

TABLE S6-20

Exports and imports of medium-high R&D intensive products, by region, country, or economy: 2003–18

(Millions of current dollars)

Region, country, or economy	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Exports																
World	2,413,659	2,904,431	3,216,908	3,664,236	4,309,057	4,775,568	3,640,993	4,449,056	5,241,777	5,230,597	5,353,783	5,485,277	5,028,702	4,983,891	5,454,712	5,787,353
North America	451,479	505,529	560,695	641,284	704,136	745,974	559,308	709,313	812,411	863,253	876,662	906,505	878,521	847,523	896,847	950,350
Canada	96,075	110,496	120,531	125,741	132,181	123,456	86,849	110,389	124,877	133,114	129,664	130,488	127,048	126,652	128,345	132,159
Mexico	69,458	76,030	85,236	98,930	104,162	110,823	87,025	119,833	140,681	156,126	168,187	185,812	191,072	188,210	206,398	229,446
United States	285,947	319,002	354,929	416,613	467,793	511,695	385,434	479,091	546,853	574,014	578,811	590,205	560,401	532,661	562,103	588,745
Central and South America	28,973	40,390	49,934	57,269	65,484	77,660	53,900	70,331	85,695	85,456	90,894	77,916	67,542	67,719	74,614	77,867
Brazil	17,100	24,456	30,585	34,900	38,797	44,768	29,609	38,493	46,621	45,558	51,687	40,181	36,459	39,446	43,605	47,037
Other South America	11,873	15,934	19,349	22,369	26,687	32,892	24,292	31,838	39,074	39,898	39,207	37,735	31,082	28,273	31,009	30,829
Europe	1,324,922	1,583,694	1,710,537	1,923,064	2,296,502	2,512,603	1,869,821	2,119,712	2,527,067	2,410,167	2,530,392	2,590,751	2,307,565	2,333,579	2,560,526	2,709,637
EU	1,242,975	1,482,138	1,597,173	1,792,381	2,133,250	2,314,139	1,725,415	1,956,072	2,328,501	2,207,682	2,327,224	2,390,299	2,128,315	2,162,055	2,365,211	2,497,137
France	150,237	173,566	178,316	190,832	219,600	234,835	176,297	190,569	215,205	201,867	204,340	206,216	180,457	182,851	202,987	223,674
Germany	382,067	455,661	502,222	567,491	660,278	728,966	530,463	619,372	744,186	709,328	731,985	758,152	673,231	678,517	743,488	792,838
United Kingdom	115,611	131,297	137,901	153,205	171,789	170,482	124,898	146,661	172,291	170,159	176,330	183,753	169,470	160,787	169,539	180,926
Other EU	595,060	721,613	778,734	880,853	1,081,583	1,179,857	893,757	999,470	1,196,819	1,126,327	1,214,568	1,242,178	1,105,157	1,139,900	1,249,197	1,299,699
Other Europe	81,947	101,556	113,364	130,682	163,252	198,464	144,406	163,640	198,565	202,485	203,169	200,452	179,250	171,524	195,315	212,500
