

TABLE S6-2

Value added of KTI industries, by region, country, or economy: 2002–18

(Millions of current dollars)

Region, country, or economy	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
World	3,473,038	3,876,320	4,305,668	4,574,271	4,914,716	5,532,705	6,003,764	5,547,411	6,304,366	7,008,185	7,132,077	7,376,083	7,679,857	7,545,253	7,779,187	8,277,119	9,020,711
North America	1,254,043	1,299,313	1,355,778	1,432,797	1,510,226	1,588,799	1,623,166	1,541,442	1,694,155	1,792,135	1,849,794	1,938,018	2,005,464	2,106,428	2,183,120	2,303,069	2,496,522
Canada	63,411	70,942	76,367	82,334	88,910	96,208	93,115	82,539	96,882	108,489	111,951	111,026	108,743	99,146	91,423	96,488	101,165
Mexico	61,453	54,766	56,498	60,888	70,137	72,937	74,264	55,445	69,532	75,706	85,171	88,705	92,889	93,737	87,886	93,960	98,039
United States	1,129,179	1,173,605	1,222,914	1,289,576	1,351,179	1,419,654	1,455,788	1,403,458	1,527,741	1,607,940	1,652,672	1,738,287	1,803,832	1,913,546	2,003,810	2,112,621	2,296,415
Central and South America	69,827	74,516	93,314	114,270	136,365	173,785	216,214	199,674	249,154	286,511	271,234	274,101	251,025	208,757	183,891	210,532	205,408
Argentina	6,370	7,986	10,193	12,632	15,264	19,395	24,925	24,107	28,446	32,266	32,800	32,981	25,371	26,486	24,090	28,026	23,196
Bolivia	244	246	250	262	274	296	387	450	467	511	560	616	653	706	788	837	918
Brazil	42,622	46,352	59,229	72,959	88,556	115,136	144,111	125,200	169,579	196,023	172,426	172,654	159,316	110,845	106,952	122,683	118,280
Chile	3,325	3,452	4,446	5,851	6,542	7,554	8,389	8,937	11,016	12,884	14,032	15,305	15,085	14,376	14,076	14,962	16,249
Colombia	5,575	5,427	6,651	8,035	9,041	11,438	12,978	12,601	15,182	16,682	18,252	18,656	18,765	15,172	14,843	16,004	16,996
Costa Rica	1,109	1,103	1,239	1,401	1,599	1,856	2,057	1,933	2,368	2,709	2,992	3,163	3,294	3,610	3,796	3,964	4,114
Ecuador	1,509	1,448	1,403	1,570	1,657	2,109	2,313	2,554	2,842	2,668	3,479	3,517	3,556	3,460	3,377	3,380	3,544
Honduras	634	655	653	758	877	953	1,049	993	1,126	1,324	1,473	1,462	1,482	1,468	1,544	1,632	1,718
Jamaica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Panama	525	555	600	631	697	748	845	959	1,064	1,169	1,315	1,496	1,569	1,687	1,786	1,930	2,105
Peru	2,373	2,465	2,641	2,954	3,375	3,916	4,870	4,890	5,849	6,610	7,554	8,248	8,050	7,559	7,254	8,066	8,555
Uruguay	725	599	643	784	882	1,037	1,461	1,495	2,038	2,350	2,659	2,973	3,060	2,933	2,980	3,281	3,353
