .....	1,957.7	2,313.4	2,415.3	9,111.8	9,966.8	10,077.7	10,468.4	11,329.8	12,569.6	11,713.5	9,940.1	10,527.7
Finland .....	141.9	340.8	508.3	903.6	971.7	1,173.9	1,264.8	1,633.1	396.3	228.0	173.3	161.8
Germany .....	6,378.2	11,324.7	12,810.4	11,785.3	12,534.2	14,566.4	17,491.3	18,599.0	23,179.3	21,769.7	19,582.0	18,855.5
Greece .....	57.7	66.9	47.5	4.9	2.6	12.3	5.2	7.1	13.6	18.4	53.4	2.5
Ireland .....	394.6	521.9	977.9	2,096.7	2,253.7	2,518.2	2,711.9	3,269.0	4,849.2	4,625.6	3,653.3	4,451.0
Italy .....	6,105.5	9,954.4	4,229.6	5,236.1	5,257.9	4,338.8	4,498.1	3,343.0	3,557.8	3,413.1	2,299.6	1,634.8
Netherlands .....	1,812.4	2,428.2	1,678.5	2,168.3	2,096.3	1,958.7	2,312.4	2,143.9	2,349.0	2,290.5	1,729.7	1,515.7
Portugal .....	74.4	175.4	38.1	67.0	41.8	41.7	23.6	79.5	78.3	67.7	66.7	70.1
Spain .....	11,363.7	7,724.5	5,939.8	2,936.1	3,120.6	2,868.0	3,162.3	2,989.1	2,720.2	1,914.2	1,111.9	726.9
Sweden .....	666.8	1,017.3	1,059.5	588.1	596.6	597.1	590.9	547.0	526.3	440.0	349.5	366.1
United Kingdom .....	2,162.2	5,126.3	9,257.7	18,601.2	19,669.1	22,642.6	25,775.2	29,314.0	32,000.5	34,787.0	29,576.3	28,680.1
European Union-15 .....	31,483.1	41,408.5	39,447.8	54,096.2	57,237.1	61,428.4	68,903.7	74,090.3	83,593.6	82,837.6	69,834.4	68,381.5
Czech Republic .....	32.4	41.8	30.6	227.4	187.6	117.0	84.8	160.0	245.7	1,047.8	2,436.2	2,484.9
Hungary .....	42.5	50.6	47.6	86.2	614.1	1,802.9	49.4	103.1	133.3	94.8	56.7	62.8
Poland .....	136.5	112.9	117.6	138.2	258.5	281.1	326.8	408.7	427.0	437.6	501.5	819.2
Slovakia .....	53.2	63.0	66.5	61.0	59.5	43.9	50.4	65.5	75.9	93.5	128.4	161.8
<b>Expanded European Union countries .....</b>												
Japan .....	24,562.3	58,537.7	97,306.9	87,361.4	95,277.4	102,111.3	88,669.7	86,989.3	88,254.4	72,550.1	57,288.8	55,241.0
China .....	793.5	817.8	1,375.5	6,059.5	13,817.5	19,809.4	31,050.6	53,344.7	73,807.8	85,371.0	114,450.9	170,531.8
South Korea .....	297.2	806.6	3,496.3	8,913.4	10,925.9	12,338.8	11,807.9	20,653.2	31,504.4	31,363.4	35,799.4	35,672.0
Taiwan .....	1,799.3	4,078.0	8,410.5	18,164.7	20,882.3	25,212.5	26,888.5	31,969.7	38,207.3	34,693.9	38,832.2	45,892.8
Singapore .....	2,011.4	4,518.6	14,815.5	23,095.4	24,522.5	27,397.7	25,246.8	28,572.6	34,172.4	27,612.1	26,056.1	25,726.0
Hong Kong .....	293.3	423.3	1,289.5	2,236.8	2,276.8	2,352.6	2,485.0	2,255.4	1,593.5	1,300.1	1,009.1	781.9
India .....	21.5	41.4	418.4	791.3	759.5	1,276.6	1,244.9	2,000.1	2,212.7	2,431.9	2,756.4	2,963.4
Malaysia .....	26.7	45.1	320.8	3,676.3	3,304.2	3,424.6	2,773.0	3,149.5	3,601.8	3,328.8	2,721.8	2,395.6
Thailand .....	6.4	12.9	39.1	8.3	9.7	11.0	10.1	11.5	17.3	20.4	27.6	31.5
Philippines .....	4.9	12.3	12.0	308.0	276.3	550.9	434.4	459.2	692.4	897.3	707.2	813.0
Indonesia .....	5.2	9.7	29.7	70.5	59.0	29.2	14.9	14.4	13.0	17.3	42.6	43.0
South Africa .....	18.5	17.3	17.5	13.0	13.7	19.8	21.0	22.7	23.2	27.9	29.7	26.9

**World industry production, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Communication equipment</b>												
Total production .....	197,550.5	315,402.6	459,427.7	620,621.9	699,371.2	822,879.4	894,823.3	1,138,085.4	1,493,039.2	1,435,250.5	1,545,315.2	1,687,592.6
United States .....	22,365.9	26,096.4	28,269.7	70,582.9	100,440.2	161,122.4	236,737.6	385,853.7	603,863.7	613,744.8	717,112.1	776,782.0
Canada .....	2,999.1	5,360.2	8,081.4	12,271.8	11,654.7	13,533.9	15,060.2	21,644.5	27,047.9	14,264.0	11,545.8	11,763.9
Mexico .....	11,179.1	10,103.2	13,454.9	11,625.7	12,776.2	19,267.1	29,776.4	35,855.0	37,100.2	32,997.2	27,825.4	26,186.9
Brazil .....	9,354.3	7,165.5	7,674.9	10,333.5	11,290.7	11,055.4	8,151.9	6,166.7	7,703.8	7,411.6	6,169.7	6,200.9
Chile .....	19.5	17.4	22.0	45.5	50.8	46.6	45.0	21.3	22.1	14.8	13.0	13.6
Costa Rica .....	84.2	44.0	82.0	39.6	38.6	50.2	65.9	35.4	29.2	30.1	31.2	34.7
Argentina .....	949.7	793.3	543.4	730.7	955.0	1,048.4	1,073.3	896.0	922.3	702.0	1,736.1	2,076.5
Peru .....	179.4	104.8	50.8	27.3	27.7	29.4	27.4	25.3	27.4	24.5	22.1	22.7
Austria .....	1,980.8	2,695.4	3,839.7	5,046.1	5,114.8	5,384.2	5,833.0	6,336.7	7,338.9	6,563.0	6,016.7	5,327.9
Belgium .....	3,360.3	3,625.3	3,582.5	3,109.8	3,132.5	3,395.7	3,938.3	3,832.3	5,158.3	4,672.1	3,725.9	3,865.3
Denmark .....	796.5	874.2	1,090.3	1,398.5	1,746.8	1,757.2	1,914.6	2,212.2	2,325.4	2,324.3	2,556.9	2,393.1
France .....	14,485.4	18,147.2	21,328.1	21,519.4	21,179.2	24,501.6	24,644.5	28,481.6	34,156.8	32,380.2	30,366.6	30,070.2
Finland .....	483.3	863.6	1,682.7	5,901.4	6,786.7	8,120.1	12,689.3	16,338.7	23,728.2	22,689.1	25,320.8	25,017.0
Germany .....	11,484.5	14,873.9	17,630.5	22,501.8	22,890.4	24,473.3	26,749.4	29,452.9	39,178.9	39,350.9	35,790.2	39,239.8
Greece .....	231.5	254.9	215.1	279.1	220.6	255.7	624.7	529.7	729.6	705.5	453.0	395.0
Ireland .....	284.3	797.0	1,757.7	4,265.7	4,790.1	5,698.7	6,432.1	8,066.1	12,757.3	13,517.8	11,343.9	9,763.6
Italy .....	8,998.5	14,488.8	17,314.9	17,192.8	18,132.2	17,641.3	16,526.7	15,912.9	16,019.4	14,073.1	11,450.5	10,896.7
Netherlands .....	3,299.4	3,672.6	8,197.0	8,889.4	8,793.8	9,234.5	9,454.9	10,061.7	11,588.7	10,587.4	5,491.5	5,202.6
Portugal .....	912.6	1,365.9	1,475.2	2,059.5	2,125.5	2,074.1	2,304.6	2,363.8	2,760.5	3,133.5	3,025.1	4,086.4
Spain .....	2,777.0	2,533.8	4,283.5	5,491.9	5,300.2	5,241.9	5,369.0	4,473.0	5,362.1	4,381.6	3,533.3	3,129.2
Sweden .....	2,261.3	3,393.0	4,913.4	10,324.9	12,626.8	13,600.6	15,323.4	17,864.3	20,419.9	19,888.9	16,936.9	14,638.5
United Kingdom .....	14,597.2	17,686.7	21,847.5	25,101.8	26,921.0	27,008.2	27,711.5	31,094.2	36,350.9	30,810.2	26,020.8	26,042.4
European Union-15 .....	65,952.7	85,272.3	109,158.2	133,082.1	139,760.6	148,387.1	159,515.8	177,020.3	217,874.8	205,077.5	182,032.0	180,068.0
Czech Republic .....	186.4	267.8	240.0	559.0	699.7	990.2	2,187.9	2,886.4	1,979.1	3,180.2	3,972.6	4,065.2
Hungary .....	707.9	831.6	480.6	533.3	835.5	1,522.0	151.5	208.7	297.2	390.9	492.6	662.6
Poland .....	1,153.9	1,222.2	1,291.3	1,044.1	1,299.2	1,441.0	1,778.0	1,898.5	2,153.3	2,240.9	2,497.8	2,555.2
Slovakia .....	152.3	171.4	178.6	163.1	155.8	265.4	284.1	259.7	308.4	481.2	655.3	714.0
<b>Expanded European</b>												
Union countries .....	2,200.5	2,493.1	2,190.5	2,299.5	2,990.1	4,218.6	4,401.4	5,253.4	4,738.1	6,293.3	7,618.4	7,997.0
Japan .....	52,496.0	127,313.5	184,457.7	195,420.8	216,244.1	234,770.1	218,839.2	221,950.4	243,705.9	217,281.5	191,521.3	218,908.9
China .....	2,307.3	8,341.7	14,968.8	32,952.9	43,834.6	52,052.7	52,883.6	67,595.8	78,559.1	90,979.6	128,337.9	155,855.1
South Korea .....	2,323.0	6,374.2	22,504.3	46,294.9	52,377.9	55,848.9	49,494.2	69,270.4	92,820.8	89,945.7	102,836.3	109,480.9
Taiwan .....	6,047.6	11,130.9	21,963.6	31,657.3	31,702.7	35,493.0	40,142.9	49,472.9	53,843.2	47,984.0	58,208.3	68,987.3
Singapore .....	2,375.3	2,762.7	6,303.7	14,102.8	15,101.1	16,058.5	15,777.7	21,963.7	25,495.0	19,199.3	18,140.9	20,898.3
Hong Kong .....	3,102.4	2,829.4	4,193.9	3,491.6	3,137.1	2,637.8	2,370.0	2,326.2	2,267.9	2,084.8	1,502.3	1,161.3
India .....	109.4	487.7	2,082.4	3,281.5	3,541.5	4,542.8	4,235.7	5,368.3	5,525.8	5,634.5	5,766.0	6,198.9
Malaysia .....	1,251.9	1,934.5	8,135.8	27,371.1	28,056.5	31,416.0	28,508.7	37,470.8	51,859.3	43,688.5	48,210.4	55,351.7
Thailand .....	114.0	180.2	3,047.5	3,627.9	4,226.3	4,103.4	3,354.1	3,863.5	4,755.8	3,583.1	4,283.2	4,884.7
Philippines .....	461.1	576.4	1,094.0	2,020.9	1,802.4	3,991.3	3,406.0	4,010.5	6,237.0	6,717.8	7,717.0	8,669.0
Indonesia .....	207.9	353.9	2,006.6	3,926.1	3,616.7	5,208.5	3,589.1	3,799.5	4,878.2	5,232.4	4,383.4	4,426.0
South Africa .....	681.7	691.9	749.8	800.2	683.3	816.1	890.5	892.7	869.4	655.5	661.0	719.5



**World industry production, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Medical, precision, and optical instruments</b>												
Total production .....	207,756.6	253,391.9	295,730.2	304,186.3	314,173.5	328,552.2	339,446.1	345,650.7	366,482.7	366,268.3	355,661.7	372,990.4
United States .....	78,603.6	102,950.0	117,646.3	131,916.2	140,293.2	146,067.9	152,014.8	155,230.8	154,607.3	150,583.9	141,845.4	151,937.8
Canada .....	1,590.6	1,659.4	1,830.5	2,129.6	2,199.6	2,311.0	2,494.4	2,546.5	3,392.0	3,429.7	3,401.5	3,674.7
Mexico .....	2,017.1	1,926.6	2,390.7	2,830.5	3,072.7	3,404.3	3,871.2	4,279.0	5,032.1	5,374.4	5,527.8	5,202.3
Brazil .....	9,767.4	7,204.4	5,558.3	3,420.9	3,584.9	3,695.8	3,422.8	3,130.6	3,240.9	3,215.3	2,986.1	2,853.2
Chile .....	13.1	15.2	34.9	56.4	58.7	68.6	74.9	37.3	39.0	33.1	32.1	25.3
Costa Rica .....	24.0	11.1	18.1	46.2	26.0	7.1	5.4	5.4	7.2	6.1	6.1	6.5
Argentina .....	863.6	615.7	537.1	350.8	329.5	412.9	378.2	358.9	362.3	269.1	288.7	345.2
Peru .....	19.2	16.0	14.6	32.9	32.1	31.9	28.4	24.7	25.0	23.1	23.9	24.4
Austria .....	420.4	744.0	1,073.0	1,216.5	1,242.1	1,400.6	1,551.5	1,913.3	2,068.0	2,151.7	2,291.7	2,399.6
Belgium .....	1,130.3	1,336.2	957.5	1,214.6	1,101.5	1,176.5	1,360.4	1,284.1	1,334.3	1,390.7	1,496.2	1,663.2
Denmark .....	606.8	953.7	1,075.2	1,452.5	1,530.5	1,731.7	1,910.5	1,968.4	2,325.0	2,399.7	2,203.7	2,183.6
France .....	16,893.7	20,222.2	22,215.9	20,488.7	19,130.5	20,258.3	21,012.3	21,268.2	22,283.8	23,120.8	23,743.9	24,340.4
Finland .....	347.6	650.9	951.0	1,129.8	1,248.5	1,441.9	1,535.4	1,559.1	1,678.4	1,887.5	1,908.3	1,691.6
Germany .....	21,179.0	24,642.0	29,212.9	29,328.2	29,863.7	30,591.6	32,820.3	33,726.3	38,406.1	39,199.0	38,495.1	39,793.5
Greece .....	183.7	139.7	107.4	107.1	116.2	126.5	107.8	108.2	115.3	157.9	127.7	171.8
Ireland .....	272.9	511.4	743.3	1,304.2	1,643.4	2,038.5	2,287.4	2,918.2	4,799.6	6,747.2	6,266.4	7,578.0
Italy .....	9,289.1	8,959.7	9,075.1	10,428.7	10,540.3	10,632.7	10,554.2	10,540.3	11,840.6	11,411.4	12,178.4	10,989.7
Netherlands .....	1,734.5	826.8	791.5	742.8	760.2	857.3	864.5	961.0	1,203.7	1,770.2	1,731.8	1,716.5
Portugal .....	328.4	356.1	351.4	437.2	391.3	335.0	357.8	371.5	319.4	326.2	282.3	269.5
Spain .....	1,600.0	1,497.2	2,766.0	2,795.1	2,732.1	2,941.5	3,063.0	3,027.1	3,256.7	2,966.4	2,392.4	2,556.8
Sweden .....	1,302.4	1,816.2	3,461.6	4,738.2	4,259.3	4,416.2	4,935.9	5,014.3	5,626.3	5,789.9	6,614.7	6,766.2
United Kingdom .....	13,796.4	15,555.4	16,818.7	17,372.4	17,800.5	16,908.2	16,750.4	16,456.8	17,526.0	18,746.9	17,316.4	17,960.1
European Union-15 .....	69,085.3	78,211.6	89,600.5	92,756.1	92,360.2	94,856.4	99,111.4	101,116.8	112,783.3	118,065.4	117,049.0	120,080.6
Czech Republic .....	172.3	192.7	268.7	629.0	714.2	784.5	832.9	906.8	928.6	962.6	1,071.5	1,150.1
Hungary .....	595.9	816.8	897.9	400.6	422.6	480.0	449.0	491.8	596.5	665.3	622.9	677.4
Poland .....	547.5	624.8	663.7	872.7	1,032.1	1,196.7	1,277.3	1,330.5	1,371.1	1,450.5	1,426.6	1,556.6
Slovakia .....	158.2	185.3	191.6	197.1	259.3	311.2	311.2	261.6	264.5	245.2	273.4	301.6
Expanded European Union countries .....	1,473.8	1,819.6	2,022.0	2,099.3	2,428.2	2,772.5	2,870.3	2,990.6	3,160.7	3,323.7	3,394.5	3,685.8
Japan .....	19,654.9	31,909.1	40,678.1	30,656.9	31,434.6	34,515.6	33,515.3	31,355.6	31,867.0	28,631.6	25,601.6	25,419.0
China .....	595.5	1,707.9	1,955.1	4,923.6	6,672.5	7,237.2	8,709.1	9,047.4	11,742.6	12,895.9	15,542.1	18,155.1
South Korea .....	1,939.0	2,395.0	4,114.6	5,162.8	5,000.5	5,015.7	4,967.6	5,920.2	6,958.4	7,091.3	7,354.0	7,645.5
Taiwan .....	824.8	1,173.6	1,884.4	2,129.0	2,000.4	1,989.6	2,032.4	2,522.4	3,151.5	2,752.5	3,350.3	3,765.4
Singapore .....	440.1	284.1	467.3	1,004.7	1,029.2	1,170.9	1,359.5	1,820.8	1,882.0	1,885.5	1,910.5	1,900.8
Hong Kong .....	586.1	720.8	1,249.6	1,579.9	1,508.1	1,437.4	1,300.1	1,221.3	1,145.8	1,029.6	766.3	593.4
India .....	258.4	240.8	937.8	968.3	953.7	976.9	1,075.3	1,592.7	1,354.8	1,510.5	1,507.1	1,620.2
Malaysia .....	497.9	472.8	794.3	1,097.6	1,016.2	1,000.8	957.1	1,055.9	1,583.2	1,282.9	1,360.3	1,546.3
Thailand .....	31.8	254.6	134.8	295.8	335.9	339.7	264.3	316.8	372.0	377.5	379.7	433.1
Philippines .....	6.0	13.2	13.8	70.6	59.0	107.3	80.5	89.9	134.9	153.3	141.9	163.2
Indonesia .....	50.8	297.1	560.0	507.1	438.0	312.2	163.6	159.0	134.5	61.0	79.3	80.1
South Africa .....	216.1	325.4	286.3	279.8	284.2	274.1	218.8	205.8	222.1	230.5	255.5	258.1

**World industry production, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Other manufacturing industries</b>												
Total production.....	9,410,747.8	10,451,222.6	12,455,097.6	13,636,932.0	13,956,763.9	14,621,191.1	14,781,875.6	15,103,103.1	15,798,294.7	15,585,373.9	15,753,792.6	16,120,883.0
United States.....	2,034,317.1	2,248,049.8	2,566,177.1	3,057,455.2	3,153,634.4	3,343,689.1	3,454,984.8	3,494,569.7	3,479,475.3	3,268,711.4	3,198,362.6	3,114,403.5
Canada.....	210,638.4	239,948.2	254,783.6	281,990.3	285,416.2	302,046.0	316,060.5	336,205.2	360,895.2	353,139.2	364,080.3	364,256.1
Mexico.....	141,651.8	150,128.5	170,488.5	175,790.9	194,361.6	207,521.0	213,051.1	216,670.9	231,338.8	223,926.9	227,483.1	224,180.6
Brazil.....	348,334.5	357,969.6	349,658.5	398,309.3	400,367.3	412,642.6	404,094.0	401,346.8	428,959.2	433,907.6	436,979.4	437,484.6
Chile.....	15,616.7	13,571.2	23,348.9	33,759.2	33,592.9	34,851.8	33,800.1	32,200.1	34,067.7	35,477.8	36,381.8	38,308.7
Costa Rica.....	3,220.7	4,081.4	5,236.5	7,622.3	7,066.3	7,551.5	9,294.6	10,550.1	10,125.2	9,836.5	10,126.8	10,750.0
Argentina.....	109,166.2	97,845.1	93,318.6	115,797.2	121,159.4	132,367.5	135,311.4	126,540.0	124,943.6	115,394.4	102,476.0	118,986.3
Peru.....	21,412.5	19,860.7	18,861.7	24,259.9	24,602.1	25,879.0	25,113.9	24,990.9	26,097.8	25,791.2	26,904.6	27,532.5
Austria.....	57,852.8	61,137.8	75,129.3	83,483.4	83,872.9	90,089.5	97,925.9	103,403.2	113,396.1	116,501.4	116,737.7	120,103.3
Belgium.....	121,042.6	123,944.0	142,957.6	145,686.6	146,799.5	153,465.9	157,438.0	158,368.3	165,969.6	167,538.8	169,527.2	166,468.0
Denmark.....	40,209.3	49,487.2	52,986.1	59,205.8	59,202.1	62,053.2	63,347.4	62,748.8	65,269.7	65,983.4	66,568.8	66,481.7
France.....	533,402.7	557,566.7	645,772.8	621,304.2	613,283.9	641,043.2	665,684.6	676,653.9	712,034.8	717,608.9	697,220.7	689,216.7
Finland.....	48,440.0	55,513.3	61,827.9	66,938.3	67,979.8	73,120.5	77,060.1	78,783.3	85,365.9	85,837.3	85,576.5	86,073.5
Germany.....	903,745.1	928,173.4	1,097,068.3	1,086,389.2	1,081,654.5	1,119,593.4	1,170,289.3	1,184,549.7	1,239,028.7	1,240,113.3	1,226,835.9	1,223,053.2
Greece.....	35,304.6	33,993.4	36,134.9	35,241.3	35,042.2	35,726.4	38,276.4	37,949.1	39,639.2	39,215.0	39,184.8	38,969.5
Ireland.....	12,691.9	15,918.3	22,937.8	34,205.1	36,370.5	43,010.1	52,885.2	59,664.3	62,207.1	66,861.9	76,018.9	81,257.4
Italy.....	549,734.9	525,661.5	623,615.8	666,717.4	656,332.8	680,208.1	693,240.3	691,787.1	713,427.9	711,192.6	696,447.7	686,796.9
Netherlands.....	159,278.9	151,363.2	169,050.3	173,405.1	174,790.7	178,088.2	183,277.5	187,151.1	193,658.6	192,921.0	196,169.4	190,335.3
Portugal.....	34,549.8	39,797.2	54,248.0	54,824.0	58,128.8	60,321.0	62,035.6	61,479.4	60,450.7	61,738.1	62,126.9	60,646.0
Spain.....	227,958.7	234,967.6	277,939.4	291,281.4	289,454.2	311,504.9	331,068.4	339,095.5	349,612.0	343,962.5	346,679.2	352,104.7
Sweden.....	88,963.2	96,524.5	112,658.8	118,822.4	117,810.1	123,922.7	126,897.6	126,776.7	133,738.0	132,718.9	135,594.9	140,588.4
United Kingdom.....	482,945.2	486,707.9	564,497.8	561,846.9	561,943.3	568,024.6	565,450.4	565,357.2	571,409.4	560,782.9	554,443.3	554,364.8
European Union-15.....	3,296,119.8	3,360,756.0	3,936,824.9	3,999,351.1	3,982,665.3	4,140,171.7	4,284,876.8	4,333,767.8	4,505,207.7	4,502,976.0	4,469,131.9	4,456,459.6
Czech Republic.....	46,458.4	53,963.9	44,573.2	46,473.5	47,965.7	50,402.3	50,264.6	47,856.7	48,257.6	52,964.3	53,740.2	56,977.3
Hungary.....	31,061.7	33,603.9	29,395.1	25,570.4	25,633.6	27,778.0	35,873.9	40,159.3	48,777.1	50,900.7	52,852.1	56,223.8
Poland.....	87,914.6	78,888.6	64,565.6	78,925.1	87,137.5	90,606.0	96,387.1	101,776.1	109,775.6	109,466.9	111,265.9	123,026.1
Slovakia.....	14,482.8	16,947.1	17,595.8	15,769.1	15,787.9	16,301.7	17,515.1	16,950.5	18,478.8	20,403.8	22,101.7	23,738.3
<b>Expanded European Union countries</b>												
Japan.....	1,677,407.5	1,883,540.4	2,290,122.6	2,174,013.9	2,201,610.2	2,265,948.4	2,113,478.2	2,112,979.0	2,231,488.0	2,092,459.3	2,103,356.6	2,156,537.6
China.....	166,933.5	271,587.0	411,014.6	894,049.6	993,217.1	1,096,365.7	1,190,811.2	1,286,222.8	1,440,931.1	1,570,261.5	1,724,682.0	1,965,364.3
South Korea.....	84,799.2	138,971.7	246,682.4	356,605.0	381,601.8	397,781.7	371,752.6	451,841.3	513,005.6	514,003.1	550,321.8	577,129.9
Taiwan.....	95,694.4	125,460.8	161,096.9	193,716.0	197,566.6	207,404.6	209,741.8	216,594.6	229,425.0	211,561.1	224,471.0	230,023.2
Singapore.....	13,900.4	11,918.3	13,649.7	15,423.5	14,806.4	13,364.4	13,969.2	10,159.8	11,695.5	14,854.6	21,632.4	20,732.5
Hong Kong.....	22,345.6	21,014.9	28,499.2	28,456.3	27,398.9	27,626.2	24,188.8	21,875.0	22,432.0	21,697.6	19,684.7	18,384.0
India.....	82,169.5	114,719.3	166,335.9	213,639.8	237,062.6	249,703.6	261,968.4	276,961.8	296,184.3	304,643.1	320,145.7	343,049.6
Malaysia.....	11,426.3	15,746.8	23,750.4	29,990.7	37,372.7	42,573.0	38,146.7	37,778.9	40,928.7	43,217.4	43,362.0	46,346.4
Thailand.....	32,785.4	39,631.1	70,599.8	107,752.5	115,739.4	114,373.2	103,355.9	116,116.8	118,928.9	121,701.0	131,663.2	147,809.4
Philippines.....	33,921.6	28,807.1	36,506.6	38,997.3	41,814.4	40,624.2	41,172.0	44,122.9	48,992.6	52,957.7	51,220.1	55,013.7
Indonesia.....	18,852.4	47,966.9	86,737.4	146,558.1	147,667.3	154,861.9	123,751.6	125,981.8	129,386.5	127,611.4	116,740.8	121,379.5
South Africa.....	79,737.0	79,564.5	76,393.1	82,172.3	84,951.1	87,472.3	84,924.0	84,771.3	87,894.5	90,619.3	94,798.8	92,915.90

NOTES: Production is total gross output. Seventy countries or economies included in "all countries." High-technology sectors cover aerospace; computers and office machinery; communications equipment; pharmaceuticals; and medical, precision, and optical instruments.

SOURCES: Global Insight, Inc., World Industry Service database (2005). Historical data from United Nations Industrial Development Organization, United Nations System of National Accounts, Organisation for Economic Co-operation and Development, and country sources.

Appendix table 6-3

**World industry value added, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

(Page 1 of 8)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>All manufacturing industries</b>												
Total value added .....	3,346,661.5	3,914,417.7	4,836,635.3	5,225,595.8	5,370,754.1	5,608,274.3	5,681,000.7	5,862,038.6	6,105,212.3	5,970,454.8	6,092,314.1	6,272,450.7
United States.....	765,149.5	922,977.7	1,086,471.2	1,266,252.0	1,297,102.5	1,367,280.1	1,423,560.1	1,492,160.7	1,562,634.0	1,468,899.6	1,495,117.6	1,495,278.0
Canada.....	68,586.3	80,392.9	92,880.8	101,711.2	100,965.2	108,351.3	116,090.5	127,616.7	132,483.9	127,875.8	131,040.9	131,160.6
Mexico.....	52,585.3	56,707.1	65,359.3	63,945.4	70,111.3	77,618.2	82,842.7	87,359.7	92,233.2	91,524.2	91,450.5	89,618.4
Brazil.....	137,050.6	133,323.2	132,584.8	153,966.9	148,429.7	156,648.4	152,255.0	142,133.7	144,579.9	144,920.1	145,671.9	145,389.0
Chile.....	5,773.4	3,906.4	8,156.9	14,122.6	13,411.0	14,427.0	14,336.7	13,439.7	13,690.2	14,726.1	15,105.2	15,889.2
Costa Rica.....	1,169.9	1,451.7	1,867.3	2,681.1	2,514.9	2,622.0	3,199.3	4,378.2	3,893.6	3,597.5	3,557.4	3,776.0
Argentina.....	40,211.5	35,883.7	34,195.9	41,082.5	43,517.7	47,589.7	48,759.8	45,400.5	44,654.3	41,035.7	36,706.7	42,640.6
Peru.....	6,453.1	7,081.7	8,664.6	8,222.7	8,344.2	8,787.7	8,505.2	8,459.1	8,830.2	8,727.6	9,100.3	9,319.8
Austria.....	22,056.2	23,284.2	30,831.2	35,847.8	36,035.8	38,839.5	42,140.4	44,932.1	48,959.7	48,663.9	49,340.1	50,467.5
Belgium.....	35,932.6	35,386.9	43,223.0	43,836.3	44,282.0	45,668.3	46,723.4	46,730.0	44,242.4	45,231.6	46,192.5	46,410.1
Denmark.....	13,758.0	17,186.6	19,926.5	23,140.7	23,068.6	25,293.6	26,175.5	26,488.1	26,734.2	26,514.9	26,192.4	26,073.6
France.....	197,397.9	204,628.6	240,493.9	232,859.3	228,779.6	239,785.1	247,238.9	248,101.4	247,168.2	253,727.8	257,640.6	256,206.6
Finland.....	15,508.7	18,409.6	22,406.9	24,484.7	24,204.8	26,069.0	30,290.5	30,721.6	33,985.8	33,807.0	34,544.8	34,539.1
Germany.....	351,607.3	377,526.1	451,344.4	436,998.4	436,687.2	443,573.0	463,314.9	459,672.2	460,389.3	458,881.2	464,061.6	465,117.8
Greece.....	3,479.9	5,574.7	9,345.3	11,695.7	11,734.2	11,736.7	13,359.6	13,257.2	13,596.8	14,085.6	14,312.5	14,255.0
Ireland.....	5,037.5	6,607.2	9,867.3	16,137.5	17,476.9	20,854.9	25,302.7	29,113.2	33,693.0	37,208.6	39,974.4	41,869.8
Italy.....	192,968.5	183,675.8	224,918.0	222,241.4	225,881.0	229,383.1	235,360.3	231,608.0	227,538.4	230,493.7	227,783.3	223,993.1
Netherlands.....	50,326.3	46,228.7	57,402.4	64,147.3	62,097.3	62,125.8	66,471.6	67,952.9	65,597.3	66,419.2	67,361.1	65,469.4
Portugal.....	8,352.6	8,962.0	13,983.0	16,877.8	18,199.2	18,680.4	19,749.8	19,978.3	19,493.8	20,050.7	20,138.6	20,016.1
Spain.....	87,994.8	87,831.5	106,971.9	95,456.5	94,404.5	101,476.3	106,608.5	107,888.6	106,464.6	102,472.3	102,675.5	104,232.1
Sweden.....	28,916.1	32,261.2	39,867.0	46,391.1	47,121.2	48,729.6	50,413.0	50,401.1	50,998.7	48,315.7	49,120.5	50,201.5
United Kingdom.....	193,040.6	198,566.7	248,776.2	242,087.5	244,879.3	253,191.8	257,256.6	259,861.1	260,779.0	258,814.0	251,330.6	252,454.3
European Union-15.....	1,206,376.9	1,246,129.6	1,519,357.0	1,512,202.0	1,514,851.6	1,565,407.0	1,630,405.5	1,636,705.7	1,639,641.1	1,644,686.2	1,650,668.4	1,651,306.0
Czech Republic.....	15,609.2	17,987.9	15,998.6	17,022.0	19,224.0	18,873.7	18,744.5	18,637.1	16,922.3	19,063.1	19,919.4	21,577.1
Hungary.....	8,505.1	9,530.4	8,378.4	8,509.7	8,584.0	9,660.6	10,777.8	11,261.5	11,237.8	11,769.7	12,123.8	12,909.8
Poland.....	30,546.5	28,077.6	22,970.1	22,503.9	24,581.2	28,230.0	30,152.1	31,138.1	33,151.2	32,460.2	32,623.1	35,433.3
Slovakia.....	4,016.3	4,691.8	4,868.7	4,421.9	4,609.8	4,408.0	4,638.7	4,774.6	4,810.1	5,355.5	5,245.8	5,567.4
<b>Expanded European</b>												
Union countries.....	58,677.0	60,287.8	52,215.9	52,457.6	56,998.9	61,172.3	64,313.1	65,811.3	66,121.4	68,648.5	69,912.1	75,487.6
Japan.....	524,366.1	698,687.7	935,206.2	937,181.5	961,149.1	977,990.7	926,309.7	946,558.8	980,996.6	895,626.4	894,903.9	923,507.7
China.....	65,535.7	98,045.7	121,068.7	234,071.1	289,229.0	311,225.1	330,441.2	360,587.2	409,740.2	450,673.4	506,326.6	590,609.8
South Korea.....	20,546.3	37,068.6	74,144.5	120,705.4	130,152.2	137,338.3	125,482.3	157,076.5	179,496.0	180,675.1	195,879.7	205,642.1
Taiwan.....	26,191.7	39,308.2	59,277.0	69,302.6	74,984.0	80,689.2	85,546.1	90,276.3	92,066.4	88,776.7	94,308.3	101,261.9
Singapore.....	6,950.9	7,510.3	13,657.0	20,261.7	20,920.5	21,863.1	21,790.7	24,698.9	28,482.7	25,174.6	27,294.9	28,117.3
Hong Kong.....	7,264.1	7,217.4	10,254.7	10,241.7	10,242.0	10,554.2	9,541.4	8,859.5	8,782.7	8,463.0	7,484.9	6,795.1
India.....	20,790.9	29,025.3	42,845.7	56,509.8	63,734.0	63,883.2	67,667.1	67,683.8	73,201.6	75,335.4	79,163.0	84,787.1
Malaysia.....	4,781.7	6,606.8	11,973.4	22,529.7	25,288.0	28,428.2	25,514.0	28,811.6	35,521.6	33,179.6	34,676.0	38,298.5
Thailand.....	12,017.5	14,659.4	26,930.3	40,702.6	43,878.4	43,388.2	39,050.4	43,920.8	45,343.1	45,946.4	49,849.5	55,983.7
Philippines.....	11,414.3	9,756.6	12,474.5	14,074.5	10,657.4	18,333.6	14,424.6	15,605.2	21,651.9	23,424.4	23,228.0	25,108.6
Indonesia.....	6,962.0	17,781.9	32,635.0	55,183.7	55,511.2	58,517.6	46,449.9	47,339.2	49,037.0	48,506.9	44,338.1	46,088.5
South Africa.....	25,884.7	25,711.4	24,859.5	25,995.3	26,490.1	27,044.9	26,546.5	26,351.8	26,997.9	27,517.4	28,732.3	28,159.6

**World industry value added, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>High technology industries</b>												
Total value added .....	336,199.7	443,418.7	596,138.0	633,696.0	683,403.7	763,185.9	838,653.0	941,641.7	1,078,420.5	1,046,941.8	1,120,519.9	1,203,331.5
United States.....	82,575.9	114,963.4	147,061.3	161,432.2	184,461.3	224,941.3	300,532.2	349,607.3	426,802.1	433,177.9	482,835.5	511,316.4
Canada .....	4,913.8	6,536.0	9,078.1	10,444.1	10,171.4	11,572.3	11,713.0	15,686.6	17,681.9	13,763.8	12,796.9	12,887.3
Mexico .....	4,610.8	4,357.9	6,005.4	5,950.3	6,679.2	8,352.6	10,383.7	11,751.2	12,592.2	12,527.5	11,775.3	11,397.5
Brazil .....	37,068.4	26,561.0	32,982.7	28,957.4	30,644.5	33,103.3	29,522.1	26,765.3	26,198.8	27,035.4	26,783.6	25,782.0
Chile .....	111.5	138.5	253.5	455.6	400.5	453.1	541.3	412.7	413.6	396.4	411.8	412.4
Costa Rica.....	104.2	85.2	122.5	138.0	105.3	63.9	69.8	59.0	63.0	66.0	66.0	69.7
Argentina .....	3,790.4	3,354.5	2,022.0	1,675.5	1,816.7	1,962.6	1,945.4	1,784.8	1,883.1	1,753.8	1,870.1	2,194.9
Peru .....	340.6	197.5	237.9	240.2	248.6	274.7	235.4	229.6	234.4	233.0	238.9	254.0
Austria .....	1,356.1	1,915.8	2,907.6	3,704.9	3,709.9	3,691.0	4,106.6	4,516.2	5,231.3	4,572.6	4,372.5	4,221.5
Belgium .....	3,627.1	4,318.0	4,883.7	4,697.0	4,515.2	4,827.6	4,618.1	4,931.4	4,901.1	4,917.0	4,842.9	6,084.0
Denmark.....	947.3	1,361.6	1,744.0	2,385.1	2,697.3	2,985.1	3,327.2	3,780.1	4,207.8	4,393.9	4,479.2	4,354.5
France.....	22,970.4	26,631.4	28,364.7	31,350.2	28,811.5	33,605.8	33,254.1	35,464.0	34,657.4	36,252.8	37,182.5	38,409.0
Finland.....	653.6	1,333.6	1,995.3	2,882.7	3,215.0	3,867.1	5,615.2	6,541.9	8,610.5	7,967.8	10,199.6	10,016.3
Germany .....	32,928.2	40,696.3	48,464.1	40,991.9	42,185.2	42,732.1	45,528.6	47,542.8	51,323.8	50,081.9	51,863.6	54,379.6
Greece .....	292.2	301.9	349.5	382.0	406.6	500.5	608.5	578.2	729.4	780.6	777.8	772.3
Ireland.....	625.0	1,232.6	2,609.6	6,435.2	7,584.5	9,448.2	11,620.0	14,569.7	19,759.8	23,466.9	23,127.9	23,005.3
Italy.....	12,961.8	16,541.4	21,710.7	19,334.1	19,661.3	19,433.2	20,038.2	20,429.2	21,722.9	22,384.5	21,350.5	20,267.7
Netherlands.....	3,502.5	4,163.7	4,565.3	5,842.1	5,000.7	5,083.6	5,158.9	5,466.7	6,269.7	6,042.8	4,393.6	4,344.2
Portugal .....	645.7	753.5	891.2	1,188.2	1,212.2	1,228.9	1,297.7	1,326.8	1,439.0	1,513.2	1,458.2	1,789.1
Spain .....	11,156.8	7,882.6	9,340.4	7,088.0	7,020.6	7,082.5	7,165.6	7,001.2	6,966.7	6,437.5	6,089.5	6,223.7
Sweden.....	2,742.8	3,765.9	4,986.8	7,281.8	7,948.9	8,239.3	9,330.2	9,301.5	8,641.8	7,125.5	6,631.2	7,006.5
United Kingdom.....	20,629.8	23,333.7	33,820.5	35,354.6	35,589.1	37,544.3	40,128.7	41,248.3	42,262.9	43,825.5	39,626.6	41,126.3
European Union-15 .....	115,039.3	134,232.2	166,633.4	168,917.8	169,558.1	180,269.2	191,797.4	202,698.1	216,724.1	219,762.4	216,395.6	221,999.9
Czech Republic .....	389.2	444.3	443.4	869.7	1,080.4	1,029.6	1,301.8	1,272.3	985.2	1,300.5	1,614.2	1,696.0
Hungary .....	764.4	1,037.3	974.8	658.5	798.8	1,155.2	771.9	764.3	905.9	912.1	945.6	983.8
Poland.....	968.0	1,183.2	1,019.9	1,199.4	1,440.5	1,506.5	1,622.5	1,872.9	1,856.5	2,082.4	2,132.5	2,272.3
Slovakia .....	207.6	223.4	223.8	210.6	262.6	273.8	281.0	188.6	189.2	203.2	210.2	217.2
<b>Expanded European</b>												
Union countries .....	2,329.2	2,888.2	2,661.9	2,938.2	3,582.3	3,965.1	3,977.2	4,098.2	3,936.8	4,498.2	4,902.5	5,169.2
Japan.....	48,308.3	99,376.3	148,350.2	146,374.7	156,458.7	165,230.5	155,110.0	161,468.7	170,993.2	132,786.4	134,610.3	145,208.2
China .....	3,146.9	5,571.9	7,461.3	16,592.9	23,413.5	28,222.3	32,578.8	44,785.3	57,116.0	65,414.4	85,051.6	112,148.8
South Korea .....	1,971.1	3,814.2	10,959.0	21,302.4	22,576.7	23,632.0	20,375.2	29,325.6	38,406.8	36,958.0	41,651.6	44,247.7
Taiwan .....	2,541.8	4,577.7	9,417.9	13,204.4	15,180.6	16,752.6	18,873.4	22,295.4	23,566.9	21,467.7	24,524.4	28,858.7
Singapore.....	2,122.7	3,823.2	8,150.0	11,643.5	12,715.4	13,424.7	14,021.8	19,434.2	23,206.1	19,353.4	19,524.0	20,813.8
Hong Kong .....	1,252.2	979.1	1,762.5	2,329.8	2,182.0	2,197.5	1,952.9	1,710.6	1,926.4	2,181.5	1,718.4	1,348.3
India.....	460.8	597.7	1,401.1	2,423.8	2,721.8	3,055.1	3,515.9	4,168.2	3,733.8	3,885.6	4,076.0	4,310.4
Malaysia .....	555.2	838.5	2,024.5	6,010.9	7,199.9	8,574.0	7,772.0	9,152.0	11,769.4	9,876.6	10,795.2	12,328.6
Thailand.....	178.3	453.1	1,575.5	1,588.9	1,852.6	1,872.4	1,551.5	1,784.9	2,149.0	1,809.9	2,078.7	2,353.9
Philippines .....	391.3	356.5	768.4	1,350.5	1,246.4	2,537.6	2,044.6	2,395.1	3,477.9	3,831.9	4,021.7	4,463.6
Indonesia .....	131.0	347.7	1,161.3	1,626.5	1,617.1	2,278.7	1,459.6	1,871.7	2,451.0	2,399.9	1,930.6	1,997.5
South Africa .....	877.3	895.7	963.4	1,104.7	875.3	1,099.5	818.8	849.8	987.7	928.2	947.8	934.6

