

TABLE S6-13

Value added of chemicals and chemical products industry, 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	388,907	428,459	485,381	515,152	543,709	635,308	697,638	660,662	792,254	897,184	888,422	920,914	932,157	901,915	888,488	914,635	1,026,461
North America	127,273	126,433	133,914	140,534	147,504	157,321	165,350	164,605	196,523	202,805	210,148	219,119	216,708	210,467	215,544	215,725	241,121
Canada	6,612	7,194	7,826	7,879	7,841	8,456	8,507	8,129	10,630	13,437	13,321	13,671	11,944	11,803	9,111	9,166	10,342
Mexico	9,826	8,684	10,279	10,598	13,401	13,814	15,351	12,105	14,156	14,664	16,751	17,762	14,683	13,299	12,062	12,870	13,982
United States	110,835	110,555	115,810	122,057	126,263	135,052	141,492	144,371	171,738	174,703	180,075	187,686	190,081	185,365	194,371	193,689	216,797
Central and South America	16,165	18,786	22,998	26,742	29,752	37,712	47,002	42,475	51,553	57,813	56,334	55,146	50,549	46,887	40,847	44,907	44,317
Argentina	1,705	2,431	3,106	3,847	4,552	5,505	7,378	7,528	9,247	9,714	9,677	9,091	5,874	5,504	5,313	6,135	5,280
Bolivia	53	55	58	62	66	69	102	120	122	134	141	155	166	175	195	205	230
Brazil	9,790	11,488	14,181	15,734	17,755	23,395	28,608	22,795	30,775	36,027	33,048	32,047	31,702	25,884	25,938	27,819	26,840
Chile	618	832	997	1,615	1,292	1,413	1,310	1,647	2,190	2,034	2,029	2,465	2,151	2,360	2,239	2,284	2,579
Colombia	1,562	1,661	1,930	2,189	2,359	2,747	3,281	3,432	3,819	3,843	4,280	4,318	4,274	3,635	3,335	3,606	3,811
Costa Rica	185	193	191	189	212	242	261	229	278	313	335	337	320	325	330	342	372
Ecuador	287	233	200	304	294	428	447	472	533	313	415	411	450	436	449	428	466
Honduras	113	115	100	122	120	130	150	149	139	179	201	198	204	202	208	221	242
Jamaica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Panama	28	28	29	31	32	44	50	56	56	58	83	93	96	105	108	113	128
Peru	534	566	650	754	829	996	1,213	1,210	1,381	1,501	1,717	1,824	1,760	1,680	1,509	1,608	1,800
Uruguay	105	99	108	122	142	153	232	183	235	281	324	348	380	369	360	344	332
Venezuela	1,184	1,087	1,446	1,774	2,100	2,589	3,969	4,654	2,778	3,416	4,085	3,859	3,173	6,212	863	1,801	2,237
Europe	112,233	132,389	149,312	157,659	164,091	188,838	206,708	164,487	179,240	199,823	183,779	189,373	198,815	186,182	176,973	173,794	196,074
EU	103,846	121,707	135,398	141,225	145,089	166,368	171,626	144,781	155,664	169,332	157,175	163,255	172,934	167,825	159,442	155,143	174,050
Austria	1,473	1,817	2,002	2,026	2,428	2,817	2,925	2,661	2,575	2,968	2,376	2,877	3,206	3,095	3,101	3,002	3,376
Belgium	6,852	7,902	8,931	9,345	9,208	10,123	10,151	9,447	9,833	10,616	9,768	10,120	10,799	10,172	9,814	10,293	11,672
Bulgaria	139	170	197	223	230	269	181	209	254	408	289	287	284	323	354	441	479
Czechia	738	909	1,076	1,252	1,261	1,487	1,741	1,187	1,474	1,687	1,600	1,495	1,885	1,630	1,479	1,651	1,934
Denmark	1,103	1,381	1,509	1,581	1,567	1,654	2,014	2,061	2,141	2,135	2,494	2,491	2,480	2,291	2,152	1,995	2,303
Finland	1,363	1,619	2,041	1,992	2,031	2,546	2,640	2,147	2,241	2,813	2,084	2,386	2,355	2,243	2,259	2,271	2,611
France	11,692	13,921	15,677	16,514	16,585	19,358	21,401	19,697	18,515	21,122	19,657	22,512	23,197	20,091	19,796	19,211	21,305
Germany	34,095	39,445	44,008	44,215	44,861	52,015	55,702	48,036	54,280	57,507	51,914	53,950	56,775	52,120	49,844	48,931	54,102
Greece	473	681	727	741	881	932	1,059	858	843	784	944	1,192	1,250	1,144	1,157	1,105	1,370
Hungary	522	589	713	707	824	1,124	1,078	598	663	780	818	962	1,242	1,405	1,404	1,397	1,623
Ireland	813	795	1,087	929	899	2,509	2,281	2,449	2,162	5,030	6,677	5,050	4,283	11,526	7,931	6,598	7,603
Italy	9,333	10,510	11,891	11,879	12,156	13,941	13,778	11,931	13,103	13,463	12,310	13,050	16,419	12,075	12,558	12,255	13,819
Netherlands	7,333	9,055	10,971	11,381	12,610	14,408	14,515	10,336	10,983	12,462	11,222	10,781	10,366	10,433	11,147	10,929	12,423
Poland	1,608	1,782	2,222	2,643	3,025	3,280	3,868	2,955	3,664	4,480	4,240	4,064	4,443	4,491	3,731	3,830	4,433
Portugal	666	811	958	958	953	1,166	1,083	948	1,067	1,132	863	941	935	975	1,063	1,065	1,171

