# Shifts in U.S. Merchandise Trade 2006



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## This report was prepared principally by the Office of Industries

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# Introduction

The annual Shifts in U.S. Merchandise Trade report is prepared on the basis of the Commission's more than 250 major industry/commodity groups and subgroups monitored by the Office of Industries. The analyses are performed by the international trade analysts of the U.S. International Trade Commission (the Commission), Office of Industries, who routinely monitor trade developments in all natural resource, agricultural, and manufacturing industries.

This report is divided into three parts:

Part I, which begins on page 2, presents an analysis of U.S. merchandise trade and overall economic performance from 2005–06. Overall U.S. merchandise trade performance is summarized for 2006, compared with such trade for 2005, on the basis of 10 merchandise sectors. Coverage of the individual merchandise sectors includes data showing U.S. export, import, and trade balance shifts by sectors, industry/commodity groups (and in some cases subgroups), and shifts in trade with U.S. trade partners. Major shifts in trade are highlighted, which are examined in greater detail in the rest of the report.

Part II, which begins on page 13, presents and examines the shifts in U.S. trade with each of the top four U.S. trade partners—Canada, China, the European Union, and Mexico. Also presented and examined are shifts in trade with India, a U.S. trading partner that is of increasing interest and importance. Summary tables detail the important shifts in U.S. bilateral trade and highlight leading changes in industry/commodity groups for each of the major trade partners.

Part III, which begins on page 46, presents a general sector overview for each of 10 merchandise sectors, identifying significant shifts in trade within each sector. Each sector chapter includes a statistical summary table of industry/commodity groups or subgroups, showing absolute and percent changes in bilateral trade in a year-to-year comparison for 2005 and 2006, and a table of industry/commodity profiles.

In addition to the sectoral analyses, shifts in 23 specific industry/commodity groups are examined in greater detail. The industry/commodity groups were selected based on shifts in trade both on an absolute and percentage basis, exceeding \$1.5 billion and 10 percent.

<sup>&</sup>lt;sup>1</sup> Agricultural Products; Forest Products; Chemicals and Related Products; Energy Products; Textiles, Apparel, and Footwear; Minerals and Metals; Transportation Equipment; Machinery; Electronic Products; and Miscellaneous Manufactures

# Part I: U.S. Merchandise Trade and Overall Economic Performance

This part of the report presents an analysis of U.S. merchandise trade and overall economic performance from 2005–06. Overall U.S. merchandise trade performance is summarized for 2006, compared with such trade for 2005, on the basis of 10 merchandise sectors. Coverage of the individual merchandise sectors includes data showing U.S. export, import, and trade balance shifts by sectors, industry/commodity groups (and in some cases subgroups), and shifts in trade with U.S. trade partners. Major shifts in trade are highlighted, which are examined in greater detail in the rest of the report.

<sup>&</sup>lt;sup>2</sup> Agricultural Products; Forest Products; Chemicals and Related Products; Energy Products; Textiles, Apparel, and Footwear; Minerals and Metals; Transportation Equipment; Machinery; Electronic Products; and Miscellaneous Manufactures

# U.S. Merchandise Trade and Overall Economic Performance

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In 2006, U.S. total merchandise trade (exports plus imports) rose by \$308.2 billion (12 percent) to \$2.8 trillion, slightly less in percent terms than in 2005, while slightly higher in value. The fastest growth in exports of U.S. goods and services was to India, but exports to China, Africa, and Latin America also increased rapidly.<sup>3</sup> U.S. total merchandise trade in 2006 accounted for 76 percent of total U.S. combined trade (exports plus imports of merchandise and services),<sup>4</sup> a slight increase from 2005. It also represented 21 percent of real U.S. gross domestic product (GDP), up from 20 percent in 2005. The rate of increase in the U.S. merchandise trade deficit slowed from 17 percent in 2005 to 7 percent in 2006, even as the deficit grew from \$858.4 billion in 2005 to \$915.6 billion in 2006. Transportation equipment, electronic products, and energy-related products combined accounted for 49 percent of total merchandise trade in 2006.

The U.S. current account deficit (the combined balances on trade in goods and services, income, and net unilateral current transfers) increased from \$791.5 billion in 2005 to \$856.7 billion (preliminary) in 2006 as a result of the increase in the merchandise trade deficit and a shift from a surplus to a deficit on income. In contrast, the surplus in services increased and net unilateral current transfers to foreigners decreased.<sup>5</sup>

Continued economic growth in the United States and its major trading partners contributed to increased bilateral trade flows in 2006.<sup>6</sup> Strong growth in consumer spending, business structures investment, and exports supported the economic performance of the United States.<sup>7</sup> Crude petroleum prices continued to rise in 2006, resulting from increased global demand as well as supply disruptions in foreign countries.<sup>8</sup>

The U.S. economic growth rate increased in 2006, while growth among its major trading partners varied. Peal GDP in the United States increased by 3.3 percent in 2006 (versus 3.2 percent in 2005), compared to 2.7 percent each in the European Union (EU) and Canada, 2.2 percent in Japan, and 4.8 percent in Mexico. China was significantly higher, at 10.7 percent.

<sup>&</sup>lt;sup>3</sup> Council of Economic Advisers (CEA), Economic Report of the President, 32.

<sup>&</sup>lt;sup>4</sup> Total U.S. combined trade increased by \$348 billion (12 percent) during 2006 to \$3.3 trillion, according to statistics of the U.S. Department of Commerce.

<sup>&</sup>lt;sup>5</sup> USDOC, U.S. International Transactions: Fourth Quarter and Year 2006.

<sup>&</sup>lt;sup>6</sup> CEA, Economic Report of the President, 23.

<sup>&</sup>lt;sup>7</sup> USDOC, BEA, Survey of Current Business, 1.

<sup>&</sup>lt;sup>8</sup> CEA, Economic Report of the President, 25.

<sup>&</sup>lt;sup>9</sup> OECD, Main Economic Indicators.

<sup>&</sup>lt;sup>10</sup> USDOC, BEA, Survey of Current Business, 6.

<sup>&</sup>lt;sup>11</sup> OECD, Main Economic Indicators.

<sup>&</sup>lt;sup>12</sup> Chinese National Bureau of Statistics, "China's GDP Grows 10.7% in 2006."

Consumer spending, the mainstay of U.S. economic growth, rose by 3.2 percent in 2006, <sup>13</sup> supported by a rise in disposable personal income of 1.8 percent. <sup>14</sup> Business fixed investment, made up of spending on equipment, software, and structures, increased by 7.4 percent in 2006, a rate slightly higher than the increase in 2005. <sup>15</sup> Growth in this area was concentrated in nonresidential construction (office and industrial buildings), which grew by 9.1 percent, while investment in equipment and software grew by 6.7 percent in 2006. <sup>16</sup>

The Federal Open Market Committee (FOMC) raised the Federal funds rate from 5.0 to 5.25 percent in mid-2006, and it remained at that level through the year. The intent of the slightly higher rate was to foster sustainable economic expansion and to promote a return to low and stable inflation.<sup>17</sup>

World prices for crude petroleum increased by an average of 20 percent from 2005 to an average of \$60.12 per barrel in 2006. During the same period, U.S. imports of crude petroleum declined by 43,000 barrels per day (b/d) (0.4 percent). The increase in prices, influenced by rising global demand and supply disruptions and uncertainties, raised the cost of production for goods that use petroleum or its derivatives as an input, the cost of production for all goods in which energy is used during production, as well as the transportation cost for all goods.