**World industry value added, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Aircraft</b>												
Total value added .....	68,763.9	81,089.0	105,421.0	74,495.5	81,718.0	88,491.9	97,637.8	97,760.4	93,903.7	103,165.6	99,078.4	98,420.6
United States .....	30,826.6	45,877.3	54,632.1	32,215.4	38,636.0	38,292.9	46,866.1	45,299.1	42,660.5	43,918.4	36,739.6	34,391.3
Canada .....	1,956.0	1,798.8	2,882.9	2,748.2	2,915.2	3,443.6	2,963.3	3,084.3	3,621.0	3,556.6	3,211.0	3,014.3
Mexico .....	22.5	39.5	63.4	203.9	168.1	118.8	123.7	176.0	136.4	164.2	184.7	234.6
Brazil .....	12,128.3	6,831.8	12,570.8	11,015.7	11,827.9	13,299.1	10,934.7	10,406.5	9,095.2	9,917.6	10,397.0	10,138.7
Chile .....	12.8	8.1	14.1	10.8	10.3	13.2	85.0	38.1	49.6	40.0	42.1	42.2
Costa Rica .....	48.7	30.9	65.0	62.4	48.5	7.0	9.1	9.7	10.6	7.2	7.1	7.3
Argentina .....	56.9	67.7	56.1	10.8	14.7	8.8	8.4	4.7	2.1	1.9	0.9	0.9
Peru .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Austria .....	28.6	9.9	24.0	19.1	25.1	40.3	21.0	24.8	23.2	22.9	28.3	34.1
Belgium .....	397.5	447.0	502.9	275.5	239.9	346.9	379.3	384.5	431.3	435.2	347.1	314.7
Denmark .....	2.8	1.7	7.5	9.0	8.4	14.5	5.6	8.9	12.8	12.4	11.0	11.1
France .....	6,261.6	5,280.9	4,459.2	5,453.1	3,270.9	6,354.7	5,640.8	5,404.2	4,352.4	5,519.2	7,230.1	7,224.6
Finland .....	19.4	77.1	84.0	108.1	131.4	139.4	148.0	115.7	94.4	86.7	91.9	94.4
Germany .....	5,202.9	5,948.8	7,457.6	4,819.5	4,672.4	4,516.6	5,140.7	5,978.1	5,277.6	6,243.5	6,798.2	7,413.7
Greece .....	58.2	69.3	86.7	116.8	154.4	196.0	148.2	134.4	127.9	150.3	171.7	166.9
Ireland .....	26.1	43.0	68.1	69.6	100.4	109.1	142.9	156.3	225.8	242.2	195.9	219.3
Italy .....	1,279.7	1,807.9	2,904.1	1,484.4	1,532.7	1,890.6	2,916.2	2,497.3	2,800.2	3,593.1	3,015.5	2,902.2
Netherlands .....	113.9	120.7	178.9	132.4	207.8	377.0	413.3	409.3	428.7	431.4	425.3	419.2
Portugal .....	1.0	0.8	2.2	22.9	8.8	17.4	24.2	6.9	8.6	7.6	6.9	6.7
Spain .....	944.4	1,110.2	936.7	676.3	661.2	730.7	848.6	865.3	944.4	826.3	759.9	815.2
Sweden .....	533.5	740.8	861.6	574.8	509.6	388.7	689.3	585.6	581.7	667.2	585.2	523.7
United Kingdom .....	4,538.7	4,533.6	10,057.8	5,604.5	5,395.6	6,349.2	7,134.4	8,048.5	8,459.3	9,015.2	7,191.9	8,072.6
European Union-15 .....	19,408.2	20,191.6	27,631.4	19,365.9	16,918.6	21,470.9	23,652.6	24,619.8	23,768.1	27,253.1	26,859.1	28,218.4
Czech Republic .....	43.0	54.4	42.1	54.8	48.8	51.0	62.7	73.4	86.2	92.0	91.6	110.1
Hungary .....	25.0	29.0	17.7	2.3	2.1	2.2	105.4	152.8	122.7	100.1	99.5	96.2
Poland .....	196.1	169.9	143.6	162.0	153.0	139.6	132.5	118.7	193.1	210.0	159.3	130.2
Slovakia .....	0.8	1.0	1.0	3.0	3.1	2.7	2.5	5.0	19.4	19.0	6.6	20.0
<b>Expanded European</b>												
Union countries .....	265.0	254.3	204.5	222.1	207.0	195.6	303.1	349.9	421.5	421.0	356.9	356.5
Japan .....	731.1	1,357.6	1,510.3	2,439.4	2,624.5	2,765.7	3,337.3	3,646.0	3,327.7	4,479.6	6,174.5	6,140.0
China .....	360.1	616.6	714.0	2,250.9	3,290.8	3,730.0	4,681.1	5,347.2	6,289.1	7,767.2	9,304.1	10,211.3
South Korea .....	16.7	52.0	260.2	211.8	231.0	294.1	566.9	557.6	724.3	804.7	686.6	572.2
Taiwan .....	109.2	106.1	136.6	160.9	204.5	332.1	295.1	321.4	356.6	593.9	713.9	778.4
Singapore .....	124.7	423.5	347.4	538.6	520.3	552.3	638.9	739.1	750.4	808.5	880.8	846.6
Hong Kong .....	122.2	153.7	236.2	219.7	254.1	276.3	234.3	234.0	241.5	260.8	294.7	228.2
India .....	14.7	23.4	31.7	84.1	69.8	97.8	111.9	107.2	83.8	78.1	84.2	90.5
Malaysia .....	3.0	3.9	6.1	6.2	5.3	6.5	1.8	7.3	10.1	11.5	11.1	11.7
Thailand .....	2.9	7.1	11.9	15.6	19.3	13.4	13.5	18.1	25.5	20.6	25.7	23.2
Philippines .....	65.3	6.0	5.9	3.4	2.9	4.4	2.3	3.0	4.1	4.4	4.7	5.4
Indonesia .....	23.0	27.1	11.7	26.6	53.0	18.8	10.7	10.0	14.6	13.8	11.8	11.0
South Africa .....	245.8	128.6	148.6	166.7	138.0	163.5	124.3	129.0	178.8	182.0	166.6	164.4

**World industry value added, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Pharmaceuticals</b>												
Total value added .....	73,815.8	90,987.1	122,906.3	149,154.4	157,081.2	162,199.0	167,104.6	182,462.1	190,265.5	211,718.2	222,397.2	229,387.5
United States .....	16,594.8	23,481.5	31,920.8	43,470.5	47,792.3	49,374.8	52,591.6	56,877.2	59,504.4	74,027.0	76,762.4	74,512.7
Canada .....	801.7	1,298.2	1,902.0	1,871.4	1,772.2	1,498.6	1,326.7	1,722.3	2,096.9	2,675.2	3,155.9	3,278.5
Mexico .....	1,152.6	1,069.9	1,488.2	1,896.1	1,986.9	2,248.2	2,570.8	2,760.9	2,963.4	3,117.6	3,329.4	3,388.2
Brazil .....	10,856.1	9,456.9	9,828.6	8,495.2	8,642.8	9,334.8	9,703.8	8,830.6	8,272.5	8,338.5	8,518.6	7,871.4
Chile .....	81.2	107.2	211.9	382.7	326.9	373.0	395.2	345.1	333.3	332.4	347.2	350.7
Costa Rica .....	23.7	39.2	30.7	39.7	29.5	32.6	31.3	31.7	36.1	42.8	42.1	43.6
Argentina .....	2,479.9	2,216.9	1,338.8	1,204.3	1,263.7	1,276.0	1,284.4	1,229.3	1,302.5	1,307.8	1,033.6	1,194.6
Peru .....	268.0	143.9	199.7	215.3	222.7	246.9	208.3	206.3	209.3	209.0	216.3	230.8
Austria .....	215.7	262.0	534.2	882.4	853.6	835.7	991.6	991.0	1,192.3	885.3	928.8	967.8
Belgium .....	800.7	1,595.3	2,146.0	2,476.5	2,352.3	2,384.2	2,348.1	2,638.5	2,461.3	2,644.4	2,930.0	4,143.9
Denmark .....	214.0	443.9	686.8	1,020.7	1,139.9	1,304.1	1,552.2	1,819.9	2,111.7	2,240.7	2,434.8	2,321.7
France .....	3,755.9	5,209.7	6,315.9	8,002.6	8,162.0	8,831.6	9,591.7	10,755.6	11,313.5	12,588.8	12,390.2	13,285.8
Finland .....	252.5	346.4	363.3	280.7	250.6	278.4	283.8	191.5	201.7	203.6	174.1	178.6
Germany .....	6,480.6	7,198.5	8,568.8	9,859.5	10,479.9	9,195.8	8,896.6	9,412.2	9,165.9	10,236.1	12,058.9	12,575.8
Greece .....	23.5	29.0	87.8	127.1	130.3	164.7	193.3	213.2	297.7	309.0	365.8	394.3
Ireland .....	133.7	279.1	544.0	2,046.1	2,460.1	3,371.6	4,525.8	5,464.1	6,489.9	8,533.4	10,306.8	9,846.7
Italy .....	2,788.7	3,459.2	5,288.2	5,709.1	6,276.9	6,358.9	6,622.3	7,130.1	7,490.1	7,454.5	7,494.5	7,435.6
Netherlands .....	832.0	1,318.9	915.7	1,758.2	1,281.4	1,460.2	1,284.4	1,485.7	1,701.6	1,712.9	1,794.0	1,869.3
Portugal .....	235.0	206.2	388.1	456.5	456.5	425.6	438.8	413.2	424.1	383.2	381.6	390.0
Spain .....	1,841.2	1,753.1	2,248.8	2,582.2	2,513.3	2,706.8	2,599.3	2,866.2	2,753.1	2,909.3	3,242.7	3,431.6
Sweden .....	426.4	559.4	842.2	1,987.9	2,138.6	2,258.4	2,467.8	2,754.8	2,893.1	3,303.3	3,691.8	4,229.9
United Kingdom .....	1,768.2	2,297.1	4,416.4	7,360.6	7,232.6	7,600.0	8,062.3	7,062.6	7,542.4	9,372.5	10,256.4	10,725.9
European Union-15 .....	19,768.3	24,958.0	33,346.2	44,550.3	45,728.0	47,175.9	49,858.1	53,198.5	56,038.5	62,776.8	68,450.4	71,796.7
Czech Republic .....	155.4	160.8	120.5	124.3	142.5	111.4	101.2	85.8	79.2	81.1	77.6	82.9
Hungary .....	336.5	485.6	467.8	272.3	250.9	271.7	428.1	348.9	496.8	497.0	535.9	533.5
Poland .....	239.4	401.8	229.1	281.2	301.4	292.8	271.3	268.1	268.0	239.7	239.6	245.2
Slovakia .....	112.6	113.4	109.5	87.8	97.9	84.2	88.4	67.8	61.6	63.8	58.6	52.7
<b>Expanded European</b>												
Union countries .....	843.8	1,161.6	926.9	765.7	792.7	760.2	889.0	770.7	905.6	881.6	911.7	914.4
Japan .....	11,790.1	14,893.4	23,095.2	27,004.1	27,296.2	27,428.0	25,580.4	29,290.9	28,926.0	26,543.7	25,444.4	25,521.0
China .....	1,096.7	1,028.7	1,774.5	3,313.8	4,537.3	4,964.0	5,207.4	6,627.2	8,515.1	9,472.2	10,353.4	14,064.1
South Korea .....	547.1	991.8	2,522.4	3,645.3	4,216.4	4,292.6	3,710.0	4,590.4	5,149.4	5,633.5	6,205.8	7,090.7
Taiwan .....	109.0	169.7	412.9	558.0	633.6	708.9	762.6	814.8	876.7	824.0	796.0	903.1
Singapore .....	215.2	546.4	1,484.6	904.5	964.7	759.4	1,711.0	3,085.6	2,754.5	2,830.9	3,806.7	4,317.1
Hong Kong .....	65.6	28.8	44.1	77.1	106.9	91.0	72.6	85.5	91.9	90.3	69.5	72.2
India .....	333.6	357.8	632.0	1,310.3	1,545.1	1,719.1	1,868.8	2,217.4	1,835.8	1,884.7	1,981.2	2,058.2
Malaysia .....	7.7	29.0	40.9	74.3	69.7	79.7	71.5	83.3	86.2	77.8	78.2	89.4
Thailand .....	98.5	161.9	186.4	332.2	390.8	452.6	393.4	443.5	501.0	526.3	570.5	640.0
Philippines .....	147.5	193.3	315.6	545.2	480.5	862.7	634.4	753.8	935.7	1,040.0	938.8	992.3
Indonesia .....	33.7	133.1	323.7	463.2	546.4	478.2	311.9	427.2	481.4	417.2	428.7	482.0
South Africa .....	171.9	369.8	410.6	415.6	409.3	409.4	286.3	282.8	302.5	312.5	326.0	292.0

**World industry value added, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Office and computing machinery</b>												
Total value added .....	26,122.1	42,241.7	65,621.4	78,133.0	92,368.5	108,737.0	129,874.3	144,079.8	159,037.5	154,521.7	153,380.7	177,160.3
United States .....	1,327.9	3,942.9	9,301.1	18,245.6	25,248.5	36,201.8	53,570.8	60,006.7	64,690.8	68,156.1	62,486.4	70,644.6
Canada .....	15.5	97.2	186.1	235.4	215.8	673.8	1,115.4	969.2	1,349.8	1,145.2	971.3	942.8
Mexico .....	127.7	173.1	410.5	1,324.6	1,855.7	2,408.4	2,628.4	2,415.7	2,739.2	2,548.8	2,296.9	2,161.6
Brazil .....	1,223.0	770.4	1,360.3	1,615.9	1,724.1	2,066.9	2,203.1	2,098.4	2,513.6	2,633.7	2,537.1	2,516.9
Chile .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Costa Rica .....	0.0	0.0	0.1	0.4	0.3	0.7	0.8	0.9	1.1	1.1	1.3	1.7
Argentina .....	68.4	90.8	65.5	53.6	68.9	90.1	90.0	60.7	77.0	65.2	55.5	66.3
Peru .....	2.4	2.4	6.3	4.9	3.4	4.8	6.2	4.7	5.8	6.4	5.4	5.6
Austria .....	39.4	39.6	46.0	29.5	28.6	39.9	41.4	85.6	48.3	75.4	61.5	64.0
Belgium .....	34.7	35.3	46.8	93.9	102.1	98.7	103.8	100.3	290.1	158.1	114.2	82.5
Denmark .....	66.3	83.8	96.0	104.1	155.4	106.4	75.4	108.2	166.1	251.0	131.6	185.3
France .....	788.0	945.5	941.3	2,724.7	3,375.1	2,987.9	3,235.8	3,130.0	3,010.1	2,908.7	2,464.9	2,610.6
Finland .....	49.3	168.0	272.8	133.6	148.5	165.1	121.2	66.1	8.4	54.2	31.1	29.0
Germany .....	2,790.7	4,968.3	5,651.6	4,010.3	4,174.2	4,953.5	5,558.9	5,666.5	5,637.5	4,457.5	4,786.1	4,608.5
Greece .....	30.8	35.7	25.3	2.6	1.5	6.4	2.6	3.5	6.7	9.2	26.5	1.2
Ireland .....	174.9	216.1	472.4	973.2	1,066.9	1,193.1	1,338.5	1,662.4	2,276.2	2,171.2	1,714.8	2,089.3
Italy .....	547.4	869.4	822.1	1,114.0	815.6	685.1	737.1	585.1	640.2	616.1	423.1	300.8
Netherlands .....	689.2	1,050.8	474.2	484.7	465.5	431.1	568.0	520.2	593.0	596.0	436.9	382.8
Portugal .....	14.4	75.9	11.7	19.2	10.3	11.6	3.5	14.8	14.6	12.6	12.4	13.0
Spain .....	5,940.7	2,939.7	2,937.6	926.6	1,091.5	860.6	1,004.3	871.0	589.6	413.9	240.4	157.2
Sweden .....	405.3	529.5	290.6	242.0	254.6	256.3	251.2	234.5	221.5	79.8	54.5	57.1
United Kingdom .....	919.5	1,712.5	2,870.7	5,184.3	5,188.8	5,704.9	6,634.3	6,759.3	6,343.5	6,530.4	5,552.2	5,384.0
European Union-15 .....	12,490.6	13,669.9	14,959.2	16,042.6	16,878.5	17,500.5	19,676.1	19,807.6	19,845.7	18,334.2	16,050.4	15,965.5
Czech Republic .....	7.1	9.2	6.7	49.8	119.6	37.1	13.8	17.0	21.3	90.8	211.2	215.4
Hungary .....	6.8	6.8	7.3	15.9	119.7	340.1	8.9	12.0	9.9	7.0	5.3	5.9
Poland .....	72.7	60.1	62.6	45.5	81.5	76.9	96.0	145.1	181.4	121.0	138.7	226.5
Slovakia .....	12.8	15.2	16.0	26.2	24.8	10.2	14.0	20.3	20.5	24.6	32.6	36.1
<b>Expanded European Union countries .....</b>												
Japan .....	7,826.1	18,531.7	28,888.7	24,935.9	26,515.6	26,400.1	24,838.9	23,428.5	21,535.8	14,486.4	13,622.2	13,135.3
China .....	355.9	294.9	397.6	1,645.1	3,690.2	5,435.2	8,158.2	14,371.1	20,027.2	23,443.1	31,334.6	46,688.6
South Korea .....	25.0	104.0	930.2	1,916.1	2,256.3	2,292.5	2,213.0	3,472.2	4,762.6	4,741.3	5,411.9	5,392.6
Taiwan .....	362.8	821.0	1,805.0	3,304.5	4,076.8	4,699.3	5,105.1	5,879.4	6,599.7	5,978.2	6,457.7	7,631.9
Singapore .....	849.5	1,811.1	4,449.7	5,557.1	6,246.6	6,715.2	6,329.6	7,517.2	10,469.7	8,319.5	7,805.4	7,706.6
Hong Kong .....	119.7	94.5	298.1	422.9	449.9	516.2	665.9	423.0	540.4	524.2	403.1	312.3
India .....	7.8	17.1	96.9	173.3	127.5	226.9	252.2	415.6	452.7	497.6	564.0	606.3
Malaysia .....	15.4	25.3	69.9	422.7	559.5	736.0	633.0	347.0	321.0	262.6	181.7	159.9
Thailand .....	2.2	4.5	25.0	2.4	2.8	3.2	2.9	3.3	5.0	5.9	8.0	9.1
Philippines .....	2.2	2.4	7.2	100.3	88.9	178.6	140.8	148.9	224.5	290.9	229.3	263.6
Indonesia .....	1.5	2.6	11.6	9.6	1.2	6.4	2.9	2.7	2.7	3.6	8.0	8.0
South Africa .....	9.1	7.5	6.7	5.7	4.3	8.6	8.4	8.6	10.1	12.1	12.9	11.7

**World industry value added, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Communication equipment</b>												
Total value added .....	79,315.8	127,058.9	182,381.5	215,527.6	231,404.8	277,346.9	312,156.0	383,681.5	492,931.6	437,596.5	508,098.7	554,720.6
United States .....	8,671.6	11,242.0	13,067.9	26,297.6	28,574.5	54,452.1	95,927.5	136,665.4	208,593.9	199,136.6	260,276.2	281,933.4
Canada .....	1,472.9	2,570.0	3,211.4	4,551.7	4,186.9	4,836.0	5,076.2	8,634.3	8,985.7	4,738.7	3,835.7	3,908.1
Mexico .....	2,393.9	2,150.9	2,965.9	1,487.1	1,541.6	2,312.5	3,616.6	4,775.6	4,823.9	4,573.5	3,856.6	3,629.5
Brazil .....	5,363.3	4,050.0	5,061.1	5,453.9	5,959.1	5,834.9	4,302.5	3,254.7	4,066.0	3,911.7	3,256.3	3,272.8
Chile .....	11.2	13.9	11.2	30.9	34.0	34.0	29.6	11.5	12.0	8.0	7.0	7.4
Costa Rica .....	23.1	9.8	18.0	15.2	15.0	19.6	25.8	13.9	11.5	11.8	12.3	13.7
Argentina .....	646.3	575.9	273.4	235.0	332.3	407.0	385.8	340.6	350.6	266.9	660.0	789.4
Peru .....	62.4	43.8	23.6	6.7	8.6	9.1	8.5	7.8	8.5	7.6	6.8	7.0
Austria .....	841.0	1,184.7	1,726.5	2,123.1	2,139.2	2,035.2	2,230.6	2,436.4	2,924.0	2,506.4	2,205.3	1,952.8
Belgium .....	1,738.8	1,619.8	1,733.2	1,316.6	1,368.6	1,554.6	1,311.7	1,335.9	1,273.9	1,216.1	953.1	988.8
Denmark .....	356.3	336.7	447.4	569.0	647.1	688.5	691.7	843.9	743.7	687.3	875.3	819.3
France .....	5,008.4	6,417.0	7,403.3	6,963.8	6,651.2	7,321.6	6,843.5	7,854.9	7,595.5	6,208.2	5,477.8	5,424.3
Finland .....	146.4	386.4	788.4	1,879.8	2,147.0	2,682.6	4,416.7	5,524.1	7,621.9	6,892.8	9,219.2	9,108.6
Germany .....	7,695.3	10,062.8	11,946.2	7,766.0	7,708.4	9,047.4	10,131.6	10,365.4	12,983.3	10,650.6	9,726.8	10,664.4
Greece .....	108.6	113.9	108.2	94.0	76.8	87.4	225.3	186.2	253.5	250.8	164.6	143.5
Ireland .....	133.2	387.9	1,022.0	2,489.0	2,853.0	3,401.8	4,007.3	5,175.8	7,560.9	8,011.6	6,723.3	5,786.6
Italy .....	3,114.0	5,357.4	7,596.7	6,499.0	6,354.6	5,709.9	5,039.9	5,429.3	5,521.3	5,541.2	4,636.4	4,412.2
Netherlands .....	913.7	1,250.2	2,597.8	3,161.6	2,760.9	2,539.1	2,602.0	2,727.9	3,139.2	2,696.4	1,124.5	1,065.4
Portugal .....	289.2	359.0	392.8	507.7	557.3	630.7	689.3	730.0	852.4	967.6	934.2	1,261.9
Spain .....	1,629.7	1,348.5	1,896.3	1,752.2	1,651.5	1,531.3	1,426.0	1,127.2	1,340.4	1,040.8	839.3	743.3
Sweden .....	993.7	1,416.2	1,743.7	2,502.4	3,188.6	3,492.7	3,880.5	3,710.4	2,855.2	1,926.0	986.7	852.8
United Kingdom .....	6,758.1	7,369.5	8,797.2	9,258.7	9,754.5	10,011.5	10,402.1	11,659.2	11,738.0	10,509.4	8,875.7	8,883.1
European Union-15 .....	29,726.5	37,609.9	48,199.7	46,882.9	47,858.9	50,734.1	53,898.3	59,106.8	66,403.4	59,105.2	52,742.1	52,106.9
Czech Republic .....	45.6	65.5	58.7	136.8	227.4	275.8	618.5	625.1	366.3	588.6	735.2	752.3
Hungary .....	139.0	163.3	94.4	181.5	222.2	317.9	27.1	30.8	38.8	51.0	64.3	86.5
Poland .....	169.3	219.8	232.5	344.8	420.7	450.3	510.9	600.1	506.2	931.0	1,027.0	1,050.6
Slovakia .....	32.4	36.4	38.0	36.5	39.1	69.2	67.8	25.4	26.2	40.0	52.5	50.3
<b>Expanded European</b>												
Union countries .....	386.3	485.1	423.5	699.5	909.5	1,113.2	1,224.3	1,281.4	937.4	1,610.6	1,879.0	1,939.7
Japan .....	19,759.6	50,981.2	77,414.0	78,708.6	85,943.4	93,728.6	87,070.4	91,072.2	102,636.0	74,234.2	77,488.5	88,569.4
China .....	991.4	2,869.4	3,859.1	7,965.8	10,073.3	12,300.4	12,414.2	16,126.4	19,384.4	21,460.1	30,229.0	36,710.5
South Korea .....	721.0	1,883.1	6,022.3	13,994.9	14,334.4	15,197.4	12,309.4	18,905.2	25,694.8	23,663.4	27,153.3	28,907.8
Taiwan .....	1,687.4	3,099.2	6,459.6	8,502.2	9,613.2	10,328.3	11,969.0	14,364.0	14,668.4	13,028.0	15,292.8	18,124.7
Singapore .....	733.6	871.1	1,651.2	4,164.8	4,474.4	4,831.4	4,642.3	7,143.7	8,205.5	6,414.3	6,036.4	6,953.9
Hong Kong .....	822.6	577.8	944.2	1,342.2	1,078.1	981.8	714.6	734.8	801.4	943.1	680.7	526.2
India .....	28.5	128.0	420.1	608.3	725.0	805.5	912.5	986.0	975.3	994.5	1,017.7	1,094.1
Malaysia .....	340.4	606.6	1,689.6	5,270.8	6,325.9	7,469.0	6,792.5	8,458.5	10,957.3	9,204.6	10,185.8	11,694.6
Thailand .....	51.6	89.4	1,263.0	1,121.7	1,306.8	1,268.8	1,037.1	1,194.6	1,470.5	1,107.9	1,324.4	1,510.4
Philippines .....	173.4	150.8	430.0	667.0	641.7	1,432.3	1,222.3	1,439.2	2,238.3	2,410.8	2,769.4	3,111.0
Indonesia .....	47.2	91.6	610.4	959.2	880.3	1,630.1	1,093.5	1,366.8	1,877.7	1,939.3	1,448.3	1,462.3
South Africa .....	328.0	250.0	216.1	307.3	225.5	311.8	305.1	332.7	329.8	248.7	250.7	273.0



Appendix table 6-3

**World industry value added, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

(Page 7 of 8)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Medical, precision, and optical instruments</b>												
Total value added .....	88,182.1	102,042.1	119,807.8	116,385.3	120,831.2	126,411.2	131,880.3	133,657.9	142,282.2	139,939.8	137,564.9	143,642.5
United States .....	25,155.0	30,419.7	38,139.3	41,203.2	44,210.0	46,619.7	51,576.2	50,759.0	51,352.5	47,939.9	46,570.8	49,834.3
Canada .....	667.8	771.8	895.8	1,037.3	1,081.2	1,120.3	1,231.4	1,276.5	1,628.5	1,648.1	1,623.0	1,743.5
Mexico .....	914.1	924.4	1,077.4	1,038.5	1,126.8	1,264.8	1,444.2	1,623.0	1,929.2	2,123.6	2,107.6	1,983.5
Brazil .....	7,497.7	5,451.9	4,162.0	2,376.7	2,490.6	2,567.7	2,378.0	2,175.0	2,251.6	2,233.9	2,074.6	1,982.3
Chile .....	6.3	9.3	16.3	31.2	29.2	33.0	31.6	18.0	18.8	16.0	15.5	12.2
Costa Rica .....	8.6	5.3	8.8	20.3	12.0	4.1	2.8	2.8	3.8	3.1	3.2	3.4
Argentina .....	539.0	403.2	288.2	171.9	137.0	180.6	176.8	149.5	150.9	112.1	120.2	143.8
Peru .....	7.7	7.3	8.3	13.2	13.9	13.8	12.3	10.7	10.8	10.0	10.3	10.6
Austria .....	231.4	419.7	576.9	650.8	663.4	740.0	822.0	978.4	1,043.5	1,082.7	1,148.7	1,202.8
Belgium .....	655.3	620.6	454.9	534.5	452.4	443.2	475.1	472.2	444.5	463.3	498.4	554.0
Denmark .....	307.9	495.5	506.2	682.3	746.5	871.6	1,002.4	999.1	1,173.5	1,202.5	1,026.4	1,017.1
France .....	7,156.5	8,778.3	9,244.9	8,206.0	7,352.2	8,109.9	7,942.2	8,319.3	8,386.0	9,027.9	9,619.5	9,863.6
Finland .....	186.1	355.7	486.8	480.5	537.4	601.7	645.5	644.5	684.1	730.5	683.3	605.7
Germany .....	10,758.6	12,517.8	14,839.8	14,536.7	15,150.3	15,018.7	15,800.6	16,120.6	18,259.5	18,494.1	18,493.5	19,117.3
Greece .....	71.2	54.1	41.6	41.4	43.6	46.1	39.0	40.8	43.7	61.3	49.4	66.4
Ireland .....	157.0	306.5	503.0	857.3	1,104.1	1,372.6	1,605.5	2,111.1	3,207.0	4,508.4	4,187.1	5,063.5
Italy .....	5,232.0	5,047.6	5,099.6	4,527.6	4,681.5	4,788.8	4,722.7	4,787.5	5,270.9	5,179.6	5,780.9	5,216.9
Netherlands .....	953.8	423.0	398.7	305.2	285.1	276.4	291.1	323.5	407.2	606.1	612.9	607.5
Portugal .....	106.0	111.7	96.4	181.8	179.3	143.8	141.9	162.0	139.3	142.2	123.1	117.5
Spain .....	800.7	731.2	1,321.0	1,150.8	1,103.0	1,253.1	1,287.3	1,271.5	1,339.2	1,247.1	1,007.1	1,076.4
Sweden .....	384.0	520.1	1,248.7	1,974.6	1,857.5	1,843.2	2,041.4	2,016.2	2,090.3	1,149.2	1,313.0	1,343.0
United Kingdom .....	6,645.2	7,421.1	7,678.3	7,946.4	8,017.7	7,878.7	7,895.7	7,718.7	8,179.7	8,398.0	7,750.3	8,060.7
European Union-15 .....	33,645.7	37,802.8	42,496.9	42,076.1	42,174.2	43,387.7	44,712.4	45,965.5	50,668.4	52,293.0	52,293.5	53,912.3
Czech Republic .....	138.0	154.4	215.3	503.9	542.1	554.2	505.6	471.0	432.2	448.0	498.7	535.3
Hungary .....	257.2	352.6	387.6	186.5	203.8	223.2	202.5	219.8	237.6	257.0	240.6	261.7
Poland .....	290.5	331.5	352.2	365.8	483.8	546.8	611.7	740.8	707.8	580.7	567.9	619.7
Slovakia .....	49.0	57.4	59.4	57.2	97.7	107.5	108.3	70.1	61.6	55.8	59.9	58.1
<b>Expanded European Union countries .....</b>												
Japan .....	8,201.4	13,612.3	17,442.0	13,286.6	14,078.9	14,908.0	14,283.1	14,031.1	14,567.6	13,042.5	11,880.6	11,842.5
China .....	342.8	762.2	716.0	1,417.4	1,821.8	1,792.7	2,118.0	2,313.5	2,900.2	3,271.9	3,830.4	4,474.4
South Korea .....	661.3	783.4	1,224.0	1,534.3	1,538.7	1,555.3	1,575.9	1,800.2	2,075.6	2,115.2	2,194.0	2,284.5
Taiwan .....	273.3	381.7	603.9	678.8	652.3	683.9	741.6	915.8	1,065.5	1,043.6	1,263.9	1,420.5
Singapore .....	199.7	170.9	217.1	478.4	509.5	566.4	700.0	948.7	1,026.0	980.2	994.7	989.6
Hong Kong .....	122.2	124.2	239.9	267.8	293.1	332.2	265.5	233.4	251.3	363.1	270.4	209.4
India .....	76.2	71.4	220.4	247.9	254.3	205.8	370.6	442.0	386.2	430.8	429.1	461.3
Malaysia .....	188.7	173.7	218.1	236.8	239.6	282.7	273.1	256.0	394.9	320.1	338.5	373.1
Thailand .....	23.1	190.1	89.3	117.0	132.8	134.4	104.6	125.4	147.0	149.2	150.1	171.2
Philippines .....	2.9	4.1	9.7	34.6	32.4	59.5	44.7	50.2	75.4	85.8	79.5	91.4
Indonesia .....	25.5	93.3	203.9	167.9	136.3	145.1	40.5	65.1	74.6	26.0	33.8	34.1
South Africa .....	122.6	139.8	181.4	209.5	98.2	206.0	94.6	96.7	166.6	172.9	191.6	193.6

**World industry value added, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Other manufacturing industries</b>												
Total value added .....	3,010,461.8	3,470,999.0	4,240,497.3	4,591,899.9	4,687,350.3	4,845,088.5	4,842,347.7	4,920,396.9	5,026,791.8	4,923,513.0	4,971,794.2	5,069,119.2
United States.....	682,573.5	808,014.3	939,409.9	1,104,819.7	1,112,641.2	1,142,338.8	1,123,028.0	1,142,553.4	1,135,831.9	1,035,721.7	1,012,282.2	983,961.6
Canada .....	63,672.5	73,856.9	83,802.7	91,267.1	90,793.8	96,779.0	104,377.6	111,930.1	114,802.0	114,111.9	118,244.0	118,273.3
Mexico .....	47,974.5	52,349.2	59,353.9	57,995.2	63,432.1	69,265.5	72,459.1	75,608.5	79,641.1	78,996.7	79,675.3	78,221.0
Brazil .....	99,982.2	106,762.2	99,602.1	125,009.5	117,785.2	123,545.0	122,732.8	115,368.4	118,381.1	117,884.6	118,888.2	119,607.0
Chile .....	5,661.9	3,767.9	7,903.4	13,667.1	13,010.6	13,973.9	13,795.3	13,026.9	13,276.6	14,329.7	14,693.4	15,476.7
Costa Rica.....	1,065.8	1,366.5	1,744.8	2,543.1	2,409.5	2,558.0	3,129.5	4,319.2	3,830.6	3,531.5	3,491.4	3,706.3
Argentina .....	36,421.1	32,529.2	32,174.0	39,407.0	41,701.0	45,627.1	46,814.4	43,615.7	42,771.2	39,281.9	34,836.6	40,445.7
Peru .....	6,112.5	6,884.3	8,426.7	7,982.6	8,095.6	8,513.0	8,269.8	8,229.5	8,595.8	8,494.5	8,861.4	9,065.8
Austria .....	20,700.1	21,368.4	27,923.6	32,142.8	32,325.9	35,148.6	38,033.8	40,415.9	43,728.4	44,091.3	44,967.5	46,245.9
Belgium .....	32,305.6	31,068.9	38,339.3	39,139.3	39,766.8	40,840.7	42,105.3	41,798.5	39,341.3	40,314.5	41,349.5	40,326.2
Denmark.....	12,810.7	15,825.0	18,182.5	20,755.5	20,371.3	22,308.5	22,848.3	22,708.0	22,526.4	22,121.0	21,713.1	21,719.1
France.....	174,427.4	177,997.2	212,129.3	201,509.1	199,968.0	206,179.4	213,984.8	212,637.4	212,510.8	217,475.0	220,458.1	217,797.6
Finland.....	14,855.1	17,076.0	20,411.6	21,602.0	20,989.9	22,201.9	24,675.2	24,179.7	25,375.3	25,839.2	24,345.2	24,522.8
Germany .....	318,679.2	336,829.8	402,880.3	396,006.5	394,502.0	400,840.9	417,786.3	412,129.4	409,065.5	408,799.4	412,198.1	410,738.1
Greece .....	3,187.7	5,272.8	8,995.8	11,313.8	11,327.6	11,236.2	12,751.1	12,679.1	12,867.4	13,305.0	13,534.6	13,482.7
Ireland.....	4,412.6	5,374.6	7,257.7	9,702.3	9,892.4	11,406.7	13,682.8	14,543.4	13,933.1	13,741.7	16,846.5	18,864.5
Italy.....	180,006.7	167,134.3	203,207.4	202,907.3	206,219.7	209,949.9	215,322.1	211,178.8	205,815.5	208,109.2	206,432.8	203,725.4
Netherlands.....	46,823.8	42,065.0	52,837.1	58,305.2	57,096.5	57,042.2	61,312.8	62,486.2	59,327.6	60,376.4	62,967.5	61,125.2
Portugal .....	7,706.9	8,208.6	13,091.7	15,689.6	16,987.0	17,451.4	18,452.1	18,651.5	18,054.8	18,537.4	18,680.4	18,227.0
Spain .....	76,838.0	79,948.8	97,631.5	88,368.5	87,383.9	94,393.8	99,442.9	100,887.4	99,497.9	96,034.8	96,586.0	98,008.4
Sweden.....	26,173.2	28,495.2	34,880.2	39,109.3	39,172.2	40,490.3	41,082.8	41,099.6	42,357.0	41,190.2	42,489.3	43,195.1
United Kingdom.....	172,410.8	175,232.9	214,955.7	206,732.9	209,290.1	215,647.5	217,127.9	218,612.7	218,516.0	214,988.6	211,704.1	211,328.0
European Union-15 .....	1,091,337.6	1,111,897.4	1,352,723.6	1,343,284.2	1,345,293.5	1,385,137.8	1,438,608.1	1,434,007.6	1,422,917.0	1,424,923.8	1,434,272.8	1,429,306.1
Czech Republic .....	15,220.0	17,543.6	15,555.2	16,152.4	18,143.6	17,844.1	17,442.7	17,364.7	15,937.1	17,762.6	18,305.1	19,881.1
Hungary .....	7,740.7	8,493.1	7,403.6	7,851.3	7,785.2	8,505.4	10,005.9	10,497.2	10,331.9	10,857.6	11,178.1	11,926.0
Poland.....	29,578.5	26,894.5	21,950.2	21,304.5	23,140.6	26,723.5	28,529.6	29,265.2	31,294.8	30,377.8	30,490.7	33,161.1
Slovakia .....	3,808.6	4,468.4	4,644.9	4,211.3	4,347.3	4,134.2	4,357.8	4,585.9	4,620.8	5,152.3	5,035.6	5,350.2
<b>Expanded European</b>												
Union countries .....	56,347.9	57,399.6	49,553.9	49,519.4	53,416.7	57,207.3	60,335.9	61,713.0	62,184.7	64,150.2	65,009.6	70,318.4
Japan.....	476,057.7	599,311.4	786,855.9	790,806.7	804,690.3	812,760.2	771,199.7	785,090.0	810,003.4	762,840.0	760,293.6	778,299.6
China .....	62,388.8	92,473.8	113,607.4	217,478.1	265,815.5	283,002.8	297,862.4	315,801.8	352,624.2	385,259.0	421,275.0	478,461.0
South Korea .....	18,575.2	33,254.4	63,185.5	99,403.0	107,575.5	113,706.3	105,107.1	127,750.9	141,089.2	143,717.1	154,228.1	161,394.3
Taiwan .....	23,650.0	34,730.5	49,859.1	56,098.2	59,803.5	63,936.6	66,672.6	67,980.9	68,499.5	67,309.0	69,783.9	72,403.2
Singapore.....	4,828.2	3,687.2	5,507.0	8,618.2	8,205.0	8,438.4	7,768.8	5,264.7	5,276.6	5,821.1	7,770.9	7,303.4
Hong Kong .....	6,011.9	6,238.3	8,492.2	7,912.0	8,060.0	8,356.7	7,588.5	7,148.9	6,856.2	6,281.5	5,766.5	5,446.8
India.....	20,330.0	28,427.6	41,444.6	54,086.0	61,012.2	60,828.1	64,151.2	63,515.6	69,467.8	71,449.7	75,087.0	80,476.8
Malaysia .....	4,226.5	5,768.3	9,948.9	16,518.8	18,088.0	19,854.2	17,742.0	19,659.6	23,752.2	23,302.9	23,880.7	25,969.8
Thailand.....	11,839.2	14,206.3	25,354.8	39,113.7	42,025.9	41,515.9	37,499.0	42,135.9	43,194.1	44,136.5	47,770.8	53,629.8
Philippines .....	11,023.0	9,400.1	11,706.1	12,723.9	9,411.0	15,796.1	12,380.1	13,210.2	18,174.0	19,592.5	19,206.4	20,644.9
Indonesia .....	6,831.0	17,434.2	31,473.7	53,557.2	53,894.1	56,238.9	44,990.3	45,467.5	46,586.0	46,106.9	42,407.5	44,091.0
South Africa .....	25,007.4	24,815.8	23,896.2	24,890.6	25,614.8	25,945.5	25,727.7	25,502.0	26,010.2	26,589.2	27,784.4	27,225.0

NOTES: Gross value added reported equal to gross output less consumption of intermediate inputs and supplies. Conceptually, value added is current income from ongoing current production available for distribution to factors of production. Seventy countries or economies included in "all countries." High-technology sectors cover aerospace; computers and office machinery; communications equipment; pharmaceuticals; and medical, precision, and optical instruments.

SOURCES: Global Insight, Inc., World Industry Service database (2005). Historical data from United Nations Industrial Development Organization, United Nations System of National Accounts, Organisation for Economic Co-operation and Development, and country sources.