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(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	185	185	227	302	445	619	800	668	692	1,038	636	713	628	563	563	667	776
Slovakia	285	282	305	360	455	540	662	522	549	677	551	518	530	601	525	521	598
Spain	7,125	8,604	10,152	10,726	11,475	12,959	14,435	12,715	13,523	15,122	12,789	12,636	13,392	12,320	11,863	11,941	13,418
Sweden	2,463	2,433	2,861	3,142	3,210	4,021	3,617	3,382	3,537	3,418	3,197	3,222	2,850	2,528	2,388	2,333	2,563
United Kingdom	15,584	18,819	17,842	20,309	19,984	20,601	17,696	11,973	13,567	11,690	12,748	14,009	15,616	17,801	16,314	14,707	16,471
Other Europe	8,387	10,681	13,914	16,435	19,002	22,470	35,082	19,706	23,576	30,491	26,605	26,118	25,881	18,357	17,531	18,651	22,024
Norway	690	805	872	1,087	1,256	1,624	2,215	1,270	1,529	1,400	970	1,161	1,350	1,190	968	887	1,018
Russia	2,955	4,081	6,360	9,056	10,426	12,751	23,052	10,677	13,115	18,964	17,153	15,116	14,302	7,164	6,042	6,763	7,461
Switzerland	2,548	2,964	3,290	3,557	3,928	4,344	5,003	4,828	5,203	5,279	3,999	4,299	4,449	4,525	5,067	4,950	5,762
Turkey	1,840	2,368	2,697	1,806	2,335	2,429	3,129	2,316	2,849	3,460	3,025	3,539	3,533	3,632	3,527	3,697	3,557
Ukraine	354	462	694	929	1,057	1,322	1,683	615	880	1,387	1,457	2,003	2,246	1,847	1,926	2,353	4,227
Middle East	8,932	9,682	12,441	14,010	17,085	26,759	32,222	30,373	35,763	40,893	44,311	46,308	49,185	44,341	46,875	50,492	54,592
Bahrain	53	57	62	83	112	144	183	145	167	192	202	215	224	188	212	223	261
Iran	2,114	1,950	2,794	2,634	3,852	5,897	6,307	7,743	8,271	7,818	6,236	4,399	5,283	4,414	5,025	5,701	4,636
Israel	413	450	572	693	823	930	1,390	1,251	1,311	1,525	1,352	3,958	3,555	3,619	3,629	3,854	4,324
Jordan	333	277	321	319	398	493	691	715	648	587	598	658	657	644	664	663	944
Kuwait	279	353	471	527	387	519	623	608	770	1,074	1,594	1,609	1,387	782	878	994	1,268
Qatar	693	1,061	1,801	2,255	2,475	5,662	7,835	5,162	7,063	9,863	12,121	12,464	13,114	7,917	6,783	7,243	8,729
Saudi Arabia	3,969	4,332	5,014	5,760	6,692	10,441	12,074	12,445	14,994	16,542	18,520	19,415	20,976	23,159	23,778	25,437	27,604
United Arab Emirates	1,077	1,203	1,404	1,738	2,345	2,674	3,118	2,303	2,539	3,292	3,687	3,590	3,989	3,619	5,907	6,376	6,826
Africa	4,990	6,495	7,933	8,891	7,141	8,230	9,699	9,519	11,139	11,619	12,653	12,735	13,086	11,486	11,516	12,226	14,087
Cameroon	31	30	41	43	45	51	87	87	88	99	99	110	120	106	114	133	157
Egypt	866	710	930	1,081	1,190	1,478	1,870	2,058	2,463	2,658	2,943	2,263	1,805	1,612	1,889	2,200	3,014
Kenya	90	115	137	141	165	214	272	266	216	265	404	388	450	507	517	493	555
Morocco	521	579	607	797	742	969	1,157	1,056	1,396	1,342	1,195	1,543	1,885	1,578	1,631	1,819	2,135
Nigeria	423	467	562	742	996	1,166	1,455	1,367	1,716	2,399	2,711	3,403	3,924	3,415	3,408	3,342	3,843
Senegal	87	105	110	107	89	83	104	95	99	139	111	93	91	105	109	127	146
South Africa	2,774	4,263	5,276	5,669	3,564	3,606	3,862	3,816	4,203	3,870	4,229	4,012	3,947	3,434	2,965	3,111	3,334
Tunisia	197	227	269	311	351	663	891	774	958	847	962	925	864	728	884	1,000	903
Zimbabwe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asia	117,107	132,108	155,748	163,959	174,798	211,785	231,826	244,178	312,108	377,864	374,937	391,732	397,302	397,229	391,641	411,521	470,098
Bangladesh	261	284	305	333	332	392	413	629	572	501	464	563	656	627	714	925	1,031
China	36,569	43,507	55,998	62,561	74,080	99,845	119,966	126,824	163,391	214,458	221,151	241,822	249,926	248,542	238,357	255,641	298,724
India	5,271	6,011	7,072	8,074	8,931	11,716	12,827	13,305	15,775	21,693	16,723	15,910	15,613	15,632	15,177	16,566	18,313
Indonesia	1,730	2,453	1,819	2,646	4,348	6,000	7,728	7,355	8,976	12,342	13,478	17,480	17,666	15,472	15,768	17,025	16,790
Japan	48,758	52,571	55,270	52,293	48,426	51,409	53,099	56,596	70,613	70,733	69,417	59,469	55,873	55,022	59,495	52,674	57,007