The trade-weighted exchange value of the dollar declined by 3.75 percent from the beginning of 2006 through early February 2007, but varied widely against other currencies. Over that period, the dollar appreciated 2.25 percent against the yen and 1.5 percent against the Canadian dollar, but it depreciated by 4 percent against the Chinese renminbi, 9 percent against the euro, and almost 13 percent against the pound sterling.<sup>18</sup>

# U.S. Trade by Industry/Commodity Groups and Sectors<sup>19</sup>

#### U.S. Trade Balance

The U.S. merchandise trade deficit expanded every year during the 2002–06 period (table US-1). In 2006, the U.S. merchandise trade deficit grew by \$57.2 billion (7 percent) to a record \$915.6 billion. Unlike 2004 and 2005, the value of the U.S. merchandise trade deficit was less than the value of U.S. merchandise exports, as the rate of increase in exports (15.6 percent) exceeded the rate of increase in imports (11 percent).

Although all industry/commodity sectors registered trade deficits in 2006, as they did in 2005, the rate of the overall deficit growth slowed in 2006. The deficits in the transportation equipment, forest products, and chemicals sectors actually declined as the increase in exports for each of the three sectors exceeded the increase in imports.

<sup>&</sup>lt;sup>13</sup> USDOC, BEA, Survey of Current Business, 10.

<sup>14</sup> Ibid.

<sup>&</sup>lt;sup>15</sup> CEA, Economic Report of the President, 285.

<sup>16</sup> Ibid., 32.

<sup>&</sup>lt;sup>17</sup> Board of Governors of the Federal Reserve System, *Monetary Policy Report*.

<sup>18</sup> Ibid.

<sup>&</sup>lt;sup>19</sup> Each industry is analyzed in a separate chapter in part III of this report.

TABLE US-1 U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major industry/commodity sectors, 2002–06a

U.S. exports of domestic merchandise: Agricultural products  58,345 64,706 66,908 68,698 76,924 8,227 1 Forest products  22,825 23,566 25637 27,809 30,156 2,346 1 Chemicals and related products  91,702 102,330 21,783 132,794 149,648 17,114 1 Energy-related products  14,431 16,639 21,783 132,794 149,648 17,114 1 Energy-related products  14,431 16,639 21,783 132,794 149,648 17,114 1 Energy-related products  14,431 16,639 21,783 129,822 38,998 9,107 17,000							Change, 200	6 from 2005
U.S. exports of domestic merchandise: Agricultural products	Item	2002	2003	2004	2005	2006	Absolute	Percent
Agricultural products				Million do	llars ———			
U.S. imports of merchandise for consumption: Agricultural products	Agricultural products Forest products Chemicals and related products Energy-related products Textiles and apparel Footwear Minerals and metals Machinery Transportation equipment Electronic products Miscellaneous manufactures	22,825 91,702 14,431 17,298 39,924 63,262 144,655 140,428 15,004 21,205	23,566 102,330 16,639 17,033 495 42,980 63,462 142,948 140,838 14,859 21,570	25,637 121,383 21,783 17,663 450 50,588 76,744 155,902 149,450 16,923 23,753	27,809 132,734 29,892 17,864 507 62,911 82,087 180,517 155,408 19,111 26,454	30,156 149,848 38,999 18,088 573 82,944 94,606 215,810 169,248 23,366 28,925	2,346 17,114 9,107 224 66 20,033 12,519 35,293 13,840 4,255 2,471	12.0 8.4 12.9 30.5 1.3 12.9 31.8 15.3 19.6 8.9 22.3 9.3
Agricultural products   55,591   60,899   67,012   73,050   81,456   8,407   1	Total	629,599	651,424	727,183	803,992	929,486	125,494	15.6
U.S. merchandise trade balance:     Agricultural products	Agricultural products Forest products Chemicals and related products Energy-related products Textiles and apparel Footwear Minerals and metals Machinery Transportation equipment Electronic products Miscellaneous manufactures	37,048 106,924 109,805 81,585 15,379 85,616 85,187 227,147 229,245 72,129 49,165	38,769 123,922 147,183 87,241 15,560 89,204 93,138 232,212 238,833 74,765 48,372	47,591 141,683 195,553 94,045 16,498 120,897 108,564 253,775 280,146 83,226 51,171	50,003 163,050 273,197 100,485 17,834 137,367 123,258 271,464 305,268 91,306 56,098	50,416 179,410 319,168 104,563 19,038 169,510 138,592 292,065 332,065 98,933 59,837	413 16,359 45,972 4,078 1,204 32,143 15,335 20,601 26,797 7,627 3,739	11.5 0.8 10.0 16.8 4.1 6.8 23.4 12.4 7.6 8.8 8.4 6.7
Agricultural products       2,754       3,807       -104       -4,352       -4,532       -180         Forest products       -14,223       -15,204       -21,953       -22,194       -20,260       1,933         Chemicals and related products       -15,222       -21,592       -20,299       -30,317       -29,562       755         Energy-related products       -95,369       -130,544       -173,770       -243,304       -280,170       -36,865       -1         Textiles and apparel       -64,288       -70,208       -76,382       -82,621       -86,476       -3,854       -         Footwear       -14,860       -15,065       -16,048       -17,327       -18,465       -1,138       -         Minerals and metals       -45,692       -46,224       -70,309       -74,456       -86,567       -12,110       -1         Machinery       -21,919       -29,676       -31,820       -41,171       -43,986       -2,815       -         Transportation equipment       -82,492       -89,264       -97,873       -90,947       -76,254       14,692       1         Electronic products       -88,817       -97,994       -130,696       -149,859       -162,816       -12,957		1,154,811	1,250,097	1,460,160	1,662,380	1,845,053	182,674	11.0
Special provisions	Agricultural products Forest products Chemicals and related products Energy-related products Textiles and apparel Footwear Minerals and metals Machinery Transportation equipment Electronic products Miscellaneous manufactures Special provisions	-14,223 -15,222 -95,368 -64,288 -14,860 -45,692 -21,919 -82,492 -88,817 -57,124 -27,960	-15,204 -21,592 -130,544 -70,208 -15,065 -46,224 -29,676 -89,264 -97,994 -59,906 -26,802	-21,953 -20,299 -173,770 -76,382 -16,048 -70,309 -31,820 -97,873 -130,696 -66,304 -27,418	-22,194 -30,317 -243,304 -82,621 -17,327 -74,456 -41,171 -90,947 -149,859 -72,195 -29,644	-20,260 -29,562 -280,170 -86,476 -18,465 -86,567 -43,986 -76,254 -162,816 -75,567 -30,912	1,933 755 -36,865 -3,854 -1,138 -12,110 -2,815 14,692 -12,957 -3,372 -1,268	-4.1 8.7 2.5 -15.2 -4.7 -6.3 -6.8 16.2 -8.6 -4.3 -4.3

Note.—Calculations based on unrounded data.

<sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

U.S. trade in energy-related products—crude petroleum, petroleum products, and natural gas and components—registered the largest trade deficit (\$280.2 billion) in 2006, as it has in every year since 2002, as well as the largest deficit increase (\$36.9 billion, or 15 percent), primarily because of higher prices (table US-1). The electronic products sector recorded the second-largest trade deficit in 2006 (\$162.8 billion), as well as the second-largest deficit increase (\$13.0 billion, or 9 percent), as U.S. companies continued to shift production overseas to take advantage of lower production costs and to serve growing Asian markets.

## U.S. Exports

In 2006, U.S. exports increased by \$125.5 billion (16 percent) to \$929.5 billion, setting a new record (table US-1). Exports increased in every sector between 2005–06, as they did between 2004–05. Aircraft, spacecraft, and related equipment; motor vehicles; and petroleum products were the industry/commodity groups that recorded the largest increases in 2006, accounting for a combined \$33.5 billion (27 percent) of net export growth (table US-2).

Exports of aircraft, spacecraft, and related equipment, principally large civil aircraft, increased by \$16.4 billion in 2006 to \$64.4 billion (table US-2). Much of the increase was due to the expansion of airline routes and frequencies which required additional aircraft, as well as fleet renewal.

Motor vehicle exports grew by \$9.0 billion (26 percent) to \$43.7 billion in 2006. This was largely the result of increased exports of higher value vehicles to Canada, the largest market by far for U.S. vehicles.

U.S. exports of petroleum products jumped by 44 percent (\$8.1 billion) to reach a record \$26.4 billion as prices for crude petroleum continued to rise. The gain was due to increasing global demand and reduced foreign production capacity resulting from production cuts by members of the Organization of Petroleum Exporting Countries (OPEC), continued labor unrest in Venezuela and Nigeria, and the ongoing war in Iraq. For example, in 2006, there were approximately 1.3 million b/d of extra production capacity in the world, compared with 1.6 million b/d in 2005 (in 2003, there was more than 3 million b/d of excess capacity available).<sup>20</sup>

The most significant decrease in U.S. exports was recorded by the cathode-ray tube industry, which dropped by \$308 million (51 percent) in 2006 (table US-2). Previously, the largest export component in this U.S. industry was picture tubes for use in the production of color television receivers in Mexico. As consumer demand shifted to television receivers incorporating flat panel displays such as plasma and LCD, the demand for picture tubes collapsed. Today, there are no longer any U.S. producers of color picture tubes.

<sup>&</sup>lt;sup>20</sup> DOE, EIA, Short-Term Energy Outlook.

TABLE US-2 Leading changes in U.S. exports and imports of all sectors, 2002–06a

						Change, 200	6 from 2005
Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
			—— Million o	dollars			
U.S. EXPORTS:							
Increases:							
Aircraft, spacecraft, and related							
equipment (ET013)	41,447	37,835	40,076	47,981	64,374	16,393	34.2
Motor vehicles (ET009)	26,209	29,379	29,979	34,681	43,707	9,026	26.0
Petroleum products (CH005)	8,662	9,783	12,651	18,302	26,407	8,104	44.3
Precious metals and non-numismatic	-,	-,	,	-,	-, -	-, -	
coins (MM020)	5,070	6,299	6,204	7,522	13,360	5,839	77.6
Semiconductor manufacturing	-,-	-,	-, -	, -	-,	-,	_
machinery (MM087A)	6,972	7,242	12.790	10,971	14,232	3,261	29.7
Medicinal chemicals (CH025)	18,742	22,527	27,098	29,296	32,460	3.164	10.8
Semiconductors and integrated circuits (ET033)	31,738	35,712	35,130	34.195	37,227	3.031	8.9
Construction and mining equipment (ET004)	9.504	9,461	11.689	15.418	18,377	2,959	19.2
Copper and related articles (MM036)	1,744	2,086	3,006	3,405	6,052	2,647	77.7
Medical goods (ET040)	15,059	16,827	18,433	20,970	23,311	2,341	11.2
Certain organic chemicals (CH012)	7.668	8,857	11,283	11,991	14,263	2,271	18.9
Cereals (AG030)	9,929	10.429	12,683	11.096	13,341	2,245	20.2
Miscellaneous inorganic chemicals (CH013)	4,820	4.903	5.608	7.003	8.737	1,734	24.8
Unwrought aluminum (MM037)	950	1,000	1,397	2,087	3,508	1,734	68.1
Decreases:	330	1,000	1,001	2,007	3,300	1,721	00.1
Cathode-ray tubes (ET031)	1.762	1,202	998	600	292	-308	-51.3
All other	439,321	447,882	498,157	548,474	609,839	61,365	11.2
All other	439,321	447,002	490,137	540,474	009,039	01,303	
TOTAL	629,599	651,424	727,183	803,992	929,486	125,494	15.6
U.S. IMPORTS:							
Increases:							
Crude petroleum (CH004)	54,704	73,527	100,338	137,331	171,243	33,912	24.7
Motor vehicles (ET009)	133,264	134,286	142,750	146,169	159,331	13,163	9.0
Petroleum products (CH005)	30,594	37,280	51,579	77,684	89,448	11,764	15.1
Medicinal chemicals (CH025)	40,699	49,284	52,677	56,104	65,218	9,115	16.2
Steel mill products (MM025)	12,203	10,499	21,559	23,534	31,500	7,966	33.8
Copper and related articles (MM036)	3,715	3,893	5,565	7,766	13,803	6,037	77.7
Television receivers and video monitors (ET022)	10,586	12,654	17,509	22,712	28,628	5,917	26.1
Precious metals and non-numismatic	•	•	•	•	•	•	
coins (MM020)	6,263	6,759	9,055	10,029	14,232	4,203	41.9
Telephone and telegraph apparatus (ET017)	27,948	30,982	39,341	49,220	53,318	4,098	8.3
Unwrought aluminum (MM037)	4,774	5,000	6,837	8,153	10,317	2,163	26.5
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TABLE US-2 Leading changes in U.S. exports and imports of all sectors, 2002–06—Continued<sup>a</sup>

						Change, 200	6 from 2005
Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
			Million	dollars			
Decreases:							
Natural gas and components (CH006)	18,609	28,885	34,195	46,211	45,118	-1,093	-2.4
Lumber (AG052)	6,647	6,007	8,808	9,005	8,335	-670	-7.4
Molybdenum ores and concentrates (MM007A)	37	51	268	746	395	-351	-47.1
Photographic cameras and equipment (ET039)	3,029	2,715	2,382	1,880	1,612	-268	-14.2
Cathode-ray tubes (ET031)	607	577	673	545	329	-216	-39.7
All other	801,133	847,699	966,624	1,065,292	1,152,227	86,935	8.2
TOTAL	1,154,811	1,250,097	1,460,160	1,662,380	1,845,053	182,674	11.0

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

## U.S. Imports

In 2006, U.S. imports for all merchandise sectors increased by \$182.7 billion (11 percent) to a record \$1.8 trillion. The energy sector accounted for \$46.0 billion (25 percent) of the net import increase, minerals and metals for \$32.1 billion (18 percent), and transportation for \$20.6 billion (16 percent) (table US-1). Crude petroleum, motor vehicles, and petroleum products were the industry commodity groups that recorded the largest increases in 2006, accounting for a combined \$58.8 billion (32 percent) of net import growth.