Venezuela	4,815	4,230	5,365	6,434	7,601	9,348	12,829	15,555	9,178	11,316	13,692	13,029	10,825	20,455	2,404	5,768	6,381
Europe	1,032,579	1,232,417	1,417,410	1,476,273	1,598,100	1,868,360	2,025,980	1,685,465	1,801,125	2,026,456	1,924,579	2,033,394	2,112,199	1,906,200	1,940,043	2,015,830	2,200,526
EU	943,573	1,127,714	1,289,138	1,327,439	1,426,637	1,654,433	1,761,808	1,481,105	1,564,190	1,735,860	1,632,183	1,724,630	1,821,494	1,675,714	1,706,800	1,757,783	1,928,566
Austria	18,720	22,859	25,982	28,283	30,949	36,398	40,160	35,390	34,689	40,343	38,725	41,487	42,656	36,762	38,111	39,096	43,547
Belgium	25,227	29,699	32,967	34,747	35,498	40,351	43,475	38,411	40,208	43,224	40,980	43,058	44,825	38,246	39,962	42,197	48,098
Bulgaria	600	793	1,020	1,217	1,393	1,954	2,065	2,010	2,336	2,923	2,684	2,885	3,127	3,078	3,384	3,818	4,332
Czechia	8,615	10,356	13,206	15,895	19,203	24,496	29,112	24,546	26,725	31,192	29,200	29,572	32,152	29,213	31,121	34,246	37,910
Denmark	15,537	18,377	20,536	20,527	22,744	26,265	30,667	28,649	29,676	31,194	30,283	33,687	34,885	33,495	36,002	36,047	39,550
Finland	18,418	22,501	25,828	27,295	29,432	36,188	39,661	30,118	29,551	31,258	25,783	28,472	29,900	25,782	26,119	27,319	29,920
France	139,906	165,821	184,906	186,877	196,612	222,328	239,576	215,523	211,079	225,957	214,084	226,372	232,954	203,165	210,077	219,467	237,213
Germany	288,638	351,621	400,386	408,897	441,394	521,351	551,564	450,368	506,328	582,885	550,133	583,970	625,664	547,109	561,461	577,730	631,688
Greece	3,926	5,211	6,209	6,490	7,083	7,786	7,732	7,092	6,887	6,034	5,775	6,099	5,946	5,167	5,107	5,246	5,978
Hungary	6,711	9,121	11,440	13,109	14,126	16,884	18,272	14,783	16,227	18,178	16,533	18,187	19,687	18,524	18,272	19,593	20,958
Ireland	29,011	30,698	33,379	34,393	34,874	41,168	43,003	44,778	42,872	48,469	45,881	47,016	52,418	93,424	95,598	95,278	111,610
Italy	103,430	123,980	140,505	141,875	150,609	174,152	185,796	159,229	163,233	173,562	157,509	163,832	168,010	146,323	150,011	153,172	165,572
Netherlands	36,233	43,506	50,919	53,477	58,673	69,514	74,362	61,795	63,496	69,200	62,376	63,359	64,876	59,201	61,056	64,412	71,497
Poland	10,907	13,291	15,987	19,056	21,841	27,161	34,566	29,733	30,862	35,197	34,542	35,662	39,588	36,192	36,092	39,126	42,488
Portugal	5,690	6,648	7,503	7,627	8,041	9,599	10,175	9,061	9,286	9,415	8,345	9,031	9,436	8,257	8,676	9,067	9,971