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(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	2,101	2,656	3,586	3,749	4,975	4,655	5,283	4,407	5,847	6,194	6,542	6,202	5,862	6,143	5,262	5,791	6,932
Pakistan	929	1,252	1,777	2,122	1,881	2,138	2,480	2,038	2,412	3,023	3,098	3,137	3,363	3,332	3,134	3,330	3,212
Philippines	619	605	660	614	706	702	684	746	671	1,010	1,119	811	739	768	655	659	770
Singapore	1,646	1,893	2,748	2,576	2,476	3,377	1,502	2,409	3,470	3,985	2,640	4,156	4,436	5,814	8,969	8,828	10,144
South Korea	11,027	12,083	15,045	16,658	17,388	19,670	18,034	17,177	22,695	26,423	25,133	26,182	27,549	28,212	25,344	28,378	33,107
Sri Lanka	216	254	315	418	1,580	504	391	474	667	719	558	565	417	399	370	409	438
Taiwan	6,759	7,124	9,597	10,161	7,631	8,949	6,271	8,207	12,642	11,839	9,455	10,154	10,005	12,233	13,370	15,826	17,413
Thailand	899	1,062	1,124	1,210	1,343	1,600	1,990	2,119	2,842	3,479	3,487	3,461	3,274	2,824	2,717	2,868	3,300
Vietnam	320	353	432	542	699	826	1,157	1,891	1,534	1,466	1,673	1,821	1,922	2,210	2,309	2,600	2,918
Oceania	2,209	2,566	3,035	3,358	3,338	4,663	4,832	5,025	5,928	6,367	6,260	6,502	6,513	5,323	5,091	5,970	6,171
Australia	1,723	2,087	2,459	2,742	2,799	4,047	4,421	4,487	5,329	5,784	5,540	5,645	5,716	4,619	4,318	5,049	5,197
New Zealand	485	478	576	616	539	617	411	538	598	583	720	857	796	704	773	921	975

EU = European Union.

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. 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.

Science and Engineering Indicators