Higher world prices drove up import values in the energy sector. Although the quantity of crude petroleum imported remained flat at 3.0 billion barrels, the value of crude petroleum imports increased by 25 percent to \$171.2 billion and accounted for 54 percent of sector imports in 2006 (table US-2). U.S. imports of crude petroleum continued to account for more than 60 percent of domestic consumption (table US-2).

Steel mill products, copper and related products, and precious metals and non-numismatic coins accounted for 57 percent of the increase in imports among minerals and metals. Steel imports increased as a result of increased demand that could not be met by domestic producers. Copper imports increased as a result of decreasing domestic capacity. The increase in precious metals imports was a result of worldwide price increases.

## Significant Shifts in U.S. Bilateral/Multilateral Trade

The growth of the U.S. merchandise trade deficit in 2006 was an extension of trends established at the start of the decade. In 2006, the United States exported more merchandise to and imported more merchandise from all of its top 10 trading partners and with selected country groups, as shown in table US-3. The U.S. merchandise trade deficit increased as a whole and grew bilaterally as well with the four major U.S. partners: in descending order, Canada, China, Mexico, and Japan. Total trade with the EU-25 ranked ahead of Canada. However, the merchandise trade deficit with the EU15 and EU-25 decreased by 4 to 5 percent.

The increase in the U.S. merchandise trade deficit with China slowed to 16 percent (\$31.6 billion) in 2006 versus 25 percent in 2005. As in the last few years, a contributing factor to the widening merchandise trade deficit with China was increased production by foreign manufacturers in China. The merchandise deficit with Mexico grew by 22 percent (\$14.9 billion) due in large part to increased U.S. imports of petroleum products and transportation equipment.

The U.S. merchandise trade deficit with beneficiary countries of the Caribbean Basin Economic Recovery Act (CBERA) declined by 68 percent (\$3.9 billion) as U.S. domestic exports exceeded imports. The trade deficit with OPEC and with sub-Saharan Africa continued double-digit growth (12 percent and 18 percent, respectively). More detailed analysis of these and other trade shifts with five leading U.S. merchandise trading partners is provided in the following country overviews.

<sup>&</sup>lt;sup>21</sup> This order has remained unchanged since 2003. For the last five years, these countries have been the top four U.S. partners in terms of total trade, although the United States may not be a top trading partner for these countries. No individual EU country was consistently ranked among the top four overall U.S. trade partners during this time.

**Table US-3** All merchandise sectors: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			— Million do	llars ———			
U.S. exports of domestic merchandise:	142,543	148,749	163,168	183,235	198,226	14,992	8.2
China	20,553	26,707	32,606	38,857	51,624	12,767	32.9
	86,076	83,108	93,018	101,667	114,562	12,896	12.7
Japan Germany United Kingdom	48,273	48,862	50,493	51,499	55,596	4,097	8.0
	24,870	26,806	27,223	29,227	37,850	8,623	29.5
	30,243	30,556	31,734	34,065	41,335	7,270	21.3
Korea	21,151	22,525	24,994	26,210	30,794	4,583	17.5
	16,786	16,111	20,343	20,527	21,376	849	4.1
France India All sets of	17,522 3,680	15,683 4,367	19,626 5,295	20,658 6,965	22,590 9,025	1,932 2,060	9.4 29.6
All other	217,902	227,951	258,684	291,082	346,508	55,426	19.0
	629,599	651,424	727,183	803,992	929,486	125,494	15.6
EU-15	132,563	138,138	151,962	163,188	190,563	27,375	16.8
EU-25	135,244	141,483	155,690	167,416	196,478	29,062	17.4
OPEC Latin America CBERA	17,664 134,284	16,308 131,236	20,570 149,534 22,999	29,199 167,686	38,378 196,723	9,179 29,037 4.953	31.4 17.3
Asia Sub-Saharan Africa	20,702 160,628 5,892	22,184 172,329 6.665	192,485 8,236	26,061 204,120 9.919	31,014 237,021 11,709	32,901 1,790	19.0 16.1 18.0
Central and Eastern Europe	2,575	3,190	3,942	4,529	5,732	1,203	26.6
U.S. imports of merchandise for consumption: Canada	210.518	224.016	255.660	287.534	303.034	15.500	5.4
China	124,796	151,620	196,160	242,638	287,052	44,414	18.3
	121,262	118,485	129,535	137,831	148,071	10,239	7.4
Germany	60,985	66,532	75,622	84,345	87,756	3,412	4.0
	40,429	42,455	45,920	50,7 <u>5</u> 8	53, <u>5</u> 02	2,743	5.4
Korea	35,284	36,930	45,064	43,155	44,714	1,559	3.6
Taiwan	32,054	31,490	34,462	34,574	38,086	3,511	10.2
France India	28,232 11,790 355,339	28,896 13,034 399.440	31,505 15,503 475,772	33,499 18,710 560,120	36,837 21,674 627,272	3,338 2,964 67.152	10.0 15.8 12.0
All other	1,154,811	1,250,097	1,460,160	1,662,380	1,845,053	182,674	11.0
EU-15	223,732	242,210	270,249	297,111	318,569	21,458	7.2
EU-25	230,262	250.424	279.759	307.009	329,289	22,280	7.3
OPEC	50,649	65,300	92,038	122,098	142,690	20,592	16.9
Latin America	202.149	215,298	253,154	290,720	329,153	38.433	13.2
CBERA	21,255	24,500	27,555	31,814	32,839	1,025	3.2
Asia	419,909	449,094	526,404	593,811	668,735	74,924	12.6
Sub-Saharan Africa	18,208	25,470	35,769	49,925	58,762	8,838	17.7
	6,822	8,344	9,716	10,303	11,071	768	7.5

See footnote(s) at end of table.