Middle East	21,675	28,163	36,992	44,584	57,344	74,017	68,456	80,580	99,335	124,529	126,721	133,726	102,005	94,807	118,845	97,114
Asia	575,493	734,249	844,745	983,954	1,168,617	1,346,658	1,075,238	1,452,437	1,698,477	1,727,455	1,710,386	1,757,906	1,656,251	1,624,150	1,787,843	1,936,001
China	95,001	128,379	166,236	215,787	289,299	368,975	302,487	411,527	508,315	530,814	550,629	595,834	587,416	559,134	619,447	696,878
India	9,658	13,188	18,388	22,889	26,845	36,321	33,275	43,378	55,427	56,647	63,597	63,775	60,016	60,935	71,706	86,349
Indonesia	7,471	8,805	11,133	12,821	16,014	18,165	15,349	19,424	24,836	25,066	25,829	26,155	22,129	23,903	25,516	27,908
Japan	264,715	318,838	337,684	371,215	414,283	450,921	320,684	447,050	482,481	476,474	422,288	409,140	369,791	388,899	417,144	445,311
Malaysia	15,238	20,020	24,286	25,142	27,616	29,192	24,706	32,486	36,455	38,651	39,001	41,144	38,906	38,179	40,585	44,580
Philippines	3,673	6,433	7,132	7,361	7,118	8,293	7,251	8,525	8,786	14,303	13,506	14,779	13,879	12,001	21,074	19,885
Singapore	39,031	50,240	53,622	59,823	69,841	75,328	65,236	83,884	105,726	106,802	103,015	104,723	95,776	94,978	103,071	117,624
South Korea	74,958	103,234	126,376	154,347	180,367	210,401	188,741	244,734	291,222	285,309	293,068	296,871	278,174	257,388	275,928	257,473
Taiwan	42,579	53,277	61,301	69,513	80,549	83,661	63,474	85,097	94,383	92,383	93,096	94,346	84,243	78,227	89,106	98,093
Thailand	20,133	27,564	33,404	38,402	47,338	54,398	43,884	62,463	72,883	79,072	83,959	86,592	81,306	83,554	90,366	98,722
Vietnam	1,360	1,912	2,345	3,290	4,723	5,542	5,228	7,751	10,592	13,764	14,690	17,053	17,393	19,580	26,039	34,627
Other Asia	1,675	2,359	2,839	3,364	4,623	5,463	4,924	6,117	7,371	8,170	7,707	7,495	7,222	7,373	7,858	8,550
Oceania	11,117	12,407	14,005	14,081	16,973	18,657	14,269	16,682	18,793	19,737	18,727	18,474	16,818	16,112	16,038	16,385
Australia	8,405	9,330	10,875	10,924	13,273	14,697	11,112	13,260	14,772	15,481	14,620	14,190	12,830	12,360	12,364	12,694
New Zealand	2,712	3,076	3,130	3,157	3,700	3,960	3,157	3,422	4,021	4,256	4,107	4,284	3,989	3,752	3,673	3,691
Imports																
World	2,408,845	2,903,237	3,205,990	3,606,893	4,220,271	4,666,728	3,550,768	4,315,196	5,108,693	5,098,368	5,210,180	5,344,771	4,943,873	4,945,029	5,426,112	5,837,416
North America	602,724	679,105	751,595	828,919	871,976	882,580	657,515	831,520	960,620	1,052,178	1,072,764	1,128,233	1,142,301	1,123,662	1,187,759	1,280,735