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Value added of KTI industries, by region, country, or economy: 2002–18

(Millions of current dollars)

Region, country, or economy	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Romania	2,085	2,788	3,350	4,225	5,914	8,453	10,913	8,789	9,138	11,110	10,447	13,835	14,855	13,775	15,117	17,260	20,283
Slovakia	1,871	2,677	3,324	3,800	4,785	6,821	9,171	7,019	8,518	9,841	9,401	9,537	10,334	9,017	9,673	10,111	11,339
Spain	49,626	62,368	71,762	75,180	82,603	95,193	106,269	95,306	88,028	94,505	85,711	92,479	97,427	88,237	90,628	94,492	103,802
Sweden	36,921	46,338	56,433	57,350	61,723	70,923	71,399	55,336	69,136	78,940	73,067	78,310	76,538	71,958	72,091	74,896	80,591
United Kingdom	141,500	159,061	183,496	187,117	199,142	217,447	213,870	163,170	175,914	192,433	190,723	197,782	216,214	208,788	198,242	195,211	212,220
Other Europe	89,007	104,703	128,272	148,834	171,463	213,927	264,173	204,360	236,935	290,597	292,397	308,764	290,705	230,486	233,243	258,047	271,960
Norway	9,467	11,063	12,493	13,901	15,392	19,306	22,515	19,611	21,181	23,190	23,129	24,210	23,528	18,972	18,290	19,686	21,141
Russia	24,409	28,015	38,870	49,780	62,879	86,106	113,056	71,272	88,660	116,683	122,822	129,939	114,025	67,454	67,420	78,292	82,591
Switzerland	42,689	49,447	56,409	59,406	64,127	71,832	84,133	79,647	86,797	104,310	99,382	103,327	105,523	100,218	102,465	104,794	113,854
Turkey	10,115	13,131	16,518	20,671	22,736	28,022	33,514	26,011	29,978	33,246	32,569	37,320	36,178	36,906	36,972	44,798	40,781
Ukraine	2,327	3,047	3,983	5,076	6,330	8,661	10,954	7,820	10,319	13,167	14,495	13,968	11,452	6,936	8,097	10,477	13,592
Middle East	38,103	41,944	48,540	54,314	64,490	83,511	98,217	100,396	111,269	122,348	123,317	123,611	133,202	127,863	137,341	147,140	148,539
Bahrain	379	408	453	569	714	883	1,067	926	1,049	1,133	1,196	1,258	1,323	1,223	1,347	1,410	1,553
Iran	9,137	10,992	13,067	14,964	19,601	24,926	28,427	34,009	36,501	37,544	29,494	21,675	25,388	23,587	26,530	29,133	21,451
Israel	14,274	14,583	15,689	16,429	18,087	20,797	24,279	24,913	26,960	29,639	30,526	34,548	36,023	35,959	37,609	40,940	43,024
Jordan	1,007	997	1,137	1,207	1,442	1,741	2,051	2,051	1,960	1,895	2,021	2,194	2,390	2,489	2,753	2,825	3,184
Kuwait	1,052	1,216	1,573	1,779	1,551	2,029	2,611	2,501	2,923	3,473	4,246	4,074	3,646	2,363	2,998	3,314	4,034
Qatar	789	1,161	1,979	2,478	2,985	6,451	8,779	6,497	8,088	11,242	13,701	14,319	15,147	10,117	9,112	9,421	11,142
Saudi Arabia	7,192	7,748	8,870	10,048	11,521	15,985	18,573	19,290	22,950	25,198	28,877	31,420	33,970	36,538	37,681	39,765	42,806
United Arab Emirates	4,274	4,839	5,772	6,839	8,588	10,699	12,430	10,209	10,838	12,222	13,257	14,122	15,313	15,588	19,311	20,332	21,344
Africa	21,489	26,978	33,408	39,019	42,882	48,835	55,393	55,431	63,861	70,528	76,554	83,064	88,306	79,565	75,134	73,402	81,576
Cameroon	248	297	347	377	412	460	568	585	593	668	665	730	760	664	732	774	873
Egypt	2,408	1,973	2,446	2,929	3,291	4,065	5,088	5,680	6,469	8,187	9,795	9,145	8,924	8,895	8,888	8,388	10,588
Kenya	330	398	444	476	625	769	868	847	772	813	1,036	1,061	1,112	1,195	1,262	1,248	1,371
Morocco	3,412	3,955	4,412	5,225	5,471	6,489	7,267	7,237	7,969	7,984	7,677	8,824	9,559	7,973	8,550	9,476	10,434
Nigeria	5,285	6,054	7,934	10,576	14,813	17,919	22,797	22,407	25,528	29,894	34,344	41,637	46,882	41,449	36,695	33,103	36,919
Senegal	259	317	362	371	381	436	526	516	522	613	567	577	594	479	554	628	704
South Africa	8,459	12,659	15,986	17,490	16,101	16,732	15,887	15,846	19,406	19,692	19,765	18,333	17,694	16,439	15,782	16,935	17,907
Tunisia	1,089	1,325	1,477	1,576	1,786	1,964	2,392	2,313	2,602	2,677	2,704	2,756	2,779	2,469	2,670	2,850	2,780
Zimbabwe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asia	1,025,302	1,160,870	1,308,641	1,404,968	1,506,871	1,701,061	1,912,443	1,893,560	2,296,871	2,606,974	2,781,662	2,826,494	2,996,073	3,037,681	3,179,564	3,438,543	3,798,970
Bangladesh	2,036	2,116	2,206	2,282	2,491	2,714	3,016	3,791	4,057	4,082	4,173	4,936	5,804	6,586	7,955	9,197	10,452
China	215,155	257,598	291,181	345,215	419,766	536,684	695,414	751,678	928,671	1,134,976	1,275,299	1,431,468	1,574,041	1,644,512	1,697,668	1,905,819	2,184,420
India	29,105	34,491	43,015	51,823	59,229	75,447	82,250	89,370	110,452	133,384	129,981	133,129	147,204	161,211	169,194	190,867	209,216
Indonesia	14,983	18,597	19,947	19,760	21,882	27,618	34,789	34,425	43,373	50,486	52,126	56,841	55,504	52,559	54,946	58,626	58,859
Japan	566,996	627,454	686,595	689,936	668,540	685,795	740,750	685,064	792,586	821,220	841,816	690,879	668,066	634,329	710,755	672,049	703,853