**World industry exports and imports, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Exports</b>												
<b>All manufacturing industries</b>												
Total exports .....	1,975,625.9	2,014,869.0	3,105,566.5	4,342,148.7	4,547,175.5	4,921,044.7	5,149,592.6	5,412,958.2	5,876,155.2	5,849,116.8	6,051,732.8	6,602,906.3
United States.....	290,067.8	242,197.6	405,050.8	563,881.7	611,112.7	684,135.1	697,466.8	721,850.6	808,384.5	763,021.0	725,461.1	803,725.7
Canada .....	68,813.2	87,640.1	114,523.1	164,764.3	172,839.6	184,554.4	194,913.9	219,497.7	234,579.3	217,788.9	221,586.0	225,518.3
Mexico .....	28,331.6	33,753.0	23,968.3	77,103.3	87,727.0	101,653.8	111,867.2	127,565.6	149,848.1	148,248.4	153,354.2	161,759.7
Brazil .....	25,420.5	31,427.7	31,993.5	44,472.6	45,221.0	47,838.9	48,222.9	47,759.0	50,840.9	53,625.5	53,722.7	58,214.9
Chile .....	3,495.2	3,204.5	6,599.8	10,826.8	11,558.0	12,528.8	11,574.3	12,398.8	13,147.4	14,355.7	14,303.9	15,039.3
Costa Rica.....	483.7	864.2	1,095.1	1,916.5	1,978.1	3,022.5	5,779.0	8,530.2	7,003.9	5,652.1	5,878.3	6,601.0
Argentina .....	6,478.7	6,089.1	10,164.9	16,033.2	17,272.0	19,877.3	19,979.6	19,166.8	19,641.0	20,047.6	20,137.3	20,796.2
Peru .....	2,433.8	2,359.4	2,511.2	4,531.7	4,777.7	5,619.6	5,298.4	5,557.6	5,816.6	6,070.6	6,375.6	6,648.6
Austria .....	23,832.6	25,293.7	43,198.7	54,009.7	54,876.7	54,739.1	60,630.4	60,150.8	59,785.9	62,972.9	66,715.5	73,173.3
Belgium .....	82,249.0	66,932.7	125,019.4	149,946.9	153,153.9	162,615.4	182,325.5	190,300.9	192,489.2	199,843.1	212,758.0	227,907.5
Denmark.....	22,631.1	23,228.8	33,563.4	41,841.7	41,556.1	44,936.8	45,707.3	47,593.1	45,706.2	48,049.0	50,290.5	53,631.9
France.....	137,709.4	114,310.8	208,244.8	263,278.7	260,783.6	276,397.5	301,908.0	309,117.1	332,619.4	322,517.2	328,879.3	351,704.4
Finland.....	17,309.9	16,683.7	25,121.5	35,328.3	36,021.9	38,684.5	43,946.9	44,408.7	48,080.4	48,561.5	50,437.7	55,208.5
Germany .....	264,092.8	269,855.9	409,621.5	466,878.5	482,970.3	499,683.7	561,805.7	579,352.9	555,197.5	615,025.5	638,144.4	694,356.5
Greece .....	5,387.0	5,158.2	7,125.9	9,404.1	9,905.8	9,485.3	9,640.9	9,904.2	9,860.5	9,341.9	9,555.1	10,354.6
Ireland.....	10,476.3	13,074.2	22,726.1	41,368.8	43,657.8	53,428.9	68,582.1	78,469.3	86,323.7	96,079.6	102,575.8	108,589.1
Italy.....	109,892.7	115,601.1	173,910.3	230,150.4	240,590.8	237,631.9	247,830.5	244,066.0	249,858.9	252,764.1	255,718.8	270,007.6
Netherlands.....	77,878.1	77,952.9	115,026.4	146,406.0	147,124.8	174,361.4	164,072.4	175,011.4	179,251.2	176,374.9	182,991.5	200,263.3
Portugal .....	6,359.7	7,898.9	16,515.0	23,144.7	22,952.6	23,588.2	24,769.9	25,013.8	24,184.7	24,276.7	25,336.7	27,476.3
Spain .....	26,126.1	30,922.0	51,252.9	82,234.0	92,102.4	100,085.6	106,096.6	111,432.9	113,383.2	115,594.9	121,633.8	136,235.5
Sweden.....	42,416.3	43,008.3	57,136.5	72,459.5	77,708.5	80,254.4	87,925.9	83,034.8	84,091.7	82,927.1	85,714.2	93,923.7
United Kingdom.....	145,712.2	118,845.1	188,747.2	231,041.5	250,341.0	273,797.9	278,286.6	272,432.9	277,211.8	294,032.1	300,073.1	319,324.1
European Union-15 .....	972,073.0	928,766.3	1,477,209.6	1,847,492.8	1,913,746.3	2,029,690.7	2,183,528.7	2,230,288.9	2,258,044.4	2,348,360.6	2,430,824.4	2,622,156.2
Czech Republic .....	13,559.3	14,904.8	11,288.3	20,688.9	20,720.7	21,845.7	27,887.5	26,725.5	28,360.6	33,060.2	34,740.8	38,722.7
Hungary .....	6,647.1	6,382.7	7,527.0	11,346.3	11,759.6	17,591.1	22,590.5	26,576.0	30,457.2	32,648.2	33,843.1	37,923.3
Poland .....	10,807.1	7,357.5	10,238.1	20,478.2	22,063.3	23,785.3	27,047.1	27,344.7	32,049.2	36,311.7	39,046.2	45,107.4
Slovakia .....	5,138.1	5,522.9	4,274.6	8,298.0	8,463.9	9,309.6	10,745.1	10,115.3	11,033.5	11,722.5	12,286.4	13,809.8
<b>Expanded European</b>												
Union countries .....	36,151.6	34,168.0	33,328.0	60,811.3	63,007.5	72,531.7	88,270.1	90,761.4	101,900.4	113,742.8	119,916.5	135,563.3
Japan.....	215,904.8	262,050.6	324,795.7	409,053.6	400,779.7	430,462.6	422,724.7	456,324.9	510,347.0	452,609.9	473,807.8	517,837.7
China .....	24,662.5	21,076.8	63,744.3	130,467.1	144,240.4	176,291.3	190,728.7	215,714.9	278,294.7	312,806.4	351,250.0	421,171.6
South Korea .....	23,636.7	37,571.2	62,119.0	112,298.8	125,000.6	137,867.6	153,325.0	169,004.2	200,441.7	188,554.2	205,522.9	230,557.2
Taiwan .....	25,336.7	37,548.1	72,754.5	117,248.9	122,361.9	128,940.9	126,273.4	144,761.1	176,770.1	160,373.2	173,442.4	193,152.7
Singapore.....	17,339.2	21,118.1	47,248.1	104,077.5	113,791.4	121,168.3	120,499.8	130,806.1	150,391.0	144,242.0	151,380.1	169,057.2
Hong Kong .....	26,810.3	38,760.8	85,424.8	165,070.4	171,985.3	185,261.3	173,221.2	171,712.6	201,251.4	196,897.7	206,077.7	225,731.9
India.....	8,346.6	8,555.6	14,315.3	28,683.3	31,141.4	32,132.9	32,028.1	37,641.6	45,116.2	44,429.9	48,415.8	52,652.0
Malaysia .....	6,870.8	9,101.0	21,690.4	58,896.8	66,588.8	71,389.5	75,443.8	90,773.9	104,652.5	98,204.9	104,232.2	116,132.9
Thailand .....	5,429.3	7,461.3	21,705.3	49,446.9	48,560.1	53,071.6	54,671.4	62,200.9	74,768.2	74,208.1	78,255.0	86,685.8
Philippines .....	4,477.6	4,907.1	7,732.0	15,685.6	18,633.7	24,813.3	34,114.0	40,089.1	47,462.1	45,383.2	48,217.9	52,224.6
Indonesia .....	5,126.8	7,718.7	17,172.3	30,163.9	33,721.2	38,168.2	41,396.3	42,913.1	49,345.5	46,995.2	48,390.8	48,977.4
South Africa .....	8,334.0	11,017.9	11,371.1	16,035.5	13,666.5	15,628.1	16,155.1	21,089.8	26,049.8	26,555.6	28,708.7	29,948.9

**World industry exports and imports, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>High technology industries</b>												
Total exports .....	190,068.1	267,379.6	474,124.3	809,423.3	905,865.0	1,075,940.4	1,181,548.8	1,344,778.5	1,635,454.4	1,581,228.4	1,646,296.6	1,901,561.3
United States.....	57,362.8	58,897.7	109,174.5	159,369.5	181,208.6	214,424.1	231,869.6	253,318.6	291,783.0	268,902.1	247,544.9	303,541.0
Canada.....	3,898.9	6,072.8	9,515.7	16,295.5	18,690.0	21,566.2	23,939.9	26,682.6	36,683.2	28,742.8	29,012.8	31,241.7
Mexico.....	2,216.2	5,619.4	1,457.5	14,663.9	17,350.7	22,380.1	28,272.3	34,389.3	44,486.5	48,054.4	49,722.1	53,146.9
Brazil.....	915.8	995.5	1,784.6	1,410.6	1,825.9	2,327.8	3,238.7	4,326.9	7,135.9	7,187.8	7,190.5	8,170.5
Chile.....	4.4	4.3	55.5	45.3	54.3	67.7	94.2	108.8	141.2	149.1	156.6	176.5
Costa Rica.....	30.8	31.0	40.8	57.7	60.2	294.3	1,534.4	844.9	953.4	1,257.4	1,247.0	1,539.5
Argentina.....	190.6	169.7	189.3	394.6	435.0	537.0	535.7	592.3	680.4	762.5	735.8	803.0
Peru.....	9.6	8.4	7.1	19.9	33.5	31.8	50.3	38.2	44.7	28.4	30.7	33.5
Austria.....	1,407.7	2,132.4	4,344.7	4,347.0	5,524.1	5,479.2	6,070.3	6,267.9	7,441.7	8,357.0	9,135.5	10,557.6
Belgium.....	3,511.9	3,098.8	6,918.6	11,465.1	13,641.0	15,774.5	18,317.4	21,033.0	24,078.1	28,429.7	30,975.9	35,268.1
Denmark.....	1,578.0	2,289.2	4,034.8	5,389.7	5,863.7	7,124.1	7,534.5	8,866.7	9,448.0	9,721.6	10,493.2	11,723.6
France.....	10,927.2	13,264.0	27,848.1	44,898.7	44,821.9	54,605.6	63,103.0	68,531.5	83,040.3	79,422.8	82,490.8	91,897.9
Finland.....	507.9	843.5	1,706.2	4,986.2	5,735.0	7,416.6	9,933.3	11,405.2	14,848.6	13,578.0	14,599.9	17,293.0
Germany.....	19,251.4	30,070.0	45,788.5	60,922.2	64,905.0	76,497.5	89,736.3	100,130.3	111,772.7	122,518.7	128,768.6	145,235.9
Greece.....	61.9	86.8	139.7	296.8	305.5	363.2	516.4	639.3	998.0	874.0	907.5	1,037.0
Ireland.....	1,168.3	3,114.7	5,206.2	12,031.1	14,439.6	19,451.8	25,285.8	30,485.3	36,666.5	42,446.1	44,802.3	49,349.7
Italy.....	5,650.1	8,762.9	14,237.4	18,919.8	20,205.6	21,021.5	23,832.3	25,340.6	28,997.7	29,147.3	30,340.8	33,351.5
Netherlands.....	7,539.4	9,229.3	14,186.2	25,460.8	28,804.5	42,747.4	44,149.6	53,289.0	62,183.3	57,310.6	59,301.0	65,812.5
Portugal.....	323.8	457.2	798.8	1,601.7	1,547.3	1,612.5	1,822.4	2,198.1	2,382.3	2,751.3	2,905.6	3,235.4
Spain.....	823.9	1,498.8	3,654.5	6,327.3	7,574.8	8,334.4	9,565.6	11,201.1	11,780.6	12,115.1	12,839.2	14,866.9
Sweden.....	2,773.7	4,756.1	7,144.1	13,276.3	15,817.9	18,329.3	20,844.6	21,853.3	23,524.8	18,405.6	19,442.4	22,302.1
United Kingdom.....	19,338.8	24,369.4	39,388.3	56,693.0	64,651.8	73,533.7	79,279.1	80,819.0	91,778.7	95,302.9	99,345.8	110,004.8
European Union-15.....	74,863.9	103,973.1	175,396.1	266,615.7	293,837.7	352,291.3	399,990.6	442,060.4	508,941.6	520,380.8	546,348.4	611,935.9
Czech Republic.....	545.3	718.4	484.1	906.6	1,069.8	1,250.5	1,960.3	1,810.5	2,165.1	4,027.3	4,267.2	4,948.6
Hungary.....	608.1	754.5	833.1	945.2	837.8	3,691.0	5,421.5	7,552.4	10,375.3	10,045.1	10,469.2	12,266.7
Poland.....	441.6	334.7	434.4	708.0	955.1	1,323.7	1,661.0	1,662.7	2,082.1	2,458.6	2,600.0	3,002.7
Slovakia.....	211.8	305.7	162.9	360.9	323.0	495.6	568.3	580.3	579.8	709.6	753.4	873.9
<b>Expanded European</b>												
Union countries.....	1,806.8	2,113.3	1,914.5	2,920.7	3,185.6	6,760.8	9,611.1	11,606.0	15,202.4	17,240.6	18,089.9	21,091.9
Japan.....	25,095.8	54,095.8	78,636.5	108,762.6	109,130.6	124,694.3	124,127.3	137,651.8	162,736.3	138,721.7	145,552.5	164,234.6
China.....	998.1	918.8	6,023.0	16,954.3	22,362.3	29,325.8	37,570.6	48,155.8	70,612.2	88,500.1	103,993.1	133,924.4
South Korea.....	1,909.5	4,118.0	11,684.9	27,007.8	30,216.2	37,779.2	43,038.4	60,854.0	83,002.0	70,028.7	79,123.4	94,113.1
Taiwan.....	2,613.8	4,106.0	13,385.1	32,472.1	38,091.2	45,858.2	49,471.8	63,202.7	86,374.9	75,394.5	82,653.3	97,294.4
Singapore.....	2,997.3	4,907.5	17,288.0	53,898.5	62,108.9	70,288.0	71,672.0	81,156.4	99,146.5	91,084.3	95,491.3	107,765.5
Hong Kong.....	4,657.0	7,283.1	17,159.5	38,907.7	40,938.0	47,153.8	48,454.8	52,629.6	70,282.3	73,128.8	78,138.3	90,467.1
India.....	209.4	186.9	571.8	1,233.3	1,538.5	1,627.3	1,455.7	1,803.8	2,372.5	2,691.2	3,103.9	3,708.9
Malaysia.....	1,092.8	2,380.6	8,482.4	28,095.9	33,047.3	37,120.1	37,164.3	45,659.0	57,638.4	53,922.6	56,083.6	62,542.7
Thailand.....	91.0	169.6	3,041.8	9,554.9	11,044.7	12,587.9	12,274.0	15,016.2	21,537.8	20,093.8	22,531.2	26,495.0
Philippines.....	98.4	212.2	577.9	2,392.4	8,649.0	13,730.0	18,467.4	21,381.7	24,888.4	24,637.0	25,647.8	29,120.8
Indonesia.....	93.9	156.5	228.2	2,097.8	2,818.4	2,792.4	2,288.1	3,227.8	6,254.4	4,427.7	5,440.2	6,415.6
South Africa.....	50.0	189.1	88.1	426.4	492.4	758.8	823.0	945.3	1,114.8	1,142.6	1,245.1	1,374.2

**World industry exports and imports, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Aircraft</b>												
Total exports .....	48,657.8	43,272.0	86,775.8	76,924.5	81,630.8	95,946.5	114,757.9	111,479.1	104,734.1	110,128.1	106,218.3	113,040.4
United States.....	26,525.5	19,487.2	40,015.3	28,746.1	35,653.8	43,578.6	55,508.9	52,135.5	41,025.1	43,545.9	39,910.1	40,406.8
Canada.....	1,719.4	1,697.3	3,615.0	3,460.5	3,898.5	4,040.3	5,179.2	5,585.5	6,229.3	7,583.8	7,393.4	8,083.6
Mexico.....	368.2	218.2	161.9	442.3	246.0	195.1	853.7	361.5	254.4	316.0	283.2	281.8
Brazil.....	230.7	107.8	840.2	332.0	532.7	830.7	1,505.9	2,056.7	3,530.2	3,400.6	3,307.3	3,616.6
Chile.....	1.4	0.6	38.5	5.8	11.3	10.8	28.6	34.5	49.4	37.3	37.9	42.0
Costa Rica.....	0.0	0.0	0.0	0.1	0.0	6.7	3.8	8.1	25.7	29.0	34.3	33.3
Argentina.....	19.8	1.4	21.4	26.8	80.8	45.1	35.2	77.8	150.1	183.7	152.6	187.3
Peru.....	0.0	0.3	0.3	1.4	0.1	0.7	0.1	0.4	0.4	0.7	0.8	0.8
Austria.....	30.0	63.1	62.8	104.9	101.4	597.5	503.5	274.4	264.5	283.4	290.4	325.9
Belgium.....	501.9	222.3	721.1	374.8	432.4	514.4	575.5	742.6	543.5	690.3	701.4	799.1
Denmark.....	151.4	71.0	541.5	112.8	247.5	241.1	299.8	518.5	338.3	206.3	208.5	238.6
France.....	3,142.8	3,113.1	8,408.7	14,599.4	11,215.8	13,200.4	13,425.4	16,161.2	17,929.0	18,280.5	18,475.0	20,457.0
Finland.....	14.4	14.3	39.6	122.9	66.5	116.1	88.6	30.7	102.6	210.1	201.0	218.2
Germany.....	2,359.9	5,010.8	8,918.1	9,141.6	8,153.8	10,754.3	12,763.9	14,556.9	14,802.5	16,554.4	16,418.6	17,642.9
Greece.....	0.1	1.9	10.3	78.3	44.4	37.4	85.2	92.8	109.5	38.9	38.7	43.1
Ireland.....	27.1	29.5	70.9	117.0	173.7	230.6	355.1	298.0	250.9	179.4	170.4	185.7
Italy.....	897.5	1,644.2	3,567.1	1,792.7	1,975.9	1,739.1	2,811.4	2,871.2	3,448.8	2,503.1	2,454.7	2,618.5
Netherlands.....	1,186.6	1,044.8	2,228.7	2,064.2	910.6	474.4	557.5	405.2	638.2	581.2	575.9	632.5
Portugal.....	4.5	21.8	60.9	97.5	63.7	59.3	68.8	82.6	186.3	193.9	199.1	218.7
Spain.....	122.3	162.4	1,185.4	1,047.1	1,343.6	1,169.1	1,028.0	1,431.9	1,404.8	1,213.5	1,246.7	1,436.8
Sweden.....	50.1	338.1	653.8	1,401.4	1,272.2	967.0	1,154.2	516.0	362.6	430.3	421.1	468.5
United Kingdom.....	8,972.6	7,735.6	12,032.4	7,028.5	9,073.9	10,032.8	9,126.7	5,313.1	5,753.3	5,876.2	5,852.2	6,423.9
European Union-15.....	17,461.3	19,472.8	38,501.3	38,083.2	35,075.3	40,133.5	42,843.8	43,295.0	46,135.0	47,241.5	47,253.7	51,709.4
Czech Republic.....	46.7	26.7	107.9	4.2	123.0	248.9	363.0	483.9	59.3	121.3	111.4	112.8
Hungary.....	0.0	0.6	1.0	3.4	4.2	3.6	2.3	1.9	1.0	1.7	1.7	1.8
Poland.....	72.7	35.0	51.5	43.8	85.7	49.4	92.1	75.4	198.6	135.3	133.5	147.4
Slovakia.....	2.7	1.4	11.0	4.3	3.8	18.6	16.7	24.2	4.5	15.4	16.4	17.8
Expanded European Union countries.....	122.1	63.7	171.4	55.6	216.6	320.4	474.2	585.4	263.4	273.7	263.0	279.9
Japan.....	203.3	197.6	617.9	636.5	920.1	1,411.3	1,846.4	1,839.4	1,368.3	1,596.0	1,538.2	1,633.1
China.....	2.9	41.4	38.1	180.7	227.3	332.9	500.4	604.4	614.6	491.2	530.5	634.9
South Korea.....	243.8	323.6	218.1	280.5	245.5	751.0	1,089.2	486.8	645.7	498.6	499.1	546.2
Taiwan.....	1.3	2.0	3.9	12.6	29.5	34.9	58.9	47.8	44.9	69.7	69.7	76.8
Singapore.....	366.6	549.7	458.2	422.8	460.9	633.9	536.4	426.1	471.7	637.8	631.9	705.2
Hong Kong.....	70.8	48.9	78.7	94.8	102.5	112.5	114.9	101.1	97.7	109.7	117.1	141.3
India.....	6.6	10.8	9.5	8.3	20.9	55.9	16.5	31.4	58.6	68.8	70.5	80.7
Malaysia.....	236.5	119.6	385.7	1,379.0	1,044.5	896.4	1,239.1	721.1	351.6	221.6	227.1	255.3
Thailand.....	8.0	0.5	0.3	19.6	25.2	23.2	20.0	16.4	58.0	46.7	44.9	47.5
Philippines.....	0.7	0.4	1.7	1.9	20.7	53.9	35.6	17.1	15.4	120.1	114.2	131.5
Indonesia.....	5.1	0.7	2.5	19.3	25.0	21.8	20.7	50.1	22.4	24.0	26.0	29.9
South Africa.....	3.5	6.1	10.1	114.9	77.4	203.5	171.6	184.7	319.3	248.7	247.7	268.9

**World industry exports and imports, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
Pharmaceuticals												
Total exports .....	22,858.7	24,327.3	42,959.5	67,786.6	73,264.9	84,225.9	96,758.4	104,203.3	103,813.9	127,394.6	134,515.1	149,634.5
United States.....	2,623.6	3,555.4	4,658.3	6,924.6	7,818.9	8,806.4	10,572.5	12,224.3	14,103.1	16,875.5	17,048.2	19,927.6
Canada.....	173.7	218.6	333.2	645.2	717.5	1,029.9	1,127.8	1,148.8	1,136.6	1,323.9	1,431.6	1,607.3
Mexico.....	1,196.4	256.0	214.6	466.0	591.8	676.0	719.1	723.1	747.1	926.4	975.1	1,021.0
Brazil.....	80.4	97.5	111.2	181.4	201.4	230.3	272.3	292.1	260.1	272.2	291.0	331.8
Chile.....	0.2	2.5	13.4	23.2	24.2	33.0	35.8	32.8	39.0	47.1	50.1	55.8
Costa Rica.....	27.1	30.7	33.9	52.5	52.3	73.4	133.7	135.6	177.6	215.3	196.4	240.2
Argentina.....	66.9	32.6	47.4	144.4	204.7	303.6	319.4	339.1	299.4	321.0	316.6	328.7
Peru.....	9.0	4.4	5.4	16.4	22.0	23.8	30.7	23.0	15.2	9.4	10.2	10.8
Austria.....	344.5	441.5	879.5	1,300.7	1,337.2	1,347.3	1,374.8	1,541.9	1,543.9	1,753.7	1,928.0	2,174.0
Belgium.....	1,006.4	897.2	2,059.0	3,755.2	4,138.3	5,077.7	5,721.4	6,389.8	6,490.0	8,799.1	9,658.1	10,553.7
Denmark.....	480.1	712.8	1,295.4	2,007.6	2,102.0	2,329.2	2,315.6	2,852.2	2,748.5	3,233.4	3,580.4	3,991.7
France.....	2,161.6	2,017.9	4,475.4	6,600.8	6,949.8	8,276.7	9,844.3	10,343.6	11,104.1	13,569.4	14,262.3	15,696.7
Finland.....	63.1	51.5	141.4	200.0	187.9	220.0	240.8	229.3	245.3	321.5	337.8	370.4
Germany.....	3,356.5	3,700.9	6,783.7	9,473.6	10,102.2	12,154.1	15,056.4	15,496.2	13,052.2	17,924.1	18,985.8	21,389.8
Greece.....	36.1	56.9	80.5	75.2	81.7	91.1	140.6	176.4	253.4	313.5	323.3	355.8
Ireland.....	251.1	305.7	1,170.3	2,148.8	2,797.7	3,526.8	5,012.9	5,097.6	4,707.8	7,602.6	7,921.6	7,978.8
Italy.....	1,069.3	1,341.9	1,787.2	3,688.3	4,116.0	4,618.6	5,163.4	5,764.1	6,332.6	7,120.2	7,482.5	8,006.1
Netherlands.....	1,298.3	1,324.1	1,646.6	3,818.2	3,365.7	3,947.2	3,616.2	3,939.1	4,096.8	4,632.9	4,912.2	5,489.7
Portugal.....	80.5	73.9	116.9	139.4	165.4	176.8	212.3	236.2	253.3	267.3	292.6	325.6
Spain.....	277.5	360.8	712.1	1,119.2	1,351.9	1,586.2	1,864.8	2,025.8	2,068.7	2,403.7	2,570.9	2,925.6
Sweden.....	456.9	634.7	1,531.1	2,491.3	2,824.7	3,206.7	3,829.2	4,229.4	3,948.1	4,295.6	4,691.2	5,465.3
United Kingdom.....	2,562.9	2,848.5	5,059.2	7,873.9	8,376.1	9,334.2	10,260.0	10,311.9	10,466.0	12,562.3	13,149.3	14,084.7
European Union-15.....	13,444.8	14,768.2	27,738.2	44,692.2	47,896.6	55,892.6	64,652.6	68,633.6	67,310.7	84,799.4	90,095.8	98,807.8
Czech Republic.....	125.9	155.7	99.0	192.7	219.3	216.9	210.7	187.7	175.9	223.5	237.9	262.8
Hungary.....	374.3	406.0	558.7	279.5	273.2	376.6	328.5	298.8	337.0	400.9	419.2	459.7
Poland.....	195.1	140.0	213.1	214.1	241.9	301.9	202.6	144.6	151.5	169.5	181.9	207.2
Slovakia.....	73.6	94.2	51.2	142.6	131.4	151.1	122.1	102.3	82.5	92.5	96.5	108.1
Expanded European												
Union countries.....	769.0	796.0	922.1	828.8	865.8	1,046.5	863.9	733.5	746.9	886.5	935.6	1,037.7
Japan.....	509.5	609.2	1,185.8	1,705.8	1,828.4	2,001.1	2,051.4	2,396.0	2,463.9	2,581.0	2,798.6	3,201.2
China.....	638.2	559.3	1,029.0	1,394.5	1,514.5	1,588.7	1,827.6	1,810.1	1,822.8	2,061.1	2,360.6	2,865.8
South Korea.....	28.0	50.7	122.3	231.6	265.3	295.1	331.0	325.6	341.0	354.2	385.8	429.6
Taiwan.....	38.1	37.5	80.4	92.0	94.9	102.7	78.3	81.8	76.2	69.7	71.0	75.2
Singapore.....	233.7	176.4	238.1	580.9	596.4	616.3	618.7	1,168.3	903.2	1,053.7	1,079.5	1,146.3
Hong Kong.....	223.2	247.7	610.3	920.6	962.1	940.0	859.2	770.3	623.2	632.2	683.8	791.6
India.....	150.8	128.6	450.7	726.4	855.4	969.6	1,005.6	1,137.2	1,267.6	1,027.5	1,169.5	1,327.6
Malaysia.....	21.1	23.4	52.7	76.3	81.6	72.9	75.1	75.0	73.0	73.2	75.8	84.8
Thailand.....	34.0	16.2	37.5	128.2	103.5	109.0	103.9	107.9	116.3	123.5	128.7	136.8
Philippines.....	11.4	8.7	9.4	18.5	36.5	30.7	28.6	21.8	19.8	28.7	28.6	29.9
Indonesia.....	23.6	25.3	36.2	39.4	47.3	41.8	58.1	90.2	74.5	88.2	91.4	92.8
South Africa.....	16.1	23.1	19.7	47.7	59.4	74.4	92.2	80.1	106.2	84.8	95.2	104.0

**World industry exports and imports, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Office and computing machinery</b>												
Total exports .....	19,290.4	43,308.8	86,112.9	192,714.8	231,238.2	293,341.5	333,033.5	400,259.0	493,571.4	488,495.8	511,506.0	607,620.3
United States.....	5,634.4	10,360.4	18,761.9	37,574.9	44,518.9	54,261.0	54,794.1	60,110.7	74,737.5	67,098.1	57,925.2	77,242.7
Canada.....	611.0	1,129.0	1,928.7	5,136.7	4,843.2	5,343.1	6,130.6	6,393.6	7,567.0	6,512.1	6,659.4	7,198.2
Mexico .....	282.8	933.0	577.8	2,609.3	3,867.1	6,135.0	8,392.7	11,991.7	15,086.4	18,356.2	19,404.9	21,181.0
Brazil.....	263.5	231.6	136.1	226.7	330.3	349.6	428.9	644.2	700.5	617.2	632.4	798.3
Chile.....	0.2	0.3	0.6	5.9	7.4	10.8	14.3	18.2	24.1	29.9	32.2	37.9
Costa Rica.....	0.0	0.0	0.0	0.2	0.8	1.2	302.5	419.3	467.1	622.0	618.4	808.8
Argentina .....	58.2	112.1	86.3	57.5	41.1	31.7	41.9	38.7	57.7	56.9	59.2	64.7
Peru .....	0.1	1.0	0.0	0.7	1.6	2.2	3.8	3.9	5.0	9.2	10.0	11.1
Austria .....	69.6	171.4	385.2	521.6	470.6	624.1	782.6	1,035.0	1,354.1	1,640.5	1,880.1	2,381.0
Belgium.....	229.3	403.8	831.2	1,614.4	2,236.9	2,776.1	3,395.4	4,400.6	5,822.6	6,464.5	7,328.1	8,856.3
Denmark .....	58.8	138.3	276.3	657.1	754.8	1,051.6	1,060.2	1,289.5	1,422.8	1,376.9	1,497.9	1,732.7
France.....	1,295.0	1,960.2	3,639.1	6,651.7	8,004.2	10,152.8	12,425.1	13,311.9	15,599.3	13,908.8	14,757.7	17,027.5
Finland.....	46.0	119.0	230.2	774.2	776.5	1,077.1	1,252.8	1,210.8	629.4	586.7	661.1	800.0
Germany .....	2,184.5	4,246.1	5,581.6	8,846.5	9,777.8	11,957.8	15,803.6	18,745.8	23,421.8	24,187.8	25,991.8	30,690.8
Greece .....	0.5	1.0	4.8	15.9	24.7	35.9	46.3	90.5	125.9	117.2	126.2	159.1
Ireland.....	415.3	1,645.2	2,473.0	6,473.3	7,262.9	10,239.9	13,245.9	15,538.7	20,440.8	21,578.9	22,732.5	26,111.6
Italy.....	1,329.8	1,938.4	2,780.6	4,270.8	3,991.9	3,785.1	4,161.7	4,520.5	4,603.7	4,445.2	4,715.2	5,392.7
Netherlands.....	645.9	1,834.7	3,720.0	9,385.7	12,335.9	17,969.8	23,779.8	29,658.1	32,470.0	34,632.1	35,588.3	39,464.6
Portugal.....	36.5	70.4	66.8	37.8	53.0	106.4	102.3	123.7	104.6	361.4	381.9	434.6
Spain.....	135.6	549.1	618.8	1,170.1	1,387.2	1,509.2	1,984.8	2,465.7	2,694.7	2,538.9	2,715.0	3,235.9
Sweden.....	529.4	851.2	891.8	683.7	789.1	870.8	909.8	932.8	965.8	1,288.2	1,345.1	1,550.8
United Kingdom.....	1,958.9	4,268.9	7,357.8	14,846.4	16,449.6	21,212.6	23,996.5	28,065.6	30,429.0	29,247.4	30,965.7	35,133.3
European Union-15.....	8,935.0	18,197.6	28,857.2	55,949.3	64,315.2	83,369.3	102,946.9	121,389.2	140,084.5	142,374.5	150,686.6	172,970.9
Czech Republic.....	70.4	120.7	47.2	167.3	191.4	205.2	400.5	369.2	675.1	1,488.6	1,624.0	2,000.1
Hungary .....	27.0	13.5	11.2	58.0	36.9	1,765.7	2,935.6	4,616.6	5,793.8	4,010.2	4,234.7	5,286.9
Poland.....	24.4	20.7	7.2	25.0	54.8	46.2	87.7	107.5	135.4	141.1	161.3	209.1
Slovakia .....	13.9	24.4	5.6	14.4	10.0	34.0	107.7	185.6	151.5	127.5	137.0	164.1
<b>Expanded European Union countries ....</b>												
Japan.....	2,099.5	7,915.1	16,568.5	26,365.9	28,031.4	35,232.8	37,081.4	39,674.0	43,562.7	40,238.4	41,580.7	46,991.7
China .....	13.5	15.2	285.8	3,243.7	5,527.9	8,745.2	13,673.4	18,240.7	27,464.8	38,619.1	45,784.1	60,307.8
South Korea.....	70.1	466.8	1,713.2	3,689.7	4,840.9	6,424.6	6,808.6	15,224.2	29,650.9	23,633.6	27,306.9	33,081.3
Taiwan.....	172.0	972.2	5,583.1	16,427.8	20,513.5	24,673.1	27,943.9	36,021.4	45,134.4	38,502.9	42,293.1	50,405.8
Singapore.....	149.0	1,040.2	6,487.0	23,644.6	29,336.0	34,535.9	36,991.9	40,883.0	43,493.1	42,529.5	43,793.0	48,562.3
Hong Kong.....	420.7	953.0	2,247.7	7,113.3	8,558.4	11,047.8	13,089.6	15,111.9	20,511.4	24,260.8	26,581.1	31,180.2
India.....	2.9	13.5	31.2	185.3	272.8	265.8	99.4	180.6	402.4	793.0	945.4	1,190.8
Malaysia.....	2.9	26.0	526.1	4,023.4	6,378.2	8,940.9	8,110.9	12,273.9	18,152.0	17,291.4	17,365.9	19,636.0
Thailand.....	3.9	51.8	852.8	2,979.9	3,878.4	4,361.8	3,966.2	5,369.4	7,556.9	7,800.1	9,407.6	11,701.5
Philippines.....	1.3	0.3	47.1	360.7	1,725.2	2,927.1	3,700.7	4,388.2	5,534.9	6,698.3	6,861.6	8,053.5
Indonesia .....	1.5	8.4	5.1	193.6	290.7	405.8	251.9	409.7	822.3	911.9	1,073.6	1,234.6
South Africa.....	6.4	18.4	17.4	60.1	101.1	148.2	160.5	264.8	203.6	228.2	255.2	288.6

**World industry exports and imports, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
Communication equipment												
Total exports .....	43,368.9	78,636.2	153,786.2	334,307.1	373,364.3	439,758.0	470,454.2	551,370.4	733,139.9	654,935.0	689,237.5	806,099.6
United States .....	7,660.5	11,436.2	25,412.3	58,371.8	62,596.9	73,669.6	76,199.3	92,531.9	118,959.5	100,221.6	94,336.7	122,882.1
Canada .....	706.9	1,873.2	2,567.7	5,306.2	7,184.8	8,836.4	8,918.1	10,572.0	17,384.8	9,890.8	10,085.6	10,806.6
Mexico .....	142.6	3,077.2	142.0	9,518.6	10,632.9	12,760.1	15,148.4	17,836.1	24,179.1	23,413.7	23,998.1	25,389.0
Brazil .....	182.1	342.9	526.6	461.4	573.3	690.8	745.8	980.6	2,250.6	2,477.9	2,533.2	2,946.5
Chile .....	1.6	0.1	0.6	4.5	3.8	5.2	6.8	14.8	16.5	20.9	22.0	24.9
Costa Rica .....	3.1	0.1	0.1	1.6	3.8	159.7	965.9	147.1	100.0	126.2	135.3	150.0
Argentina .....	7.3	5.9	5.2	87.4	62.5	88.9	67.9	61.6	68.0	71.8	72.7	76.8
Peru .....	0.1	0.8	1.0	0.6	1.4	1.3	2.2	6.9	22.0	5.5	6.1	7.0
Austria .....	431.6	718.4	1,969.8	1,183.2	2,482.4	1,713.7	2,166.8	2,212.5	2,946.1	3,175.5	3,454.4	3,969.5
Belgium .....	1,136.6	837.7	2,074.5	3,576.9	4,346.4	4,958.7	5,915.8	6,293.0	8,018.6	9,127.2	9,706.7	11,150.3
Denmark .....	258.3	364.5	742.2	1,348.7	1,465.1	2,034.9	2,338.8	2,579.0	2,879.1	2,907.8	3,094.0	3,459.1
France .....	1,440.9	2,280.3	5,625.9	10,744.6	12,382.8	16,096.3	20,363.3	21,623.5	30,022.3	24,771.1	25,908.0	29,027.8
Finland .....	208.1	315.3	856.8	3,284.7	4,071.8	5,195.0	7,421.2	8,912.0	12,816.7	11,197.4	12,075.9	14,473.6
Germany .....	3,917.4	5,661.5	10,156.6	17,322.9	19,779.6	23,368.6	25,509.1	29,636.1	38,074.9	39,377.3	41,817.4	47,823.0
Greece .....	15.6	15.8	23.7	70.9	82.7	122.7	177.5	209.9	433.5	326.3	338.7	390.1
Ireland .....	133.7	300.7	472.3	2,055.1	2,602.3	3,712.5	4,659.6	7,418.2	8,980.1	10,598.1	11,369.0	12,386.1
Italy .....	900.1	1,613.2	2,858.9	4,833.3	5,348.1	5,960.4	6,641.8	7,064.9	9,043.1	9,210.3	9,627.3	10,837.7
Netherlands .....	2,540.2	2,518.9	3,084.5	5,340.8	7,026.5	13,684.5	9,809.8	11,987.7	16,985.9	9,626.5	10,016.6	11,234.4
Portugal .....	127.7	230.5	451.2	1,056.1	1,030.6	1,010.4	1,171.1	1,538.3	1,624.9	1,678.9	1,777.8	1,988.4
Spain .....	123.9	146.5	630.3	2,147.8	2,444.5	2,986.2	3,448.6	3,929.8	4,197.2	4,401.2	4,668.3	5,402.8
Sweden .....	953.9	1,566.0	2,413.3	6,787.0	8,964.3	11,125.9	12,563.2	13,790.2	15,705.5	9,666.9	10,159.0	11,673.2
United Kingdom .....	1,673.1	3,030.5	6,992.9	18,046.6	21,057.4	21,400.4	24,164.4	25,491.1	33,021.6	34,948.2	36,474.8	40,572.3
European Union-15 .....	13,861.2	19,600.0	38,352.9	77,798.6	93,084.6	113,370.3	126,351.0	142,686.1	184,749.6	171,012.8	180,488.0	204,388.3
Czech Republic .....	138.1	212.8	103.4	264.7	277.1	309.1	568.5	430.8	876.6	1,720.7	1,795.2	2,014.4
Hungary .....	73.9	127.7	136.5	450.3	351.3	1,351.6	1,957.5	2,393.1	3,858.0	5,110.9	5,271.4	5,927.8
Poland .....	49.5	53.8	66.5	311.9	452.1	783.8	1,122.2	1,186.1	1,414.1	1,818.9	1,917.8	2,204.8
Slovakia .....	66.2	97.4	42.2	88.1	83.0	186.6	239.4	200.9	262.6	377.8	403.4	471.7
Expanded European Union countries .....	327.7	491.6	348.6	1,115.0	1,163.6	2,631.2	3,887.7	4,210.8	6,411.3	9,028.2	9,387.8	10,618.8
Japan .....	12,282.7	27,666.3	39,771.6	55,707.2	53,980.0	59,469.9	58,781.8	66,733.4	83,968.4	67,109.4	71,140.7	80,524.7
China .....	83.2	132.2	2,918.2	8,281.4	10,366.2	12,754.8	15,119.4	20,323.2	31,603.9	38,187.2	44,898.8	57,474.8
South Korea .....	1,139.2	2,711.2	8,700.0	21,253.9	23,202.2	28,002.9	31,649.8	40,328.6	49,894.9	42,987.6	48,126.7	56,817.3
Taiwan .....	1,862.3	2,328.2	5,772.0	13,034.1	14,634.0	18,201.4	18,800.2	24,237.2	37,683.4	33,334.1	36,544.2	42,626.1
Singapore .....	1,831.9	2,532.8	8,751.6	26,147.7	28,435.5	30,787.8	30,097.5	34,944.5	50,002.8	42,512.1	45,522.8	52,616.0
Hong Kong .....	1,340.7	2,656.7	8,282.6	21,541.8	22,262.1	25,337.0	25,173.1	27,439.0	38,067.8	37,294.2	39,440.5	46,049.5
India .....	11.2	9.1	31.5	207.0	255.3	193.3	180.4	251.1	341.8	447.7	503.3	607.2
Malaysia .....	749.7	2,048.1	7,023.1	21,474.3	24,281.6	25,765.2	26,417.7	31,245.6	37,137.4	34,051.0	36,024.3	40,030.3
Thailand .....	9.0	6.2	1,823.9	5,326.8	5,827.4	6,918.0	7,149.4	8,438.3	12,436.6	10,706.4	11,480.4	13,025.4
Philippines .....	46.2	193.3	505.1	1,958.2	6,511.2	10,337.5	14,262.4	16,586.7	18,787.6	17,137.1	17,974.7	20,198.7
Indonesia .....	58.0	72.0	113.3	1,632.7	2,195.1	2,048.5	1,837.6	2,429.9	5,070.4	3,145.8	3,952.7	4,744.2
South Africa .....	3.7	103.5	12.4	109.7	135.5	173.1	253.9	267.6	332.7	419.8	473.2	529.1



**World industry exports and imports, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
Medical, precision, and optical instruments												
Total exports .....	55,892.3	77,835.3	104,490.0	137,690.3	146,366.8	162,668.4	166,544.9	177,466.8	200,195.1	200,274.9	204,819.7	225,166.5
United States.....	14,918.8	14,058.5	20,326.7	27,752.2	30,620.1	34,108.5	34,794.8	36,316.2	42,957.8	41,161.0	38,324.6	43,082.0
Canada.....	687.9	1,154.7	1,071.1	1,747.0	2,045.9	2,316.6	2,584.3	2,982.7	4,365.5	3,432.2	3,442.7	3,546.0
Mexico .....	226.1	1,135.0	361.2	1,627.7	2,013.0	2,613.9	3,158.4	3,477.0	4,219.4	5,042.1	5,060.8	5,274.1
Brazil.....	159.1	215.6	170.5	209.1	188.2	226.5	285.8	353.4	394.5	419.8	426.7	477.3
Chile.....	0.9	0.8	2.4	5.9	7.5	7.9	8.7	8.5	12.1	13.8	14.5	15.8
Costa Rica.....	0.6	0.2	6.8	3.4	3.3	53.3	128.5	134.7	182.8	264.9	262.6	307.1
Argentina .....	38.3	17.7	29.1	78.4	46.0	67.7	71.4	75.1	105.2	129.1	134.7	145.5
Peru .....	0.4	1.8	0.3	1.0	8.4	3.8	13.6	3.9	2.1	3.5	3.7	3.7
Austria .....	532.0	738.0	1,047.4	1,236.6	1,132.7	1,196.5	1,242.6	1,204.1	1,333.1	1,503.9	1,582.6	1,707.3
Belgium.....	637.6	737.7	1,232.8	2,143.7	2,487.0	2,447.5	2,709.3	3,207.1	3,203.4	3,348.5	3,581.5	3,908.6
Denmark.....	629.4	1,002.7	1,179.4	1,263.4	1,294.3	1,467.4	1,520.0	1,627.5	2,059.3	1,997.2	2,112.5	2,301.4
France.....	2,886.9	3,892.4	5,699.0	6,302.1	6,269.2	6,879.5	7,044.8	7,091.3	8,385.6	8,892.9	9,087.7	9,688.8
Finland.....	176.3	343.5	438.1	604.5	632.4	808.4	929.9	1,022.4	1,054.6	1,262.3	1,324.2	1,430.8
Germany .....	7,433.0	11,450.7	14,348.5	16,137.6	17,091.7	18,262.7	20,603.3	21,695.3	22,421.3	24,475.0	25,555.1	27,689.4
Greece .....	9.6	11.3	20.5	56.5	71.9	76.0	66.8	69.6	75.6	78.2	80.5	88.8
Ireland.....	341.1	833.5	1,019.6	1,237.0	1,603.0	1,742.0	2,012.2	2,133.0	2,286.9	2,487.0	2,608.8	2,687.5
Italy.....	1,453.5	2,225.3	3,243.6	4,334.6	4,773.6	4,918.3	5,054.2	5,120.0	5,569.5	5,868.5	6,061.1	6,496.5
Netherlands.....	1,868.5	2,506.8	3,506.4	4,851.9	5,165.8	6,671.5	6,386.2	7,299.0	7,992.4	7,838.0	8,208.0	8,991.4
Portugal.....	74.5	60.6	103.1	270.9	234.5	259.6	267.9	217.3	213.3	249.8	254.1	268.2
Spain.....	164.5	280.0	508.0	843.0	1,047.5	1,083.8	1,239.5	1,347.9	1,415.2	1,557.8	1,638.2	1,865.9
Sweden.....	783.6	1,366.1	1,654.1	1,912.9	1,967.6	2,158.8	2,388.0	2,384.8	2,542.8	2,724.6	2,826.0	3,144.3
United Kingdom.....	4,171.3	6,486.0	7,946.0	8,897.6	9,694.8	11,553.7	11,731.5	11,637.3	12,108.9	12,668.8	12,903.8	13,790.7
European Union-15.....	21,161.8	31,934.6	41,946.5	50,092.4	53,465.9	59,525.8	63,196.3	66,056.4	70,661.8	74,952.6	77,824.3	84,059.6
Czech Republic.....	164.3	202.5	126.6	277.7	259.0	270.5	417.7	338.9	378.2	473.2	498.7	558.6
Hungary .....	132.9	206.7	125.8	154.1	172.2	193.5	197.7	242.1	385.5	521.4	542.2	590.5
Poland.....	99.8	85.1	96.0	113.2	120.6	142.4	156.3	149.1	182.7	193.7	205.5	234.1
Slovakia .....	55.4	88.3	52.8	111.6	94.8	105.3	82.3	67.3	78.7	96.4	100.1	112.1
Expanded European Union countries .....	452.3	582.6	401.2	656.6	646.6	711.7	853.9	797.4	1,025.0	1,284.7	1,346.6	1,495.4
Japan.....	10,000.7	17,707.6	20,492.7	24,347.1	24,370.7	26,579.1	24,366.2	27,008.9	31,373.1	27,196.9	28,494.4	31,883.9
China .....	260.3	170.6	1,751.8	3,854.0	4,726.5	5,904.2	6,449.8	7,177.4	9,106.2	9,141.4	10,419.0	12,641.2
South Korea.....	428.4	565.7	931.3	1,552.1	1,662.3	2,305.6	3,159.8	4,488.8	2,469.5	2,554.7	2,804.8	3,238.9
Taiwan.....	540.0	766.0	1,945.7	2,905.6	2,819.5	2,846.2	2,590.6	2,814.5	3,435.9	3,418.0	3,675.5	4,110.6
Singapore.....	416.0	608.4	1,353.1	3,102.4	3,280.1	3,714.1	3,427.5	3,734.4	4,275.7	4,351.2	4,464.0	4,735.8
Hong Kong.....	2,601.5	3,376.9	5,940.1	9,237.1	9,052.9	9,716.5	9,218.1	9,207.3	10,982.2	10,832.0	11,315.7	12,304.5
India.....	37.8	25.0	48.9	106.3	134.1	142.7	153.8	203.6	302.1	354.4	415.1	502.6
Malaysia.....	82.6	163.5	494.9	1,142.9	1,261.3	1,444.7	1,321.4	1,343.5	1,924.5	2,285.4	2,390.5	2,536.4
Thailand.....	36.1	94.9	327.2	1,100.4	1,210.2	1,175.8	1,034.4	1,084.2	1,370.1	1,417.1	1,469.6	1,583.7
Philippines.....	38.8	9.6	14.6	53.1	355.5	380.9	440.1	367.9	530.7	652.8	668.6	707.2
Indonesia .....	5.7	50.0	71.1	212.7	260.2	274.5	119.8	247.9	264.8	257.7	296.5	314.1
South Africa.....	20.3	38.0	28.5	94.0	119.0	159.7	144.9	148.2	152.9	161.3	173.8	183.6