**Table US-3** All merchandise sectors: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—Continued

						Change, 200	6 from 2005
Item	2002	2003	2004	2005 200	6 Absolu	te	Percent
			Million do	llars ———			
U.S. merchandise trade balance: Canada China Mexico Japan Germany United Kingdom Korea Taiwan France India All other	-67,975 -104,243 -48,045 -72,989 -36,115 -10,186 -14,133 -15,268 -10,710 -8,111 -137,438	-75,267 -124,913 -54,091 -69,623 -39,726 -11,899 -14,405 -15,379 -13,213 -8,666 -171,490	-92,492 -163,553 -61,941 -79,042 -48,399 -14,186 -20,070 -14,119 -11,879 -10,208 -217,088	-104,299 -203,781 -67,549 -86,333 -55,118 -16,693 -16,944 -14,047 -12,841 -11,745 -269,038	-104,808 -235,428 -82,493 -92,475 -49,907 -12,166 -13,920 -16,709 -14,247 -12,649 -280,765	-509 -31,647 -14,944 -6,143 5,211 4,527 3,024 -2,662 -1,406 -904 -11,727	-0.5 -15.5 -22.1 -7.1 9.5 27.1 17.8 -19.0 -10.9 7.7 -4.4
Total	-525,212	-598,673	-732,977	-858,388	-915,567	-57,179	-6.7
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan África Central and Eastern Europe	-91,169 -95,018 -32,985 -67,865 -552 -259,281 -12,316 -4,247	-104,072 -108,941 -48,992 -84,061 -2,316 -276,765 -18,806 -5,154	-118,287 -124,070 -71,467 -103,620 -4,557 -333,920 -27,533 -5,774	-133,923 -139,593 -92,899 -123,034 -5,753 -389,691 -40,005 -5,774	-128,006 -132,811 -104,312 -132,430 -1,825 -431,714 -47,053 -5,339	5,917 6,782 -11,413 -9,396 3,928 -42,023 -7,047 435	4.4 4.9 -12.3 -7.6 68.3 -10.6 7.5

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

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# Part II: Bilateral Trade

This part of the report analyzes shifts in trade between the United States and its four major trading partners (based on total trade)—the EU-25, Canada, China, and Mexico. Trade with India is also examined in light of India's rising importance as a trading partner.

## Canada

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$0.5 billion (1 percent) to \$104.8 billion U.S. exports: Increased by \$15.0 billion (8 percent) to \$198.2 billion U.S. imports: Increased by \$15.5 billion (5 percent) to \$303.0 billion

For the first time in several decades, the U.S. trade deficit with Canada (the U.S.'s largest trading partner) remained largely unchanged from 2005 to 2006 (rising by less than 1 percent) as the \$15 billion increase in U.S. exports nearly matched the increase in U.S. imports from Canada. Canada's energy exports benefitted from rising world prices, but Canadian exports of transportation equipment (largely automobiles and parts) and forestry products declined. Four sectors—transportation equipment, energy products, chemicals, and forest products—accounted for about two-thirds of U.S. imports from Canada in 2006. Similarly, two-thirds of U.S. exports in 2006 to Canada were within four sectors—transportation equipment, chemicals, minerals and metals, and machinery.

The U.S. dollar depreciated relative to the Canadian dollar during the first half of 2006 by about 4 percent, but then recovered in the second half, ending up 1.5 percent for the full year. Nevertheless, the slightly weakened U.S. dollar during that year aided U.S. exports to Canada and diminished Canadian goods' price advantage in the U.S. market. Other salient factors affecting bilateral trade in 2006 were the higher prices of petroleum, natural gas, coal, and electricity, which boosted the value of U.S. energy imports from Canada, and the heightened competitiveness of U.S. fully assembled autos (minivans, SUVS, and pickup trucks) sold in the Canadian market.

## U.S. Exports

U.S. exports to Canada benefitted from a strong Canadian economy and buoyant consumer purchases in 2006 (with 2.8 percent GDP growth and a 6.2 percent rise in Canadian consumer sales),<sup>2</sup> as well as the slightly stronger Canadian dollar. U.S. exports to Canada rose by \$15.0 billion (8 percent) to \$198.2 billion in 2006.

U.S. exports of transportation equipment to Canada rose by \$4.6 billion (8 percent) to \$63.0 billion in 2006. These U.S. exports reflected a growth in sales of U.S. assembled SUVs, minivans, and pickup trucks in Canada.<sup>3</sup> The North American auto industry is highly integrated, with manufacturing and assembly on both sides of the border.

<sup>&</sup>lt;sup>1</sup> The U.S. dollar depreciated from CN\$1.1572 in January 2006 to CN\$1.1100 in May 2006, and then rose irregularly to CN\$1.1532 in December 2006, according to data of the U.S. Federal Reserve Bank.

<sup>&</sup>lt;sup>2</sup> The change in final domestic demand from the 4<sup>th</sup> quarter 2005 to the 4<sup>th</sup> quarter 2006. Statistics Canada, *Gross Domestic Product, Expenditure-Based (Quarterly)*. The U.S. GDP growth rate was a preliminary 3.3 percent, and the growth rate in final U.S. domestic purchases was 2.5 percent. USDOC, BEA, *Gross Domestic Product: Fourth Quarter 2006 (Preliminary)*, February 28, 2007, tables 1 and 8.

<sup>&</sup>lt;sup>3</sup> See the Transportation Equipment chapter for more details.

U.S. minerals and metals exports rose by \$3.6 billion (19 percent) to \$22.7 billion. Higher prices for finished steel and other metals and expanding Canadian industrial production in 2006 led to higher U.S. exports of these intermediate inputs.<sup>4</sup>

## U.S. Imports

About one-half of the \$15.5 billion increase in U.S. merchandise imports from Canada resulted from higher energy imports (table CANADA-1). U.S. imports of energy products from Canada increased by \$7.6 billion (12 percent) to \$73.7 billion in 2006. Natural gas was the leading energy product imported, followed by crude petroleum, refined petroleum, and electrical energy. In addition to the 20 percent increase in the price of petroleum, the volume of U.S. imports of crude petroleum from Canada increased by 12 percent to 1.8 million barrels per day in 2006, according to data of the U.S. Department of Energy.<sup>5</sup>

U.S. imports of mineral and metal products accounted for most of the other half of the \$15.5 billion increase in U.S. imports from Canada. U.S. imports of minerals and metals products from Canada rose by \$6.6 billion (26 percent) to \$32 billion in 2006. Higher prices for iron, aluminum, steel, copper and other metals substantially increased the unit values of these imports.

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<sup>&</sup>lt;sup>4</sup> See the Minerals and Metals chapter for more details.

<sup>&</sup>lt;sup>5</sup> Crude petroleum from Canada averaged \$60 per barrel in 2006; see the Energy and Related Products chapter for more details.

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TABLE CANADA-1 Canada: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major industry/commodity sectors, 2002-06a