TABLE S6-2

Value added of KTI industries, by region, country, or economy: 2002–18

(Millions of current dollars)

Region, country, or economy	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Malaysia	14,873	16,890	19,742	18,917	22,067	23,699	25,134	19,941	26,382	29,846	32,936	33,990	35,124	34,289	32,990	35,573	39,907
Pakistan	2,755	3,546	4,864	6,032	7,033	7,709	8,368	7,363	8,724	10,821	11,466	11,551	12,834	13,581	14,063	15,560	14,695
Philippines	5,698	5,270	5,928	6,332	7,268	9,444	8,905	9,663	10,402	11,494	12,745	11,297	12,707	13,609	14,880	15,457	15,057
Singapore	16,425	17,347	22,598	24,441	29,417	32,309	28,844	29,083	38,434	43,702	44,717	43,755	45,801	44,446	45,567	52,713	57,592
South Korea	91,193	101,326	124,874	143,755	162,476	183,111	163,089	150,630	196,751	222,166	225,748	245,557	259,776	255,700	249,018	279,982	294,374
Sri Lanka	493	562	638	817	2,027	991	887	927	1,210	1,345	1,225	1,292	1,198	1,171	1,105	1,223	1,249
Taiwan	51,035	58,279	66,763	72,602	77,399	82,539	83,348	76,722	96,014	103,040	104,212	109,874	121,760	121,577	123,745	137,070	139,682
Thailand	13,039	15,675	18,193	20,471	23,936	28,590	32,208	28,124	32,354	32,089	35,159	39,147	34,411	33,826	34,432	35,519	38,940
Vietnam	1,516	1,719	2,098	2,584	3,340	4,409	5,441	6,780	7,460	8,322	10,057	12,776	21,842	20,285	23,248	28,889	30,674
Oceania	31,693	40,281	48,577	52,630	55,783	68,354	72,350	71,443	87,932	103,233	104,936	97,401	93,589	78,759	80,095	88,604	89,172
Australia	28,750	36,534	44,101	47,709	51,368	62,856	67,412	66,843	82,562	97,327	98,617	90,625	86,540	72,488	73,899	81,653	81,960
New Zealand	2,943	3,748	4,475	4,921	4,415	5,498	4,938	4,600	5,369	5,905	6,319	6,776	7,048	6,271	6,196	6,951	7,212

EU = European Union; KTI = knowledge and technology intensive.

Note(s):

Value added is the amount contributed by a country, firm, or other entity to the value of a good or service and excludes purchases of domestic and imported materials and inputs. KTI industries include high R&D intensive and medium-high R&D intensive industries classified by the Organisation for Economic Co-operation and Development. High R&D intensive industries include aircraft; pharmaceuticals; computer, electronic, and optical products; scientific research and development services; and software publishing. Medium-high R&D intensive industries include weapons and ammunition; motor vehicles; medical and dental instruments; machinery and equipment; chemicals and chemical products; electrical equipment; railroad, military vehicles, and transport; and IT and other information services. Data on the software publishing are not available; data on the publishing industry, which includes software publishing, are used as a proxy for this industry. Data on medical and dental instruments and military vehicles are not available. Detail may not add to total because of rounding or minor discrepancies. World total does not include all countries and economies due to limitations in data availability. See Table S6-1 for a full list of countries and economies in each region.

Source(s):

IHS Markit, special tabulations (2019) of Comparative Industry Service.