**World industry exports and imports, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
Other manufacturing industries												
Total exports .....	1,785,557.8	1,747,489.5	2,631,442.2	3,532,725.5	3,641,310.5	3,845,104.4	3,968,043.7	4,068,179.7	4,240,700.9	4,267,888.4	4,405,436.2	4,701,345.1
United States .....	232,705.1	183,299.9	295,876.2	404,512.2	429,904.1	469,711.0	465,597.2	468,531.9	516,601.5	494,118.9	477,916.2	500,184.7
Canada .....	64,914.2	81,567.4	105,007.4	148,468.8	154,149.6	162,988.2	170,974.0	192,815.1	197,896.1	189,046.1	192,573.2	194,276.7
Mexico .....	26,115.4	28,133.6	22,510.8	62,439.4	70,376.2	79,273.7	83,594.9	93,176.3	105,361.6	100,194.1	103,632.1	108,612.8
Brazil .....	24,504.7	30,432.2	30,208.9	43,062.0	43,395.1	45,511.0	44,984.2	43,432.1	43,705.0	46,437.7	46,532.1	50,044.3
Chile .....	3,490.8	3,200.2	6,544.3	10,781.5	11,503.7	12,461.1	11,480.1	12,290.1	13,006.2	14,206.6	14,147.3	14,862.8
Costa Rica .....	452.9	833.2	1,054.3	1,858.7	1,917.9	2,728.2	4,244.6	7,685.2	6,050.5	4,394.7	4,631.3	5,061.5
Argentina .....	6,288.1	5,919.4	9,975.6	15,638.5	16,837.0	19,340.3	19,443.9	18,574.5	18,960.6	19,285.1	19,401.5	19,993.3
Peru .....	2,424.3	2,351.0	2,504.2	4,511.7	4,744.2	5,587.8	5,248.1	5,519.5	5,771.8	6,042.2	6,344.9	6,615.1
Austria .....	22,425.0	23,161.3	38,854.0	49,662.7	49,352.6	49,259.9	54,560.1	53,883.0	52,344.1	54,615.9	57,580.0	62,615.7
Belgium .....	78,737.1	63,833.9	118,100.8	138,481.9	139,513.0	146,841.0	164,008.1	169,267.9	168,411.0	171,413.4	181,782.1	192,639.4
Denmark .....	21,053.1	20,939.6	29,528.6	36,452.0	35,692.4	37,812.7	38,172.8	38,726.4	36,258.2	38,327.4	39,797.2	41,908.3
France .....	126,782.2	101,046.8	180,396.7	218,380.0	215,961.8	221,791.9	238,805.0	240,585.6	249,579.2	243,094.4	246,388.5	259,806.5
Finland .....	16,802.0	15,840.2	23,415.4	30,342.1	30,287.0	31,267.9	34,013.5	33,003.5	33,231.8	34,983.5	35,837.8	37,915.5
Germany .....	244,841.3	239,785.9	363,833.0	405,956.4	418,065.2	423,186.3	472,069.4	479,222.6	443,424.8	492,506.8	509,375.8	549,120.6
Greece .....	5,325.1	5,071.4	6,986.2	9,107.4	9,600.3	9,122.1	9,124.6	9,264.9	8,862.5	8,467.9	8,647.6	9,317.6
Ireland .....	9,308.0	9,959.5	17,519.9	29,337.7	29,218.2	33,977.1	43,296.3	47,984.0	49,657.3	53,633.5	57,773.6	59,239.4
Italy .....	104,242.6	106,838.2	159,672.8	211,230.6	220,385.2	216,610.4	223,998.2	218,725.4	220,861.2	223,616.8	225,378.0	236,656.1
Netherlands .....	70,338.7	68,723.6	100,840.1	120,945.1	118,320.3	131,613.9	119,922.8	121,722.4	117,067.8	119,064.3	123,690.5	134,450.8
Portugal .....	6,035.9	7,441.6	15,716.2	21,543.0	21,405.3	21,975.7	22,947.4	22,815.7	21,802.3	21,525.4	22,431.1	24,240.9
Spain .....	25,302.2	29,423.2	47,598.4	75,906.7	84,527.6	91,751.1	96,531.0	100,231.8	101,602.6	103,479.7	108,794.7	121,368.6
Sweden .....	39,642.6	38,252.2	49,992.4	59,183.2	61,890.5	61,925.1	67,081.4	61,181.6	60,566.9	64,521.5	66,271.8	71,621.7
United Kingdom .....	126,373.4	94,475.7	149,358.9	174,348.5	185,689.2	200,264.3	199,007.5	191,613.9	185,433.1	198,729.2	200,727.3	209,319.3
European Union-15 .....	897,209.0	824,793.1	1,301,813.5	1,580,877.1	1,619,908.7	1,677,399.4	1,783,538.2	1,788,228.5	1,749,102.8	1,827,979.7	1,884,476.0	2,010,220.2
Czech Republic .....	13,013.9	14,186.4	10,804.2	19,782.3	19,651.0	20,595.2	25,927.2	24,914.9	26,195.5	29,033.0	30,473.6	33,774.1
Hungary .....	6,039.0	5,628.2	6,693.8	10,401.1	10,921.7	13,900.1	17,169.0	19,023.5	20,081.9	22,603.1	23,373.9	25,656.6
Poland .....	10,365.5	7,022.8	9,803.7	19,770.2	21,108.2	22,461.6	25,386.1	25,682.0	29,967.0	33,853.2	36,446.2	42,104.7
Slovakia .....	4,926.3	5,217.3	4,111.8	7,937.1	8,140.9	8,814.0	10,176.8	9,535.0	10,453.6	11,012.9	11,532.9	12,935.9
Expanded European Union countries .....												
Japan .....	190,809.1	207,954.8	246,159.2	300,291.0	291,649.1	305,768.3	298,597.4	318,673.1	347,610.8	313,888.2	328,255.3	353,603.2
China .....	23,664.4	20,158.0	57,721.3	113,512.8	121,878.1	146,965.5	153,158.0	167,559.1	207,682.5	224,306.4	247,257.0	287,247.2
South Korea .....	21,727.2	33,453.1	50,434.1	85,291.0	94,784.4	100,088.4	110,286.6	108,150.2	117,439.7	118,525.4	126,399.5	136,444.1
Taiwan .....	22,722.9	33,442.1	59,369.4	84,776.8	84,270.7	83,082.7	76,801.5	81,558.4	90,395.2	84,978.7	90,789.0	95,858.4
Singapore .....	14,342.0	16,210.6	29,960.1	50,179.0	51,682.5	50,880.3	48,827.8	49,649.8	51,244.5	53,157.7	55,888.8	61,291.7
Hong Kong .....	22,153.3	31,477.7	68,265.3	126,162.6	131,047.4	138,107.5	124,766.4	119,083.0	130,969.1	123,768.9	127,939.4	135,264.9
India .....	8,137.2	8,368.7	13,743.6	27,450.1	29,602.9	30,505.6	30,572.3	35,837.7	42,743.7	41,738.7	45,312.0	48,943.1
Malaysia .....	5,778.1	6,720.3	13,208.1	30,800.9	33,541.6	34,269.4	38,279.5	45,114.9	47,014.1	44,282.3	48,148.6	53,590.1
Thailand .....	5,338.3	7,291.7	18,663.6	39,891.9	37,515.4	40,483.7	42,397.4	47,184.6	53,230.4	54,114.3	55,723.8	60,190.8
Philippines .....	4,379.2	4,694.9	7,154.0	13,293.2	9,984.7	11,083.3	15,646.6	18,707.4	22,573.7	20,746.2	22,570.1	23,103.8
Indonesia .....	5,032.9	7,562.2	16,944.1	28,066.1	30,902.8	35,375.8	39,108.1	39,685.3	43,091.0	42,567.4	42,950.6	42,561.9
South Africa .....	8,284.0	10,828.8	11,283.0	15,609.1	13,174.1	14,869.2	15,332.1	20,144.5	24,935.0	25,413.0	27,463.6	28,574.6

**World industry exports and imports, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Imports</b>												
<b>All manufacturing industries</b>												
Total imports .....	1,833,585.5	1,921,488.1	3,016,676.0	4,238,117.5	4,439,281.5	4,803,448.6	5,032,184.4	5,317,696.3	5,776,497.7	5,733,385.9	5,937,321.6	6,485,990.8
United States.....	255,210.6	420,643.4	474,203.6	676,936.6	712,863.5	799,855.2	896,024.2	1,000,453.5	1,124,027.7	1,077,822.3	1,101,352.7	1,142,499.9
Canada .....	72,742.1	89,376.9	121,529.1	156,652.8	162,014.0	186,592.1	195,191.5	209,435.6	224,102.2	212,265.5	221,227.8	235,065.7
Mexico .....	27,472.1	19,066.6	39,382.2	67,255.1	82,478.6	103,169.4	120,683.4	139,351.8	178,465.4	175,322.7	177,557.6	180,130.1
Brazil .....	18,558.8	8,884.3	17,510.2	46,917.4	47,586.3	57,984.0	57,931.2	48,582.1	52,703.4	55,279.0	50,855.9	50,084.0
Chile .....	6,314.4	3,096.6	7,227.9	14,193.1	15,782.8	17,342.4	16,979.7	13,151.4	15,104.4	14,492.6	13,884.5	14,530.6
Costa Rica.....	1,703.9	1,445.6	2,331.7	3,342.5	3,638.6	4,352.9	6,193.3	5,242.3	5,791.2	6,279.5	6,279.1	6,757.0
Argentina .....	14,092.0	4,222.6	4,519.1	19,687.0	23,331.8	29,192.9	31,407.3	25,199.3	24,125.9	20,177.1	10,058.3	14,571.2
Peru .....	3,797.1	2,164.3	2,588.5	6,753.1	6,728.0	7,460.9	7,587.7	6,253.1	6,453.8	6,493.1	6,933.2	7,017.5
Austria .....	28,008.9	25,058.6	47,026.0	59,081.7	60,327.5	61,045.2	67,992.3	69,582.2	65,582.0	69,793.3	72,879.2	82,716.4
Belgium .....	78,898.6	61,697.6	111,501.9	134,672.4	137,656.5	145,968.3	160,105.7	166,150.4	165,576.3	176,959.1	187,686.2	207,834.1
Denmark.....	20,598.3	21,269.6	30,653.1	38,597.4	38,817.7	43,436.0	46,188.5	46,558.1	44,661.1	46,315.7	48,842.1	53,768.3
France.....	131,659.3	116,118.1	220,588.2	249,384.9	252,135.6	258,450.2	292,721.3	306,980.7	313,388.0	313,294.8	320,637.0	352,490.0
Finland.....	14,998.4	13,846.4	23,977.8	25,247.5	27,488.0	29,121.0	31,590.0	32,080.4	33,405.2	33,666.1	34,744.4	39,611.8
Germany .....	184,224.9	162,850.8	309,739.0	404,091.7	398,033.3	401,751.9	443,186.5	451,275.6	449,850.1	465,655.5	463,736.3	512,859.3
Greece .....	12,705.6	11,083.9	19,137.7	24,014.9	25,388.0	26,447.2	29,277.8	30,871.4	29,573.0	28,764.0	29,699.4	34,439.6
Ireland.....	13,189.6	11,406.0	19,695.3	28,770.5	31,656.7	39,410.7	45,280.6	49,556.8	55,431.9	58,050.2	62,481.7	67,684.4
Italy.....	89,659.7	80,894.8	150,673.9	163,983.6	163,712.3	173,935.8	192,018.9	199,367.1	204,250.9	207,819.7	215,895.5	235,905.8
Netherlands.....	77,699.1	69,838.9	117,307.9	145,355.5	149,968.0	163,622.6	173,705.9	185,885.6	182,043.0	185,878.5	190,730.4	204,413.9
Portugal .....	8,497.6	6,689.1	22,067.6	29,567.4	31,170.5	33,903.1	37,846.1	41,358.5	39,529.6	40,610.3	40,933.2	43,192.2
Spain .....	24,024.9	23,954.3	77,143.5	97,821.4	105,202.9	110,835.6	130,502.7	146,371.3	146,302.4	150,531.3	159,782.0	185,965.8
Sweden.....	35,151.6	31,648.3	51,141.1	55,613.2	58,256.9	61,872.1	67,212.2	66,353.2	67,077.3	63,567.3	65,518.1	72,960.4
United Kingdom.....	128,699.6	125,670.9	204,218.7	241,527.3	258,188.0	288,532.3	316,470.9	328,031.7	341,063.2	346,409.6	359,474.7	385,979.5
European Union-15 .....	848,016.1	762,027.2	1,404,871.7	1,697,729.4	1,738,001.7	1,838,332.0	2,034,099.3	2,120,423.1	2,137,733.8	2,187,315.5	2,253,040.3	2,479,821.4
Czech Republic .....	10,691.4	10,900.3	11,910.3	21,629.1	23,951.2	24,786.1	28,948.9	28,353.4	31,248.9	36,289.3	39,380.8	44,927.4
Hungary .....	8,907.0	7,375.7	7,815.8	15,273.4	15,689.4	20,503.1	27,383.4	29,465.3	32,054.1	35,607.4	40,038.7	46,353.5
Poland.....	11,565.3	7,720.4	7,605.0	26,368.0	32,629.8	38,871.5	45,932.9	44,900.8	45,406.5	47,593.7	48,542.3	53,212.5
Slovakia .....	4,502.3	4,773.5	4,321.4	8,259.8	8,825.6	9,977.0	11,906.2	10,243.3	10,929.8	13,200.6	14,314.6	16,425.4
<b>Expanded European</b>												
Union countries .....	35,665.9	30,769.9	31,652.5	71,530.3	81,096.0	94,137.8	114,171.3	112,962.8	119,639.4	132,691.0	142,276.4	160,918.7
Japan.....	63,217.0	73,081.4	158,234.1	228,997.3	239,837.8	237,498.0	215,167.7	241,499.6	282,597.0	271,377.5	260,805.5	290,083.3
China .....	24,227.1	55,174.7	57,603.4	148,533.7	159,513.0	171,412.6	173,638.1	192,312.4	238,103.5	261,879.2	309,666.8	400,714.1
South Korea .....	16,451.2	24,943.2	55,048.2	98,879.8	106,438.5	102,872.8	67,911.8	94,386.1	123,067.2	111,322.8	123,974.3	134,024.8
Taiwan .....	17,338.0	18,655.8	46,774.3	81,500.3	80,926.2	93,978.6	94,667.9	114,860.7	136,049.9	108,082.6	111,014.5	115,379.8
Singapore.....	23,241.5	23,922.2	52,104.4	104,077.3	111,074.3	117,529.3	100,281.7	110,903.5	131,920.4	116,918.1	118,508.9	124,311.5
Hong Kong .....	30,143.9	35,623.4	85,340.4	148,568.0	153,994.9	173,312.3	161,673.2	161,897.5	193,460.7	193,642.4	205,190.0	223,455.0
India.....	13,784.9	16,916.2	17,305.9	25,844.0	25,563.9	28,150.0	30,265.8	33,819.1	31,655.6	36,043.0	39,085.5	45,633.8
Malaysia .....	14,729.8	14,985.9	28,626.1	71,941.9	73,884.6	79,342.1	63,367.5	73,195.9	91,617.4	83,962.1	92,140.8	103,483.3
Thailand.....	9,896.8	9,638.8	31,647.7	62,036.8	60,907.5	55,286.8	40,052.8	46,546.9	56,257.0	56,680.6	62,099.9	70,213.6
Philippines .....	8,823.2	4,248.3	10,138.1	20,601.5	28,883.9	34,970.0	31,072.5	33,603.1	34,926.5	32,877.2	32,708.6	35,563.3
Indonesia .....	14,504.4	11,537.8	20,432.8	30,412.6	32,200.5	34,028.7	19,938.6	17,932.4	24,794.0	24,000.0	25,213.5	26,318.7
South Africa .....	19,548.7	10,871.6	13,556.9	23,279.7	23,260.7	23,245.0	24,008.5	22,531.8	24,806.5	24,863.6	25,068.7	30,031.1

**World industry exports and imports, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>High-technology industries</b>												
Total imports .....	181,029.1	260,140.5	466,825.2	806,756.8	908,783.8	1,083,825.6	1,206,348.3	1,387,862.8	1,680,966.0	1,633,302.8	1,726,994.6	2,007,885.7
United States.....	23,406.9	60,747.8	81,842.6	152,102.4	166,313.1	201,578.3	234,769.7	273,725.4	332,198.2	302,620.1	308,477.7	338,014.5
Canada.....	8,387.4	10,763.2	17,688.9	28,157.6	30,750.2	36,855.7	39,091.6	45,209.8	53,115.9	48,034.3	51,053.3	58,385.2
Mexico.....	2,776.6	2,693.4	6,404.3	12,080.0	15,118.8	19,741.1	24,927.0	31,012.1	42,548.1	43,343.1	46,163.9	50,758.5
Brazil.....	2,544.0	1,753.6	4,226.3	8,762.9	10,666.7	13,352.1	13,495.2	13,283.5	15,898.6	15,428.1	14,333.6	14,747.6
Chile.....	563.5	295.6	1,016.7	1,973.1	2,185.1	2,565.2	3,011.8	2,554.9	3,034.4	2,634.1	2,569.2	2,802.4
Costa Rica.....	264.9	111.7	198.3	390.4	375.0	561.4	1,578.6	1,407.4	1,759.3	2,356.3	2,148.0	2,487.9
Argentina.....	2,077.2	710.2	797.2	3,216.9	3,731.2	4,935.8	5,565.6	5,507.5	6,089.7	4,230.7	1,951.2	2,993.8
Peru.....	289.0	234.6	276.1	1,000.2	1,063.1	1,241.0	1,244.6	1,047.1	1,156.7	1,191.6	1,309.3	1,405.2
Austria.....	2,269.8	2,777.9	5,637.5	7,919.8	8,405.4	10,135.9	11,760.0	12,999.5	13,302.2	13,453.8	14,010.1	16,585.7
Belgium.....	5,312.6	4,521.2	8,762.9	12,626.7	14,690.3	17,262.4	20,876.6	25,100.4	27,784.0	31,806.6	33,555.3	39,097.6
Denmark.....	1,725.3	2,329.8	4,078.9	5,969.4	6,423.9	7,997.8	8,515.8	9,133.4	9,486.4	9,937.6	10,747.1	12,589.2
France.....	12,727.5	16,193.1	33,406.7	41,986.8	46,067.4	54,199.0	65,070.5	70,853.6	78,946.2	76,779.2	78,967.5	89,983.6
Finland.....	1,343.8	1,871.7	3,197.5	5,132.2	6,299.5	6,788.1	7,887.7	8,991.6	10,753.6	10,030.6	10,421.3	12,403.4
Germany.....	16,841.4	21,885.7	46,299.5	64,408.2	68,296.1	77,435.6	89,721.1	101,962.1	115,905.0	121,939.6	120,613.7	138,887.8
Greece.....	735.3	860.6	1,596.1	2,740.0	3,102.4	3,856.6	4,837.1	5,809.8	5,314.3	5,250.3	5,373.7	6,930.3
Ireland.....	1,102.9	2,134.9	3,897.1	9,381.7	10,341.0	14,754.6	19,539.0	23,325.3	28,430.4	32,539.8	35,963.9	39,820.1
Italy.....	7,770.1	10,244.0	21,024.5	23,145.9	25,464.1	28,558.2	33,910.1	37,483.5	42,182.3	41,954.8	43,984.1	50,182.9
Netherlands.....	6,857.7	8,577.7	18,015.9	28,716.8	32,714.6	44,477.4	49,592.8	59,444.4	63,611.0	66,822.5	69,195.3	78,021.5
Portugal.....	776.1	768.1	2,299.2	3,615.1	3,780.8	4,781.0	5,597.1	6,899.8	7,099.7	7,639.6	7,698.2	8,261.2
Spain.....	3,274.1	3,687.7	12,435.0	13,152.0	16,350.7	17,253.1	20,699.1	25,791.5	28,287.4	27,988.5	29,566.9	35,501.5
Sweden.....	3,144.3	4,271.2	7,547.6	10,397.8	11,788.9	13,196.2	15,811.2	15,596.8	17,717.3	15,149.0	15,795.8	18,556.1
United Kingdom.....	16,692.2	19,844.1	34,196.4	47,822.3	56,076.8	68,231.8	77,247.9	86,630.4	104,680.7	100,246.9	105,304.1	117,363.0
European Union-15.....	80,573.0	99,967.7	202,394.7	277,014.7	309,801.9	368,927.6	431,066.0	490,022.2	553,500.7	561,538.9	581,197.0	664,183.7
Czech Republic.....	808.3	1,119.1	1,361.4	2,766.3	3,411.4	3,563.8	4,330.8	4,614.6	6,110.3	7,390.2	8,370.8	10,287.6
Hungary.....	438.7	485.6	881.7	1,766.8	2,278.6	3,778.0	5,297.1	6,469.6	9,273.6	9,610.7	11,795.0	15,100.3
Poland.....	592.2	585.7	973.2	3,100.0	4,131.7	5,545.8	6,741.6	7,313.3	9,029.9	8,966.8	9,423.1	10,869.2
Slovakia.....	320.6	434.0	423.4	916.1	994.2	1,397.2	1,607.6	1,464.5	1,634.1	2,016.6	2,252.1	2,720.6
<b>Expanded European</b>												
Union countries.....	2,159.7	2,624.4	3,639.7	8,549.2	10,815.9	14,284.9	17,977.1	19,862.0	26,047.9	27,984.3	31,841.0	38,977.7
Japan.....	8,072.0	10,340.6	23,321.3	49,130.8	56,995.7	62,290.8	61,440.6	76,317.0	99,023.3	92,577.7	90,149.3	106,714.5
China.....	1,621.3	7,931.1	7,989.4	24,307.3	26,829.1	34,514.8	43,594.0	53,669.6	76,103.2	90,902.7	118,108.6	176,415.9
South Korea.....	2,361.1	4,496.2	10,334.9	21,941.4	25,635.6	28,335.3	22,435.0	34,995.5	49,978.6	41,799.5	48,871.5	56,590.7
Taiwan.....	2,334.9	3,356.5	9,602.3	22,113.7	24,450.8	32,931.0	35,989.1	44,848.0	58,744.0	47,838.0	50,865.9	55,660.5
Singapore.....	3,841.3	5,716.4	14,424.5	38,799.2	45,430.6	50,581.5	46,782.9	54,407.8	69,540.2	61,395.0	63,741.2	71,221.9
Hong Kong.....	4,291.2	6,474.7	17,072.9	37,302.5	41,245.4	49,304.1	49,371.7	53,277.2	72,999.7	79,361.2	85,857.2	98,596.6
India.....	1,997.9	1,648.4	2,587.3	3,381.9	3,625.5	4,038.6	4,489.9	4,694.0	6,114.7	7,549.7	8,634.4	11,384.7
Malaysia.....	1,575.2	2,823.4	7,820.2	26,812.6	28,509.9	33,169.0	33,964.8	39,822.6	51,942.2	47,060.3	53,889.1	64,440.6
Thailand.....	1,163.1	1,281.3	5,166.2	13,557.0	14,721.9	16,599.1	14,488.2	17,238.7	22,905.7	22,697.7	25,961.6	31,719.9
Philippines.....	1,210.7	599.3	1,621.5	4,202.6	10,136.4	14,890.9	17,228.5	19,745.0	20,414.6	18,845.7	19,281.8	21,886.0
Indonesia.....	1,396.1	1,091.0	2,034.6	2,507.0	3,823.1	4,452.0	1,941.9	1,499.1	2,490.8	2,672.1	2,750.3	2,964.9
South Africa.....	2,066.6	1,769.5	1,924.4	4,274.1	4,387.0	4,879.0	6,546.2	6,154.4	6,823.2	6,405.2	6,555.7	8,127.5

**World industry exports and imports, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Aircraft</b>												
Total imports .....	46,619.1	41,728.8	82,771.2	72,064.2	78,155.1	93,308.3	112,063.6	107,654.3	101,344.9	106,345.7	102,367.7	108,782.3
United States.....	6,083.0	7,805.9	12,305.5	11,863.5	11,940.0	13,501.5	18,130.8	19,180.4	21,610.4	24,082.4	20,204.5	19,506.9
Canada.....	2,555.1	2,232.0	2,890.8	2,259.5	2,652.7	4,024.7	4,225.6	4,140.7	4,138.5	5,233.5	5,535.6	6,130.7
Mexico.....	742.6	74.5	618.8	190.3	169.6	227.3	862.5	457.2	472.4	705.5	722.0	741.9
Brazil.....	973.5	342.1	1,302.9	874.3	861.5	1,375.1	1,714.2	1,865.4	1,825.1	1,958.7	1,885.9	1,965.0
Chile.....	126.2	25.7	318.0	293.5	340.7	237.5	455.4	145.4	439.6	159.9	159.5	171.8
Costa Rica.....	29.8	0.4	10.9	90.0	10.0	10.4	14.1	30.7	17.0	44.9	23.2	28.6
Argentina.....	353.1	8.5	139.3	259.0	233.6	369.7	438.6	565.6	435.7	211.8	150.2	170.2
Peru.....	27.9	36.3	72.1	69.0	29.0	16.2	42.5	29.9	32.1	16.0	16.6	18.4
Austria.....	166.3	143.3	270.9	624.8	543.4	797.4	884.0	798.1	855.7	468.1	453.8	492.2
Belgium.....	1,298.7	462.9	1,140.9	761.6	735.9	992.2	1,161.6	2,342.7	1,605.9	1,419.6	1,479.9	1,704.5
Denmark.....	276.3	271.5	881.9	409.1	403.8	337.2	623.8	600.2	350.3	491.4	505.0	549.8
France.....	3,621.2	4,684.0	11,159.4	8,009.7	8,763.8	9,964.3	12,096.5	13,209.9	11,903.3	12,516.3	12,316.3	12,976.9
Finland.....	151.4	206.9	456.0	419.5	1,186.0	532.7	713.8	767.4	525.5	378.1	396.2	449.2
Germany.....	2,652.4	3,585.9	9,071.4	5,068.3	5,379.6	7,045.7	7,278.0	8,745.8	8,676.2	9,645.1	8,949.1	9,814.7
Greece.....	92.2	139.8	141.3	107.1	108.9	108.7	682.9	883.7	310.8	366.9	374.1	418.4
Ireland.....	121.5	110.9	389.4	329.9	354.8	648.7	1,105.8	2,003.0	1,199.6	1,116.0	1,285.9	1,474.4
Italy.....	1,367.2	1,608.8	2,389.8	1,683.0	1,868.3	1,712.4	2,584.8	2,630.7	3,214.3	3,087.0	3,101.2	3,227.3
Netherlands.....	1,151.9	1,068.7	2,580.2	2,014.8	1,502.6	1,426.1	1,326.1	1,706.2	1,628.7	1,253.0	1,296.7	1,404.0
Portugal.....	73.6	37.8	199.2	334.8	104.1	258.7	440.1	750.9	694.2	469.3	342.6	383.1
Spain.....	658.3	215.9	2,676.9	1,219.8	1,640.9	1,162.7	1,375.7	2,783.1	2,907.4	1,819.6	1,888.0	2,231.3
Sweden.....	212.4	297.7	1,514.8	716.4	908.4	582.9	878.4	1,277.3	1,049.5	736.4	730.6	871.2
United Kingdom.....	7,471.3	4,782.7	7,367.6	4,947.3	6,014.7	8,890.2	9,016.9	7,397.4	8,167.1	8,216.9	8,557.2	9,067.4
European Union-15.....	19,314.6	17,616.7	40,239.7	26,645.9	29,515.2	34,459.9	40,168.3	45,896.4	43,088.3	41,983.8	41,676.5	45,064.3
Czech Republic.....	34.3	21.0	39.4	10.0	106.8	169.5	394.0	410.8	266.2	172.5	180.1	200.9
Hungary.....	13.6	4.2	4.3	62.0	58.4	6.7	49.4	8.2	10.2	39.3	44.0	49.2
Poland.....	71.5	2.6	10.8	68.2	92.5	270.2	76.8	117.0	712.5	235.8	226.0	235.9
Slovakia.....	9.0	4.0	9.8	23.7	30.6	28.7	72.3	64.6	23.0	20.1	21.1	23.1
Expanded European Union countries.....	128.6	31.8	64.4	163.9	288.2	475.1	592.5	600.6	1,012.0	467.7	471.2	509.1
Japan.....	2,470.4	2,687.1	4,717.6	3,166.6	2,935.2	5,016.1	6,230.9	5,702.3	4,484.0	3,172.6	3,080.9	3,580.4
China.....	480.3	1,234.2	1,181.7	1,629.1	2,449.5	3,970.6	5,045.7	3,229.0	2,706.0	3,601.6	3,122.0	3,663.4
South Korea.....	722.5	832.7	1,480.8	2,686.5	2,793.7	2,517.5	2,098.3	1,329.7	2,468.4	2,876.8	3,121.7	3,367.2
Taiwan.....	525.4	564.5	749.4	2,395.7	1,535.5	2,577.1	3,271.2	2,333.5	1,511.7	1,860.0	1,876.4	1,955.6
Singapore.....	1,334.2	1,216.8	1,309.4	1,879.3	3,137.7	3,367.6	2,862.4	2,336.6	1,253.5	3,916.7	3,732.6	3,790.9
Hong Kong.....	465.6	337.5	766.8	2,031.0	1,913.8	708.7	2,071.4	963.1	549.2	1,805.5	1,805.7	1,876.6
India.....	1,467.3	353.6	919.7	719.0	931.2	578.0	783.0	301.1	450.0	554.9	587.9	664.0
Malaysia.....	412.2	193.3	1,694.1	2,769.1	1,552.2	1,851.7	1,981.5	1,198.9	460.9	754.2	824.9	909.0
Thailand.....	539.6	195.6	1,149.5	1,420.8	993.0	1,502.6	1,682.5	1,399.9	742.2	825.2	906.1	1,009.5
Philippines.....	625.7	63.2	350.7	492.6	902.9	1,292.4	470.0	73.1	207.3	134.6	117.9	127.2
Indonesia.....	802.3	198.8	678.4	317.8	869.8	1,112.7	412.1	182.5	207.2	183.1	188.9	202.4
South Africa.....	554.1	238.3	291.6	527.4	348.3	444.8	850.1	687.2	852.9	850.3	917.2	1,077.3

**World industry exports and imports, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
Pharmaceuticals												
Total imports .....	20,523.1	22,440.0	41,695.7	66,581.1	73,254.7	83,086.3	95,410.0	103,403.6	102,145.7	126,647.5	134,096.1	148,248.8
United States.....	1,180.0	1,788.0	3,041.8	5,757.3	6,605.0	8,939.7	12,148.4	13,404.9	13,450.0	17,190.0	21,889.4	26,495.4
Canada.....	438.5	525.7	999.1	1,789.6	1,955.7	2,282.0	2,841.3	3,413.8	3,647.2	4,323.1	4,663.6	5,056.1
Mexico.....	201.9	182.0	334.5	544.9	713.8	828.9	1,012.7	1,115.8	1,278.7	1,526.4	1,570.1	1,616.6
Brazil.....	209.3	184.3	439.8	891.8	1,182.6	1,405.2	1,536.9	1,759.1	1,628.9	1,700.5	1,616.6	1,587.4
Chile.....	57.6	44.4	70.5	174.4	201.1	232.2	249.4	252.9	236.3	281.9	266.8	279.0
Costa Rica.....	146.8	56.9	60.1	77.6	90.9	100.9	128.2	137.7	162.9	196.5	207.5	215.6
Argentina.....	207.4	132.9	122.4	433.0	510.2	609.5	747.3	715.3	687.6	684.2	412.8	555.3
Peru.....	67.2	48.5	57.8	153.5	140.3	169.5	206.4	186.9	171.2	190.7	206.5	211.6
Austria.....	508.5	503.8	1,048.0	1,583.7	1,744.0	1,913.9	2,303.6	2,396.8	1,941.0	2,301.9	2,409.6	2,786.3
Belgium.....	1,108.5	842.3	1,783.6	2,913.7	3,187.3	3,552.2	4,413.2	4,763.8	5,290.6	8,604.9	8,842.2	9,446.9
Denmark.....	319.9	343.3	600.0	825.3	854.4	870.7	972.6	927.1	861.2	1,089.8	1,111.1	1,249.9
France.....	1,059.9	1,196.8	3,009.7	5,126.1	5,538.5	6,051.1	7,273.6	8,046.0	7,735.0	9,082.3	9,292.9	10,178.5
Finland.....	206.8	238.2	479.7	541.8	593.7	635.7	701.6	712.6	630.8	747.5	784.0	877.3
Germany.....	2,072.8	2,130.8	4,050.5	6,209.1	6,831.9	6,966.5	8,537.9	9,074.7	8,322.8	12,285.5	12,330.5	13,643.9
Greece.....	237.8	170.3	400.5	765.5	888.1	993.6	1,072.1	1,135.3	1,094.9	1,260.7	1,303.2	1,509.5
Ireland.....	234.5	341.7	573.8	745.6	808.8	959.2	1,051.5	1,233.5	1,436.0	1,679.0	1,887.6	2,154.7
Italy.....	932.2	1,313.0	3,172.4	3,621.3	4,190.2	4,770.3	5,554.0	6,109.5	5,938.4	7,008.3	6,991.1	7,481.2
Netherlands.....	885.4	940.4	1,841.1	3,476.1	3,390.5	3,748.7	3,938.2	4,455.3	4,079.8	4,916.0	5,110.2	5,400.7
Portugal.....	253.6	182.6	342.6	589.9	718.9	748.1	832.5	967.7	896.8	1,037.2	1,059.2	1,124.8
Spain.....	370.2	362.6	1,150.6	2,081.1	2,419.4	2,818.7	3,303.8	3,562.5	3,550.7	4,536.8	4,847.3	5,567.4
Sweden.....	491.6	489.0	851.9	1,120.3	1,280.7	1,260.2	1,432.9	1,535.8	1,337.0	1,496.3	1,539.3	1,715.1
United Kingdom.....	799.3	1,170.3	2,296.9	4,024.4	4,558.8	5,195.7	5,809.4	6,887.3	7,153.4	9,222.1	9,245.5	9,677.1
European Union-15.....	9,481.1	10,225.3	21,601.5	33,623.9	37,005.2	40,484.6	47,196.8	51,808.1	50,268.3	65,268.3	66,733.7	72,813.3
Czech Republic.....	177.8	216.6	216.8	558.6	623.8	670.2	734.1	720.9	689.8	827.1	887.4	996.3
Hungary.....	153.0	149.1	198.3	413.3	441.7	494.2	573.7	603.4	569.0	710.2	756.9	851.8
Poland.....	267.4	274.5	209.0	770.6	922.5	1,202.5	1,432.7	1,368.0	1,409.5	1,705.1	1,791.4	1,958.8
Slovakia.....	101.4	124.8	98.9	253.5	297.3	348.8	329.6	326.6	319.6	373.8	405.0	451.1
Expanded European												
Union countries.....	699.6	765.0	723.0	1,995.9	2,285.4	2,715.6	3,070.0	3,018.9	2,988.1	3,616.2	3,840.8	4,258.0
Japan.....	1,501.2	1,703.0	3,077.2	4,265.9	4,015.5	4,115.1	3,731.4	4,370.1	4,244.3	4,610.4	4,392.8	4,640.4
China.....	28.8	133.4	546.3	937.3	1,040.6	1,069.2	1,193.5	1,138.7	1,109.2	1,264.0	1,362.1	1,475.0
South Korea.....	130.6	162.5	346.1	648.7	752.0	741.0	584.4	704.4	764.0	935.2	1,000.6	1,025.7
Taiwan.....	146.6	212.0	352.5	625.0	698.2	719.5	757.5	851.2	846.7	917.6	930.3	952.1
Singapore.....	173.4	162.2	258.1	520.1	550.6	628.5	527.3	593.0	607.4	720.4	733.5	749.2
Hong Kong.....	375.8	386.2	783.1	1,146.4	1,156.8	1,185.0	1,185.9	1,009.1	869.9	819.0	884.1	963.8
India.....	120.5	162.4	243.7	385.3	340.5	419.7	437.9	424.1	415.5	497.1	510.8	587.8
Malaysia.....	117.0	157.5	220.5	333.0	355.0	406.3	304.5	352.0	351.1	418.5	450.2	491.1
Thailand.....	165.1	168.6	260.7	515.5	530.0	561.8	389.4	489.4	497.7	573.1	595.2	630.8
Philippines.....	108.5	82.5	178.7	301.3	332.2	372.3	349.9	379.9	357.1	362.1	395.0	438.0
Indonesia.....	130.0	132.2	200.8	238.4	230.4	275.1	204.7	162.2	182.3	168.3	175.7	187.4
South Africa.....	192.7	164.9	290.9	490.9	526.8	602.7	637.4	669.5	690.4	716.2	726.9	832.1

**World industry exports and imports, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Office and computing machinery</b>												
Total imports .....	18,676.2	43,356.1	86,600.1	198,351.0	239,662.5	306,169.3	357,296.3	439,403.6	533,650.3	536,211.1	584,567.5	707,549.8
United States.....	2,337.4	9,865.7	19,590.4	46,983.4	54,445.3	69,835.6	81,357.0	99,654.7	115,869.5	107,362.3	112,532.3	126,334.0
Canada.....	897.3	2,050.0	3,838.4	8,176.6	9,624.6	11,618.6	12,594.5	14,320.6	17,178.5	15,661.8	16,931.0	20,340.8
Mexico .....	235.1	370.6	732.6	2,051.9	2,998.2	4,345.8	4,761.0	6,176.8	8,309.1	10,573.9	11,985.3	13,791.1
Brazil.....	194.5	243.2	349.3	1,548.1	2,177.6	2,813.9	2,951.7	2,576.6	3,584.9	3,483.2	3,280.7	3,431.9
Chile.....	43.9	54.4	96.0	383.9	468.7	664.3	663.3	714.0	822.4	796.6	777.3	888.2
Costa Rica.....	0.9	11.4	31.1	60.8	82.5	119.8	297.5	354.3	389.6	465.7	445.8	528.4
Argentina .....	227.1	158.3	132.0	660.6	884.2	1,162.9	1,483.5	1,526.5	1,709.1	1,292.6	515.8	845.9
Peru .....	21.5	36.2	30.0	171.0	237.6	313.6	346.1	300.4	366.3	352.7	389.3	431.3
Austria .....	265.7	481.1	977.1	1,646.9	1,848.0	2,302.8	2,702.9	3,362.6	3,758.9	4,019.9	4,299.2	5,261.7
Belgium.....	488.2	901.3	1,599.1	2,631.4	3,459.4	4,123.9	5,212.1	6,396.9	7,523.0	8,216.4	8,811.3	10,751.6
Denmark .....	256.8	490.0	862.7	1,872.9	2,082.3	2,637.0	2,606.6	3,163.2	3,297.9	3,242.4	3,625.9	4,511.3
France.....	1,855.9	3,272.9	5,650.4	10,513.0	12,040.9	15,221.1	18,379.1	19,561.8	22,718.5	22,447.1	24,023.4	29,165.9
Finland.....	219.9	381.9	599.9	1,310.1	1,428.7	1,807.1	2,230.6	2,651.3	2,346.0	2,643.2	2,770.7	3,471.9
Germany .....	2,361.2	4,398.1	9,692.0	18,280.8	20,464.3	26,006.2	31,227.0	38,132.7	41,670.2	44,328.5	43,613.8	51,566.9
Greece.....	27.9	60.4	171.5	357.7	425.6	532.8	743.1	1,137.9	1,148.6	1,081.5	1,131.2	1,624.5
Ireland.....	257.1	944.9	1,593.0	5,013.4	5,802.0	8,726.9	11,845.5	13,265.7	16,052.6	17,852.8	20,018.6	22,347.0
Italy.....	1,118.8	1,975.7	3,492.8	5,123.9	6,288.4	6,949.2	8,410.6	10,195.3	11,368.0	11,109.8	11,973.9	14,397.3
Netherlands.....	845.5	2,077.6	5,301.7	11,432.3	14,618.7	20,435.1	26,439.6	32,025.9	33,594.3	35,526.6	36,876.0	42,133.9
Portugal.....	59.3	114.6	375.7	635.3	784.5	931.0	1,150.5	1,636.2	1,551.9	1,920.9	1,941.5	1,988.7
Spain.....	421.0	1,011.4	2,039.0	2,819.1	3,340.0	4,199.7	5,008.9	6,024.1	6,842.2	7,605.6	8,232.7	10,342.1
Sweden.....	532.2	970.7	1,491.8	2,728.5	3,051.9	3,544.6	4,826.7	4,284.2	4,607.8	4,581.9	4,860.0	5,970.5
United Kingdom.....	2,062.5	4,215.2	8,600.3	15,350.4	17,606.2	22,678.4	28,363.8	34,377.8	41,454.2	38,550.4	41,524.8	47,821.9
European Union-15.....	10,771.8	21,295.8	42,447.1	79,715.8	93,240.7	120,095.8	149,146.8	176,215.6	197,934.1	203,127.0	213,703.1	251,355.2
Czech Republic.....	118.7	217.2	303.1	692.9	815.2	873.3	1,191.9	1,273.9	1,729.1	2,490.2	2,930.4	3,789.1
Hungary .....	50.2	45.2	164.5	328.0	428.6	1,293.9	1,862.7	2,500.8	3,431.0	3,358.3	4,349.7	5,844.4
Poland.....	33.9	35.2	108.8	626.8	886.3	1,173.5	1,655.6	2,006.0	2,390.2	2,600.0	2,794.2	3,373.0
Slovakia .....	39.8	70.4	75.2	202.7	130.2	291.7	392.7	412.5	473.1	561.8	659.4	852.6
Expanded European Union countries .....	242.6	367.9	651.6	1,850.3	2,260.3	3,632.5	5,102.9	6,193.2	8,023.5	9,010.4	10,733.7	13,859.2
Japan.....	722.9	1,267.5	3,356.8	12,605.9	16,339.7	18,123.5	17,787.5	25,717.5	36,119.0	33,818.9	32,744.6	39,043.7
China .....	102.6	745.1	605.9	3,472.0	4,504.2	6,536.3	9,360.7	12,831.6	18,557.2	25,137.4	40,343.4	69,661.2
South Korea.....	109.5	387.6	1,162.9	2,763.3	3,468.9	3,590.6	2,126.8	5,316.7	10,053.2	7,914.6	10,146.0	12,507.2
Taiwan.....	99.7	300.5	1,217.5	2,918.1	4,092.3	5,488.4	6,197.1	9,993.8	14,791.7	13,304.0	14,805.4	15,918.7
Singapore.....	157.3	693.4	2,813.4	8,878.2	11,894.1	14,562.4	14,358.7	17,925.3	22,011.9	20,312.0	22,058.5	25,683.1
Hong Kong.....	317.4	703.1	1,428.1	5,214.3	6,877.4	9,849.8	11,668.1	14,367.9	21,679.0	26,337.2	28,875.0	33,386.3
India.....	19.7	74.8	173.3	441.3	534.3	878.2	1,039.4	1,482.9	2,327.5	2,554.3	3,059.1	4,487.8
Malaysia.....	53.5	138.5	482.2	3,300.2	4,531.7	6,378.4	6,782.8	8,371.9	10,232.9	10,840.8	12,933.9	15,926.7
Thailand.....	27.9	135.6	835.5	3,106.0	4,202.7	4,682.9	4,188.8	5,479.6	7,632.6	7,986.5	9,566.8	11,888.6
Philippines.....	44.9	40.7	131.2	457.2	1,737.2	2,796.6	3,423.8	4,277.5	5,041.2	5,810.9	6,287.0	7,234.0
Indonesia .....	36.0	86.3	141.3	179.0	267.9	405.5	245.3	348.6	858.2	871.6	962.5	1,119.4
South Africa.....	271.8	372.1	290.0	917.1	1,004.6	1,066.9	1,438.8	1,720.8	1,888.8	1,789.8	1,814.3	2,447.2