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million doll	lars			
U.S. exports of domestic merchandise:     Agricultural products     Forest products     Chemicals and related products     Energy-related products     Textiles and apparel     Footwear     Minerals and metals     Machinery     Transportation equipment     Electronic products     Miscellaneous manufactures	9,121 7,502 20,115 2,889 3,193 65 13,447 15,207 46,733 17,025 3,561	9,805 7,960 21,516 4,296 3,121 57 13,820 15,310 48,568 16,637 3,697	10,111 8,536 23,495 5,754 3,275 59 16,835 16,214 52,268 17,559 4,257	11,151 9,111 26,412 8,487 3,471 65 19,110 18,008 58,366 18,894 4,745	12,514 9,846 28,475 8,953 3,561 73 22,687 20,054 63,007 18,336 5,230	1,363 735 2,063 466 89 8 3,577 2,046 4,641 -558 485	12.2 8.1 7.8 5.5 2.6 12.8 18.7 11.4 8.00 -3.0
Special provisions	3,686 142,543	3,961 148,749	4,805 163,168	5,414 183,235	5,490 198,226	76 14,992	1.4 8.2
U.S. imports of merchandise for consumption:     Agricultural products     Forest products     Chemicals and related products     Energy-related products     Textiles and apparel     Footwear     Minerals and metals     Machinery     Transportation equipment     Electronic products     Miscellaneous manufactures     Special provisions	12,953 22,311 16,673 29,903 3,859 68 17,797 9,810 65,462 10,605 5,967 15,108	12,975 22,640 18,440 41,579 3,788 64 18,003 10,071 66,727 9,768 6,137 13,824	14,130 27,584 21,996 49,278 3,834 77 22,636 11,233 73,154 10,960 6,700 14,079	14,963 28,224 25,535 66,116 3,633 94 25,590 12,129 77,209 12,457 6,828 14,757	16,128 26,717 28,036 73,748 3,395 79 32,155 13,371 75,682 11,930 6,880 14,911	1,166 -1,507 2,502 7,633 -238 -14 6,565 1,242 -1,526 -526 52 154	7.8 -5.3 9.8 11.5 -6.6 -15.3 25.7 10.2 -2.0 -4.2 0.8 1.0
U.S. merchandise trade balance:     Agricultural products     Forest products     Chemicals and related products     Energy-related products     Textiles and apparel     Footwear     Minerals and metals     Machinery     Transportation equipment     Electronic products Miscellaneous manufactures     Special provisions     Total	-3,833 -14,809 3,442 -27,014 -666 -3 -4,350 5,396 -18,730 6,420 -2,406 -11,423 -67,975	-3,170 -14,680 3,076 -37,283 -666 -8 -4,183 5,240 -18,159 6,869 -2,440 -9,863	-4,019 -19,047 1,499 -43,524 -559 -18 -5,801 4,981 -20,886 6,600 -2,443 -9,274	-3,811 -19,113 878 -57,629 -162 -29 -6,480 5,879 -18,842 6,437 -2,083 -9,343	-3,614 -16,871 -439 -64,796 -6 -9,468 6,684 -12,675 6,405 -1,650 -9,421 -104,808	197 2,242 -439 -7,167 327 23 -2,988 805 6,167 -31 433 -78	5.2 11.7 -50.0 -12.4 (*) 78.8 -46.1 13.7 -0.5 20.8 -0.8

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export. <sup>b</sup>Not meaningful for purposes of comparison.

TABLE CANADA-2 Leading changes in U.S. exports to and U.S. imports from Canada, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Sector/commodity	2002	2003	2004	2005	2006	Absolute	Percent
			——— Million o	dollars			
U.S. EXPORTS:							
Increases:							
Transportation equipment:							
Motor vehicles (ET009)	15,486	17,193	17,918	20,404	22,625	2,221	10.9
Construction and mining equipment (ET004)	1,249	1,524	1,926	2,650	3,441	791	29.9
Miscellaneous vehicles and transportation-related							
equipment (ET012)	1,279	1,498	1,838	2,366	3,005	639	27.0
Minerals and metals:							
Precious metals and non-numismatic							
coins (MM020)	568	658	1,131	802	1,563	761	94.9
Copper and related articles (MM036)	405	396	578	663	1,241	578	87.2
Petroleum products (CH005)	1,240	1,432	1,725	2,605	3,272	667	25.6
Electric motors, generators, and related	•	,	,	•	,		
equipment (MM091)	949	822	951	1,048	1,488	441	42.1
Decreases:				1,010	1,100		
Semiconductors and integrated circuits (ET033)	1.294	1.171	1.475	1.993	1.292	-701	-35.2
Natural gas and components (CH006)	523	1,285	2,176	3,171	2,532	-639	-20.2
All other	119,551	122,770	133,450	147,535	157,768	10,233	6.9
				,	,		
TOTAL	142,543	148,749	163,168	183,235	198,226	14,992	8.2
U.S. IMPORTS:							
Increases:							
Crude petroleum (CH004)	11,196	14,086	18,888	24,120	32,889	8,769	36.4
Minerals and metals:							
Unwrought aluminum (MM037)	2,658	3,008	3,507	4,197	5,874	1,678	40.0
Copper and related articles (MM036)	1,074	1,057	1,606	2,073	3,364	1,291	62.3
Zinc and related articles (MM040)	508	496	622	654	1,437	783	119.8
Medicinal chemicals (CH025)	1,326	1,946	2,228	2,500	3,618	1,118	44.7
Decreases:	,	,	, -	,	-,	, -	
Natural gas and components (CH006)	12,647	20,043	21,535	29,357	27,039	-2,318	-7.9
Transportation equipment:	, -	- / -	,	-,	,	,	
Aircraft, spacecraft, and related							
equipment (ET013)	5,268	6.345	5.347	6.006	5.082	-924	-15.4
Certain motor-vehicle parts (ET010)	9,685	10,564	11,142	11,842	11,282	-559	-4.7
2 2	0,000	. 5,55	· · · , · · -	,	,===		

TABLE CANADA-2 Leading changes in U.S. exports to and U.S. imports from Canada, 2002–06ª—Continued

						Change, 200	6 from 2005
Sector/commodity	2002	2003	2004	2005	2006	Absolute	Percent
			——— Million o	dollars			
Wood veneer and wood panels (AG054)	2,219 1,068 162,869	3,152 1,052 162,266	4,286 1,186 185,313	4,087 1,628 201,070	3,292 1,039 208,117	-796 -589 7,047	-19.5 -36.2 3.5
TOTAL	210,518	224,016	255,660	287,534	303,034	15,500	5.4

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

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## China

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$31.6 billion (16 percent) to \$235.4 billion U.S. exports: Increased by \$12.8 billion (33 percent) to \$51.6 billion U.S. imports: Increased by \$44.4 billion (18 percent) to \$287.1 billion

The U.S. merchandise trade deficit with China, the second largest trading partner of the U.S., increased from 2005-06, reflecting the continued U.S. demand for goods produced in China (table CHINA-1). China accounted for 26 percent of the entire U.S. merchandise trade deficit in 2006 (table US-3) and 55 percent of the increase in the trade deficit. China was the fourth-largest export market for the United States and the second-leading import source.

Continuing the trend in preceding years, U.S. exports to China rose in 2006 by 33 percent to \$51.6 billion. Every major sector, with the exception of miscellaneous manufactures, experienced double-digit percent increases. Sectors that experienced the greatest percent increases in exports were minerals and metals (48 percent), electronic products (40 percent), and transportation equipment (39 percent).

U.S. imports from China increased by \$44.4 billion (18 percent) in 2006. The largest growth was in electronic products (\$16.4 billion, or 19 percent), minerals and metals (\$5.9 billion, or 34 percent), and miscellaneous manufactures (\$5.0 billion, or 11 percent). The three leading U.S. import sectors, in terms of absolute value, continued to be electronic products (\$103.1 billion), miscellaneous manufactures (\$51.4 billion), and textiles and apparel (\$31.3 billion).

## U.S. Exports

U.S. exports to China rose at a greater rate than the preceding years, by \$12.8 billion, or 33 percent. The most significant increases in U.S. exports were in electronic products (\$3.2 billion, or 40 percent), transportation equipment (\$2.5 billion, or 39 percent), and minerals and metals (\$2.5 billion, or 48 percent) (table CHINA-2). Together these sectors accounted for 64 percent of the total increase, in terms of absolute value, in 2006.