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(Millions of current dollars)

Region, country, or economy	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Canada	110,526	122,266	136,585	151,234	161,493	161,399	124,867	155,446	175,238	188,055	188,945	190,381	179,374	176,524	188,270	197,711
Mexico	72,675	82,718	94,638	108,462	117,978	125,313	92,952	119,322	138,721	152,737	159,673	169,630	172,736	170,409	183,894	197,663
United States	419,524	474,122	520,372	569,222	592,505	595,867	439,696	556,752	646,661	711,386	724,145	768,222	790,191	776,729	815,595	885,361
Central and South America	59,245	78,056	98,413	115,841	148,041	201,484	152,531	201,921	255,869	262,196	265,993	243,797	212,661	185,289	198,208	223,349
Brazil	21,557	26,947	31,153	36,520	49,543	74,332	58,204	79,762	99,947	98,737	105,602	98,545	78,972	65,751	65,877	84,977
Other South America	37,688	51,110	67,260	79,321	98,498	127,152	94,327	122,159	155,921	163,459	160,391	145,251	133,689	119,538	132,331	138,372
Europe	1,152,553	1,389,471	1,510,250	1,717,734	2,068,402	2,258,948	1,626,184	1,852,758	2,229,004	2,078,193	2,167,282	2,219,181	1,984,571	2,039,549	2,274,566	2,410,843
EU	1,041,038	1,244,146	1,333,563	1,502,629	1,781,629	1,904,516	1,401,724	1,576,900	1,865,915	1,703,842	1,786,784	1,867,912	1,704,494	1,758,220	1,947,840	2,076,583
France	132,809	155,896	167,581	178,986	216,080	235,082	181,553	195,279	231,976	210,773	214,562	213,917	192,205	199,272	227,173	241,870
Germany	191,728	223,435	249,829	294,060	326,606	365,049	282,205	327,157	399,638	373,606	383,731	401,820	363,369	374,895	421,470	466,488
United Kingdom	144,053	168,930	172,189	190,798	220,490	205,665	149,150	182,200	207,354	190,351	200,660	220,237	209,687	204,012	211,831	221,031
Other EU	572,447	695,885	743,965	838,784	1,018,453	1,098,720	788,816	872,264	1,026,948	929,112	987,830	1,031,937	939,233	980,040	1,087,366	1,147,194
Other Europe	111,515	145,325	176,687	215,105	286,773	354,432	224,459	275,858	363,088	374,351	380,498	351,269	280,077	281,329	326,726	334,260
Middle East	71,867	89,078	100,469	105,613	156,037	194,664	164,635	173,805	195,222	222,657	237,989	254,147	225,602	204,563	240,359	215,412
Asia	481,084	616,782	687,676	778,786	903,454	1,045,654	884,049	1,173,266	1,377,148	1,377,353	1,369,522	1,404,101	1,291,779	1,306,958	1,422,525	1,606,536
China	177,642	231,407	250,464	287,468	338,828	377,199	340,847	468,439	550,313	522,025	529,428	557,574	485,088	494,003	522,831	580,621
India	14,458	19,902	29,370	38,309	49,171	73,055	60,718	72,581	90,198	94,884	90,226	91,245	90,507	88,889	98,134	146,333
Indonesia	12,471	17,529	20,555	20,834	23,702	44,872	35,585	48,510	61,551	69,006	65,242	61,887	54,532	52,331	57,825	70,121
Japan	74,639	88,715	96,837	109,103	118,399	131,561	100,822	125,659	149,592	150,589	142,518	146,859	136,319	139,701	151,683	169,389
Malaysia	22,005	28,449	31,482	34,781	39,613	42,167	36,351	46,997	51,614	55,610	55,905	55,762	50,162	50,279	55,352	60,306
Philippines	8,429	8,808	9,368	10,053	10,287	11,669	10,031	13,437	15,220	16,084	16,057	17,598	19,869	27,283	31,292	33,081
Singapore	32,912	41,924	44,319	51,327	59,973	68,349	55,482	70,117	79,972	84,268	81,188	80,164	71,523	72,481	76,696	88,468
South Korea	47,051	60,499	68,714	77,656	91,570	101,561	86,000	114,374	126,612	124,403	127,381	128,276	123,368	118,719	139,845	142,724
Taiwan	41,242	57,432	60,796	63,978	67,603	66,918	51,089	80,233	86,460	78,655	79,171	79,664	73,051	74,957	77,481	82,424
Thailand	25,312	30,769	36,072	37,372	42,143	52,339	41,029	57,336	68,886	82,319	76,343	70,475	65,928	66,811	70,317	76,073
Vietnam	9,182	10,449	11,587	13,534	20,448	26,111	24,551	28,373	33,799	34,195	39,119	44,908	52,901	55,219	66,296	76,877
Other Asia	15,739	20,898	28,111	34,369	41,717	49,853	41,546	47,209	62,932	65,314	66,943	69,688	68,531	66,282	74,773	80,118
Oceania	41,372	50,744	57,586	60,000	72,361	83,399	65,854	81,925	90,830	105,791	96,630	95,312	86,959	85,008	102,695	100,541
Australia	34,050	41,664	47,710	51,040	61,181	71,659	57,718	71,915	79,347	92,762	82,689	79,836	73,227	70,905	86,345	83,534
New Zealand	7,322	9,080	9,876	8,960	11,180	11,739	8,136	10,011	11,483	13,030	13,941	15,476	13,732	14,102	16,350	17,007

EU = European Union.

Note(s):

Medium-high R&D intensive products include weapons and ammunition; motor vehicles; medical and dental instruments; machinery and equipment; chemicals and chemical products; electrical equipment; and railroad, military vehicles, and transport classified by the Organisation for Economic Co-operation and Development. Detail may not add to total because of rounding or minor discrepancies. World exports do not equal imports because of statistical errors in the reporting of trade data and the lack of trade data on sub-Saharan African countries. World total does not include all countries and economies due to limitations in data availability. China includes Hong Kong. China data exclude bilateral flows between mainland China and Hong Kong. See Table S6-17 for a full list of countries and economies in each region.

Source(s):

Oxford Economics, special tabulations (2019) of Global Trade Databank.

Science and Engineering Indicators