**World industry exports and imports, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
Communication equipment												
Total imports .....	40,425.2	76,208.3	149,852.4	328,354.9	367,052.9	432,744.2	467,750.9	550,779.1	730,784.1	651,545.6	686,825.6	801,664.2
United States.....	7,182.8	24,864.4	29,792.3	64,748.8	69,123.4	80,682.7	90,904.3	106,214.7	139,556.9	113,378.4	113,301.7	121,242.5
Canada.....	1,657.7	2,677.8	5,621.5	10,656.5	11,273.6	12,869.3	12,935.2	16,002.9	19,961.8	14,718.5	15,571.6	18,079.1
Mexico .....	673.2	1,259.1	3,211.4	7,338.0	8,746.9	11,276.2	14,800.6	19,270.5	27,603.5	25,598.1	26,889.2	29,539.6
Brazil.....	439.1	498.4	1,260.3	3,782.5	4,608.2	5,667.1	5,180.1	5,291.3	6,798.0	6,037.1	5,531.1	5,726.4
Chile.....	190.8	59.5	333.0	770.5	804.6	1,008.0	1,215.3	1,067.6	1,184.6	1,040.2	1,017.8	1,092.4
Costa Rica.....	52.9	15.7	43.3	89.9	112.9	215.0	985.0	739.6	1,008.6	1,426.0	1,255.8	1,480.2
Argentina .....	684.5	213.6	230.2	1,276.9	1,434.7	2,003.4	2,067.8	1,942.1	2,578.1	1,453.8	614.3	1,018.0
Peru .....	100.5	56.7	66.7	427.6	489.5	560.0	468.9	376.8	443.9	499.9	555.5	596.6
Austria .....	531.1	635.1	1,805.1	2,295.4	2,493.6	3,319.0	3,925.1	4,439.1	4,740.6	4,517.7	4,617.9	5,514.8
Belgium.....	1,140.3	959.4	2,166.2	3,421.1	4,217.4	5,060.6	6,204.2	7,389.1	9,136.3	9,189.7	9,923.0	12,274.1
Denmark .....	377.2	544.1	923.2	1,830.8	2,041.2	2,965.6	3,081.1	3,189.3	3,702.7	3,735.1	4,042.6	4,671.6
France.....	2,059.2	2,540.2	6,903.6	10,743.7	11,984.2	14,792.6	18,382.1	20,421.8	26,529.7	22,541.1	23,098.5	26,817.7
Finland.....	308.2	476.3	849.5	2,107.0	2,297.5	2,944.0	3,230.3	3,790.6	6,156.3	5,165.0	5,380.3	6,357.2
Germany .....	4,004.7	5,274.7	13,320.3	22,257.3	22,776.8	24,239.4	28,238.9	31,010.3	41,216.3	38,989.2	38,815.1	44,948.2
Greece.....	189.1	230.5	439.9	836.4	1,012.2	1,350.4	1,579.5	1,825.7	1,999.1	1,821.7	1,803.0	2,394.8
Ireland.....	219.5	333.3	765.9	2,458.1	2,503.2	3,262.9	4,248.6	5,516.5	8,286.4	10,539.8	11,347.9	12,422.9
Italy.....	1,651.2	2,178.0	6,344.8	7,474.7	7,803.8	9,136.3	11,056.1	11,728.2	14,439.6	13,325.1	14,208.1	16,579.2
Netherlands.....	1,840.6	1,883.9	4,037.7	6,562.4	7,398.3	12,061.0	11,231.8	13,945.8	16,415.4	17,361.4	17,998.3	20,398.5
Portugal.....	153.7	222.2	829.3	1,362.2	1,416.2	2,037.1	2,220.0	2,519.5	2,898.3	3,182.0	3,288.1	3,626.8
Spain.....	635.6	716.4	3,109.5	3,964.7	5,486.0	5,335.6	6,977.8	9,139.8	10,658.2	9,522.7	9,880.6	11,788.3
Sweden.....	739.0	1,099.8	1,871.2	3,838.3	4,478.0	5,621.0	6,258.5	6,159.3	8,264.0	5,889.4	6,157.7	7,255.9
United Kingdom.....	2,267.3	4,267.9	9,008.9	15,684.1	19,536.6	21,984.9	24,295.9	28,036.5	37,099.8	32,977.4	34,559.5	38,779.3
European Union-15....	16,116.5	21,361.9	52,374.9	84,835.9	95,445.1	114,110.5	130,929.9	149,111.4	191,542.7	178,757.2	185,120.6	213,829.5
Czech Republic.....	189.4	284.2	365.0	768.5	1,105.0	1,137.2	1,230.1	1,438.9	2,581.5	2,941.9	3,342.4	4,127.8
Hungary .....	71.3	108.3	277.0	613.9	956.8	1,489.2	2,204.1	2,732.8	4,481.4	4,705.3	5,776.2	7,378.7
Poland.....	78.1	91.3	439.3	1,000.1	1,458.7	1,965.3	2,566.7	2,856.2	3,435.0	3,358.9	3,492.8	4,033.3
Slovakia .....	69.4	104.0	109.8	235.5	307.6	466.7	514.1	406.2	534.5	706.6	782.5	948.1
Expanded European Union countries ....	408.1	587.8	1,191.1	2,618.0	3,828.2	5,058.4	6,514.9	7,434.2	11,032.5	11,712.7	13,393.9	16,487.8
Japan.....	910.5	1,684.9	6,465.6	19,676.4	22,687.1	23,115.6	22,261.7	27,992.2	39,642.7	36,396.6	35,513.5	43,438.1
China .....	386.4	3,310.2	3,472.6	13,711.0	13,980.6	17,678.5	22,207.4	29,487.8	44,027.3	48,421.9	58,535.3	82,822.9
South Korea.....	799.7	1,780.9	4,699.5	10,429.8	12,794.4	15,721.2	14,118.8	22,622.6	29,894.5	24,388.3	28,071.8	32,393.4
Taiwan.....	862.4	1,430.0	5,522.7	12,702.2	14,013.4	18,885.1	19,996.8	24,249.2	31,762.5	25,145.0	26,392.3	29,590.8
Singapore.....	1,247.7	2,400.2	7,863.0	23,628.4	25,729.1	27,298.1	25,168.6	29,115.3	40,273.8	31,929.6	32,705.2	36,382.4
Hong Kong.....	1,162.4	2,370.2	8,491.6	21,188.5	23,035.7	28,336.2	25,775.1	28,072.0	39,262.9	39,234.8	42,520.2	49,771.7
India.....	105.8	399.0	505.3	1,020.6	1,068.5	1,240.0	1,216.7	1,437.7	1,819.1	2,507.6	2,847.3	3,678.7
Malaysia.....	682.0	1,776.5	4,468.9	18,240.3	20,071.0	22,268.2	23,110.2	27,935.9	38,293.1	32,498.5	36,983.3	44,251.7
Thailand.....	222.4	416.5	2,138.6	6,771.0	7,202.2	8,146.8	7,016.6	8,622.8	12,412.3	11,690.2	13,155.6	16,271.5
Philippines.....	240.7	303.8	777.7	2,513.6	6,506.0	9,701.4	12,297.4	14,350.0	14,077.7	11,752.1	11,696.5	13,278.9
Indonesia .....	213.0	295.1	564.0	1,252.5	1,947.3	2,057.1	708.2	541.2	793.1	1,096.9	1,064.0	1,078.3
South Africa.....	338.3	431.7	445.1	1,516.8	1,655.0	1,911.4	2,760.5	2,222.9	2,449.3	2,134.0	2,173.2	2,734.4



**World industry exports and imports, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
Medical, precision, and optical instruments												
Total imports .....	54,785.4	76,407.3	105,905.8	141,405.5	150,658.6	168,517.5	173,827.4	186,622.2	213,041.0	212,552.9	219,137.7	241,640.6
United States.....	6,623.6	16,423.8	17,112.7	22,749.5	24,199.5	28,618.7	32,229.2	35,270.7	41,711.5	40,607.0	40,549.9	44,435.8
Canada.....	2,838.8	3,277.7	4,339.0	5,275.4	5,243.6	6,061.1	6,495.0	7,331.8	8,190.0	8,097.3	8,351.6	8,778.5
Mexico .....	923.8	807.1	1,507.1	1,954.9	2,490.3	3,062.9	3,490.1	3,991.7	4,884.4	4,939.3	4,997.2	5,069.4
Brazil.....	727.5	485.6	873.9	1,666.1	1,836.8	2,090.8	2,112.2	1,791.1	2,061.6	2,248.6	2,019.3	2,036.8
Chile.....	145.0	111.6	199.1	350.7	370.0	423.3	428.5	374.9	351.6	355.4	347.8	371.1
Costa Rica.....	34.5	27.2	52.8	72.1	78.8	115.3	153.8	145.1	181.2	223.2	215.8	235.2
Argentina .....	605.1	196.9	173.3	587.5	668.5	790.4	828.4	758.2	679.2	588.4	258.1	404.5
Peru .....	72.0	56.9	49.5	179.2	166.8	181.8	180.7	153.1	143.3	132.3	141.3	147.4
Austria .....	798.2	1,014.7	1,536.4	1,769.1	1,776.4	1,802.7	1,944.4	2,002.8	2,006.0	2,146.2	2,229.7	2,530.7
Belgium.....	1,276.9	1,355.4	2,073.1	2,898.9	3,090.3	3,533.5	3,885.5	4,208.0	4,228.3	4,376.0	4,498.9	4,920.4
Denmark .....	495.0	680.9	811.1	1,031.3	1,042.2	1,187.3	1,231.7	1,253.6	1,274.4	1,379.0	1,462.5	1,606.5
France.....	4,131.4	4,499.2	6,683.6	7,594.4	7,740.0	8,169.9	8,939.3	9,614.2	10,059.8	10,192.4	10,236.4	10,844.5
Finland.....	457.5	568.4	812.4	753.9	793.7	868.5	1,011.4	1,069.7	1,095.0	1,096.9	1,110.1	1,247.8
Germany .....	5,750.4	6,496.0	10,165.2	12,592.7	12,843.5	13,177.8	14,439.2	14,998.6	16,019.5	16,691.3	16,905.2	18,914.1
Greece.....	188.3	259.5	442.9	673.4	667.6	871.1	759.7	827.2	760.8	719.5	762.3	983.0
Ireland.....	270.4	404.0	575.0	834.7	872.2	1,156.9	1,287.6	1,306.6	1,455.8	1,352.2	1,423.9	1,421.1
Italy.....	2,700.8	3,168.5	5,624.7	5,242.9	5,313.4	5,990.0	6,304.7	6,819.8	7,222.1	7,424.5	7,709.8	8,498.0
Netherlands.....	2,134.4	2,607.1	4,255.2	5,231.3	5,804.5	6,806.5	6,657.2	7,311.2	7,892.9	7,765.3	7,914.1	8,684.3
Portugal.....	235.8	210.9	552.4	692.8	757.2	806.1	954.0	1,025.4	1,058.5	1,030.3	1,066.8	1,137.8
Spain.....	1,189.1	1,381.3	3,459.1	3,067.2	3,464.4	3,736.5	4,032.9	4,281.9	4,328.9	4,503.8	4,718.4	5,572.4
Sweden.....	1,169.0	1,414.0	1,817.8	1,994.4	2,069.9	2,187.4	2,414.7	2,340.2	2,459.1	2,445.0	2,508.1	2,743.4
United Kingdom.....	4,091.8	5,408.0	6,922.6	7,816.1	8,360.5	9,482.6	9,761.9	9,931.4	10,806.2	11,280.0	11,417.0	12,017.3
European Union-15...	24,889.0	29,468.1	45,731.4	52,193.2	54,595.7	59,776.8	63,624.2	66,990.6	70,667.3	72,402.6	73,963.2	81,121.3
Czech Republic.....	288.0	380.0	437.0	736.3	760.7	713.7	780.8	770.1	843.6	958.5	1,030.5	1,173.4
Hungary .....	150.6	178.8	237.6	349.6	393.0	494.0	607.2	624.4	781.9	797.7	868.2	976.2
Poland.....	141.3	182.1	205.2	634.4	771.7	934.3	1,009.8	966.1	1,082.6	1,066.9	1,118.7	1,268.3
Slovakia .....	100.8	130.8	129.7	200.7	228.5	261.3	299.0	254.6	283.8	354.3	384.0	445.7
Expanded European Union countries ....	680.7	871.8	1,009.5	1,921.0	2,153.8	2,403.3	2,696.8	2,615.2	2,991.9	3,177.4	3,401.4	3,863.6
Japan.....	2,467.1	2,998.1	5,704.2	9,415.9	11,018.2	11,920.6	11,429.1	12,534.8	14,533.3	14,579.3	14,417.5	16,011.8
China .....	623.2	2,508.2	2,183.0	4,558.0	4,854.2	5,260.2	5,786.7	6,982.6	9,703.5	12,477.8	14,745.8	18,793.4
South Korea.....	598.8	1,332.5	2,645.6	5,413.1	5,826.6	5,765.0	3,506.6	5,022.0	6,798.4	5,684.6	6,531.3	7,297.1
Taiwan.....	700.8	849.5	1,760.2	3,472.7	4,111.3	5,261.0	5,766.4	7,420.2	9,831.4	6,611.5	6,861.5	7,243.3
Singapore.....	928.7	1,243.7	2,180.6	3,893.2	4,119.1	4,725.0	3,866.0	4,437.6	5,393.7	4,516.4	4,511.4	4,616.3
Hong Kong.....	1,970.0	2,677.7	5,603.2	7,722.3	8,261.7	9,224.5	8,671.1	8,865.1	10,638.7	11,164.7	11,772.3	12,598.1
India.....	284.5	658.7	745.2	815.7	750.9	922.8	1,012.9	1,048.1	1,102.6	1,435.8	1,629.3	1,966.3
Malaysia.....	310.5	557.6	954.5	2,170.0	2,000.0	2,264.5	1,785.8	1,963.9	2,604.3	2,548.2	2,696.8	2,862.1
Thailand.....	208.1	365.1	782.0	1,743.7	1,794.1	1,704.9	1,210.8	1,247.1	1,620.9	1,622.7	1,737.9	1,919.5
Philippines.....	190.9	109.0	183.3	438.0	658.1	728.2	687.4	664.5	731.3	786.0	785.3	807.8
Indonesia .....	214.8	378.6	450.1	519.2	507.7	601.6	371.5	264.5	450.0	352.3	359.1	377.4
South Africa.....	709.7	562.6	606.9	821.9	852.4	853.2	859.3	854.0	941.8	914.9	924.1	1,036.5

**World industry exports and imports, by selected country/economy and industry: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Industry and country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
Other manufacturing industries												
Total imports .....	1,652,556.4	1,661,347.6	2,549,850.8	3,431,360.7	3,530,497.7	3,719,623.0	3,825,836.2	3,929,833.5	4,095,531.7	4,100,083.1	4,210,327.0	4,478,105.1
United States.....	231,803.7	359,895.6	392,360.9	524,834.1	546,550.4	598,276.9	661,254.4	726,728.1	791,829.4	775,202.2	792,875.0	804,485.4
Canada.....	64,354.7	78,613.8	103,840.2	128,495.2	131,263.8	149,736.4	156,099.9	164,225.8	170,986.3	164,231.2	170,174.5	176,680.5
Mexico.....	24,695.5	16,373.2	32,977.9	55,175.1	67,359.9	83,428.3	95,756.4	108,339.7	135,917.2	131,979.6	131,393.7	129,371.5
Brazil.....	16,014.8	7,130.7	13,284.0	38,154.6	36,919.7	44,631.9	44,436.0	35,298.6	36,804.8	39,850.9	36,522.3	35,336.5
Chile.....	5,750.9	2,800.9	6,211.2	12,220.0	13,597.7	14,777.2	13,967.9	10,596.5	12,070.0	11,858.6	11,315.2	11,728.3
Costa Rica.....	1,439.0	1,334.0	2,133.4	2,952.0	3,263.6	3,791.5	4,614.7	3,835.0	4,031.9	3,923.2	4,131.1	4,269.1
Argentina.....	12,014.8	3,512.4	3,721.9	16,470.1	19,600.6	24,257.1	25,841.7	19,691.8	18,036.2	15,946.3	8,107.1	11,577.4
Peru.....	3,508.1	1,929.7	2,312.4	5,752.8	5,664.9	6,219.9	6,343.0	5,206.0	5,297.1	5,301.5	5,623.9	5,612.3
Austria.....	25,739.2	22,280.7	41,388.5	51,161.9	51,922.1	50,909.3	56,232.3	56,582.7	52,279.7	56,339.5	58,869.1	66,130.7
Belgium.....	73,586.0	57,176.3	102,739.0	122,045.6	122,966.2	128,705.9	139,229.1	141,050.0	137,792.2	145,152.5	154,130.9	168,736.5
Denmark.....	18,873.0	18,939.7	26,574.2	32,627.9	32,393.8	35,438.1	37,672.7	37,424.7	35,174.6	36,378.1	38,095.0	41,179.1
France.....	118,931.9	99,925.0	187,181.5	207,398.1	206,068.1	204,251.3	227,650.8	236,127.2	234,441.9	236,515.6	241,669.5	262,506.4
Finland.....	13,654.7	11,974.7	20,780.3	20,115.3	21,188.5	22,332.9	23,702.2	23,088.8	22,651.6	23,635.5	24,323.2	27,208.4
Germany.....	167,383.5	140,965.1	263,439.5	339,683.5	329,737.2	324,316.3	353,465.4	349,313.4	333,945.1	343,716.0	343,122.6	373,971.4
Greece.....	11,970.3	10,223.3	17,541.7	21,274.9	22,285.5	22,590.6	24,440.7	25,061.7	24,258.8	23,513.7	24,325.7	27,509.3
Ireland.....	12,086.7	9,271.1	15,798.2	19,388.8	21,315.7	24,656.1	25,741.6	26,231.5	27,001.5	25,510.5	26,517.8	27,864.3
Italy.....	81,889.6	70,650.8	129,649.4	140,837.7	138,248.2	145,377.6	158,108.8	161,883.5	162,068.6	165,864.9	171,911.3	185,722.9
Netherlands.....	70,841.4	61,261.2	99,292.0	116,638.7	117,253.4	119,145.2	124,113.1	126,441.1	118,431.9	119,056.1	121,535.0	126,392.4
Portugal.....	7,721.5	5,921.1	19,768.4	25,952.2	27,389.7	29,122.0	32,249.0	34,458.7	32,429.9	32,970.7	33,235.0	34,931.1
Spain.....	20,750.8	20,266.6	64,708.5	84,669.4	88,852.3	93,582.5	109,803.6	120,579.7	118,015.0	122,542.8	130,215.1	150,464.4
Sweden.....	32,007.3	27,377.1	43,593.5	45,215.4	46,468.0	48,676.0	51,401.0	50,756.4	49,359.9	48,418.3	49,722.3	54,404.3
United Kingdom.....	112,007.4	105,826.8	170,022.4	193,705.0	202,111.2	220,300.5	239,222.9	241,401.4	236,382.4	246,162.7	254,170.7	268,616.5
European Union-15.....	767,443.1	662,059.5	1,202,477.0	1,420,714.7	1,428,199.8	1,469,404.4	1,603,033.2	1,630,400.9	1,584,233.1	1,625,776.7	1,671,843.2	1,815,637.7
Czech Republic.....	9,883.1	9,781.2	10,549.0	18,862.8	20,539.8	21,222.3	24,618.0	23,738.8	25,138.6	28,899.1	31,010.0	34,639.8
Hungary.....	8,468.3	6,890.1	6,934.1	13,506.5	13,410.8	16,725.2	22,086.3	22,995.7	22,780.5	25,996.7	28,243.7	31,253.2
Poland.....	10,973.1	7,134.7	6,631.8	23,267.9	28,498.1	33,325.7	39,191.3	37,587.5	36,376.6	38,626.8	39,119.2	42,343.3
Slovakia.....	4,181.7	4,339.5	3,897.9	7,343.7	7,831.4	8,579.8	10,298.6	8,778.7	9,295.8	11,183.9	12,062.5	13,704.8
Expanded European Union countries .....												
Japan.....	55,145.0	62,740.8	134,912.7	179,866.5	182,842.1	175,207.2	153,727.1	165,182.6	183,573.8	178,799.7	170,656.2	183,368.8
China.....	22,605.8	47,243.6	49,614.0	124,226.4	132,683.9	136,897.8	130,044.1	138,642.9	162,000.3	170,976.5	191,558.1	224,298.3
South Korea.....	14,090.2	20,447.0	44,713.4	76,938.4	80,802.8	74,537.5	45,476.8	59,390.6	73,088.5	69,523.3	75,102.8	77,434.1
Taiwan.....	15,003.2	15,299.3	37,172.0	59,386.6	56,475.4	61,047.6	58,678.8	70,012.7	77,305.9	60,244.6	60,148.6	59,719.3
Singapore.....	19,400.3	18,205.8	37,679.8	65,278.1	65,643.7	66,947.8	53,498.9	56,495.6	62,380.2	55,523.1	54,767.7	53,089.6
Hong Kong.....	25,852.7	29,148.7	68,267.5	111,265.5	112,749.5	124,008.1	112,301.5	108,620.3	120,461.0	114,281.2	119,332.7	124,858.5
India.....	11,787.0	15,267.8	14,718.6	22,462.1	21,938.4	24,111.4	25,775.9	29,125.2	25,540.8	28,493.3	30,451.1	34,249.1
Malaysia.....	13,154.6	12,162.5	20,805.9	45,129.3	45,374.6	46,173.1	29,402.8	33,373.3	39,675.2	36,901.8	38,251.7	39,042.7
Thailand.....	8,733.7	8,357.5	26,481.5	48,479.8	46,185.5	38,687.7	25,564.7	29,308.1	33,351.3	33,982.9	36,138.3	38,293.7
Philippines.....	7,612.5	3,649.0	8,516.6	16,398.9	18,747.5	20,079.1	13,844.0	13,858.1	14,512.0	14,031.5	13,426.7	13,677.3
Indonesia.....	13,108.2	10,446.9	18,398.2	27,905.6	28,377.4	29,576.7	17,996.7	16,433.3	22,303.2	21,327.8	22,463.2	23,353.8
South Africa.....	17,482.1	9,102.1	11,632.5	19,005.6	18,873.7	18,366.0	17,462.3	16,377.5	17,983.3	18,458.4	18,513.0	21,903.6

NOTES: Industry exports include all products shipped to other countries. Industry imports include all products received from other countries. Value of industry shipments classified according to industry classification of reporting firm and may include products produced by firm but not necessarily related to industry classification. Seventy countries or economies included in "all countries." High-technology sectors cover aerospace; computers and office machinery; communications equipment; pharmaceuticals; and medical, precision, and optical instruments.

SOURCES: Global Insight, Inc., World Industry Service database (2005). Historical data from United Nations Industrial Development Organization, United Nations System of National Accounts, Organisation for Economic Co-operation and Development, and country sources.

**World service industry data, by selected country/economy: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Service industries</b>												
Total production .....	16,792,201.8	19,335,853.8	23,492,306.3	26,970,481.4	28,070,162.9	29,002,623.6	29,960,041.4	31,222,662.3	32,787,112.4	33,695,853.1	34,472,892.9	35,236,587.1
United States.....	5,968,042.5	6,722,079.8	8,069,233.4	8,987,111.7	9,388,732.8	9,771,439.6	10,230,808.9	10,816,175.1	11,439,556.3	11,659,181.1	12,083,574.2	12,389,423.0
Canada.....	359,752.4	423,671.9	506,029.3	571,646.4	590,245.6	616,144.2	649,191.1	693,450.7	736,142.1	759,592.8	791,083.9	810,448.5
Mexico.....	231,365.0	258,047.7	273,538.3	297,188.6	306,169.5	326,507.7	341,756.0	355,573.4	382,029.3	386,683.9	392,424.4	403,480.2
Brazil.....	381,553.1	423,074.1	482,574.9	582,351.7	618,742.6	640,872.6	648,638.8	648,200.6	668,585.0	686,970.7	700,942.6	706,667.5
Chile.....	31,970.9	31,195.9	40,535.1	59,212.0	66,418.0	70,048.3	72,844.3	73,427.6	76,864.8	79,618.5	81,682.8	84,221.5
Costa Rica.....	6,812.3	6,466.1	7,851.9	9,466.4	10,025.9	10,549.1	10,768.0	11,335.3	12,127.9	12,776.1	13,398.2	14,176.7
Argentina.....	176,523.5	151,423.7	154,134.1	217,836.9	232,048.5	252,935.9	267,150.2	259,995.2	260,455.5	246,965.1	219,883.6	228,625.5
Peru.....	40,518.7	41,149.1	38,013.7	46,219.7	47,471.2	50,044.4	49,577.6	50,184.8	51,296.4	51,627.7	53,863.0	55,950.3
Austria.....	134,791.6	144,647.8	174,205.9	192,059.3	197,971.7	199,198.1	204,542.3	210,774.6	216,680.9	220,575.5	223,436.4	224,040.1
Belgium.....	188,393.9	214,913.7	250,811.1	272,841.5	280,558.0	288,390.3	300,190.3	316,637.4	336,710.8	348,433.2	347,760.5	353,914.5
Denmark.....	117,306.5	131,955.7	146,685.6	158,260.1	163,974.7	169,333.7	175,435.6	185,163.5	193,400.1	202,256.7	209,207.9	212,964.2
France.....	948,297.0	1,081,805.7	1,296,604.0	1,339,262.1	1,379,143.3	1,387,374.0	1,427,304.1	1,497,585.8	1,590,685.6	1,623,208.1	1,655,276.4	1,676,121.7
Finland.....	81,399.2	90,147.0	112,140.2	102,288.5	108,131.1	111,337.7	116,238.3	123,237.9	126,832.9	128,883.6	132,544.0	136,869.5
Germany.....	1,023,796.4	1,165,186.9	1,428,585.8	1,941,875.3	1,998,266.8	2,035,740.0	2,090,922.3	2,180,310.8	2,265,041.1	2,321,808.4	2,349,397.9	2,351,302.2
Greece.....	56,376.0	63,972.2	76,946.0	93,975.0	96,131.5	98,722.5	102,661.8	106,329.6	108,872.0	114,436.2	120,177.4	126,634.9
Ireland.....	29,723.5	31,813.1	41,952.9	49,118.2	53,392.0	55,437.9	57,797.6	65,622.8	70,661.5	75,075.6	81,919.9	83,767.0
Italy.....	737,252.1	859,776.1	1,007,534.9	1,137,801.8	1,147,965.8	1,174,580.7	1,198,558.9	1,228,547.3	1,285,362.4	1,324,351.0	1,341,299.4	1,352,810.8
Netherlands.....	255,946.7	271,644.0	319,221.6	353,783.3	375,266.8	390,308.5	409,650.7	433,600.2	454,882.8	463,524.8	468,595.4	473,894.9
Portugal.....	54,863.9	61,183.6	87,750.9	97,943.9	102,187.4	104,220.8	110,411.2	119,038.4	125,089.4	128,325.4	131,003.7	131,240.1
Spain.....	291,405.4	338,507.8	420,219.1	493,913.4	508,633.0	516,628.7	535,412.9	564,391.4	588,786.1	612,834.8	622,551.5	641,653.5
Sweden.....	186,925.5	213,585.0	252,219.7	253,483.7	254,593.7	261,862.3	271,941.8	283,752.7	297,239.5	302,690.9	307,421.8	315,176.4
United Kingdom.....	918,558.7	1,024,346.0	1,236,407.6	1,427,731.9	1,494,115.0	1,561,650.8	1,663,844.0	1,723,863.2	1,802,163.8	1,865,214.1	1,915,059.8	1,975,913.4
European Union-15.....	5,025,036.3	5,693,484.4	6,851,285.4	7,914,338.0	8,160,330.8	8,354,786.0	8,664,911.7	9,038,855.6	9,462,408.9	9,731,618.2	9,905,652.1	10,056,303.2
Czech Republic.....	37,530.8	36,246.2	43,110.2	51,779.9	54,655.8	52,961.3	52,511.8	54,744.9	56,729.2	56,119.9	58,035.8	60,320.0
Hungary.....	23,613.9	26,785.3	37,083.4	40,877.7	41,264.9	42,362.8	44,228.0	45,726.3	44,341.2	45,608.3	46,812.1	47,719.9
Poland.....	107,537.4	101,699.3	105,024.5	119,003.2	125,426.4	133,232.7	138,016.5	149,090.7	154,277.2	156,761.0	163,526.9	170,018.8
Slovakia.....	20,433.8	21,159.1	22,374.3	19,602.0	20,838.8	22,677.0	23,931.0	25,466.9	25,276.9	24,525.7	26,124.1	26,675.7
<b>Expanded European</b>												
Union countries.....	189,115.9	185,889.8	207,592.4	231,262.9	242,185.9	251,233.8	258,687.3	275,028.9	280,624.4	283,014.8	294,498.8	304,734.4
Japan.....	2,448,388.0	2,941,211.6	3,715,102.7	4,186,972.2	4,319,894.3	4,372,042.9	4,401,347.7	4,489,454.8	4,638,659.1	4,827,604.5	4,753,451.6	4,812,672.7
China.....	86,862.0	145,488.0	216,625.4	316,596.2	342,483.4	369,067.6	406,315.5	448,019.9	496,210.4	540,199.6	539,513.4	568,814.8
South Korea.....	101,476.6	154,336.0	240,382.8	364,112.4	388,946.4	410,919.9	388,387.4	397,009.1	413,055.8	437,629.6	478,059.9	484,024.8
Taiwan.....	59,374.6	86,798.8	153,278.7	224,471.4	250,667.1	272,120.0	290,359.3	302,144.8	318,534.0	324,479.3	335,444.6	345,585.3
Singapore.....	25,435.7	38,005.2	56,107.9	87,469.8	94,654.3	104,055.4	103,596.1	109,520.1	118,609.6	121,987.8	124,153.0	125,804.3
Hong Kong.....	66,799.2	96,968.5	146,517.8	206,609.2	221,203.1	236,115.4	227,315.2	237,444.0	265,216.0	269,126.6	275,404.3	278,691.3
India.....	87,464.3	116,287.5	166,978.8	235,814.4	252,145.9	254,505.4	280,923.9	304,948.9	327,365.9	347,911.8	372,037.5	401,313.2
Malaysia.....	22,598.3	27,196.0	34,665.1	60,231.0	66,715.3	73,741.3	72,683.0	75,792.8	77,445.0	83,240.5	89,310.0	91,795.2
Thailand.....	38,557.2	48,069.2	74,894.3	112,964.7	118,337.1	115,548.6	101,985.0	103,475.2	106,719.9	107,806.4	114,897.4	116,874.4
Philippines.....	30,707.8	33,749.6	45,371.0	51,515.9	55,151.3	58,804.6	61,342.1	63,229.5	63,621.6	65,652.9	70,436.0	74,617.3
Indonesia.....	48,867.7	65,709.2	81,730.5	115,096.6	128,158.0	131,501.6	110,080.8	111,164.1	115,531.2	121,651.2	134,700.8	144,267.9
South Africa.....	84,180.4	94,551.4	112,855.1	123,835.6	130,657.8	135,649.3	139,299.5	143,797.0	149,533.8	156,187.2	160,277.6	165,666.6

**World service industry data, by selected country/economy: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>High-technology service industries</b>												
Total production .....	5,706,116.1	6,727,578.3	8,477,934.6	9,901,728.4	10,463,948.0	10,957,267.1	11,509,241.3	12,178,583.7	13,006,296.8	13,478,975.2	13,733,722.7	14,118,835.8
United States.....	2,096,202.9	2,433,420.5	3,004,534.6	3,383,215.5	3,583,611.8	3,787,944.0	4,050,020.0	4,340,840.5	4,692,625.5	4,813,892.5	4,907,762.2	5,087,137.0
Canada .....	126,724.3	158,388.7	191,954.2	216,692.8	224,512.6	235,898.8	249,740.5	267,808.5	284,547.3	292,429.6	302,418.6	308,895.7
Mexico .....	53,263.4	65,228.3	67,466.4	81,304.3	83,288.4	87,528.2	92,390.0	98,089.2	104,419.4	109,129.0	109,616.2	112,771.6
Brazil .....	162,234.3	183,532.2	200,986.6	260,431.2	281,380.9	289,409.2	294,747.1	289,736.5	300,832.0	310,304.1	319,561.9	321,853.4
Chile .....	9,637.2	12,519.4	16,280.2	22,962.1	26,211.0	27,342.0	28,709.5	29,644.8	31,136.9	32,620.6	33,377.1	34,475.3
Costa Rica.....	1,498.6	1,644.3	2,047.0	3,797.7	4,101.7	4,291.0	4,381.1	4,712.8	5,161.2	5,524.0	5,875.9	6,280.3
Argentina .....	60,330.7	50,690.7	50,240.9	76,647.1	82,404.1	91,411.8	100,152.7	99,988.6	101,364.6	96,996.3	86,232.7	86,842.6
Peru .....	13,194.5	14,006.7	13,706.5	16,280.1	16,754.8	17,692.2	17,700.1	18,106.3	18,409.2	18,700.3	19,411.8	19,993.0
Austria .....	43,501.7	46,892.0	58,721.5	68,396.3	71,479.9	72,201.6	75,329.4	81,103.6	86,013.7	89,051.8	90,032.1	90,627.9
Belgium .....	68,665.9	82,640.5	102,096.7	113,429.1	118,474.8	123,667.1	126,188.0	131,852.4	136,414.0	142,083.0	141,683.6	144,480.6
Denmark.....	40,441.6	47,530.8	57,079.6	59,222.4	60,839.2	64,149.1	68,113.8	72,401.5	74,889.4	78,865.6	81,464.3	82,753.9
France.....	403,869.2	478,427.8	584,382.4	599,504.9	620,541.1	618,295.4	641,075.7	683,354.0	739,331.0	762,410.2	782,257.9	799,211.3
Finland.....	29,869.8	34,289.3	42,101.0	37,253.4	39,219.9	40,244.2	42,044.5	45,272.9	47,469.5	48,423.6	49,857.9	52,006.1
Germany.....	386,780.5	436,117.3	545,049.7	793,840.9	824,195.2	857,187.6	890,377.5	955,124.5	997,486.2	1,045,013.6	1,066,189.8	1,069,077.9
Greece.....	13,498.7	15,046.6	18,401.6	24,431.0	25,535.0	26,523.9	28,045.9	29,623.3	30,505.0	31,380.9	33,844.6	35,940.1
Ireland.....	10,382.2	10,905.9	18,704.6	23,501.5	25,307.9	26,081.0	27,710.0	31,909.5	34,759.0	37,673.9	40,965.1	42,027.2
Italy.....	297,072.8	347,413.6	411,595.5	419,504.9	444,480.0	462,125.2	474,330.4	493,243.0	524,071.9	543,071.8	556,408.6	546,263.9
Netherlands.....	102,599.9	108,524.1	124,103.9	144,424.7	154,888.6	162,400.3	173,207.6	186,142.4	197,201.3	201,851.5	204,617.1	208,566.1
Portugal.....	15,266.1	19,812.4	30,281.8	37,593.6	39,206.4	39,883.2	43,006.6	47,700.0	50,065.5	51,892.5	52,333.6	52,164.8
Spain.....	74,516.0	98,839.5	133,581.2	166,141.1	172,744.7	177,179.3	185,380.6	198,229.8	211,744.7	223,944.3	226,714.4	234,065.3
Sweden.....	76,881.5	88,021.5	110,650.4	103,318.3	103,339.5	107,490.9	112,658.9	120,449.7	129,651.6	134,220.1	135,643.0	139,068.2
United Kingdom.....	377,092.4	426,588.5	546,334.0	641,946.2	676,241.2	715,962.3	769,131.4	807,078.3	857,459.1	898,310.8	918,048.4	958,662.8
European Union-15 .....	1,940,438.4	2,241,049.8	2,783,084.1	3,232,508.4	3,376,493.3	3,493,391.0	3,656,600.3	3,883,484.8	4,117,062.1	4,288,193.5	4,380,060.4	4,454,916.1
Czech Republic .....	12,266.8	10,821.7	15,730.1	18,724.7	19,374.9	19,717.5	19,604.3	21,162.6	22,319.9	22,183.9	22,039.1	22,741.8
Hungary.....	5,864.2	6,612.1	9,194.3	14,731.3	15,506.8	15,651.3	16,204.8	16,669.4	16,848.3	17,642.8	17,949.7	17,791.4
Poland.....	23,982.9	22,623.5	23,050.1	34,728.6	36,283.1	37,999.6	39,362.3	41,757.7	43,122.2	43,257.9	43,253.8	44,114.7
Slovakia.....	6,940.1	6,569.9	6,633.3	5,927.5	5,890.0	6,855.8	7,417.8	7,812.1	7,778.5	7,258.3	8,082.8	8,661.8
<b>Expanded European Union countries .....</b>												
Japan.....	462,392.3	611,608.7	933,154.4	1,114,189.3	1,199,854.6	1,247,466.0	1,294,622.5	1,358,017.0	1,444,621.7	1,521,145.0	1,482,073.1	1,516,605.3
China .....	31,398.9	47,054.9	76,380.8	114,580.4	128,413.4	139,982.4	151,683.2	168,074.5	199,928.5	217,268.7	220,448.5	234,642.4
South Korea .....	22,532.3	40,336.6	68,865.6	126,548.2	136,081.6	145,992.2	140,580.8	142,467.3	148,783.5	159,382.2	184,078.5	190,253.8
Taiwan.....	12,058.0	17,093.1	36,836.5	54,648.1	61,402.0	70,710.8	77,885.7	84,444.4	90,264.5	95,124.8	101,988.7	105,356.1
Singapore.....	11,190.7	16,572.5	25,791.6	41,922.5	46,017.0	51,850.1	51,395.5	54,068.8	57,630.5	59,867.0	60,360.4	60,653.5
Hong Kong .....	28,723.9	38,024.0	52,213.8	79,464.9	86,554.6	93,297.8	89,508.8	91,397.1	101,226.7	103,422.6	104,930.9	107,625.8
India.....	24,332.3	31,008.0	46,060.9	71,633.1	77,822.2	86,000.5	97,171.5	110,052.9	113,718.5	122,051.4	130,772.2	139,228.6
Malaysia .....	9,559.4	10,997.5	13,491.5	23,588.5	26,686.6	30,035.7	29,399.7	30,932.7	32,062.1	35,352.6	38,665.5	39,976.2
Thailand.....	11,361.8	13,315.4	21,286.6	38,155.6	40,277.9	38,636.0	33,082.0	31,022.4	31,255.5	31,635.7	33,270.6	34,701.1
Philippines .....	6,987.8	6,888.7	10,326.0	11,945.1	13,361.0	15,076.2	16,347.8	16,824.2	17,264.4	18,249.4	19,981.4	21,648.6
Indonesia .....	14,303.5	20,963.1	25,670.9	38,945.9	44,037.7	44,574.6	37,874.6	39,066.6	40,309.4	42,795.0	48,302.6	53,154.9
South Africa .....	30,285.8	35,219.3	42,827.7	49,502.7	52,507.8	54,744.3	57,769.5	61,320.2	64,402.6	68,543.0	70,859.6	73,336.9

Country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
Communication services												
Total production .....	493,308.2	589,260.8	767,131.3	933,030.6	1,044,563.3	1,138,761.6	1,259,942.4	1,455,976.4	1,671,421.1	1,829,823.6	1,868,869.2	1,954,346.3
United States.....	177,496.0	197,367.5	248,977.0	307,800.9	354,887.0	377,161.0	422,457.1	488,848.5	569,699.9	611,427.2	595,543.1	630,347.6
Canada.....	10,315.9	12,910.6	19,323.1	22,138.6	23,166.3	24,917.0	26,205.5	30,210.2	34,371.8	36,991.7	39,614.7	40,219.2
Mexico.....	1,547.3	1,714.6	2,673.8	5,453.3	6,306.7	7,120.2	7,787.7	8,917.0	10,269.5	11,604.2	12,209.4	12,673.3
Brazil.....	17,876.7	12,531.7	14,146.5	21,989.8	24,112.5	26,039.7	30,030.2	34,635.7	42,359.1	46,943.1	48,785.6	49,670.8
Chile.....	573.2	586.9	836.3	1,928.0	2,105.5	2,440.2	2,757.4	2,865.7	3,186.4	3,657.2	3,900.8	4,129.2
Costa Rica.....	364.7	390.7	532.3	783.5	854.0	913.4	956.9	1,046.9	1,148.2	1,285.6	1,389.8	1,555.2
Argentina.....	3,192.7	442.4	4,852.2	8,856.5	9,796.3	11,802.2	14,126.7	14,499.8	14,663.0	14,387.6	13,495.9	13,606.4
Peru.....	1,302.5	1,339.8	1,185.7	1,454.6	1,479.4	1,608.5	1,584.8	1,591.3	1,725.9	1,715.0	1,763.5	1,871.1
Austria.....	2,763.1	3,270.8	3,838.7	4,813.9	6,079.3	6,400.4	7,081.2	8,800.0	10,620.0	11,462.7	11,357.8	11,453.2
Belgium.....	6,474.7	7,306.3	8,788.7	9,245.4	9,457.5	9,373.2	8,904.5	10,773.6	12,197.4	12,947.5	12,299.6	12,655.1
Denmark.....	1,772.6	2,468.9	3,405.2	4,105.2	4,777.4	5,258.9	5,692.9	6,583.1	8,085.9	8,274.4	8,430.4	8,685.0
France.....	12,585.5	18,378.2	28,636.5	33,559.5	36,262.0	40,228.3	47,126.3	59,363.0	75,636.9	82,025.0	87,015.0	92,286.9
Finland.....	1,733.9	2,008.8	2,740.7	3,008.4	3,425.5	3,970.7	4,652.3	5,262.6	6,226.0	6,663.0	7,073.7	7,256.6
Germany.....	29,326.0	32,345.5	40,426.2	55,449.6	58,514.3	62,359.4	67,820.2	90,179.1	97,761.9	119,077.5	132,988.3	134,717.0
Greece.....	1,884.1	2,134.7	2,476.4	3,034.8	3,248.5	3,870.7	4,178.6	5,218.8	5,809.5	6,432.8	7,525.2	8,067.3
Ireland.....	1,086.6	1,508.5	2,349.5	2,935.6	3,181.4	3,233.4	3,196.2	3,492.5	3,882.5	4,225.5	4,307.1	4,484.5
Italy.....	11,702.1	18,055.9	21,516.6	25,466.0	28,756.1	30,329.7	32,468.0	38,522.7	41,616.8	46,318.8	48,529.9	49,411.8
Netherlands.....	6,553.3	7,470.1	9,020.2	10,565.3	11,167.7	13,149.3	16,615.7	21,179.5	27,031.0	29,507.3	31,143.7	32,227.5
Portugal.....	1,070.7	1,474.7	2,336.1	3,414.7	3,577.8	3,571.4	3,860.5	4,198.0	4,752.0	5,045.8	5,158.0	5,204.7
Spain.....	6,182.5	8,074.1	10,194.3	14,431.3	17,635.3	19,317.4	21,184.6	24,270.5	27,247.6	29,446.9	30,349.3	31,772.7
Sweden.....	5,586.3	6,025.0	8,123.7	8,982.3	9,355.5	10,185.9	11,022.6	12,076.1	14,795.2	16,123.3	16,866.0	17,415.8
United Kingdom.....	21,410.8	26,357.6	35,547.9	44,938.5	51,287.0	58,457.4	63,677.0	75,167.6	86,575.1	93,243.2	94,357.4	98,880.6
European Union-15.....	110,132.2	136,879.0	179,400.8	223,950.6	246,725.4	269,706.0	298,480.5	365,087.0	422,238.0	470,793.5	497,401.5	514,518.6
Czech Republic.....	2,007.7	1,969.4	1,523.3	1,968.6	1,956.4	2,220.8	2,141.2	2,664.0	3,366.6	3,533.8	3,678.3	3,896.5
Hungary.....	1,496.1	1,537.5	1,618.5	1,769.0	1,950.6	2,254.4	2,382.6	2,521.5	2,611.9	2,755.2	2,758.6	2,772.9
Poland.....	1,722.6	1,818.1	2,136.6	3,297.6	3,637.3	4,246.0	5,002.7	5,946.1	6,542.6	6,965.9	7,538.1	7,881.2
Slovakia.....	210.0	230.2	270.4	543.7	629.6	841.3	824.2	687.0	753.7	831.7	764.7	742.5
Expanded European												
Union countries.....	5,436.4	5,555.3	5,548.9	7,578.9	8,173.9	9,562.6	10,350.7	11,818.6	13,274.8	14,086.7	14,739.8	15,293.1
Japan.....	45,020.3	55,080.9	65,532.3	89,254.2	107,614.4	129,530.8	150,410.1	175,785.9	201,483.3	231,826.2	225,741.1	230,660.4
China.....	712.3	1,474.7	4,237.6	12,114.8	14,626.1	17,727.1	19,806.0	23,249.5	33,414.6	39,659.7	41,030.3	44,969.2
South Korea.....	1,783.4	3,852.6	6,746.2	10,968.3	13,438.4	17,171.7	19,185.1	22,620.0	28,302.6	33,293.3	40,987.1	43,011.6
Taiwan.....	980.5	1,899.2	3,477.9	5,558.3	6,388.3	6,893.1	9,387.5	12,842.9	16,305.8	18,357.3	19,636.7	20,759.9
Singapore.....	2,511.3	3,645.6	5,659.2	8,626.4	9,274.1	9,943.6	10,627.6	11,417.4	12,289.2	12,782.0	13,437.3	13,289.5
Hong Kong.....	1,475.3	1,901.5	3,422.4	6,488.0	7,584.7	7,668.2	6,799.8	6,428.1	8,305.8	9,426.7	10,522.4	11,295.6
India.....	2,724.1	3,583.1	5,166.6	9,177.9	10,448.7	11,087.4	12,939.4	14,397.0	13,905.6	15,265.8	16,930.6	16,931.8
Malaysia.....	1,749.6	2,200.7	3,014.3	5,406.0	5,749.5	6,253.7	6,258.9	6,554.4	7,040.7	7,677.2	7,948.5	8,009.6
Thailand.....	553.1	831.3	1,923.7	4,316.5	5,048.7	5,194.4	4,707.2	5,006.2	5,367.8	5,756.5	6,144.3	6,174.1
Philippines.....	658.2	803.0	1,356.0	1,868.1	2,124.0	2,472.4	2,922.2	3,129.3	3,631.7	4,322.5	5,096.1	5,782.3
Indonesia.....	3,389.1	4,728.5	5,847.8	9,199.5	11,075.7	12,571.4	12,417.8	12,969.2	14,339.8	15,844.9	18,721.5	21,784.2
South Africa.....	5,176.0	6,370.5	7,738.8	9,034.3	9,684.3	10,731.5	12,096.1	13,721.1	15,467.8	17,567.2	19,078.1	19,863.9