In the electronic products sector, U.S. exports of semiconductors and integrated circuits increased by \$2 billion (73 percent) over 2005. Record growth of global semiconductor sales in 2006 contributed to the growth in U.S. exports, as global semiconductor sales increased by 9 percent to a high of \$247.7 billion. Sales were mainly driven by increased demand for consumer products such as cell phones, MP3 players, high-definition television sets, and personal computers. China continues to grow as the world's leading semiconductor market, because a large portion of the world's electronic goods is manufactured there. Therefore, strong and broad worldwide electronic product demand resulted in the large increase in U.S. semiconductor exports in 2006.

<sup>&</sup>lt;sup>1</sup> McClean, Matas, and Yancey, *The McClean Report*; and SIA, "Global Chip Sales Hit Record \$247.7 Billion in 2006."

**TABLE CHINA-1** China: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major industry/commodity sectors, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
I. S. experts of demostic merchandics:			— Million dol	lars ———			
U.S. exports of domestic merchandise:     Agricultural products     Forest products     Chemicals and related products     Energy-related products     Textiles and apparel     Footwear     Minerals and metals     Machinery     Transportation equipment     Electronic products     Miscellaneous manufactures     Special provisions	2,128 1,058 3,069 142 339 35 1,539 2,730 4,293 4,855 137 228	5,129 1,314 3,816 180 405 36 2,636 3,091 3,757 5,934 143 266	5,879 1,651 5,061 289 501 31 3,197 4,729 3,835 6,902 185 346	5,648 1,995 5,831 221 629 41 5,215 4,275 6,440 7,951 222 389	7,264 2,572 6,863 307 731 57 7,736 5,296 8,973 11,111 230 483	1,616 577 1,033 86 102 16 2,521 1,021 2,533 3,160 9	28.6 28.9 17.7 38.9 16.2 48.3 23.9 39.3 39.3 4.0 24.4
Total	20,553	26,707	32,606	38,857	51,624	12,767	32.9
U.S. imports of merchandise for consumption:     Agricultural products     Forest products     Chemicals and related products     Energy-related products     Textiles and apparel     Footwear     Minerals and metals     Machinery     Transportation equipment     Electronic products     Miscellaneous manufactures     Special provisions	1,896 2,749 6,262 457 12,602 10,242 8,656 10,467 2,302 36,270 31,490 1,401	2,470 3,362 7,438 561 15,426 10,546 10,054 13,922 47,150 35,812 1,808	2,925 4,398 9,287 1,063 18,902 11,348 13,890 17,585 4,548 69,153 40,712 2,348	3,365 5,463 12,240 1,023 26,937 12,654 17,553 21,314 6,072 86,716 46,411 2,891	4,303 6,630 14,389 1,139 31,284 13,795 23,462 25,916 8,133 103,117 51,416 3,467	938 1,167 2,149 116 4,347 1,141 5,909 4,602 2,062 16,401 5,005 576	27.9 21.4 17.6 11.4 16.1 9.0 33.7 21.6 34.0 18.9 10.8 19.9
U.S. merchandise trade balance:     Agricultural products     Forest products     Chemicals and related products     Energy-related products     Textiles and apparel     Footwear     Minerals and metals     Machinery     Transportation equipment     Electronic products     Miscellaneous manufactures     Special provisions     Total	232 -1,691 -3,193 -315 -12,263 -10,207 -7,117 -7,737 1,990 -31,414 -31,353 -1,173 -104,243	2,659 -2,048 -3,622 -381 -15,021 -10,510 -7,418 -10,831 686 -41,216 -35,669 -1,542 -124,913	2,954 -2,747 -4,225 -774 -18,401 -11,317 -10,692 -12,856 -713 -62,251 -40,527 -2,002 -163,553	2,283 -3,468 -6,409 -802 -26,308 -12,613 -12,339 -17,039 -78,764 -46,189 -2,502	2,961 -4,058 -7,526 -832 -30,553 -13,738 -15,726 -20,620 840 -92,006 -51,186 -2,984 -235,428	678 -590 -1,117 -30 -4,245 -1,125 -3,388 -3,581 471 -13,242 -4,996 -481	29.7 -17.0 -17.4 -3.8 -16.1 -8.9 -27.5 -21.0 127.6 -10.8 -10.8 -19.2

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

Exports of aircraft, spacecraft, and related equipment led the increase in U.S. exports of transportation equipment, increasing by over \$1.7 billion (39 percent) in 2006 to \$6.0 billion. Most U.S. exports to China were large civil aircraft (LCA), which rose to meet market demand in China. Orders of LCA that were placed 18 to 24 months beforehand were delivered during 2006.

Copper and related articles led export increases in the minerals and metals sector,<sup>2</sup> increasing by \$813 million (96 percent) to \$1.7 billion, as did unwrought aluminum, increasing by \$810 million (111 percent) to \$1.5 billion in 2006. Various forms of unalloyed and alloyed copper waste and scrap accounted for 86 percent of all copper and related articles exported to China in 2006. China has emerged in recent years as the largest foreign market for U.S. copper waste and scrap, as supplies of both ferrous and nonferrous scrap were increasingly sought from abroad to meet the growing demand of its rapidly expanding metals sector.<sup>3</sup> The value of U.S. exports more than doubled in 2006 in response to an 85 percent increase in copper prices,<sup>4</sup> as mine and refinery production failed to keep pace with rising demand worldwide.<sup>5</sup> Similar to copper, U.S. exports of aluminum waste and scrap were fueled by market demand in China, leading to increased demand for sector products such as unwrought aluminum, including waste and scrap. China is a significant market for aluminum scrap due to rapid industrialization in the country and the lack of domestically available aluminum scrap. The largest consumers of aluminum scrap in China are aluminum diecasters that manufacture products such as ingots.<sup>6</sup>

Two sectors that experienced large decreases in U.S. exports to China in 2006, in terms of absolute value, were organic commodity chemicals and fertilizers. Organic commodity chemicals decreased by \$160 million (49 percent) to \$167 million. China increased its domestic production and its imports from closer, lower cost producers in Asia and the Middle East, thereby reducing its imports of U.S. organic commodity chemicals. Increased Chinese domestic production of fertilizers also contributed to a decrease in U.S. exports of \$128 million (36 percent) to \$226 million in 2006.

Another sector that saw a large decline in U.S. exports to China was molybdenum ore and concentrates; such exports were valued at \$20 million in 2006, declining by \$144 million (88 percent) over the 2005 level. Average annual prices for molybdenum decreased by 25 percent over this period, and a declining volume (from 4,388 metric tons in 2005 to 3,983 metric tons in 2006) was shipped to China, which led to the drop in U.S. exports. Additionally, a greater share of domestically produced molybdenum concentrates were

<sup>&</sup>lt;sup>2</sup> See "Copper and Related Articles" in the Minerals and Metals chapter.

<sup>&</sup>lt;sup>3</sup> Barry, "What's Behind the Waning of China's Insatiable Appetite for Copper?"