**World service industry data, by selected country/economy: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Finance and insurance</b>												
Total production .....	1,424,610.5	1,690,624.8	2,160,477.9	2,437,616.9	2,565,595.3	2,687,105.6	2,857,051.2	2,998,025.0	3,206,111.7	3,295,837.5	3,360,150.6	3,514,256.7
United States.....	697,240.3	770,129.6	877,422.6	930,002.7	975,263.4	1,022,384.1	1,135,853.7	1,205,764.9	1,327,975.5	1,367,059.5	1,406,855.1	1,509,290.0
Canada.....	33,458.9	42,945.3	51,082.6	63,267.2	68,058.0	74,082.9	77,525.6	81,834.3	86,156.5	88,992.1	91,397.2	92,629.9
Mexico.....	6,786.0	9,251.5	11,527.7	14,203.7	13,609.3	14,756.2	16,475.5	17,272.9	19,396.2	21,275.7	23,232.4	24,226.2
Brazil.....	28,462.7	32,703.6	36,463.0	49,871.4	54,749.1	55,996.6	55,575.7	50,549.3	55,057.6	58,897.2	63,663.3	64,425.5
Chile.....	1,681.0	1,938.1	2,812.3	4,388.4	5,609.6	5,971.9	6,375.6	6,347.7	6,722.8	7,031.4	7,186.8	7,401.9
Costa Rica.....	307.2	341.3	403.0	518.3	554.4	572.2	564.2	612.3	710.8	789.9	844.6	880.6
Argentina.....	9,683.9	8,632.0	7,930.3	13,416.7	15,181.8	17,172.0	20,250.6	20,411.2	20,894.9	19,130.9	15,571.7	13,118.6
Peru.....	1,616.8	1,802.6	1,831.3	2,286.9	2,590.8	3,113.8	3,067.2	2,754.6	2,778.8	2,833.6	2,941.4	3,020.3
Austria.....	11,355.1	11,775.2	14,699.9	17,552.9	18,122.6	19,469.4	19,998.9	21,190.0	22,235.3	22,263.1	22,309.0	22,420.4
Belgium.....	11,473.0	15,206.8	19,537.9	20,881.5	22,430.6	25,355.3	26,027.2	26,535.4	25,890.8	24,371.2	24,157.3	24,708.4
Denmark.....	6,561.8	7,808.2	11,278.7	9,937.0	10,422.3	11,035.5	12,195.9	12,237.2	12,545.9	13,248.6	13,726.2	14,070.5
France.....	84,799.2	114,482.5	138,952.4	121,664.8	124,261.4	120,807.0	118,169.8	121,842.8	132,094.5	130,602.9	133,216.7	137,964.3
Finland.....	7,671.3	8,022.2	8,608.5	5,607.1	6,026.8	6,072.2	6,163.7	6,989.8	7,229.0	6,397.5	6,233.2	7,387.1
Germany.....	72,143.2	85,310.1	112,935.8	167,913.5	174,484.7	183,628.9	185,621.6	202,030.3	196,363.0	202,486.9	209,554.3	211,891.6
Greece.....	2,815.1	3,181.0	4,047.0	5,424.8	5,788.3	6,011.6	6,814.0	7,661.8	8,245.8	8,452.1	8,515.6	9,084.3
Ireland.....	989.8	1,085.9	3,139.4	4,381.4	4,844.3	5,123.0	5,557.7	6,400.8	6,934.8	7,599.0	8,315.4	8,523.7
Italy.....	70,230.3	74,820.3	92,429.0	91,226.5	100,911.1	109,703.1	117,982.3	114,989.3	125,715.2	125,723.1	125,024.9	125,917.2
Netherlands.....	21,782.7	24,310.7	25,335.8	28,802.5	31,808.6	33,743.5	35,343.6	37,470.8	37,157.8	37,024.4	36,254.2	36,620.6
Portugal.....	2,385.4	3,221.2	6,399.9	7,157.4	7,726.4	8,921.9	10,970.1	12,354.7	13,353.9	14,851.9	14,920.5	14,750.3
Spain.....	17,308.8	25,177.9	33,035.7	40,396.2	39,874.1	41,458.7	42,635.6	41,037.1	44,915.5	50,122.8	49,645.6	50,907.7
Sweden.....	15,843.0	17,691.2	26,723.9	11,417.4	11,763.5	13,804.7	13,535.8	15,585.5	15,631.8	14,639.9	14,804.3	14,999.0
United Kingdom.....	78,271.3	112,861.6	142,883.9	147,662.1	152,121.7	158,986.9	168,208.4	169,814.7	180,285.9	190,486.7	193,691.2	205,584.0
European Union-15.....	403,629.9	504,954.8	640,007.9	680,025.1	710,586.4	744,121.8	769,224.3	796,140.2	828,599.3	848,270.1	860,368.4	884,828.9
Czech Republic.....	1,040.7	871.1	3,114.2	2,699.3	3,480.9	3,799.5	4,792.4	4,763.8	4,255.3	4,380.4	4,681.2	4,407.8
Hungary.....	1,626.4	1,884.4	2,779.9	2,894.5	2,827.8	2,756.1	2,627.1	2,702.7	2,678.5	2,794.2	3,032.7	3,071.5
Poland.....	409.2	375.3	404.1	4,288.6	4,993.8	5,295.4	5,620.1	7,565.7	8,401.9	8,504.4	7,240.1	7,130.9
Slovakia.....	1,234.2	1,127.6	1,178.3	1,274.3	1,091.7	1,379.7	1,400.5	1,534.6	1,436.5	1,365.9	1,454.6	1,471.5
<b>Expanded European</b>												
Union countries.....	4,310.5	4,258.5	7,476.5	11,156.8	12,394.2	13,230.8	14,440.2	16,566.9	16,772.2	17,044.9	16,408.6	16,081.7
Japan.....	97,574.9	150,167.3	274,780.3	318,057.2	333,370.8	342,444.1	362,499.8	391,831.4	414,883.0	412,976.6	394,078.1	397,981.6
China.....	9,213.2	15,388.3	39,669.4	56,761.7	63,053.6	66,521.7	68,726.5	74,137.0	79,842.1	88,235.9	89,187.5	95,815.9
South Korea.....	6,152.0	9,185.6	20,021.8	43,445.8	45,781.4	47,839.8	46,983.0	44,515.3	43,021.2	46,615.1	57,521.5	59,299.3
Taiwan.....	6,320.9	7,843.0	20,630.6	27,742.4	30,754.2	37,012.2	39,169.5	40,142.6	40,725.3	41,640.6	45,413.8	46,985.0
Singapore.....	1,966.8	3,709.2	5,635.9	10,343.2	11,419.4	13,743.8	12,207.4	12,674.9	13,209.5	13,446.8	12,507.8	12,971.5
Hong Kong.....	7,312.4	8,405.9	9,187.5	14,179.4	15,723.3	16,075.3	14,765.9	15,075.3	16,998.8	16,339.3	16,749.9	18,421.0
India.....	3,734.8	6,718.4	13,483.3	22,781.5	24,980.0	27,981.0	30,076.8	35,178.2	35,582.3	40,874.1	44,130.3	47,012.3
Malaysia.....	1,791.6	2,147.8	2,917.0	5,301.4	6,272.0	7,242.7	7,192.9	7,788.3	8,096.2	9,116.1	10,309.4	10,861.7
Thailand.....	2,888.8	3,830.0	9,254.3	18,158.6	18,927.1	17,321.3	12,580.3	8,806.4	8,303.7	8,466.6	9,024.5	10,426.4
Philippines.....	1,528.2	1,105.9	2,674.4	3,052.3	3,663.6	4,331.3	4,556.3	4,515.4	4,270.1	4,165.3	4,309.3	4,615.1
Indonesia.....	1,517.9	2,526.4	4,030.8	6,863.2	7,375.7	7,768.7	5,152.7	4,646.6	4,869.9	5,232.6	5,675.5	6,066.2
South Africa.....	6,198.7	6,928.1	8,089.0	9,093.6	9,669.9	9,972.7	10,739.7	11,452.3	11,902.7	12,724.6	13,156.0	13,478.4

Country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
Business services												
Total production .....	1,707,966.8	2,108,820.9	2,871,294.2	3,467,572.9	3,674,203.9	3,910,879.3	4,114,642.8	4,394,661.6	4,669,703.9	4,767,525.8	4,790,645.9	4,858,457.7
United States.....	619,717.7	801,146.7	1,106,239.6	1,313,647.3	1,393,736.1	1,527,436.9	1,624,492.3	1,767,373.5	1,856,192.6	1,832,514.1	1,848,990.5	1,868,052.0
Canada.....	21,132.7	28,739.8	41,474.9	48,178.3	50,961.4	55,536.7	62,645.4	71,252.6	78,792.4	80,265.9	83,192.7	85,767.1
Mexico.....	14,387.8	19,195.0	18,266.5	25,851.0	27,562.9	28,919.7	30,209.4	32,915.6	35,773.8	37,170.2	35,328.9	36,840.1
Brazil.....	33,660.9	38,306.8	43,023.6	78,337.3	90,805.2	94,817.2	96,641.2	91,317.3	86,516.8	88,574.5	91,118.9	91,584.3
Chile.....	2,560.1	3,054.6	4,478.9	6,999.5	8,945.2	9,401.0	10,034.8	10,360.6	10,947.8	11,475.6	11,645.6	12,102.3
Costa Rica.....	429.4	481.3	569.0	676.7	723.2	764.8	769.6	836.8	907.4	975.6	1,017.7	1,068.9
Argentina.....	21,514.5	19,508.1	17,996.5	27,064.6	28,383.2	30,284.8	31,563.1	31,159.2	31,382.2	30,278.0	27,883.7	29,053.0
Peru.....	3,479.7	3,859.9	3,879.6	4,575.5	4,710.6	4,901.7	4,976.3	5,100.4	5,058.9	5,184.7	5,389.2	5,533.8
Austria.....	8,496.3	9,351.6	14,801.7	18,538.4	19,228.3	20,089.5	21,512.6	22,872.0	25,075.0	26,901.7	27,687.2	27,921.8
Belgium.....	22,525.0	28,393.6	36,807.0	44,507.1	46,699.8	49,910.6	51,457.3	53,783.4	57,735.5	62,617.4	62,292.5	63,143.2
Denmark.....	9,314.7	12,455.7	15,890.0	16,534.1	15,995.4	17,710.3	19,375.8	22,086.1	22,984.7	25,154.0	25,229.9	25,367.7
France.....	164,085.6	183,634.1	238,348.5	247,943.7	257,151.4	257,039.9	274,535.4	297,585.0	321,413.4	333,610.2	335,830.5	338,944.3
Finland.....	4,519.6	6,571.5	10,047.4	9,747.8	10,314.1	10,683.7	11,524.0	12,774.6	13,806.4	14,541.0	15,099.8	15,795.9
Germany.....	137,397.0	164,189.1	221,080.1	303,745.7	317,608.6	331,780.6	356,379.9	377,102.8	413,282.0	429,766.6	417,205.8	416,659.3
Greece.....	2,152.4	2,426.1	3,124.5	4,231.5	4,231.7	4,429.9	4,735.8	4,823.3	4,795.2	4,979.5	5,345.8	5,746.3
Ireland.....	1,462.2	1,621.8	5,356.2	6,478.7	7,080.9	7,848.6	8,851.4	10,134.3	10,966.9	11,831.2	12,991.1	13,213.7
Italy.....	83,756.5	114,321.7	142,742.0	156,381.3	158,854.2	163,820.8	165,349.8	181,160.5	194,772.8	204,877.5	213,568.9	198,758.6
Netherlands.....	30,353.1	32,524.3	43,505.3	54,448.1	59,888.1	63,671.3	68,039.6	73,394.5	78,688.9	79,699.7	79,141.1	80,879.7
Portugal.....	4,469.1	4,888.6	8,032.7	10,625.2	11,118.3	10,929.2	11,443.1	13,249.8	13,412.3	13,072.5	13,146.6	13,252.4
Spain.....	19,002.3	26,268.5	38,124.8	43,276.2	45,572.2	46,650.8	50,218.0	56,964.8	60,828.6	63,678.8	63,988.2	66,499.6
Sweden.....	19,094.8	22,046.7	27,660.9	34,052.4	34,533.3	35,979.0	38,804.1	43,200.3	49,160.5	51,981.4	51,543.8	53,118.7
United Kingdom.....	111,163.6	110,959.4	161,806.4	196,558.2	208,701.5	228,386.9	249,163.0	266,570.7	283,702.1	297,237.3	303,471.8	319,070.3
European Union-15.....	617,792.2	719,652.8	967,327.5	1,147,068.4	1,196,977.7	1,248,931.1	1,331,389.7	1,435,702.1	1,550,624.4	1,619,948.8	1,626,543.1	1,638,371.5
Czech Republic.....	2,074.8	1,752.4	6,223.8	8,024.5	7,795.2	8,165.4	7,688.6	8,386.2	9,273.0	8,681.1	8,078.4	8,747.5
Hungary.....	2,588.0	3,034.2	4,547.3	5,343.0	5,831.8	5,447.6	5,842.1	5,916.0	5,936.9	6,416.0	6,550.2	6,482.6
Poland.....	5,421.2	5,064.9	5,380.6	12,129.9	12,290.4	12,953.5	12,576.1	12,770.0	12,926.5	13,088.0	13,810.8	14,460.4
Slovakia.....	2,491.7	2,322.9	2,398.8	2,047.7	2,061.0	2,559.7	2,633.8	3,110.5	3,169.2	2,761.2	3,431.7	3,862.2
Expanded European												
Union countries.....	12,575.8	12,174.3	18,550.5	27,545.2	27,978.4	29,126.2	28,740.6	30,182.7	31,305.6	30,946.3	31,871.2	33,552.7
Japan.....	177,866.8	248,042.5	390,250.7	450,608.8	486,184.7	498,352.5	505,920.3	515,634.7	551,225.0	584,788.6	567,531.2	580,790.8
China.....	4,784.7	5,469.3	4,585.3	10,867.7	12,201.1	14,056.6	15,582.4	17,394.0	19,917.8	23,368.9	23,597.6	25,955.3
South Korea.....	8,216.1	13,360.4	21,592.1	32,119.9	34,927.4	36,619.2	32,548.1	32,886.9	35,336.6	35,954.0	37,255.7	38,077.9
Taiwan.....	2,462.0	3,550.2	5,518.5	10,401.7	11,834.3	12,993.4	13,877.2	14,896.4	16,106.4	16,795.0	16,783.4	17,196.4
Singapore.....	4,141.7	5,824.4	8,417.3	14,017.5	15,443.2	17,300.4	17,094.1	17,711.4	18,840.7	19,197.6	19,282.3	18,943.5
Hong Kong.....	11,131.1	12,237.3	13,665.6	20,549.2	22,458.3	25,305.8	22,884.6	22,602.4	25,539.7	26,048.8	26,116.5	26,352.1
India.....	5,051.1	5,769.7	7,374.7	11,854.1	12,450.0	14,068.0	15,702.7	16,887.1	18,191.1	16,784.3	18,043.8	19,222.2
Malaysia.....	2,692.3	3,249.5	4,441.4	8,296.9	9,649.5	11,401.5	11,147.7	11,677.0	11,953.9	13,193.8	14,884.7	15,682.2
Thailand.....	1,242.8	1,437.7	2,187.4	3,043.8	3,203.0	3,039.5	3,210.9	3,596.4	3,718.0	3,754.0	4,066.1	4,236.6
Philippines.....	2,850.1	2,176.0	3,102.6	3,541.8	3,942.6	4,389.8	4,619.7	4,767.3	4,779.4	4,961.3	5,365.6	5,762.7
Indonesia.....	2,676.5	4,416.0	5,902.5	9,927.1	11,359.4	12,229.5	9,813.8	9,317.1	9,807.7	10,324.5	11,542.7	12,370.6
South Africa.....	9,306.6	10,562.2	12,356.1	13,967.2	14,871.5	15,699.2	16,905.0	17,979.4	18,635.0	19,803.2	20,379.9	21,159.0

**World service industry data, by selected country/economy: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Educational services</b>												
Total production .....	727,115.9	824,495.8	949,702.6	1,100,139.5	1,136,129.1	1,151,218.9	1,172,328.2	1,188,279.0	1,217,348.2	1,238,458.2	1,266,938.3	1,285,099.5
United States.....	65,878.6	75,980.1	90,955.9	106,239.8	110,429.2	111,493.1	116,631.4	118,776.7	127,096.0	131,670.0	133,667.5	130,600.5
Canada.....	32,904.6	37,893.3	38,245.6	39,908.4	39,967.8	38,604.0	39,481.2	39,904.6	39,670.0	39,659.9	40,020.8	40,222.1
Mexico.....	18,880.7	20,720.3	20,427.6	21,308.9	21,635.8	21,941.6	22,403.3	23,063.2	22,891.3	23,025.6	22,921.7	23,031.8
Brazil.....	30,711.6	38,925.8	45,438.7	47,786.3	47,914.5	47,963.4	47,712.7	47,531.1	48,764.9	48,093.1	48,463.6	48,538.2
Chile.....	2,366.4	3,396.7	3,999.5	4,719.7	4,651.7	4,495.9	4,538.0	4,922.7	5,156.0	5,274.7	5,392.2	5,492.5
Costa Rica.....	147.9	167.8	229.7	788.6	845.0	869.6	886.6	935.6	999.0	1,026.3	1,096.3	1,157.1
Argentina.....	14,085.9	12,176.7	10,784.8	15,229.0	16,056.8	17,621.9	18,777.7	19,024.6	19,152.4	18,308.4	16,231.5	17,220.0
Peru.....	2,704.4	2,857.4	2,813.8	3,474.3	3,436.3	3,388.8	3,369.4	3,385.6	3,435.6	3,463.8	3,625.0	3,722.3
Austria.....	10,608.2	11,250.5	11,700.6	11,723.0	11,870.1	11,688.2	11,573.3	11,785.5	11,744.0	11,610.6	12,020.6	12,078.3
Belgium.....	13,784.9	15,249.5	16,005.4	16,556.1	17,170.1	16,774.4	16,796.5	17,172.5	16,727.3	17,068.1	17,371.1	17,789.8
Denmark.....	8,209.3	8,695.9	8,962.0	9,911.2	10,354.9	10,287.6	10,284.5	10,575.6	10,471.9	10,814.9	11,498.2	11,564.3
France.....	61,108.0	66,205.1	69,733.1	76,946.7	78,590.1	78,318.9	79,385.7	81,616.4	84,028.6	85,063.8	87,654.5	88,678.9
Finland.....	6,615.9	6,505.0	7,645.2	7,418.3	7,530.4	7,482.2	7,678.1	7,913.9	7,831.7	7,924.6	8,092.3	8,147.2
Germany.....	54,160.2	59,911.5	68,736.9	99,560.4	99,981.9	100,856.2	99,975.5	99,718.6	99,850.1	99,872.6	100,807.2	100,025.2
Greece.....	2,848.8	3,139.3	3,789.9	5,151.3	5,440.1	5,350.8	5,381.4	5,125.2	5,103.4	4,951.3	5,485.1	5,712.1
Ireland.....	3,048.8	3,037.5	3,844.5	4,615.6	4,726.7	4,449.8	4,484.0	5,075.4	5,180.1	5,418.0	6,115.9	6,296.7
Italy.....	56,177.0	58,511.1	61,266.4	57,267.4	61,677.2	62,077.1	61,274.8	60,303.8	59,343.2	59,418.0	58,915.1	60,818.4
Netherlands.....	16,670.1	16,112.6	16,512.3	17,409.9	17,720.8	18,161.6	18,674.2	18,905.5	18,914.5	19,023.7	19,418.5	19,568.0
Portugal.....	3,519.7	4,532.0	5,846.7	7,370.9	7,679.2	7,693.7	7,817.6	8,082.8	8,291.4	8,311.0	8,402.4	8,326.8
Spain.....	13,659.6	17,360.7	22,209.8	28,853.7	29,546.3	29,608.9	30,480.2	32,499.7	33,514.7	34,626.0	35,310.1	35,984.6
Sweden.....	13,545.6	15,754.0	17,990.7	17,917.5	17,769.6	17,518.3	17,736.1	19,122.2	18,705.8	18,989.6	19,481.8	19,698.0
United Kingdom.....	64,130.3	65,481.6	74,771.1	86,384.0	88,401.7	89,683.6	94,539.8	97,459.2	99,133.2	100,376.0	101,514.1	101,438.9
European Union-15.....	328,086.4	351,746.3	389,014.6	447,086.0	458,459.0	459,951.2	466,081.6	475,356.0	478,839.8	483,468.2	492,087.0	496,127.2
Czech Republic.....	2,968.7	2,660.9	2,142.5	2,586.1	2,791.4	2,372.8	2,064.8	2,317.5	2,327.3	2,414.3	2,419.4	2,457.9
Hungary.....	71.1	72.7	118.0	2,225.5	2,269.0	2,398.1	2,499.9	2,572.1	2,608.3	2,683.8	2,647.0	2,562.2
Poland.....	6,983.7	6,623.9	6,689.0	6,945.7	7,071.6	7,131.5	7,606.9	7,712.5	7,615.3	7,227.5	7,343.9	7,364.5
Slovakia.....	1,572.4	1,546.5	1,515.0	1,010.7	1,019.1	827.4	960.9	1,029.5	1,007.8	985.1	1,019.5	1,175.4
<b>Expanded European</b>												
Union countries.....	11,595.9	10,904.0	10,464.5	12,767.9	13,151.1	12,729.9	13,132.4	13,631.6	13,558.8	13,310.6	13,429.9	13,560.0
Japan.....	85,227.3	92,813.7	125,073.7	160,427.8	165,881.4	167,182.9	164,343.2	163,799.4	161,423.9	171,217.0	175,680.5	184,421.7
China.....	9,811.2	15,927.8	17,550.3	22,625.2	25,208.0	27,260.1	31,573.2	35,711.6	47,978.2	44,204.4	45,232.7	45,748.4
South Korea.....	5,766.3	11,288.4	15,740.6	26,547.0	27,842.0	29,058.0	27,797.5	27,825.2	27,966.2	29,811.4	32,969.7	33,913.0
Taiwan.....	1,281.5	2,200.5	4,085.3	6,305.0	7,327.3	8,185.9	9,081.3	9,708.0	9,401.2	10,095.1	11,169.8	11,313.9
Singapore.....	1,080.3	1,423.6	2,598.9	3,852.3	4,237.7	4,628.7	4,891.0	5,228.3	5,656.9	6,145.4	6,412.2	6,546.1
Hong Kong.....	3,601.2	6,496.7	11,152.3	16,580.8	17,494.2	18,855.7	19,109.9	19,850.9	21,142.0	21,416.8	21,534.8	21,541.1
India.....	5,176.9	6,160.3	8,534.5	12,059.9	12,842.9	14,004.4	16,308.3	18,297.5	19,205.6	20,387.4	21,587.2	23,423.4
Malaysia.....	1,220.9	1,323.4	1,320.1	1,987.3	2,151.2	2,189.4	2,035.9	2,062.3	2,073.8	2,226.7	2,307.5	2,265.7
Thailand.....	2,746.5	3,048.4	3,443.2	5,490.8	5,636.8	5,574.1	5,486.7	5,746.3	5,824.6	5,548.0	5,751.1	5,860.9
Philippines.....	1,381.3	1,822.9	1,959.7	2,067.8	2,154.3	2,325.4	2,550.4	2,646.4	2,708.1	2,820.1	3,020.4	3,149.9
Indonesia.....	2,833.8	3,975.9	4,277.1	5,586.6	6,101.9	5,115.7	4,498.8	5,196.5	4,838.2	4,906.6	5,322.4	5,568.1
South Africa.....	3,753.2	4,531.6	6,255.2	7,500.4	7,841.2	7,815.6	7,646.2	7,626.0	7,674.5	7,655.8	7,623.2	7,881.9



**World service industry data, by selected country/economy: Selected years, 1980–2003**

(Millions of 1997 U.S. dollars)

Country/economy	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Health services</b>												
Total production .....	1,353,114.7	1,514,375.9	1,729,328.5	1,963,368.5	2,043,456.4	2,069,301.7	2,105,276.7	2,141,641.7	2,241,711.9	2,347,330.1	2,447,118.7	2,506,675.6
United States.....	535,870.3	588,796.6	680,939.5	725,524.8	749,296.1	749,468.9	750,585.5	760,076.9	811,661.4	871,221.8	922,706.1	948,846.8
Canada.....	28,912.2	35,899.6	41,828.1	43,200.3	42,359.1	42,758.3	43,882.8	44,606.7	45,556.6	46,520.0	48,193.3	50,057.3
Mexico.....	11,661.5	14,346.9	14,570.7	14,487.3	14,173.7	14,790.5	15,514.1	15,920.6	16,088.6	16,053.5	15,923.7	16,000.1
Brazil.....	51,522.3	61,064.2	61,914.8	62,446.4	63,799.7	64,592.3	64,787.2	65,703.1	68,133.6	67,796.2	67,530.6	67,634.6
Chile.....	2,456.5	3,543.2	4,153.2	4,926.5	4,899.0	5,033.0	5,003.7	5,148.1	5,123.9	5,181.7	5,251.8	5,349.4
Costa Rica.....	249.3	263.2	313.0	1,030.6	1,125.1	1,171.1	1,203.8	1,281.2	1,395.8	1,446.7	1,527.6	1,618.5
Argentina.....	11,853.7	9,931.4	8,677.2	12,080.4	12,985.9	14,530.9	15,434.6	14,893.9	15,272.2	14,891.4	13,049.9	13,844.7
Peru.....	4,091.2	4,147.0	3,996.0	4,488.7	4,537.7	4,679.3	4,702.3	5,274.4	5,410.0	5,503.2	5,692.8	5,845.6
Austria.....	10,278.9	11,243.9	13,680.7	15,768.1	16,179.6	14,554.1	15,163.5	16,456.1	16,339.3	16,813.6	16,657.6	16,754.2
Belgium.....	14,408.3	16,484.2	20,957.7	22,239.0	22,716.9	22,253.5	22,002.5	23,587.6	23,862.9	25,078.8	25,563.0	26,184.2
Denmark.....	14,583.3	16,102.2	17,543.6	18,734.9	19,289.3	19,856.8	20,564.8	20,919.5	20,801.0	21,373.7	22,579.7	23,066.4
France.....	81,290.9	95,728.0	108,711.9	119,390.2	124,276.2	121,901.4	121,858.6	122,946.8	126,157.6	131,108.3	138,541.2	141,337.0
Finland.....	9,329.1	11,181.8	13,059.3	11,471.8	11,923.2	12,035.3	12,026.4	12,332.0	12,376.4	12,897.6	13,359.0	13,419.3
Germany.....	93,754.1	94,361.2	101,870.7	167,171.7	173,605.6	178,562.4	180,580.4	186,093.6	190,229.1	193,810.0	205,634.2	205,784.7
Greece.....	3,798.3	4,165.4	4,963.8	6,588.5	6,826.5	6,861.0	6,936.1	6,794.2	6,551.1	6,565.2	6,972.9	7,330.1
Ireland.....	3,794.9	3,652.2	4,015.0	5,090.2	5,474.6	5,426.2	5,620.7	6,806.5	7,794.6	8,600.2	9,235.6	9,508.6
Italy.....	75,207.0	81,704.5	93,641.5	89,163.7	94,281.3	96,194.6	97,255.6	98,266.7	102,624.0	106,734.3	110,369.8	111,358.0
Netherlands.....	27,240.7	28,106.4	29,730.3	33,198.9	34,303.5	33,674.5	34,534.5	35,192.1	35,409.1	36,596.4	38,659.5	39,270.3
Portugal.....	3,821.2	5,695.9	7,666.4	9,025.5	9,104.6	8,767.0	8,915.3	9,814.8	10,256.0	10,611.4	10,706.0	10,630.6
Spain.....	18,362.9	21,958.4	30,016.6	39,183.7	40,116.8	40,143.5	40,862.2	43,457.7	45,238.4	46,069.7	47,421.1	48,900.7
Sweden.....	22,811.9	26,504.6	30,151.3	30,948.7	29,917.5	30,003.1	31,560.4	30,465.7	31,358.3	32,486.0	32,947.2	33,836.8
United Kingdom.....	102,116.5	110,928.3	131,324.6	166,403.4	175,729.3	180,447.5	193,543.2	198,066.1	207,762.9	216,967.7	225,013.8	233,689.1
European Union-15.....	480,797.8	527,816.9	607,333.4	734,378.3	763,744.8	770,680.9	791,424.3	811,199.5	836,760.6	865,712.9	903,660.5	921,069.9
Czech Republic.....	4,174.9	3,567.9	2,726.3	3,446.2	3,351.1	3,158.9	2,917.3	3,031.1	3,097.8	3,174.3	3,181.6	3,232.2
Hungary.....	82.5	83.3	130.5	2,499.3	2,627.6	2,794.9	2,853.1	2,957.1	3,012.6	2,993.6	2,961.2	2,902.2
Poland.....	9,446.0	8,741.2	8,439.9	8,066.8	8,290.0	8,373.1	8,556.6	7,763.4	7,635.9	7,472.1	7,320.8	7,277.7
Slovakia.....	1,431.9	1,342.7	1,270.8	1,051.1	1,088.5	1,247.7	1,598.4	1,450.4	1,411.4	1,314.5	1,412.4	1,410.2
<b>Expanded European</b>												
Union countries.....	15,135.4	13,735.1	12,567.5	15,063.4	15,357.2	15,574.6	15,925.3	15,202.0	15,157.7	14,954.5	14,876.0	14,822.3
Japan.....	56,702.9	65,504.3	77,517.4	95,841.3	106,803.4	109,955.8	111,449.1	110,965.6	115,606.4	120,336.5	119,042.3	122,750.8
China.....	6,877.4	8,794.9	10,338.3	12,211.1	13,324.6	14,416.9	15,995.1	17,582.3	18,775.7	21,799.8	21,400.4	22,153.7
South Korea.....	614.4	2,649.6	4,764.8	13,467.2	14,092.4	15,303.5	14,067.1	14,619.9	14,156.9	13,708.4	15,344.6	15,952.0
Taiwan.....	1,013.0	1,600.1	3,124.2	4,640.8	5,097.8	5,626.1	6,370.3	6,854.7	7,725.9	8,236.7	8,985.1	9,101.0
Singapore.....	1,490.5	1,969.7	3,480.3	5,083.1	5,642.6	6,233.5	6,575.3	7,036.8	7,634.2	8,295.1	8,720.8	8,903.0
Hong Kong.....	5,204.0	8,982.6	14,786.1	21,667.5	23,294.1	25,392.9	25,948.5	27,440.3	29,240.4	30,191.0	30,007.3	30,016.0
India.....	7,645.3	8,776.5	11,501.7	15,759.6	17,100.7	18,859.6	22,144.3	25,293.0	26,833.8	28,739.8	30,080.3	32,638.9
Malaysia.....	2,105.1	2,076.1	1,798.7	2,597.0	2,864.4	2,948.4	2,764.4	2,850.7	2,897.5	3,138.9	3,215.4	3,157.0
Thailand.....	3,930.7	4,168.0	4,478.0	7,145.9	7,462.5	7,506.7	7,096.9	7,867.1	8,041.5	8,110.6	8,284.6	8,003.1
Philippines.....	570.1	981.0	1,233.2	1,415.1	1,476.6	1,557.3	1,699.2	1,765.8	1,874.9	1,980.1	2,190.0	2,338.6
Indonesia.....	3,886.2	5,316.3	5,612.7	7,369.6	8,124.9	6,889.4	5,991.5	6,937.2	6,453.9	6,486.3	7,040.7	7,365.7
South Africa.....	5,851.3	6,827.0	8,388.7	9,907.1	10,440.9	10,525.3	10,382.5	10,541.5	10,722.6	10,792.2	10,622.3	10,953.6

NOTES: Production is total gross output. Seventy countries or economies included in "all countries." High-technology sectors cover communication services, finance and insurance, business services, education, and medical and health care.

SOURCES: Global Insight, Inc., World Industry Service database (2005). Historical data from United Nations Industrial Development Organization, United Nations System of National Accounts, Organisation for Economic Co-operation and Development, and country sources.

**U.S. trade in advanced technology products: 2000-04**

(Millions of U.S. dollars)

Country/economy	Exports					Imports					Balance				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
Total .....	225,415.3	202,107.8	180,629.3	181,789.5	201,454.0	195,660.3	195,265.2	196,100.1	207,196.2	238,478.3	29,755.0	6,842.6	-15,470.8	-25,406.7	-37,024.2
Argentina.....	1,395.3	1,015.2	223.5	441.7	605.7	10.7	14.4	18.1	9.7	17.1	1,384.6	1,000.8	205.4	432.0	588.7
Australia.....	3,743.0	3,043.0	4,711.2	4,046.1	3,345.0	390.0	427.9	381.9	374.2	416.4	3,352.9	2,615.1	4,329.2	3,671.9	2,928.6
Austria.....	624.4	563.8	708.9	423.6	532.0	314.0	289.6	443.4	402.8	498.9	310.4	274.2	265.5	20.7	33.1
Belgium.....	2,122.0	1,945.4	1,659.0	1,655.4	1,860.3	973.6	1,367.6	1,296.2	986.9	1,519.9	1,148.4	577.8	362.8	668.5	340.4
Brazil.....	5,793.0	5,703.3	3,947.5	3,281.0	4,352.3	1,929.7	2,927.2	2,961.3	2,685.9	2,809.4	3,863.3	2,776.1	986.1	595.1	1,543.0
Canada.....	25,601.5	21,417.5	17,420.3	18,027.7	20,438.5	20,293.5	17,302.0	13,769.3	13,722.6	13,844.2	5,308.0	4,115.5	3,651.0	4,305.1	6,594.2
Chile.....	926.9	858.3	600.0	585.1	615.5	2.0	2.6	4.4	3.3	6.1	924.9	855.7	595.6	581.8	609.4
China.....	5,499.5	7,243.4	8,303.6	8,290.1	9,401.2	10,699.9	13,364.5	20,093.6	29,345.2	45,698.2	-5,200.3	-6,121.1	-11,790.0	-21,055.1	-36,297.0
Costa Rica.....	437.8	485.4	1,075.4	1,286.7	1,124.0	395.5	725.9	918.5	1,206.5	1,104.7	42.2	-240.5	156.9	80.2	19.3
Czech Republic.....	354.9	321.7	333.9	268.6	336.5	97.3	163.7	220.5	287.7	339.7	257.6	158.1	113.5	-19.1	-3.2
Denmark.....	516.0	555.5	524.1	492.4	912.4	456.1	494.3	493.6	602.4	756.0	59.9	61.2	30.5	-110.1	156.5
Dominican Republic.....	267.8	363.0	258.3	198.2	203.1	356.6	355.5	353.6	456.4	469.8	-88.8	7.5	-95.3	-258.3	-266.6
Federal Republic of Germany.....	12,407.9	12,376.9	9,341.8	9,306.8	9,340.1	8,804.5	9,536.6	8,074.9	8,007.9	9,595.4	3,603.3	2,840.3	1,266.9	1,298.9	-255.2
Finland.....	725.4	602.4	595.2	422.0	477.5	273.0	463.3	639.6	607.9	414.0	452.3	139.1	-44.4	-185.9	63.5
France.....	9,221.6	8,677.0	8,508.6	6,672.3	9,165.7	9,443.6	10,434.0	9,617.5	9,206.0	8,836.6	-222.0	-1,757.0	-1,108.9	-2,533.7	329.1
Greece.....	593.2	606.2	548.9	456.8	1,066.4	12.2	7.5	17.3	20.0	16.6	581.0	598.6	531.6	436.8	1,049.9
Hong Kong.....	5,726.4	5,773.3	4,749.4	5,141.5	6,370.7	1,630.6	1,056.8	1,192.9	1,028.7	1,122.9	4,095.8	4,716.5	3,556.6	4,112.8	5,247.8
Hungary.....	145.7	244.9	235.5	460.5	644.2	1,240.6	886.4	1,085.1	1,288.0	1,247.6	-1,094.8	-641.5	-849.6	-827.5	-603.3
India.....	1,056.4	1,150.9	1,254.8	1,328.4	1,505.1	143.1	199.7	198.8	253.0	318.5	913.3	951.2	1,056.0	1,075.4	1,186.6
Indonesia.....	255.6	215.9	198.2	208.1	220.7	1,144.9	1,399.1	1,265.0	1,076.0	1,123.3	-889.3	-1,183.2	-1,066.9	-867.9	-902.6
Ireland.....	3,901.4	3,578.3	2,823.3	3,285.8	3,735.2	6,630.4	8,924.4	13,233.2	14,573.9	13,433.0	-2,729.0	-5,346.1	-10,409.9	-11,288.1	-9,697.8
Israel.....	2,738.2	2,603.8	2,025.8	1,851.5	2,773.8	2,543.9	2,229.3	2,100.0	2,013.7	2,280.8	194.3	374.4	-74.2	-162.2	493.0
Italy.....	3,136.3	2,744.1	3,131.3	3,147.0	2,902.8	1,579.6	1,674.4	1,899.9	1,734.5	1,972.1	1,556.8	1,069.7	1,231.4	1,412.6	930.6
Japan.....	22,116.8	18,525.0	16,849.3	16,945.1	18,163.5	34,816.3	27,879.6	23,744.4	22,386.0	23,876.9	-12,699.5	-9,354.6	-6,895.1	-5,440.9	-5,713.4
Luxembourg.....	144.3	358.3	253.9	84.0	437.8	3.1	3.0	2.7	4.4	2.6	141.1	355.3	251.2	79.6	435.1
Malaysia.....	7,226.2	6,051.1	7,234.8	7,806.3	7,554.7	12,776.9	14,051.9	15,150.4	16,384.4	18,204.0	-5,550.7	-8,000.7	-7,915.6	-8,578.2	-10,649.2
Malta.....	229.3	211.8	160.3	147.5	145.8	368.4	280.8	217.0	272.6	281.5	-139.0	-69.0	-56.7	-125.1	-135.7
Mexico.....	15,071.8	13,924.3	12,584.6	13,604.7	16,508.5	12,931.9	16,422.5	16,271.5	17,954.6	22,143.8	2,139.9	-2,498.2	-3,687.0	-4,350.0	-5,635.3
Netherlands.....	9,547.4	7,805.1	7,261.5	8,413.3	9,152.1	1,643.4	1,514.6	1,762.8	2,043.0	2,191.0	7,904.1	6,290.5	5,498.7	6,370.3	6,961.1
Norway.....	587.6	551.4	457.1	407.6	379.8	257.3	332.9	313.8	279.6	372.3	330.3	218.6	143.3	128.0	7.5
Peru.....	318.4	279.1	289.4	301.7	323.8	0.7	2.3	2.3	1.0	2.0	317.7	276.9	287.2	300.7	321.8
Philippines.....	5,537.3	4,934.6	4,965.5	5,851.5	4,836.0	7,344.3	5,907.9	5,843.2	4,917.2	3,809.1	-1,807.0	-973.2	-877.7	934.3	1,026.9
Poland.....	264.0	215.3	179.8	189.0	224.7	48.7	38.2	41.2	46.1	74.0	215.3	177.1	138.6	142.9	150.7
Portugal.....	350.2	583.5	229.3	195.2	366.5	33.9	253.7	312.2	427.9	542.9	316.4	329.8	-82.9	-232.7	-176.5
Russia.....	445.0	390.4	430.3	367.5	411.2	1,045.4	1,011.6	831.5	1,052.7	921.1	-600.4	-621.2	-401.2	-685.2	-509.9
Singapore.....	8,862.5	9,693.3	8,139.4	8,430.7	10,158.4	11,045.6	10,081.4	10,042.5	10,407.8	10,804.6	-2,183.1	-388.0	-1,903.1	-1,977.1	-646.2
Slovakia.....	46.0	24.1	21.8	29.2	25.6	2.5	4.2	6.7	8.7	9.0	43.5	20.0	15.1	20.5	16.6
Slovenia.....	33.9	25.5	39.7	36.2	33.0	5.4	5.0	15.4	21.5	25.2	28.4	20.5	24.3	14.7	7.7
South Africa.....	908.8	931.2	570.0	642.1	535.7	27.7	22.6	27.9	31.8	29.6	881.1	908.6	542.1	610.3	506.1
South Korea.....	13,485.5	9,927.6	9,598.7	9,569.5	10,341.4	13,706.3	13,756.0	13,827.4	14,412.9	17,977.8	-220.8	-3,828.4	-4,228.8	-4,843.4	-7,636.4
Spain.....	2,252.5	1,471.9	1,069.1	1,465.3	1,605.9	231.1	255.6	368.4	751.9	700.7	2,021.4	1,216.3	700.7	713.4	905.2

Appendix table 6-6

**U.S. trade in advanced technology products: 2000-04**

(Millions of U.S. dollars)

(Page 2 of 2)

Country/economy	Exports					Imports					Balance				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
Sweden .....	2,284.6	1,399.4	1,212.8	1,205.6	1,048.0	1,226.0	1,126.8	1,510.1	1,343.8	1,464.5	1,058.6	272.7	-297.3	-138.2	-416.4
Switzerland .....	1,810.0	1,436.8	1,141.7	1,028.1	1,162.6	1,399.7	1,565.6	1,420.5	1,795.2	1,785.6	410.3	-128.9	-278.8	-767.2	-623.0
Taiwan.....	12,645.1	9,032.5	9,171.5	8,225.9	9,952.2	14,773.5	13,815.8	13,378.7	12,044.6	12,810.4	-2,128.4	-4,783.2	-4,207.2	-3,818.7	-2,858.3
Thailand .....	3,472.8	2,841.4	1,719.2	2,324.4	2,531.3	3,538.3	2,898.6	3,041.6	3,290.3	4,598.0	-65.5	-57.1	-1,322.4	-965.9	-2,066.7
Turkey .....	1,595.7	1,007.8	1,247.4	610.8	514.0	99.2	106.8	82.7	83.2	107.0	1,496.4	900.9	1,164.8	527.6	407.1
United Kingdom .....	16,693.4	15,476.9	10,590.2	10,833.7	12,073.3	8,527.4	9,256.2	7,172.8	6,847.1	7,411.5	8,166.0	6,220.7	3,417.4	3,986.7	4,661.8
Venezuela.....	758.3	690.6	580.9	376.0	854.5	4.9	1.5	2.9	1.8	2.9	753.4	689.0	578.0	374.2	851.6
Vietnam .....	63.9	49.6	57.7	796.0	474.9	0.0	0.0	8.0	10.2	12.3	63.9	49.6	49.7	785.8	462.6
Subtotal .....	213,941.5	189,928.0	169,234.2	171,164.0	191,743.7	195,223.2	194,841.7	195,677.2	206,713.6	238,001.3	18,718.2	-4,913.7	-26,443.0	-35,549.6	-46,257.5
All other countries .....	11,473.8	12,179.8	11,395.1	10,625.5	9,710.3	437.1	423.5	422.9	482.6	477.0	11,036.8	11,756.3	10,972.2	10,143.0	9,233.3

SOURCE: U.S. Census Bureau, Foreign Trade Division, special tabulations (March 2005).

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Appendix table 6-7

**U.S. receipts and payments of royalties and fees associated with affiliated and unaffiliated foreign companies: 1987–2003**

(Millions of U.S. dollars)

Year	Receipts			Payments			Balance		
	All	Affiliated	Unaffiliated	All	Affiliated	Unaffiliated	All	Affiliated	Unaffiliated
1987.....	9,914	7,629	2,285	1,844	1,296	547	8,070	6,333	1,738
1988.....	11,802	9,156	2,646	2,585	1,410	1,175	9,217	7,746	1,471
1989.....	13,064	10,207	2,857	2,602	1,778	824	10,462	8,429	2,033
1990.....	16,634	13,251	3,384	3,135	2,206	929	13,499	11,045	2,455
1991.....	18,107	14,395	3,712	4,076	2,996	1,080	14,031	11,399	2,632
1992.....	19,715	15,718	3,997	5,074	3,381	1,694	14,641	12,337	2,303
1993.....	20,323	15,707	4,616	4,765	3,364	1,401	15,558	12,343	3,215
1994.....	26,712	20,275	6,437	5,852	3,934	1,919	20,860	16,341	4,518
1995.....	30,289	22,859	7,430	6,919	5,257	1,663	23,370	17,602	5,767
1996.....	32,470	24,556	7,914	7,837	5,406	2,431	24,633	19,150	5,483
1997.....	33,639	24,876	8,763	9,614	7,202	2,412	24,025	17,674	6,351
1998.....	35,626	26,313	9,314	11,235	8,547	2,688	24,391	17,766	6,626
1999.....	39,670	29,275	10,395	13,107	10,374	2,733	26,563	18,901	7,662
2000.....	43,233	30,479	12,754	16,468	12,536	3,932	26,765	17,943	8,822
2001.....	40,696	29,164	11,532	16,538	13,241	3,297	24,158	15,923	8,235
2002.....	44,219	32,658	11,561	19,235	15,084	4,151	24,984	17,574	7,410
2003.....	48,277	35,924	12,303	20,049	16,407	3,642	28,228	19,517	8,661

NOTES: Detail may not add to total because of rounding. Affiliate refers to business enterprise located in one country that is directly or indirectly owned or controlled by entity in another country. Controlling interest must be  $\geq 10\%$  of its voting stock or its equivalent.

SOURCE: U.S. Bureau of Economic Analysis, *Survey of Current Business* 84(10):25–76 (2004).

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Appendix table 6-8

(Page 1 of 3)

**U.S. receipts and payments of royalties and license fees generated from exchange and use of industrial processes with unaffiliated foreign companies, by region or country/economy: 1990–2003**

(Millions of U.S. dollars)

Region or country/economy	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Receipts</b>														
All countries/economies.....	2,333	2,434	2,525	2,820	3,026	3,513	3,566	3,544	3,499	3,900	4,705	4,174	4,021	4,775
Canada.....	79	62	47	41	54	55	82	92	82	118	159	152	135	116
Europe.....	630	575	637	642	768	829	1,042	979	1,170	1,416	1,446	1,429	1,375	1,717
Eastern Europe <sup>a</sup> .....	15	8	D	16	30	21	11	7	14	34	5	11	6	12
European Union <sup>b</sup> .....	500	475	498	496	598	756	937	885	1,071	1,283	1,314	1,297	1,257	1,452
Belgium-Luxembourg.....	22	34	25	49	88	83	90	57	72	102	126	91	48	51
France.....	78	91	64	89	107	84	123	92	142	226	153	198	224	241
Germany <sup>c</sup> .....	107	97	108	109	142	171	219	184	243	297	373	332	388	506
Italy.....	105	70	99	69	71	66	66	77	53	117	106	79	101	90
Netherlands.....	59	35	60	27	30	36	80	71	59	45	54	31	24	37
Spain.....	21	29	20	23	18	31	28	29	27	18	14	13	11	13
Sweden <sup>b</sup> .....	44	35	48	53	55	106	137	115	148	100	85	52	39	46
United Kingdom.....	91	106	103	103	113	115	129	147	154	216	156	192	230	250
Norway.....	10	14	5	3	15	5	3	4	3	2	2	2	3	4
Switzerland.....	24	15	50	45	44	41	84	76	77	94	122	114	104	244
All others.....	37	28	36	29	26	6	7	7	5	3	5	2	203	235
South/Central America.....	59	85	73	D	83	D	D	81	109	96	85	80	61	49
Brazil.....	8	8	6	7	8	9	14	17	17	10	D	D	9	9
Mexico.....	23	31	29	28	33	24	26	32	40	36	22	27	39	28
All others.....	28	46	38	D	42	D	D	11	D	50	17	D	—	—
Africa.....	22	34	27	36	26	35	28	15	17	19	14	16	15	29
Middle East.....	22	25	21	33	20	35	25	41	20	50	81	30	31	55
Asia.....	1,465	1,638	1,704	1,966	2,063	2,462	2,299	2,299	2,094	2,188	2,910	2,454	2,366	2,763
China.....	NA	NA	NA	NA	33	31	43	52	47	32	44	43	69	100
Hong Kong.....	6	6	11	12	15	22	19	21	23	12	12	14	18	26
India.....	21	14	34	D	28	27	37	29	20	17	23	20	13	22
Indonesia.....	11	20	13	20	20	15	13	26	11	21	15	10	19	21
Japan.....	1,028	1,219	1,268	1,434	1,372	1,548	1,429	1,508	1,172	1,161	1,636	1,567	1,245	1,341
Malaysia.....	2	2	7	18	19	D	D	12	43	12	10	11	10	9
Philippines.....	4	2	3	D	1	2	2	7	8	7	7	4	3	5
Singapore.....	19	21	20	20	73	34	37	39	37	37	20	D	27	31
South Korea.....	249	225	220	278	396	607	478	389	483	650	896	506	611	786
Taiwan.....	55	57	42	34	39	80	130	144	192	187	196	190	299	347
All others <sup>d</sup> .....	70	72	86	D	67	96	D	1	58	52	3	60	—	—
All other countries.....	56	15	16	102	12	97	90	37	7	13	34	11	—	—
<b>Payments</b>														
All countries/economies.....	665	796	818	1,054	1,034	948	1,319	1,417	1,319	1,568	1,695	1,720	2,000	2,188
Canada.....	16	11	10	8	11	13	66	89	82	136	117	130	116	162
Europe.....	482	637	635	820	712	572	782	729	705	766	908	1,098	1,389	1,425
Eastern Europe <sup>a</sup> .....	D	1	3	9	D	1	4	2	—	D	1	8	5	14
European Union <sup>b</sup> .....	360	426	417	472	395	461	649	558	555	578	695	816	1076	1012
Belgium-Luxembourg.....	15	14	21	22	27	30	D	30	29	31	29	30	31	35

**U.S. receipts and payments of royalties and license fees generated from exchange and use of industrial processes with unaffiliated foreign companies,  
by region or country/economy: 1990–2003: 1990–2003**

(Millions of U.S. dollars)

Region or country/economy	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
France.....	54	73	D	92	92	121	192	D	D	D	133	D	D	235
Germany <sup>c</sup> .....	133	182	D	187	113	110	148	149	124	148	211	263	223	248
Italy.....	29	34	24	9	7	9	49	35	18	6	12	11	20	6
Netherlands.....	9	14	14	15	22	27	24	30	33	37	33	28	25	25
Spain.....	1	—	1	1	—	1	1	1	3	D	D	2	2	5
Sweden <sup>b</sup> .....	62	122	D	198	D	3	49	61	55	57	69	70	109	112
United Kingdom.....	111	106	125	123	104	126	135	118	146	147	162	172	210	182
Norway.....	D	D	D	D	D	D	5	9	6	9	5	8	D	7
Switzerland.....	19	26	45	60	114	79	72	86	76	112	135	153	D	253
All others.....	41	62	170	81	203	31	52	74	68	67	72	119	308	139
South/Central America.....	—	1	D	D	D	D	D	28	45	29	120	7	6	D
Brazil.....	—	—	—	2	2	—	—	4	D	D	D	D	—	—
Mexico.....	—	—	1	—	1	D	5	D	2	7	14	6	D	—
All others.....	NA	1	D	D	D	D	D	D	D	D	D	D	—	—
Africa.....	0	—	—	—	1	—	4	5	—	—	D	—	2	—
Middle East.....	3	4	5	9	9	13	12	9	5	14	26	9	3	—
Asia.....	160	140	152	200	283	333	401	530	480	614	515	468	478	—
China.....	NA	NA	NA	NA	7	—	D	D	D	13	6	2	6	3
Hong Kong.....	0	—	—	2	3	D	2	2	—	2	2	1	—	—
India.....	—	—	—	0	—	—	D	D	—	1	D	2	D	1
Indonesia.....	0	0	—	0	0	—	—	—	—	—	D	D	0	0
Japan.....	141	138	145	191	262	307	308	360	374	550	460	411	455	524
Malaysia.....	0	0	0	—	0	—	3	3	—	—	—	D	0	—
Philippines.....	0	0	—	—	—	—	1	—	—	—	—	—	—	—
Singapore.....	0	—	D	—	—	—	—	2	—	—	—	D	1	D
South Korea.....	D	—	1	1	6	D	D	D	D	22	19	18	5	D
Taiwan.....	1	—	2	2	2	—	2	4	—	7	D	2	1	D
All others <sup>d</sup> .....	D	2	D	4	3	26	—	D	D	D	D	D	—	—
All other countries.....	4	3	16	17	18	17	54	27	47	112	9	6	—	—
Balance.....														
All countries/economies.....	1,668	1,638	1,707	1,766	1,992	2,565	2,247	2,127	2,180	2,332	3,010	2,454	2,021	2,587
Canada.....	63	51	37	33	43	42	16	3	0	-18	42	33	19	-46
Europe.....	148	-62	2	-178	56	257	260	250	465	650	538	378	-14	292
Eastern Europe <sup>a</sup> .....	—	7	—	7	—	20	7	5	—	—	4	1	1	-2
European Union <sup>b</sup> .....	140	49	81	24	203	295	288	327	516	705	619	521	181	440
Belgium-Luxembourg.....	7	20	4	27	61	53	—	27	43	71	97	70	17	16
France.....	24	18	—	-3	15	-37	-69	—	—	—	20	—	—	6
Germany <sup>c</sup> .....	-26	-85	—	-78	29	61	71	35	119	149	162	105	165	258
Italy.....	76	36	75	60	64	57	17	42	35	111	94	95	81	84
Netherlands.....	50	21	46	12	8	9	56	41	26	8	21	19	-1	12
Spain.....	20	—	19	22	—	30	27	28	24	—	—	—	9	8
Sweden <sup>b</sup> .....	-18	-87	—	-145	—	103	88	54	93	43	16	-2	-70	-66

**U.S. receipts and payments of royalties and license fees generated from exchange and use of industrial processes with unaffiliated foreign companies, by region or country/economy: 1990–2003: 1990–2003**

(Millions of U.S. dollars)

Region or country/economy	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
United Kingdom .....	-20	0	-22	-20	9	-11	-6	29	8	69	-6	18	20	68
Norway .....	—	—	—	—	—	—	-2	-5	-3	-7	-3	—	—	-3
Switzerland .....	5	-11	5	-15	-70	-38	12	-10	1	-18	-13	-30	—	-9
All others.....	-4	-34	-134	-52	-177	-25	-45	-67	-63	-64	-67	-117	-252	235
South/Central America.....	—	84	—	—	—	—	—	53	64	67	-35	17	55	—
Brazil .....	—	—	—	5	6	—	—	13	—	—	—	—	—	—
Mexico .....	—	—	28	—	32	—	21	—	38	29	8	24	—	—
All other .....	—	45	—	—	—	—	—	—	—	—	—	—	—	—
Africa .....	22	—	—	—	25	—	24	10	—	—	—	—	13	—
Middle East .....	19	21	16	24	11	22	13	32	15	36	55	30	28	—
Asia.....	1,305	1,498	1,552	1,766	1,780	2,129	1,898	1,769	1,614	1,574	2,395	2,557	1,888	—
China .....	—	—	—	—	26	—	—	—	—	19	38	43	63	97
Hong Kong .....	6	—	—	10	12	—	17	19	—	10	10	13	—	—
India.....	—	—	—	—	—	—	—	—	—	16	—	—	—	21
Indonesia .....	11	20	—	20	20	—	—	—	—	—	—	—	19	21
Japan.....	887	1,081	1,123	1,243	1,110	1,241	1,121	1,148	798	611	1,176	1,467	790	817
Malaysia .....	2	2	7	—	19	—	—	9	—	—	—	—	10	—
Philippines .....	4	2	—	—	—	—	1	—	—	—	—	—	—	—
Singapore.....	19	—	—	—	—	—	—	37	—	—	—	—	26	—
South Korea .....	—	—	219	277	390	—	—	—	—	628	877	724	606	—
Taiwan .....	54	—	40	32	37	—	128	140	—	180	—	227	496	—
All others <sup>d</sup> .....	—	70	—	—	64	70	—	—	—	—	—	—	—	—
All other countries .....	52	12	0	85	-6	80	36	10	-40	-99	25	5	—	—

D = withheld to avoid disclosing operations of individual companies; NA = not available; — = &lt;\$500,000

<sup>a</sup>Albania, Azerbaijan, Belarus, Bulgaria, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovakia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.<sup>b</sup>Austria, Finland, and Sweden joined European Union in 1995. European Union countries not listed separately are Denmark, Greece, Ireland, and Portugal.<sup>c</sup>Data before 1990 for former West Germany only. Beginning in 1990, data include former East Germany.<sup>d</sup>Includes data before 1994.

NOTES: Industrial processes (or manufacturing know-how) include patents and other proprietary inventions and technology. Affiliate refers to business enterprise located in one country directly or indirectly owned or controlled by an entity in another country. Controlling interest must equal ≥10% or more of its voting stock or its equivalent.

SOURCE: U.S. Bureau of Economic Analysis, *Survey of Current Business* 84 (10):25–76 (2004).

Appendix table 6-9  
**Leading indicators of technological competitiveness: 2005**  
 (Index)

Region or country/economy	National orientation	Socioeconomic infrastructure	Technological infrastructure	Productive capacity	Total
Argentina.....	47.7	53.3	30.1	42.6	173.7
Australia.....	76.2	78.4	53.5	57.4	265.5
Brazil.....	59.6	51.3	36.9	49.3	197.1
Canada.....	76.2	73.1	54.5	52.7	256.6
China.....	74.3	60.4	64.7	72.4	271.9
Czech Republic.....	74.4	59.1	43.6	55.0	232.2
France.....	66.8	67.3	55.1	65.0	254.2
Germany.....	71.6	75.5	64.5	74.6	286.3
Hungary.....	61.7	66.2	40.5	51.4	219.7
India.....	61.6	52.8	43.2	59.9	217.5
Indonesia.....	44.2	40.8	24.1	41.1	150.2
Ireland.....	74.1	74.2	41.9	55.7	245.9
Israel.....	78.4	85.8	54.0	56.6	274.9
Italy.....	67.0	63.5	46.4	57.3	234.2
Japan.....	70.3	65.5	71.1	88.9	295.9
Malaysia.....	75.4	70.4	31.4	51.5	228.7
Mexico.....	55.1	48.7	30.4	45.8	179.9
Netherlands.....	69.6	77.2	52.5	57.8	257.1
New Zealand.....	70.0	75.7	47.0	47.5	240.2
Philippines.....	53.2	52.9	31.1	52.2	189.4
Poland.....	61.8	65.6	34.1	54.5	216.0
Russia.....	42.0	59.2	43.9	45.1	190.2
Singapore.....	78.5	79.5	50.3	59.2	267.6
South Africa.....	50.6	52.8	36.5	41.3	181.2
South Korea.....	74.7	72.7	48.0	63.8	259.3
Spain.....	56.9	69.0	33.5	45.8	205.1
Sweden.....	80.1	82.0	54.5	60.8	277.4
Switzerland.....	64.6	62.8	51.5	58.2	237.1
Taiwan.....	73.6	77.2	43.7	60.3	254.9
Thailand.....	58.7	53.2	25.0	42.5	179.5
United Kingdom.....	77.7	82.9	58.0	60.1	278.7
United States.....	79.2	84.2	91.9	88.7	344.1
Venezuela.....	36.5	47.8	27.2	38.5	150.0

NOTES: In past, High Tech Indicators (HTI) was labeled based on most recent full year of statistical data. HTI now named by year of data generation and year in which panel of experts rated countries.

For score and indicator calculations, raw data were transformed into scales of 0–100 for each indicator component and then averaged to generate comparable indicators with a 0–100 range. For survey items, 100 represents highest response category for each question; for statistical data, 100 typically represents value attained by country with the largest value among 33 countries included in study. In indicator formulations cited below, each term carries equal weight.

National orientation (NO) provides evidence that a nation is taking directed action to achieve technological competitiveness. Actions could take place in the business, government, or cultural sector or any combination of the three.

Indicator formulation:  $NO = [(Q1 + (Q2 + Q3)/2 + Q4 + F1V 2005)/4]$ .

Data used: Published data from PRS Group, Political and Economic Forecast table, Political Risk Letter for January 1, 2005, rating each country's investment risk (F1V2005) rescaled from D=–1 to A+=12, <http://www.prsgroup.com>; and survey data assessing each country's national strategy to promote high-technology development (Q1), social influences favoring technological change (Q2 and Q3), and entrepreneurial spirit (Q4).

Socioeconomic infrastructure (SE) assesses social and economic institutions that support and maintain physical, human, organizational, and economic resources essential to functioning of a modern, technology-based industrial nation.

Indicator formulation:  $SE = (Q5 + Q10 + HMHS/3)$ .

Data used: Published data on percentage of students enrolled in secondary (net percentage; W4) and tertiary (gross percentage; W6) education (HMHS) from Harbison-Myers Human Skills Index (formula for index is  $W4+4*W6$ ). Percentage based on number of individuals in school versus total number who could be enrolled as defined by United Nations Educational, Scientific, and Cultural Organization (UNESCO) and adjusted for local practice, Institute for Statistics, UNESCO, *Gross and Net Enrollment Ratios* and Gender Parity Index, secondary, for school years 1998/99 to 2004/05 (May 2005); and survey data assessing each country's efforts to attract foreign investment (Q10) and mobility of capital (Q5).

Technological infrastructure (TI) assesses institutions and resources that contribute to a nation's capacity to develop, produce, and market new technology.

Indicator formulation:  $TI = [(Q7 + Q8)/2 + Q9 + Q11 + EDP 2005 + S\&E]/5$ .

Data used: Data on electronic data processing equipment (EDP 2005) from Reed Electronics Research, Full Statistical Database 1985–2005, <http://www.rer.co.uk>; published data from Institute for Statistics, UNESCO, Science and Technology, Personnel Engaged in R&D by Category of Personnel (available data for 1996–2002) (May 2005), on number of scientists and engineers involved in research in most recent available year (S&E); and survey data assessing linkages of R&D to industry (Q9), output of indigenous academic S&E (Q7 and Q8), and ability to make effective use of technological knowledge (Q11).

Productive capacity (PC) assesses physical and human resources devoted to manufacturing products and efficiency employing those resources.

Indicator formulation:  $PC = (Q6 + Q12 + Q13 + A26 2005)/4$ .

Data used: Data for electronics production (A262005) from Reed Electronics Research, Full Statistical Database 1985–2005, <http://www.rer.co.uk>; and survey data assessing supply and quality of skilled labor (Q6), capability of indigenous management (Q13), and existence of indigenous suppliers of components for technology-intensive products (Q12).

INPUT: Sum is the sum of NO + SE + TI + PC.

SOURCE: Georgia Institute of Technology, Technology Policy and Assessment Center, *High Tech Indicators: Preliminary Report*, report to National Science Foundation, Division of Science Resources Statistics (2005).



Appendix table 6-10  
**Leading indicators of technological competitiveness: 2003**  
 (Index)

Region or country/economy	National orientation	Socioeconomic infrastructure	Technological infrastructure	Productive capacity	Total
Argentina.....	44.9	52.4	31.0	32.5	160.7
Brazil.....	52.5	50.5	35.4	35.8	174.2
China.....	63.0	55.0	55.2	49.6	222.7
Czech Republic.....	64.6	64.4	34.7	44.6	208.3
Germany.....	75.6	78.2	65.5	65.0	284.3
Hungary.....	66.7	67.9	40.0	42.2	216.7
India.....	62.5	49.3	37.0	47.8	196.6
Indonesia.....	45.1	39.1	20.7	27.7	132.6
Ireland.....	84.1	80.7	44.2	53.0	262.0
Israel.....	79.5	85.0	52.3	49.4	266.2
Japan.....	76.4	67.6	73.8	80.3	298.1
Malaysia.....	73.0	64.9	28.8	39.1	205.9
Mexico.....	55.2	49.0	28.7	35.4	168.2
Philippines.....	59.3	55.0	24.0	45.0	183.3
Poland.....	63.7	68.3	36.6	42.5	211.1
South Korea.....	80.4	81.1	45.2	52.3	259.0
Taiwan.....	83.0	84.4	45.3	59.6	272.2
United States.....	79.8	86.4	92.7	82.8	341.2
Thailand.....	47.7	54.2	23.9	30.9	156.7
Venezuela.....	37.2	46.0	19.5	20.3	123.0

NOTES: In *Science and Engineering Indicators 2004*, latest table was labeled "2002." Table is now labeled "2003" to reflect change in data provider's labeling convention. In past, High Tech Indicators (HTI) was labeled based on most recent full year of statistical data. HTI is now named by year of data generation and year in which panel of experts rated countries. Value of socioeconomic infrastructure for United States has been revised from 85.9 shown in last publication to 86.4 shown here.

For score and indicator calculations, raw data were transformed into scales of 0–100 for each indicator component and then averaged to generate comparable indicators with a 0–100 range. For survey items, 100 represents the highest response category for each question; for statistical data, 100 typically represents the value attained by the country with the largest value among the 33 countries included in the study. In the indicator formulations cited below, each term carries equal weight.

National orientation (NO) provides evidence that a nation is taking directed action to achieve technological competitiveness. These actions could take place in the business, government, or cultural sector or any combination of the three.

Indicator formulation:  $NO = (Q1 + (Q2 + Q3)/2 + Q4 + F1V2002)/4$ .

Data used: Published data from the PRS Group, Political and Economic Forecast table, Political Risk Letter for 2002 rating each country's investment risk (F1V2002); and survey data assessing each country's national strategy to promote high-technology development (Q1), social influences favoring technological change (Q2 and Q3), and entrepreneurial spirit (Q4).

Socioeconomic infrastructure (SE) assesses the social and economic institutions that support and maintain the physical, human, organizational, and economic resources essential to functioning of a modern, technology-based industrial nation.

Indicator formulation:  $SE = (Q5 + Q10 + HMHS2000)/3$ .

Data used: Published data on the percentage of students enrolled in secondary (net percentage) and tertiary (gross percentage) education (HMHS2000) from the Harbison-Myers Skills Index for 2000, Gross and Net Enrollment Ratio at Secondary Level by Country and by Gender for the School Years 1998/1999 and 1999/2000, Institute for Statistics, United Nations Educational, Scientific, and Cultural Organization (UNESCO), October 2002 and Gross Enrollment Ratio at Tertiary Level by Country and Gender for the Academic Years 1998/1999 and 1999/2000, Institute for Statistics, UNESCO, October 2002; and survey data assessing each country's efforts to attract foreign investment (Q10) and the mobility of capital (Q5).

Technological infrastructure (TI) assesses the institutions and resources that contribute to a nation's capacity to develop, produce, and market new technology.

Indicator formulation:  $TI = [(Q7 + Q8)/2 + Q9 + Q11 + EDP2002 + S\&E2000]/5$ .

Data used: Published data from Science and Technology, Personnel Engaged in R&D by Category of Personnel (new available data for 1996-2000), Institute for Statistics, UNESCO, November 2002, on the number of scientists and engineers involved in research in 2000 (S&E 2000), national purchases of electronic data-processing equipment (EDP2002) from Reed Electronics Research, *Yearbook of World Electronics Data 2002/2003*, Reed Business Information Ltd. (2002); and survey data assessing linkages of R&D to industry (Q9), output of indigenous academic S&E (Q7 and Q8), and the ability to make effective use of technological knowledge (Q11).

Productive capacity (PC) assesses the physical and human resources devoted to manufacturing products and efficiency employing those resources.

Indicator formulation:  $PC = (Q6 + Q12 + Q13 + A262002)/4$ .

Data used: Published data on electronics production (A262002) from Reed Electronics Research, *Yearbook of World Electronics Data 2002/2003*, Reed Business Information Ltd., (2002); and survey data assessing the supply and quality of skilled labor (Q6), capability of the indigenous management (Q13), and the existence of indigenous suppliers of components for technology-intensive products (Q12).

INPUT: Sum is the sum of NO + SE + TI + PC.

SOURCE: Georgia Institute of Technology, Technology Policy and Assessment Center, *High Technology Indicators: Preliminary Report*, report to National Science Foundation, Division of Science Resources Statistics (2005).

Appendix table 6-11

**Leading indicators of technological competitiveness: 1999**

(Index)

Region or country/economy	National orientation	Socioeconomic infrastructure	Technological infrastructure	Productive capacity	Total
Argentina.....	41.3	53.3	27.5	31.0	153.1
Brazil.....	61.5	49.1	40.4	39.6	190.6
China.....	65.3	52.4	46.4	41.9	206.0
Czech Republic.....	68.2	58.9	41.5	44.6	213.2
Hungary.....	73.7	60.9	43.0	42.2	219.8
India.....	67.7	48.4	46.8	51.3	214.2
Indonesia.....	53.9	43.8	19.2	23.7	140.6
Ireland.....	92.2	75.6	48.0	55.9	271.7
Israel.....	92.0	74.1	58.2	50.6	274.9
Malaysia.....	69.5	58.9	31.9	44.1	204.4
Mexico.....	41.8	40.4	21.8	24.8	128.8
Philippines.....	60.9	63.7	24.4	42.6	191.6
Poland.....	69.6	58.4	38.2	44.3	210.5
South Korea.....	74.9	73.5	44.6	48.8	241.8
Taiwan.....	90.7	74.2	43.6	53.7	262.2
Thailand.....	50.7	46.5	20.5	30.6	148.3
Venezuela.....	39.8	49.4	21.3	24.3	134.8

NOTES: For score and indicator calculations, raw data were transformed into scales of 0–100 for each indicator component and then averaged to generate comparable indicators with a 0–100 range. For survey items, 100 represents highest response category for each question; for statistical data, 100 typically represents value attained by country with largest value among the 30 countries included in study. In indicator formulations cited below, each term carries equal weight.

National orientation (NO) provides evidence that a nation is taking directed action to achieve technological competitiveness. These actions could take place in business, government, or cultural sector or any combination of the three.

Indicator formulation:  $NO = [Q1 + (Q2 + Q3)/2 + Q4 + F1V99]/4$ .

Data used: Published data from the PRS Group, Political and Economic Forecast table, Political Risk Letter for 1999 rating each country's investment risk (F1V99); and survey data assessing each country's national strategy to promote high-technology development (Q1), social influences favoring technological change (Q2 and Q3), and entrepreneurial spirit (Q4).

Socioeconomic infrastructure (SE) assesses social and economic institutions that support and maintain physical, human, organizational, and economic resources essential to functioning of a modern, technology-based industrial nation.

Indicator formulation:  $SE = (Q5 + Q10 + HMHS99)/3$ .

Data used: Published data on the percentage of students enrolled in secondary and tertiary education (HMHS99) from Harbison-Myers Human Skills Index for 1999, World Bank, *World Development Indicators* (1999); and survey data assessing each country's efforts to attract foreign investment (Q10) and mobility of capital (Q5).

Technological infrastructure (TI) assesses institutions and resources that contribute to a nation's capacity to develop, produce, and market new technology.

Indicator formulation:  $TI = [(Q7 + Q8)/2 + Q9 + Q11 + EDP99 + S\&E96]/5$ .

Data used: Published data from *Statistical Yearbook 1998*, United Nations Educational, Scientific, and Cultural Organization (1998), on the number of scientists and engineers involved in research in 1996 (S&E 96); national purchases of electronic data-processing equipment (EDP99) from Reed Business Information Ltd., Reed Electronics Research, *Yearbook of World Electronics Data 1999/2000* (1999); and survey data assessing linkages of R&D to industry (Q9), output of indigenous academic S&E (Q7 and Q8), and ability to make effective use of technological knowledge (Q11).

Productive capacity (PC) assesses physical and human resources devoted to manufacturing products and efficiency employing those resources.

Indicator formulation:  $PC = (Q6 + Q12 + Q13 + A2699)/4$ .

Data used: Published data on electronics production (A2699) from Reed Business Information Ltd., Reed Electronics Research, *Yearbook of World Electronics Data 1999/2000* (1999); and survey data assessing supply and quality of skilled labor (Q6), capability of indigenous management (Q13), and existence of indigenous suppliers of components for technology-intensive products (Q12).

SOURCE: A.L. Porter, J.D. Roessner, N. Newman, and X.Y. Jin, 1999 *Indicators of Technology-Based Competitiveness of 33 Nations: Summary Report* (2000).

## U.S. patents granted, by country/economy of origin of first-named inventor and type of ownership: Pre-1990 and 1990-2003

Variable	Total	Pre-1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
All residence countries/economies	3,583,813	1,815,531	90,365	96,511	97,444	98,342	101,676	101,419	109,645	111,984	147,518	153,486	157,494	166,037	167,333	169,028
U.S. origin.....	2,132,534	1,182,124	47,391	51,177	52,253	53,231	56,066	55,739	61,104	61,708	80,289	83,906	85,068	87,605	86,972	87,901
Foreign origin .....	1,451,279	633,407	42,974	45,334	45,191	45,111	45,610	45,680	48,541	50,276	67,229	69,580	72,426	78,432	80,361	81,127
Japan.....	556,335	184,348	19,525	21,025	21,925	22,293	22,384	21,764	23,053	23,179	30,840	31,104	31,295	33,224	34,859	35,517
Germany .....	265,313	146,010	7,614	7,680	7,309	6,893	6,731	6,600	6,818	7,008	9,095	9,337	10,235	11,259	11,280	11,444
United Kingdom.....	113,109	70,825	2,789	2,800	2,425	2,295	2,234	2,478	2,453	2,678	3,464	3,572	3,667	3,965	3,837	3,627
France.....	101,163	54,725	2,866	3,030	3,029	2,909	2,779	2,821	2,788	2,958	3,674	3,820	3,819	4,041	4,035	3,869
Canada.....	67,753	31,144	1,859	2,037	1,964	1,944	2,008	2,104	2,232	2,379	2,974	3,226	3,419	3,606	3,431	3,426
Switzerland .....	48,728	31,386	1,284	1,335	1,197	1,127	1,169	1,056	1,112	1,090	1,279	1,279	1,322	1,420	1,364	1,308
Taiwan .....	40,746	2,341	732	906	1,001	1,189	1,443	1,620	1,897	2,057	3,100	3,693	4,667	5,371	5,431	5,298
Italy.....	39,328	19,600	1,259	1,209	1,271	1,285	1,215	1,078	1,200	1,239	1,584	1,492	1,714	1,709	1,751	1,722
Sweden.....	34,800	19,681	768	716	626	636	706	806	854	867	1,225	1,401	1,577	1,741	1,675	1,521
Netherlands.....	31,978	17,353	960	992	855	800	852	799	797	808	1,226	1,247	1,241	1,332	1,391	1,325
South Korea.....	29,437	599	225	405	538	779	943	1,161	1,493	1,891	3,259	3,562	3,314	3,538	3,786	3,944
Australia .....	14,725	6,402	432	463	409	378	467	459	471	478	720	707	705	875	859	900
Belgium.....	13,728	6,567	313	324	325	350	352	397	488	515	693	648	694	718	722	622
Austria .....	12,476	6,595	393	359	371	312	289	337	362	376	387	479	505	589	530	592
Israel.....	11,364	2,877	299	304	335	314	350	384	484	534	754	743	783	970	1,040	1,193
Finland.....	10,008	2,885	304	331	361	293	312	358	444	452	595	649	618	732	809	865
Denmark .....	8,349	3,862	158	210	193	197	207	199	241	333	392	487	436	479	426	529
Former Soviet Union.....	6,995	6,415	174	178	66	65	53	12	16	4	6	3	1	NA	1	1
Spain.....	4,752	1,934	130	153	133	158	141	148	157	177	248	222	270	269	303	309
Norway.....	4,610	2,186	112	111	108	117	126	130	139	142	198	224	248	265	242	262
South Africa.....	3,507	1,981	114	105	97	93	101	123	111	101	115	110	111	120	113	112
Hungary .....	2,615	1,819	93	85	88	61	46	50	43	25	50	39	36	60	48	72
Hong Kong.....	2,254	480	52	50	60	60	57	86	88	81	160	155	179	237	233	276
Mexico .....	2,166	1,385	32	29	39	45	44	40	39	45	57	76	76	81	94	84
Czech Republic.....	2,140	1,960	39	27	17	13	19	15	8	9	9	5	9	7	2	1
Singapore.....	2,098	100	12	15	32	38	51	53	88	94	120	144	218	296	410	427
New Zealand .....	1,977	850	51	41	44	39	37	44	52	85	114	114	107	124	140	135
Ireland.....	1,745	543	54	56	55	53	50	50	78	73	74	94	123	143	133	166
China .....	1,711	240	47	50	41	53	48	62	46	62	72	90	119	195	289	297
India.....	1,669	329	23	22	24	30	27	37	35	47	85	112	131	177	249	341
Brazil.....	1,599	552	41	62	40	57	60	63	63	62	74	91	98	110	96	130
Russian Federation.....	1,555	NA	NA	NA	NA	3	38	98	116	111	189	181	183	234	200	202
Argentina .....	1,072	558	17	16	20	24	32	31	30	35	43	44	54	51	54	63
Luxembourg.....	794	423	17	27	26	28	22	24	18	22	20	22	40	33	37	35
Poland.....	743	572	17	8	5	8	8	8	15	11	15	19	13	16	11	17
Venezuela.....	632	264	20	25	22	31	23	29	25	25	27	39	27	26	30	19
Other countries (132).....	7,305	3,616	149	148	140	141	186	156	187	223	292	350	372	419	450	476
Ownership																
United States																
Corporations .....	1,675,007	900,473	36,094	39,132	40,308	41,825	44,036	44,035	48,741	50,221	66,052	69,391	70,884	74,325	74,161	75,329
Government .....	51,995	37,665	983	1,183	1,161	1,167	1,258	1,028	923	944	1,027	983	928	957	907	881
Individuals.....	484,304	289,097	12,542	13,207	12,751	12,281	12,805	12,885	13,729	12,914	16,407	16,698	16,129	15,205	14,116	13,538

**U.S. patents granted, by country/economy of origin of first-named inventor and type of ownership: Pre-1990 and 1990–2003**

Variable	Total	Pre-1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Foreign .....																
Corporations .....	1,190,355	483,992	35,548	37,593	38,239	38,401	38,788	38,688	41,477	42,907	57,667	60,168	63,182	68,943	71,663	73,099
Government .....	10,981	7,305	423	472	463	434	296	245	259	273	256	162	104	92	112	85
Individuals.....	171,171	96,999	4,775	4,924	4,522	4,234	4,493	4,538	4,516	4,725	6,109	6,084	6,267	6,515	6,374	6,096

NA = not available

NOTE: Country of origin determined by residence of first-named inventor.

SOURCE: U.S. Patent and Trademark Office, Office of Electronic Information Products, Patent Technology Monitoring Division, special tabulations (December 2004).

*Science and Engineering Indicators 2006*

## U.S. patent applications, by country/economy of origin of first-named inventor: 1990–2003

Country/economy	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
All applications .....	164,558	164,306	173,075	174,743	189,857	212,377	195,187	215,257	243,062	270,187	295,926	326,508	334,445	342,441
U.S. origin.....	90,643	87,955	92,425	99,955	107,233	123,958	106,892	120,445	135,483	149,825	164,795	177,511	184,245	188,941
Foreign origin .....	73,915	76,351	80,650	74,788	82,624	88,419	88,295	94,812	107,579	120,362	131,131	148,997	150,200	153,500
Japan.....	34,113	36,846	38,633	34,816	37,768	39,872	39,510	41,767	45,260	47,821	52,891	61,238	58,739	60,350
Germany .....	NA	10,874	11,652	10,500	11,324	11,853	11,550	12,333	13,885	16,978	17,715	19,900	20,418	18,890
Taiwan .....	2,035	2,252	2,667	2,874	3,560	4,054	4,766	5,492	7,412	9,411	9,046	11,086	12,488	13,786
South Korea.....	775	1,321	1,471	1,624	2,354	2,820	4,248	4,920	5,452	5,033	5,705	6,719	7,937	10,411
Canada.....	3,511	3,641	3,761	3,910	4,255	4,745	4,443	4,694	5,689	6,149	6,809	7,221	7,375	7,750
United Kingdom.....	4,959	4,557	4,587	4,414	4,856	5,202	4,791	5,147	6,110	6,948	7,523	8,362	8,391	7,700
France.....	4,771	4,723	4,828	4,320	4,528	5,001	4,486	4,759	5,249	6,216	6,623	6,852	6,825	6,603
Italy.....	2,093	2,123	2,288	1,906	1,998	2,128	2,062	2,119	2,313	2,577	2,704	2,967	2,980	3,011
Israel.....	608	633	780	803	1,040	1,072	1,042	1,198	1,442	2,009	2,509	2,710	2,645	2,539
Sweden.....	1,057	1,086	1,072	1,157	1,405	1,500	1,481	1,980	2,359	2,570	2,825	2,827	2,410	2,314
Australia.....	811	783	863	781	921	1,007	1,057	1,006	1,420	1,462	1,800	1,995	2,160	2,310
Switzerland.....	1,931	1,902	1,922	1,759	1,852	1,917	1,609	1,637	1,875	2,144	2,233	2,337	2,338	2,275
Netherlands.....	1,588	1,397	1,547	1,472	1,455	1,570	1,559	1,726	1,816	2,058	2,289	2,712	2,602	2,257
Finland.....	595	592	576	568	707	745	836	891	970	1,376	1,530	1,840	1,811	1,935
Belgium.....	592	614	692	685	862	1,001	930	894	1,059	1,204	1,245	1,286	1,293	1,395
India.....	58	51	64	54	70	91	115	137	180	271	438	643	919	1,164
China (People's Republic) .....	111	126	129	135	100	144	142	117	181	257	469	626	888	1,034
Denmark.....	370	358	378	376	445	618	496	634	748	863	859	1,113	1,065	1,002
Austria.....	560	516	566	526	599	619	543	552	710	823	881	961	1,115	933
Singapore.....	36	63	89	104	134	144	176	213	336	460	632	786	807	771
China, Hong Kong SAR.....	86	132	150	155	219	163	222	207	274	403	473	626	681	729
Spain.....	289	258	313	269	315	357	359	370	409	464	549	601	564	606
Norway.....	164	169	212	190	203	243	227	303	337	415	447	475	531	449
New Zealand.....	105	91	107	85	130	137	174	174	187	240	279	318	375	387
Ireland.....	130	116	103	104	149	131	114	138	228	252	362	366	440	368
Russian Federation.....	NA	NA	183	153	206	221	254	249	273	388	382	433	377	341
Brazil.....	88	124	112	105	156	115	145	134	165	186	220	219	243	259
Malaysia.....	11	22	16	20	37	30	30	61	41	76	104	116	142	237
South Africa.....	185	186	207	246	238	187	189	174	211	179	209	231	241	224
Mexico.....	76	106	105	82	105	99	97	110	141	147	190	196	157	185
Argentina.....	56	59	59	56	75	65	78	77	119	96	137	137	95	125
Hungary.....	138	103	76	69	76	70	59	40	73	120	107	103	128	118
Czech Republic.....	NA	NA	NA	1	15	14	17	30	34	30	52	77	58	61
Luxembourg.....	32	36	39	35	39	20	31	32	36	59	57	61	69	60
Thailand.....	8	4	11	15	19	21	20	21	26	41	92	70	61	60
Poland.....	13	21	16	27	20	19	22	19	19	31	33	39	46	59
Iceland.....	3	10	16	3	6	6	13	8	25	31	30	51	41	56
Greece.....	27	20	28	19	27	29	23	30	45	50	44	49	58	50
Ukraine.....	NA	NA	4	16	14	17	18	24	28	22	40	32	43	45
Philippines.....	9	10	10	9	7	12	9	15	13	20	32	51	58	42
Slovenia.....	NA	NA	8	19	11	13	19	24	29	21	27	20	36	38
Chile.....	13	12	12	11	11	10	23	17	17	16	24	23	38	33

**U.S. patent applications, by country/economy of origin of first-named inventor: 1990–2003**

Country/economy	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Liechtenstein.....	13	14	19	13	15	13	17	19	24	26	28	29	34	32
Saudi Arabia.....	8	12	11	17	23	24	19	17	26	11	28	26	37	32
Venezuela.....	48	43	47	38	43	32	38	40	35	42	45	53	36	29
Turkey.....	6	3	2	3	5	6	7	10	16	29	28	28	36	28
Croatia.....	NA	NA	NA	6	9	15	16	20	20	12	21	21	16	24
Colombia.....	10	5	13	3	18	19	10	6	12	20	21	29	16	20
Portugal.....	6	3	11	9	14	10	16	12	17	28	17	28	27	20
Kenya.....	4	2	3	1	3	2	0	1	1	5	5	10	10	15
Panama.....	4	1	1	4	4	8	4	2	7	5	6	6	2	14
Egypt.....	3	4	10	4	6	2	2	10	11	16	20	16	11	12
United Arab Emirates.....	3	1	2	NA	2	2	2	3	3	4	7	2	6	12
Costa Rica.....	4	2	1	8	12	7	4	6	13	8	16	3	8	11
Ecuador.....	4	2	1	6	NA	2	3	5	4	4	6	5	8	11
Romania.....	1	1	2	5	4	7	5	12	11	8	12	14	8	11
Uruguay.....	5	2	3	8	6	6	1	4	1	3	4	7	8	11
Yugoslavia.....	34	30	28	10	6	8	3	7	7	4	6	2	7	11
Bulgaria.....	31	11	7	3	4	6	5	4	3	11	18	13	8	10
Lithuania.....	NA	NA	NA	1	2	3	NA	3	2	4	4	5	1	10
Belarus.....	NA	NA	4	8	5	7	9	3	5	10	7	10	5	8
Indonesia.....	4	11	11	7	5	4	11	3	9	12	9	5	27	8
Peru.....	7	1	4	5	6	5	4	3	6	5	5	8	8	8
Slovakia.....	NA	NA	NA	NA	13	7	2	3	6	5	10	6	8	5

NA = not available

NOTE: Country of origin determined by residence of first-named inventor.

SOURCE: U.S. Patent and Trademark Office, Office of Electronic Information Products, Patent Technology Monitoring Division, special tabulations (December 2004).

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Appendix table 6-14

## Patent classes most emphasized (top 50) by UK inventors patenting in United States: 1993 and 2003

Title (partial)	Class	Patents granted to inventors				Activity index	
		All countries		United Kingdom		1993	2003
		1993	2003	1993	2003		
All classes .....	na	80,226	148,427	2,040	3,321	1.000	1.000
Wells (shafts or deep borings in the earth) .....	166	340	515	21	48	2.429	4.166
Cleaning compositions for solid surfaces .....	510	225	514	13	35	2.272	3.043
Rotary kinetic fluid motors or pumps .....	415	213	344	19	21	3.508	2.728
Food or edible material .....	426	521	576	13	32	0.981	2.483
Compositions: coating or plastic .....	106	339	442	14	24	1.624	2.427
Drug, bioaffecting and body treating (includes class 514).....	424	3,512	6,353	239	336	2.676	2.364
Brushing, scrubbing, and general cleaning.....	015	167	325	4	17	0.942	2.338
Boring or penetrating the earth.....	175	122	223	7	11	2.256	2.205
Bleaching and dyeing of textiles and fibers.....	008	183	230	8	11	1.719	2.138
Communications: directive radio wave systems and devices.....	342	238	531	12	25	1.983	2.104
Data processing: artificial intelligence (data processing).....	706	157	213	2	10	0.501	2.098
Electrical audio signal processing systems and devices.....	381	179	330	3	15	0.659	2.032
Registers (e.g., cash registers, calculators).....	235	288	685	2	31	0.273	2.023
Geometrical instruments.....	033	128	231	13	10	3.994	1.935
Electrolysis: processes, methods, preparing the compositions.....	205	273	325	10	14	1.441	1.925
Dispensing (apparatus and process).....	222	337	334	10	14	1.167	1.873
Seal for a joint or juncture.....	277	169	241	10	10	2.327	1.855
Photography.....	396	464	435	2	18	0.170	1.849
Optical communications.....	398	105	376	6	15	2.247	1.783
Fluent material handling.....	141	161	226	2	9	0.489	1.780
Aeronautics.....	244	173	327	8	12	1.819	1.640
Chemistry: natural resins; peptides or proteins.....	530	336	491	8	18	0.936	1.638
Organic compounds (includes classes 532-570).....	532	3,141	2,715	116	99	1.452	1.630
Processing architectures and instruction processing.....	712	139	303	1	11	0.283	1.623
Gas separation: processes.....	095	131	250	2	9	0.600	1.609
Chemistry: analytical and immunological testing.....	436	293	421	6	15	0.805	1.592
Multicellular living organisms and unmodified parts.....	800	29	423	1	15	1.356	1.585
Power plants.....	060	517	845	13	29	0.989	1.534
Refrigeration.....	062	557	845	12	29	0.847	1.534
Communications: radio wave antennas.....	343	195	559	9	19	1.815	1.519
Multiplex communications.....	370	505	2,563	14	86	1.090	1.500
Static structures (e.g., buildings).....	052	331	458	11	15	1.307	1.464
Arithmetic processing and calculating (electrical computers).....	708	267	245	6	8	0.884	1.459
Chemical apparatus and process disinfecting, deodorizing.....	422	502	620	12	20	0.940	1.442
Package making.....	053	255	379	9	12	1.388	1.415
Chemistry of inorganic compounds.....	423	500	451	10	14	0.787	1.387
Telecommunications.....	455	385	1,584	10	49	1.021	1.383
Compositions.....	252	517	518	16	16	1.217	1.380
Electronic digital logic circuitry.....	326	230	488	1	15	0.171	1.374
Fluid sprinkling, spraying, and diffusing.....	239	280	391	15	12	2.107	1.372
Chemistry: molecular biology and microbiology.....	435	1,349	2,938	30	89	0.875	1.354
Special receptacle or package.....	206	356	364	2	11	0.221	1.351
Data processing: software development, installation, and management.....	717	51	333	0	10	0.000	1.342
Data processing: speech signal processing, linguistics, language translation....	704	177	406	3	12	0.667	1.321
Radiant energy.....	250	969	1,631	41	48	1.664	1.315
Optical waveguides.....	385	559	1,816	28	52	1.970	1.280
Measuring and testing.....	073	918	1,790	23	51	0.985	1.273
Error detection/correction and fault detection/recovery.....	714	367	1,240	2	35	0.214	1.262
Fluid handling.....	285	191	240	11	7	1.809	1.164
Oscillators.....	702	205	518	6	15	0.920	1.156

na = not applicable

NOTES: Activity index is percentage of patents in class granted to inventors from one country divided by percentage of all patents having inventors from that country in that year. Listing limited to Patent and Trademark Office classes that received at least 200 patents from all countries in 2003.

SOURCE: U.S. Patent and Trademark Office, Office of Electronic Information Products, Patent Technology Monitoring Division, special tabulations (2004).

Appendix table 6-15  
**Patent classes most emphasized (top 50) by French inventors patenting in United States: 1993 and 2003**

Title (partial)	Class	Patents granted to inventors				Activity index	
		All countries		France		1993	2003
		1993	2003	1993	2003		
All classes .....	na	76,726	143,268	2,489	3,672	1.000	1.000
Resilient tires and wheels .....	152	134	201	9	38	2.165	7.642
Bleaching and dyeing: fluid treatment and chemical modification of textiles and fibers .....	008	183	230	21	33	3.699	5.800
Dispensing (apparatus and process) .....	222	337	334	26	43	2.487	5.204
Aeronautics .....	244	173	327	14	33	2.608	4.079
Pipe joints or couplings.....	285	184	243	13	24	2.277	3.992
Heat exchange.....	165	258	310	18	29	2.249	3.781
Optics: eye examining, vision testing and correcting .....	351	107	221	3	14	0.904	2.561
Drug, bioaffecting and body treating compositions (includes class 514) .....	424	3,512	6,353	213	372	1.955	2.367
Chemistry of inorganic compounds.....	423	500	451	28	26	1.805	2.330
Arithmetic processing and calculating (electrical computers) .....	708	267	245	6	14	0.724	2.310
Chairs and seats.....	297	149	457	7	25	1.514	2.211
Land vehicles: bodies and tops .....	296	188	617	5	33	0.857	2.162
Catalyst, solid sorbent, or support therefore: product or process of making .....	502	417	395	17	20	1.314	2.047
Land vehicles .....	280	469	764	21	38	1.443	2.010
Joints and connections .....	403	118	210	2	10	0.546	1.925
Gas separation: processes .....	095	131	250	8	11	1.968	1.779
Prosthesis (i.e., artificial body members), parts thereof, or aids and accessories therefore .....	623	132	617	4	27	0.977	1.769
Food or edible material: processes, compositions, and products .....	426	521	576	17	25	1.052	1.754
Compositions: ceramic .....	501	306	208	6	9	0.632	1.749
Organic compounds (includes classes 532-570) .....	532	3,141	2,715	118	116	1.211	1.727
Data processing: artificial intelligence (data processing) .....	706	157	213	0	9	0.000	1.708
Metal deforming .....	072	266	308	6	13	0.727	1.706
Specialized metallurgical processes, compositions for use therein, consolidated metal powder compositions, and loose metal particulate mixtures .....	075	205	218	6	9	0.943	1.669
Electricity: circuit makers and breakers .....	200	200	354	7	14	1.128	1.599
Printing.....	101	257	498	7	19	0.878	1.542
Liquid purification or separation.....	210	910	792	37	30	1.311	1.531
Seal for a joint or juncture.....	277	169	241	4	9	0.763	1.510
Chemistry: molecular biology and microbiology .....	435	1,349	2,938	21	109	0.502	1.500
Package making.....	053	255	379	12	14	1.517	1.493
Registers (e.g., cash registers, calculators) .....	235	288	685	12	25	1.343	1.475
Typewriting machines.....	400	209	247	1	9	0.154	1.473
Electric heating.....	219	587	928	37	33	2.032	1.437
Compositions: coating or plastic .....	106	339	442	7	15	0.666	1.372
Fluid sprinkling, spraying, and diffusing .....	239	280	391	11	13	1.266	1.344
Valves and valve actuation.....	251	193	242	8	8	1.336	1.336
Pulse or digital communications .....	375	485	1,532	23	50	1.529	1.319
Metal treatment.....	148	359	432	15	14	1.347	1.310
Bearings.....	384	192	279	8	9	1.343	1.304
Communications: radio wave antennas.....	343	195	559	16	18	2.645	1.302
Electrical transmission or interconnection systems .....	307	146	287	9	9	1.987	1.268
Cleaning compositions for solid surfaces, auxiliary compositions therefore, or processes of preparing the compositions.....	510	225	514	5	16	0.716	1.258
Electricity: conductors and insulators.....	174	283	709	8	22	0.911	1.254
Fluent material handling, with receiver or receiver coating means.....	141	161	226	7	7	1.401	1.252
Conveyors: power driven .....	198	329	430	7	13	0.686	1.222
Communications: electrical.....	340	489	894	18	27	1.186	1.221
Electricity: motive power systems .....	318	429	504	9	15	0.676	1.203
Optical waveguides .....	385	559	1,816	22	54	1.269	1.202
Chemical apparatus and process disinfecting, deodorizing, preserving, or sterilizing.....	422	502	620	14	18	0.899	1.174
Clutches and power-stop control .....	192	168	311	2	9	0.384	1.170
X-ray or gamma-ray systems or devices.....	378	216	422	13	12	1.940	1.149

na = not applicable

NOTES: Activity index is percentage of patents in class granted to inventors from one country divided by percentage of all patents having inventors from that country in that year. Listing limited to Patent and Trademark Office classes that received at least 200 patents from all countries in 2003.

SOURCE: U.S. Patent and Trademark Office, Office of Electronic Information Products, Patent Technology Monitoring Division, special tabulations (2004).



## U.S. biotechnology patents granted, by residence of inventor/type of ownership: Pre-1990 and 1990–2003

Variable	Total	Pre-1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
All residence countries/economies...	98,869	18,630	2,251	2,631	3,137	3,604	3,402	3,516	4,514	6,133	8,758	8,779	7,932	8,769	8,746	8,067
U.S. origin.....	62,903	11,164	1,284	1,650	1,919	2,229	2,129	2,193	2,960	4,200	5,862	5,845	5,201	5,751	5,523	4,993
Foreign origin .....	35,966	7,466	967	981	1,218	1,375	1,273	1,323	1,554	1,933	2,896	2,934	2,731	3,018	3,223	3,074
Japan.....	9,033	2,401	309	308	445	456	418	399	423	436	670	603	524	593	530	518
Germany.....	5,418	1,419	165	161	175	194	163	200	217	256	348	374	359	384	477	526
United Kingdom.....	3,407	698	84	76	78	94	114	105	136	218	303	317	299	315	311	259
France.....	3,100	646	107	107	99	112	92	100	134	202	262	250	226	257	242	264
Canada.....	2,638	302	51	59	64	77	68	89	115	169	237	290	280	301	286	250
Netherlands.....	2,212	340	58	48	74	98	96	59	73	104	170	174	218	152	310	238
Denmark.....	1,235	134	12	16	20	23	36	43	62	78	136	118	131	135	162	129
Australia.....	1,023	80	14	37	25	26	36	44	50	65	111	104	86	134	116	95
Switzerland.....	1,008	276	18	26	34	54	34	39	45	67	69	62	66	87	70	61
Israel.....	975	136	21	16	38	54	33	45	47	34	89	96	70	85	99	112
Italy.....	918	224	38	32	45	52	36	37	39	53	64	77	52	52	61	56
Sweden.....	850	182	14	14	22	26	20	31	34	48	73	78	67	85	77	79
Belgium.....	809	118	10	13	13	17	26	20	41	41	87	86	85	71	85	96
South Korea.....	387	6	4	3	5	12	8	11	21	19	28	50	34	70	57	59
Austria.....	371	67	9	4	11	12	16	10	18	32	44	33	27	30	29	29
Finland.....	291	48	9	8	11	7	8	13	14	18	28	38	25	28	17	19
India.....	279	9	1	2	3	5	1	7	8	9	15	16	20	38	63	82
New Zealand.....	246	46	4	5	10	8	10	6	6	8	12	27	22	16	33	33
Taiwan.....	207	7	1	2	3	3	9	6	5	8	20	20	17	38	39	29
Hungary.....	160	82	5	8	8	6	5	4	6	2	7	2	4	8	9	4
Spain.....	155	14	3	3	8	4	6	9	10	11	12	17	11	15	18	14
Norway.....	142	20	3	10	2	6	5	5	10	8	14	19	14	9	7	10
Russian Federation.....	118	NA	NA	NA	NA	NA	1	2	10	8	22	14	17	12	21	11
China.....	104	5	2	1	1	1	2	5	2	4	9	5	10	18	19	20
USSR.....	87	61	4	7	7	NA	NA	1	2	1	1	2	NA	NA	1	NA
Costa Rica.....	80	33	NA	3	NA	4	4	6	5	NA	4	2	1	9	5	4
South Africa.....	62	16	3	NA	1	2	1	2	NA	2	6	5	4	8	6	6
Ireland.....	56	3	NA	2	3	3	1	4	3	4	3	5	7	6	8	4
Mexico.....	53	7	4	2	2	3	1	5	NA	3	3	4	7	5	4	3
Czechoslovakia.....	50	31	3	2	1	2	2	1	1	1	NA	1	3	2	NA	NA
Brazil.....	47	5	1	1	NA	3	1	2	2	2	3	1	8	3	7	8
Hong Kong.....	39	NA	NA	NA	NA	1	1	5	1	1	2	3	4	6	9	6
Singapore.....	39	NA	NA	NA	NA	NA	2	NA	2	1	8	7	5	5	2	7
Cuba.....	31	1	NA	NA	NA	1	2	NA	NA	3	5	2	3	2	7	5
Greece.....	27	1	1	NA	NA	1	2	NA	3	NA	2	1	3	4	4	5
Argentina.....	21	5	1	NA	1	NA	1	1	1	3	2	1	1	2	2	NA
Other countries (57).....	288	43	8	5	9	8	12	7	8	14	27	30	21	33	30	33
Ownership																
United States																
Corporations.....	57,634	9,855	1,181	1,473	1,740	2,049	1,903	1,964	2,669	3,862	5,486	5,385	4,940	5,347	5,170	4,610
Government.....	1,934	311	50	52	80	97	95	95	113	140	190	189	134	145	129	114
Individuals.....	6,071	1,861	153	198	188	201	217	220	247	336	422	409	339	453	425	402

**U.S. biotechnology patents granted, by residence of inventor/type of ownership: Pre-1990 and 1990–2003**

Variable	Total	Pre-1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Foreign																
Corporations .....	29,356	5,621	735	771	995	1,094	1,077	1,112	1,343	1,626	2,388	2,504	2,269	2,551	2,678	2,592
Government .....	525	163	29	28	31	33	19	18	21	24	41	42	23	20	20	13
Individuals.....	3,349	819	103	109	103	130	91	107	121	145	231	250	227	253	324	336

NA = not available

SOURCE: U.S. Patent and Trademark Office, Office of Electronic Information Products, Patent Technology Monitoring Division, special tabulations (2004).

*Science and Engineering Indicators 2006*

## U.S. biotechnology patents granted, by organization: Pre-1990 and 1990–2003

Organization	Total	Pre-1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
All patents .....	89,448	15,950	1,995	2,324	2,846	3,273	3,094	3,189	4,146	5,652	8,104	8,120	7,366	8,063	7,997	7,329
University of California .....	1,585	215	12	25	20	35	43	44	84	114	162	151	171	185	166	158
U.S. Department of Health and Human Services.....	1,021	110	19	18	32	53	63	52	72	92	126	107	74	81	67	55
Merck.....	943	344	25	43	36	71	51	33	33	43	52	57	33	46	39	37
Genentech .....	792	64	18	21	32	36	27	26	39	76	129	53	75	63	64	69
Yoder Brothers.....	729	204	14	47	18	38	53	22	29	35	28	22	14	77	87	41
Pioneer Hi-Bred International.....	693	8	1	3	13	4	19	20	51	26	106	92	109	110	61	70
Eli Lilly.....	674	243	19	20	15	21	15	26	58	51	42	51	35	30	24	24
Abbott .....	654	113	15	25	39	37	39	32	42	69	59	61	39	44	26	14
Smithkline Beecham .....	636	0	1	2	1	7	1	4	3	13	46	126	130	183	94	25
University of Texas.....	576	52	22	30	25	37	34	28	34	40	49	46	47	47	42	43
Incyte Pharmaceuticals .....	572	0	0	0	4	5	4	3	5	18	106	245	146	30	4	2
Boehringer Mannheim .....	549	190	26	29	33	36	34	38	32	40	43	30	11	5	0	2
Isis Pharmaceuticals.....	512	0	0	0	2	2	2	3	21	38	32	70	100	90	98	54
Novo Nordisk .....	490	0	1	4	10	15	23	18	31	64	79	92	80	49	14	10
Chiron .....	484	17	2	5	16	11	7	10	16	66	79	62	62	50	48	33
Du Pont De Nemours and Company .....	461	88	16	15	22	24	25	21	21	21	25	18	22	41	49	53
Becton, Dickinson .....	427	104	16	16	17	15	19	17	30	54	43	30	21	19	13	13
Hoffmann-La Roche .....	426	194	9	13	17	20	20	31	35	34	22	6	7	6	6	6
U.S. Department of Agriculture.....	418	73	15	20	17	23	14	24	16	26	35	41	27	32	26	29
General Hospital Corporation .....	414	33	7	4	11	13	16	8	23	33	46	56	40	49	35	40
Johns Hopkins University.....	412	18	3	9	5	14	12	12	15	27	58	68	51	45	49	26
Hoechst Aktiengesellschaft.....	402	123	13	17	32	24	20	21	21	36	35	28	24	3	3	2
Institut Pasteur .....	395	47	6	14	8	12	12	5	14	30	42	50	43	47	29	36
Miles .....	387	267	20	10	29	30	21	7	1	2	0	0	0	0	0	0
Takeda Chemical Industries.....	387	138	14	7	22	24	14	21	23	25	17	23	21	18	11	9
Human Genome Sciences.....	355	0	0	0	0	0	0	0	4	12	28	63	47	31	86	84
Ajinomoto Company.....	349	115	5	11	9	17	15	10	20	15	25	23	22	28	18	16
Wisconsin Alumni Research Foundation.....	342	59	6	10	10	13	14	9	13	17	35	39	29	34	25	29
Bristol-Myers Squibb .....	339	70	10	17	15	8	11	14	22	26	39	33	21	12	18	23
Monsanto Company.....	332	74	10	20	30	17	16	13	16	17	21	31	31	29	2	5
Massachusetts Institute of Technology.....	318	95	14	12	14	18	7	4	18	22	25	22	12	22	17	16
Schering .....	318	60	11	16	11	9	6	12	6	20	35	32	18	31	22	29
Cornell Research Foundation .....	316	51	9	8	15	6	11	8	12	19	29	34	28	35	18	33
Harvard College, President and Fellows .....	312	51	17	6	9	9	7	9	20	19	34	27	18	22	36	28
Stanford University, Leland Junior, Board of Trustees.....	311	47	3	11	3	4	10	12	13	24	33	28	31	30	39	23
The Scripps Research Institute .....	310	0	0	0	8	22	19	24	18	20	48	32	30	44	24	21
Salk Institute for Biological Studies.....	308	85	5	15	11	13	10	9	18	29	25	19	17	22	17	13
American Cyanamid Company.....	307	71	5	9	17	17	21	12	21	30	30	40	15	8	8	3
Kyowa Hakko Kogyo .....	302	90	17	15	14	12	10	11	13	18	19	23	14	15	15	16
Millennium Pharmaceuticals.....	286	0	0	0	0	0	0	0	0	4	14	29	46	64	76	53
Ludwig Institute for Cancer Research.....	284	0	0	1	4	6	6	3	19	20	43	34	39	50	38	21
Genetics Institute.....	280	21	8	13	8	12	13	15	14	27	39	32	19	25	15	19
Amgen.....	276	15	6	4	12	4	9	10	13	25	36	37	32	39	17	17
Columbia University.....	271	24	4	2	7	10	6	9	13	16	29	33	23	33	29	33

## U.S. biotechnology patents granted, by organization: Pre-1990 and 1990–2003

Organization	Total	Pre-1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Eastman Kodak.....	271	120	10	20	30	27	23	23	1	3	5	2	4	2	0	1
University of Pennsylvania.....	271	5	1	3	7	8	15	10	18	34	42	32	16	34	28	18
Behringwerke Aktiengesellschaft.....	270	95	11	13	10	20	11	12	26	47	10	10	4	1	0	0
Pfizer.....	265	84	15	5	10	6	3	9	11	21	13	10	11	16	26	25
Bear Creek Gardens.....	263	9	2	15	14	13	61	29	17	4	15	29	53	2	0	0
Rockefeller University.....	251	28	1	4	7	7	9	3	6	19	34	31	40	22	30	10
Washington University.....	244	17	4	9	11	6	9	13	12	17	23	37	27	31	14	14
Zymogenetics.....	241	9	4	4	6	7	5	8	16	18	28	24	20	30	33	29
Immunex.....	240	18	4	5	6	13	10	14	15	12	21	17	22	22	24	37
Paul Ecke Ranch.....	233	9	14	7	11	25	12	16	1	14	26	12	24	31	23	8
University of Minnesota.....	233	37	7	3	13	6	8	12	12	14	21	23	25	19	17	16
Conard-Pyle.....	216	89	21	12	9	24	13	10	16	14	7	1	0	0	0	0
Thomas Jefferson University.....	214	9	3	6	3	5	6	5	11	21	20	23	23	33	26	20
Bayer Aktiengesellschaft.....	212	82	5	7	9	5	3	5	13	12	16	15	14	9	9	8
Genencor International.....	201	0	0	3	4	10	12	9	3	11	20	16	17	34	26	36
Ciba-Geigy Corporation.....	198	69	6	10	10	20	11	14	24	19	10	1	2	0	2	0
Syntex (U.S.A.).....	197	94	11	13	15	16	7	12	5	3	13	4	1	2	1	0
Akzo Nobel.....	195	0	0	0	0	0	0	5	12	38	35	30	27	18	20	10
Dana-Farber Cancer Institute.....	195	19	5	8	5	11	8	8	13	16	31	20	13	13	16	9
University of Michigan.....	195	4	1	1	1	3	4	8	6	31	20	27	31	20	20	18
Baxter International.....	190	62	8	8	4	6	7	5	9	8	17	15	12	15	5	9
Bayer Corporation.....	187	0	0	0	0	0	0	3	17	21	28	32	27	28	21	10
Yeda Research and Development.....	187	32	5	5	4	10	4	6	14	9	18	23	14	14	12	17
Hayashibara Biochemical Laboratories.....	184	36	3	5	5	3	5	7	14	12	23	31	14	13	7	6
Michigan State University.....	184	6	2	5	3	4	7	4	9	20	25	32	20	15	17	15
Cetus Corporation.....	182	100	36	18	21	3	1	0	0	3	0	0	0	0	0	0
Suntory.....	181	27	2	5	13	5	12	14	5	10	19	24	13	15	2	15
California Institute of Technology.....	178	26	3	3	4	1	7	3	4	10	27	15	15	26	10	24
Basf Aktiengesellschaft.....	177	27	5	4	6	4	5	5	8	10	19	20	14	17	16	17
Dekalb Genetics Corporation.....	176	0	0	0	0	0	0	4	10	1	8	43	39	31	31	9
Zeneca.....	175	0	0	0	0	0	4	15	27	14	27	32	22	23	8	3
Mycogen Corporation.....	174	12	5	10	14	21	18	10	7	11	11	13	15	9	4	14
Smithkline Beckman.....	173	122	2	2	3	3	3	12	9	6	7	3	0	0	1	0
American Home Products Corporation.....	172	115	2	6	0	2	4	1	1	5	8	5	7	8	7	1
Duke University.....	172	10	0	2	1	6	11	6	18	10	16	21	13	24	16	18
Novartis (Formerly Sandoz).....	171	0	0	0	0	0	0	0	0	3	10	29	40	41	30	18
Yale University.....	169	12	2	0	3	6	4	9	0	11	24	17	20	21	19	21
Gen-Probe.....	165	0	2	0	1	2	8	6	11	31	38	22	14	10	5	15
G.D. Searle.....	164	57	9	1	8	9	4	0	6	9	13	9	17	6	7	9
Upjohn Company.....	163	124	1	3	10	4	9	3	3	5	1	0	0	0	0	0
Brigham and Women's Hospital.....	162	8	2	4	5	7	11	6	6	13	17	17	13	26	14	13
Fujisawa Pharmaceutical.....	161	46	9	7	5	7	9	7	11	12	7	5	4	12	12	8
Affymetrix.....	160	0	0	0	0	0	0	0	1	2	9	12	21	44	36	35
Floris.....	160	0	6	3	0	8	15	14	11	5	7	6	3	7	57	18
New York University.....	160	17	9	2	2	8	4	6	9	16	14	19	11	17	15	11

**U.S. biotechnology patents granted, by organization: Pre-1990 and 1990–2003**

Organization	Total	Pre-1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Mikkelsen	159	107	12	0	15	6	12	2	3	2	0	0	0	0	0	0
Sloan-Kettering Institute for Cancer Research	159	52	6	6	9	2	1	3	6	13	16	8	10	7	8	12
Council of Scientific and Industrial Research	158	0	0	0	1	0	0	1	1	3	4	5	7	20	53	63
Baylor College of Medicine	157	12	4	2	1	5	8	3	13	11	22	16	20	12	15	13
Fuji Photo Film	157	69	13	10	6	12	5	3	5	2	3	4	4	5	9	7
Jackson & Perkins	157	146	10	1	0	0	0	0	0	0	0	0	0	0	0	0
Roche Diagnostics	156	0	0	0	0	0	0	0	0	0	0	15	29	55	30	27
Incyte Genomics	154	0	0	0	0	0	0	0	0	0	0	0	4	58	67	25
Research Foundation of State University of New York	153	6	2	3	5	7	13	7	10	17	15	18	14	16	13	7
Max-Planck-Gesellschaft zur Forderung der Wissenschaften E.V.	151	39	1	3	1	4	3	5	4	7	16	21	13	9	7	18
Procter & Gamble	151	24	1	4	11	10	11	8	9	6	6	4	3	14	23	17

SOURCE: U.S. Patent and Trademark Office, Office of Electronic Information Products, Patent Technology Monitoring Division, special tabulations (2004).

Science and Engineering Indicators 2006

Appendix table 6-18  
**U.S. venture capital total disbursements, by industry category: Selected years, 1980–2004**

Industry	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Disbursements (\$ millions)</b>																	
All industries.....	574.4	2,838.5	2,796.7	2,269.7	3,586.7	3,794.0	4,148.2	7,638.1	11,610.5	15,080.1	21,447.9	54,793.9	106,270.2	40,825.2	21,279.4	19,218.1	21,007.2
Biotechnology.....	44.0	141.8	285.0	268.0	517.5	458.4	539.3	737.6	1,064.4	1,256.9	1,251.7	1,698.0	3,270.6	2,074.4	1,750.3	2,135.7	2,331.3
Communications.....	53.0	473.2	346.3	270.8	507.8	790.4	701.0	1,272.9	2,128.5	2,512.2	3,812.2	7,743.6	16,353.4	7,006.0	3,334.3	2,566.4	2,621.7
Computer hardware.....	128.3	649.6	286.9	222.9	230.3	186.4	193.1	410.1	419.3	450.4	521.7	1,182.9	2,876.7	1,142.0	723.3	609.6	866.7
Consumer related.....	29.4	142.5	328.2	242.6	260.6	475.8	445.4	950.8	784.6	999.4	1,050.7	1,843.8	1,759.1	739.5	216.5	453.3	359.7
Industrial/energy.....	141.5	199.9	166.2	114.1	96.1	190.3	196.3	364.7	375.8	561.3	886.0	800.7	1,126.1	707.2	534.7	620.4	486.9
Medical/health.....	52.8	277.7	442.6	339.4	766.8	640.0	670.7	1,202.4	1,467.2	1,985.4	2,282.8	2,555.1	4,213.4	3,568.4	3,280.3	3,154.5	3,770.5
Semiconductors/other electronics.....	60.5	356.5	242.4	149.9	226.5	185.5	238.0	409.2	524.5	936.4	1,033.3	2,069.8	7,106.2	4,175.6	1,975.3	2,310.9	2,568.3
Software and services.....	17.6	423.0	464.2	436.1	580.4	472.3	721.7	1,103.6	2,246.6	2,939.7	4,007.7	8,396.3	18,313.1	8,449.1	4,237.7	3,965.5	4,504.1
Other products/services.....	47.2	172.8	204.7	199.9	343.6	326.1	279.0	663.1	810.1	988.5	1,545.3	2,821.5	3,512.6	1,479.5	719.6	885.6	765.8
Internet specific.....	0.1	1.5	30.1	26.0	57.2	68.8	163.7	523.7	1,789.4	2,449.9	5,056.5	25,682.3	47,739.0	11,483.6	4,507.5	2,516.1	2,732.2
<b>Disbursements (percent)</b>																	
All industries.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Biotechnology.....	7.7	5.0	10.2	11.8	14.4	12.1	13.0	9.7	9.2	8.3	5.8	3.1	3.1	5.1	8.2	11.1	11.1
Communications.....	9.2	16.7	12.4	11.9	14.2	20.8	16.9	16.7	18.3	16.7	17.8	14.1	15.4	17.2	15.7	13.4	12.5
Computer hardware.....	22.3	22.9	10.3	9.8	6.4	4.9	4.7	5.4	3.6	3.0	2.4	2.2	2.7	2.8	3.4	3.2	4.1
Consumer related.....	5.1	5.0	11.7	10.7	7.3	12.5	10.7	12.4	6.8	6.6	4.9	3.4	1.7	1.8	1.0	2.4	1.7
Industrial/energy.....	24.6	7.0	5.9	5.0	2.7	5.0	4.7	4.8	3.2	3.7	4.1	1.5	1.1	1.7	2.5	3.2	2.3
Medical/health.....	9.2	9.8	15.8	15.0	21.4	16.9	16.2	15.7	12.6	13.2	10.6	4.7	4.0	8.7	15.4	16.4	17.9
Semiconductors/other electronics.....	10.5	12.6	8.7	6.6	6.3	4.9	5.7	5.4	4.5	6.2	4.8	3.8	6.7	10.2	9.3	12.0	12.2
Software and services.....	3.1	14.9	16.6	19.2	16.2	12.4	17.4	14.4	19.3	19.5	18.7	15.3	17.2	20.7	19.9	20.6	21.4
Other products/services.....	8.2	6.1	7.3	8.8	9.6	8.6	6.7	8.7	7.0	6.6	7.2	5.1	3.3	3.6	3.4	4.6	3.7
Internet specific.....	0.0	0.1	1.1	1.1	1.6	1.8	3.9	6.9	15.4	16.2	23.6	46.9	44.9	28.1	21.2	13.1	13.0
<b>Companies (number)</b>																	
All industries.....	430	1,215	1,069	929	1,050	936	979	1,573	2,117	2,588	3,460	4,478	6,429	3,829	2,539	2,355	2,425
Biotechnology.....	17	65	92	91	103	94	97	129	159	164	190	181	202	186	173	183	176
Communications.....	34	166	113	107	140	125	137	192	254	291	385	413	661	476	306	263	256
Computer hardware.....	83	212	89	77	85	66	56	97	94	110	115	120	176	125	72	88	103
Consumer related.....	35	85	103	78	89	89	92	162	164	200	258	173	190	131	60	55	65
Industrial/energy.....	84	110	95	74	70	53	61	78	102	114	152	74	100	98	68	67	73
Medical/health.....	41	143	182	149	184	159	154	227	292	338	398	357	390	333	297	320	352
Semiconductors/other electronics.....	60	141	90	68	80	61	59	94	106	146	193	181	336	255	192	239	274
Software and services.....	19	204	208	203	209	181	216	338	511	617	721	909	1335	875	650	653	664
Other products/services.....	56	85	85	67	68	86	68	130	151	217	408	257	360	221	131	112	126
Internet specific.....	1	4	12	15	22	22	39	126	284	391	640	1813	2679	1129	590	375	336

SOURCE: Thomson Financial Services, special tabulations (May 2005).

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## U.S. venture capital total disbursements, by financing stage: Selected years, 1980–2004

Industry	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Disbursements (\$ millions)																	
All stages .....	574.3	2,838.5	2,796.8	2,269.8	3,586.8	3,793.9	4,148.2	7,635.2	11,610.5	15,080.2	21,448.0	54,785.2	106,269.8	40,825.2	21,278.8	19,218.1	21,007.3
Early stage .....	286.6	1,033.2	1,100.9	804.9	1,139.3	1,347.3	1,618.1	3,114.2	4,358.6	4,837.5	7,306.5	15,444.5	29,285.8	9,934.5	4,416.9	3,753.2	4,293.0
Seed .....	11.7	104.5	124.2	87.9	166.1	319.9	223.7	360.3	569.9	790.0	908.1	1,222.1	1,927.1	429.9	203.7	252.2	157.8
Start-up .....	164.9	424.3	278.3	162.5	395.7	382.2	570.4	964.6	953.6	545.3	941.1	2,095.2	1,143.0	377.9	117.0	2,560.7	2,796.6
Other early stage.....	110.0	504.4	698.4	554.5	577.5	645.2	824.0	1,789.3	2,835.1	3,502.2	5,457.3	12,127.2	26,215.7	9,126.7	4,096.2	940.3	1,338.7
Later stage.....	287.7	1,805.3	1,695.9	1,464.9	2,447.5	2,446.6	2,530.1	4,521.0	7,251.9	10,242.7	14,141.5	39,340.7	76,984.0	30,890.7	16,861.9	15,464.9	16,714.2
Expansion .....	181.8	1,241.5	1,332.5	1,104.9	1,843.7	1,964.6	1,587.7	3,240.7	5,470.5	7,879.2	10,772.5	30,081.2	60,582.3	23,087.6	13,195.6	10,052.0	9,548.5
Later stage.....	53.6	542.1	363.4	360.0	603.8	472.6	942.4	1,277.5	1,779.1	2,363.4	3,362.2	9,256.4	16,401.6	7,803.1	3,666.3	5,412.7	7,165.7
Other later stage .....	52.3	21.7	0.0	0.0	283.2	9.4	277.3	2.8	2.3	0.1	6.8	3.1	0.1	0.0	0.0	0.3	0.0
Disbursements (percent)																	
All stages .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Early stage .....	49.9	36.4	39.4	35.5	31.8	35.5	39.0	40.8	37.5	32.1	34.1	28.2	27.6	24.3	20.8	19.5	20.4
Seed .....	2.0	3.7	4.4	3.9	4.6	8.4	5.4	4.7	4.9	5.2	4.2	2.2	1.8	1.1	1.0	1.3	0.8
Start-up .....	28.7	14.9	10.0	7.2	11.0	10.1	13.8	12.6	8.2	3.6	4.4	3.8	1.1	0.9	0.5	13.3	13.3
Other early stage.....	19.2	17.8	25.0	24.4	16.1	17.0	19.9	23.4	24.4	23.2	25.4	22.1	24.7	22.4	19.3	4.9	6.4
Later stage.....	50.1	63.6	60.6	64.5	68.2	64.5	61.0	59.2	62.5	67.9	65.9	71.8	72.4	75.7	79.2	80.5	79.6
Expansion .....	31.7	43.7	47.6	48.7	51.4	51.8	38.3	42.4	47.1	52.2	50.2	54.9	57.0	56.6	62.0	52.3	45.5
Later stage.....	9.3	19.1	13.0	15.9	16.8	12.5	22.7	16.7	15.3	15.7	15.7	16.9	15.4	19.1	17.2	28.2	34.1
Other later stage .....	9.1	0.8	0.0	0.0	7.9	0.2	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Companies (number)																	
All stages .....	430	1,215	1,069	929	1,050	936	979	1,573	2,117	2,588	3,460	4,478	6,429	3,829	2,539	2,482	2,578
Early stage .....	34	166	113	107	140	125	137	192	254	291	385	413	661	476	306	861	935
Seed .....	17	101	87	64	95	111	99	161	265	329	410	430	451	168	109	144	113
Start-up .....	93	234	133	95	118	126	178	216	196	138	237	357	187	71	29	483	499
Other early stage.....	87	269	298	235	237	152	216	457	676	793	910	1,596	2,638	1,168	740	234	323
Later stage.....	41	143	182	149	184	159	154	227	292	338	398	357	390	333	297	1,621	1,643
Expansion .....	123	488	460	429	492	425	378	624	923	1,246	1,734	2,155	3,253	2,128	1,436	1,154	1,059
Later stage.....	27	157	173	199	184	153	170	197	257	303	366	540	709	570	364	466	584
Other later stage .....	104	25	0	0	1	2	0	1	3	2	40	2	2	0	0	1	0
Disbursements/company (\$ millions)																	
All stages .....	1.3	2.3	2.6	2.4	3.4	4.1	4.2	4.9	5.5	5.8	6.2	12.2	16.5	10.7	8.4	7.7	8.2
Early stage .....	8.4	6.2	9.7	7.5	8.1	10.8	11.8	16.2	17.2	16.6	19.0	37.4	44.3	20.9	14.4	4.4	4.6
Seed .....	0.7	1.0	1.4	1.4	1.7	2.9	2.3	2.2	2.2	2.4	2.2	2.8	4.3	2.6	1.9	1.8	1.4
Start-up .....	1.8	1.8	2.1	1.7	3.4	3.0	3.2	4.5	4.9	4.0	4.0	5.9	6.1	5.3	4.0	5.3	5.6
Other early stage.....	1.3	1.9	2.3	2.4	2.4	4.2	3.8	3.9	4.2	4.4	6.0	7.6	9.9	7.8	5.5	4.0	4.1
Later stage.....	7.0	12.6	9.3	9.8	13.3	15.4	16.4	19.9	24.8	30.3	35.5	110.2	197.4	92.8	56.8	9.5	10.2
Expansion .....	1.5	2.5	2.9	2.6	3.7	4.6	4.2	5.2	5.9	6.3	6.2	14.0	18.6	10.8	9.2	8.7	9.0
Later stage.....	2.0	3.5	2.1	1.8	3.3	3.1	5.5	6.5	6.9	7.8	9.2	17.1	23.1	13.7	10.1	11.6	12.3
Other later stage .....	0.5	0.9	0.0	0.0	283.2	4.7	0.0	2.8	0.8	0.1	0.2	1.6	0.1	0.0	0.0	0.3	0.0

**U.S. venture capital total disbursements, by financing stage: Selected years, 1980–2004**

Stage	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Disbursements (number)																	
All stages .....	451	1,274	1,151	1,022	1,127	969	1,041	1,656	2,320	2,811	3,697	5,080	7,240	4,105	2,678	2,832	2,885
Early stage .....	197	604	518	394	450	389	493	834	1,137	1,260	1,557	2,383	3,276	1,407	878	960	1,007
Seed .....	17	101	87	64	95	111	99	161	265	329	410	430	451	168	109	155	125
Start-up .....	93	234	133	95	118	126	178	216	196	138	237	357	187	71	29	549	541
Other early stage.....	87	269	298	235	237	152	216	457	676	793	910	1,596	2,638	1,168	740	256	341
Later stage.....	254	670	633	628	677	580	548	822	1,183	1,551	2,140	2,697	3,964	2,698	1,800	1,872	1,878
Expansion .....	123	488	460	429	492	425	378	624	923	1,246	1,734	2,155	3,253	2,128	1,436	1,328	1,213
Later stage.....	27	157	173	199	184	153	170	197	257	303	366	540	709	570	364	543	665
Other later stage .....	104	25	0	0	1	2	0	1	3	2	40	2	2	0	0	1	0

SOURCE: Thomson Financial Services, special tabulations (May 2005).

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Appendix table 6-20

## U.S. venture capital seed disbursements, by industry category: Selected years, 1980–2004

Industry	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Disbursements (\$ millions)																	
All industries.....	11.7	104.5	124.2	87.8	166.1	319.9	223.7	360.3	569.9	790.0	908.1	1,222.1	1,927.1	429.9	203.7	252.2	157.8
Biotechnology.....	1.1	3.5	7.4	6.3	49.9	40.6	25.2	7.4	48.8	50.9	90.5	69.4	40.6	20.6	31.4	37.4	15.3
Communications.....	1.5	3.5	13.2	4.1	24.1	83.1	20.6	50.3	43.9	115.7	123.4	71.1	395.2	135.0	26.9	25.8	9.9
Computer hardware.....	6.0	10.9	14.0	11.3	3.8	18.2	2.6	35.8	23.9	15.0	42.2	12.5	48.0	5.2	1.6	2.4	0.9
Consumer related.....	0.0	3.0	26.0	3.1	9.7	15.8	45.1	57.5	7.8	43.6	14.4	26.2	20.1	3.5	1.5	4.5	0.3
Industrial/energy.....	0.5	16.9	1.0	0.0	4.0	25.3	45.4	7.9	24.7	17.9	4.2	3.0	9.3	4.6	3.9	8.1	0.6
Medical/health.....	1.2	17.6	28.7	31.7	36.2	57.7	38.4	60.1	113.7	127.7	159.6	64.4	78.5	42.2	41.1	64.6	39.2
Semiconductors/other electronics.....	0.0	14.7	2.7	1.5	7.3	10.6	10.6	38.0	34.0	63.2	40.3	48.1	170.2	36.2	29.9	24.5	35.5
Software and services.....	1.5	17.8	26.2	19.5	23.2	42.8	29.4	65.4	138.0	183.3	176.7	181.6	283.2	66.7	47.4	49.4	35.2
Other products/services.....	0.0	15.9	1.1	9.3	0.2	18.0	0.6	9.0	7.2	45.5	33.3	34.4	51.1	24.6	5.0	15.1	0.1
Internet specific.....	0.0	0.7	3.9	1.1	7.8	7.9	5.8	28.9	128.0	127.3	223.6	711.4	830.9	91.3	15.1	20.5	20.8
Disbursements (percent)																	
All industries.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Biotechnology.....	9.4	3.4	6.0	7.2	30.1	12.7	11.3	2.1	8.6	6.4	10.0	5.7	2.1	4.8	15.4	14.8	9.7
Communications.....	12.8	3.4	10.6	4.7	14.5	26.0	9.2	14.0	7.7	14.6	13.6	5.8	20.5	31.4	13.2	10.2	6.3
Computer hardware.....	50.7	10.5	11.3	12.9	2.3	5.7	1.2	9.9	4.2	1.9	4.6	1.0	2.5	1.2	0.8	1.0	0.6
Consumer related.....	0.0	2.9	20.9	3.5	5.8	4.9	20.2	16.0	1.4	5.5	1.6	2.1	1.0	0.8	0.7	1.8	0.2
Industrial/energy.....	4.3	16.1	0.8	0.0	2.4	7.9	20.3	2.2	4.3	2.3	0.5	0.2	0.5	1.1	1.9	3.2	0.4
Medical/health.....	10.1	16.8	23.1	36.0	21.8	18.0	17.2	16.7	20.0	16.2	17.6	5.3	4.1	9.8	20.2	25.6	24.8
Semiconductors/other electronics.....	0.0	14.0	2.2	1.8	4.4	3.3	4.7	10.5	6.0	8.0	4.4	3.9	8.8	8.4	14.7	9.7	22.5
Software and services.....	12.8	17.0	21.1	22.2	14.0	13.4	13.2	18.2	24.2	23.2	19.5	14.9	14.7	15.5	23.3	19.6	22.3
Other products/services.....	0.0	15.2	0.9	10.6	0.1	5.6	0.3	2.5	1.3	5.8	3.7	2.8	2.6	5.7	2.5	6.0	0.1
Internet specific.....	0.0	0.7	3.1	1.3	4.7	2.5	2.6	8.0	22.5	16.1	24.6	58.2	43.1	21.2	7.4	8.1	13.2
Companies (number)																	
All industries.....	17	101	87	64	95	111	99	161	265	329	410	430	451	168	109	144	113
Biotechnology.....	3	11	13	8	20	17	13	7	20	22	43	22	18	12	18	20	18
Communications.....	2	7	5	9	16	17	16	17	27	39	46	27	58	34	13	13	13
Computer hardware.....	7	11	9	5	6	9	2	10	12	7	12	9	11	4	2	5	3
Consumer related.....	0	6	8	2	6	5	4	12	6	29	15	7	8	3	3	5	1
Industrial/energy.....	1	9	2	0	2	5	3	6	9	8	15	1	4	3	3	5	2
Medical/health.....	2	16	24	15	15	23	25	24	48	58	64	32	27	19	24	33	29
Semiconductors/other electronics.....	0	15	3	2	7	5	5	16	12	18	21	13	29	14	9	20	11
Software and services.....	2	19	17	15	15	19	25	42	68	84	77	69	88	36	27	29	21
Other products/services.....	0	6	3	6	4	7	1	7	6	14	23	25	25	7	4	3	1
Internet specific.....	0	1	3	2	4	4	5	20	57	50	94	225	183	36	6	11	14

SOURCE: Thomson Financial Services, special tabulations (May 2005).

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