<sup>&</sup>lt;sup>4</sup> Prices for copper products, including waste and scrap, are based on prices for refined copper cathodes, which nearly quadrupled over the 2002-06 period, and escalated from second quarter 2005 through third quarter 2006. Average annual domestic producer prices for cathodes were \$3.20 per pound in 2006 compared to \$1.73 per pound in 2005. Barry, "Copper Scrap Prices Pushed Higher"; U.S. government official, telephone interview by Commission staff, January 31, 2006; and Edelstein, "Copper."

<sup>&</sup>lt;sup>5</sup> World Bureau of Metal Statistics, World Metal Statistics.

<sup>&</sup>lt;sup>6</sup> See "Unwrought Aluminum" in the Minerals and Metals chapter.

<sup>&</sup>lt;sup>7</sup> U.S. industry officials, interviews by Commission staff, November 3, 2006.

<sup>&</sup>lt;sup>8</sup> U.S. industry official, e-mail communication with Commission staff, March 8, 2007.

<sup>&</sup>lt;sup>9</sup> Average annual prices of molybdenum contained in technical-grade molybdic oxide fell to \$53.10 per kilogram in 2006 from \$70.68 per kilogram in 2005. Platts, *Metals Week*.

TABLE CHINA-2 Leading changes in U.S. exports to and U.S. imports from China, 2002–06<sup>a</sup>

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						Change, 200	6 from 2005
Sector/commodity	2002	2003	2004	2005	2006	Absolute	Percent
			Million d	ollars			
U.S. EXPORTS:							
Increases:							
Semiconductors and integrated circuits (ET033)	1,238	2,025	2,303	2,676	4,633	1,957	73.1
Aircraft, spacecraft, and related equipment (ET013) Minerals and metals:	3,367	2,447	1,948	4,338	6,047	1,709	39.4
Copper and related articles (MM036)	274	596	608	852	1,665	813	95.5
Unwrought aluminum (MM037)	170	240	356	730	1,540	810	111.0
Decreases:	170	210	000	700	1,010	010	111.0
Chemicals and related products:							
Organic commodity chemicals (CH010)	90	287	430	327	167	-160	-49.0
Fertilizers (CH016)	671	475	321	354	226	-128	-36.2
Minerals and metals:							
Plates, sheets, and strips of stainless							
steels (MM025G)	12	97	68	178	59	-119	-67.0
Certain ores, concentrates, ash, and							
residues (MM007)	3	9	24	182	66	-115	-63.6
All other	14,729	20,532	26,549	29,220	37,222	8,002	27.4
TOTAL	20,553	26,707	32,606	38,857	51,624	12,767	32.9
U.S. IMPORTS:							
Increases:							
Electronic products:							
Computers, peripherals, and parts (ET035)	14,928	22,141	33,985	40,298	46,583	6,284	15.6
Telephone and telegraph apparatus (ET017)	4,659	5,932	9,556	14,410	18,083	3,673	25.5
Television receivers and video monitors (ET022)	849	1,490	2,438	5,130	7,836	2,706	52.8
Apparel (CH049)	9,602	11,408	13,640	19,962	23,191	3,229	16.2
Steel mill products (MM025)	264	269	1,104	1,687	3,605	1,918	113.7
Decreases:							
Electronic products:	700	0.40	700	000	474	450	04.4
Photographic cameras and equipment (ET039)	766	843	760	622	471	-152	-24.4
Photographic film and paper (ET036)	5	40	175	159	58	-101	-63.6

TABLE CHINA-2 Leading changes in U.S. exports to and U.S. imports from China, 2002–06a—Continued

						Change, 200	6 from 2005
Sector/commodity	2002	2003	2004	2005	2006	Absolute	Percent
			—— Million o	dollars			
Other plastics in primary forms (CH036)	133 49 93,539	131 88 109,279	197 269 134,036	246 351 159,773	160 280 186,786	-85 -71 27,013	-34.8 -20.2 16.9
TOTAL	124,796	151,620	196,160	242,638	287,052	44,414	18.3

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

roasted (i.e., processed into intermediate molybdic oxide) in the United States, rather than being sent abroad for processing. Domestic roasters returned to full production by late 2005, as an additional roasting facility came onstream in 2006.<sup>10</sup>

## U.S. Imports

Growing demand for products from China contributed to a \$44.4 billion (18 percent) increase in U.S. imports in 2006. In terms of absolute value, electronic products, minerals and metals, and miscellaneous manufactures accounted for the largest increases in U.S. imports, collectively accounting for 62 percent of the total increase.

The two electronics sectors that experienced the largest increases in U.S. imports in 2006, in terms of absolute value, were computers, peripherals, and parts, and telephone and telegraph apparatus. Increased demand for computer and telecommunications products by U.S. consumers contributed to continued growth in U.S. imports from China, increasing by \$6.3 billion (16 percent) and \$3.7 billion (26 percent), respectively. In 2006, the U.S. telecommunications market grew by the largest percentage since 2000, with demand for services such as broadband leading to increased demand for telecommunications and network equipment. In the computer sector, decreasing prices and the demand for portability caused U.S. imports of notebook computers from China to increase to \$12.8 billion in 2006.

Apparel products were another sector that registered substantial increases in U.S. imports in 2006, by \$3.2 billion (16 percent) to \$23.2 billion. Imports of apparel in 2005, the year after the expiration of the Multilateral Agreement on Textiles and Clothing (ATC), were limited by certain bilateral safeguards (quotas) that were to expire at the end of 2005. However, the United States and China reached agreement on a memorandum of understanding (MOU) to limit certain apparel imports from China in 2006. Under the MOU, fewer products were subject to quotas compared to the earlier safeguards, and quotas were established at higher levels than in 2005, factors that contributed to the 2006 increase in U.S. imports in this sector.

U.S. imports of photographic cameras and equipment along with film and paper decreased by \$253 million in 2006. The decline in these categories was led by decreases in imports of photographic plates and film, 35mm cameras, and analog camera parts and accessories. Notwithstanding this decline, China continues to be the leading supplier of photographic cameras and equipment to the United States, surpassing Japan in 2005. The overall decline appears to be attributable to the ongoing shift in consumer demand from analog cameras and film to digital camera equipment.

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<sup>11</sup> See "Computers, Peripherals, and Parts" in the Electronic Products chapter.

<sup>10</sup> Magyar, "Molybdenum."

<sup>&</sup>lt;sup>12</sup> See "Telephone and Telegraph Apparatus" in the Electronic Products chapter.

<sup>&</sup>lt;sup>13</sup> TIA, "TIA Report: Broadband Demand Drives Highest Telecom Industry Growth Since 2000."

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# European Union<sup>1</sup>

Change in 2006 from 2005:

U.S. trade deficit: Decreased by \$6.8 billion (5 percent) to \$132.8 billion U.S. exports: Increased by \$29.1 billion (17 percent) to \$196.5 billion U.S. imports: Increased by \$22.3 billion (7 percent) to \$329.3 billion

The European Union (EU) and the United States have the world's largest bilateral trade relationship.<sup>2</sup> The EU was the largest U.S. trading partner in terms of total trade and the largest source of U.S. imports, and second only to Canada as a destination for U.S. exports in 2006. Germany, the United Kingdom, and France accounted for 52 percent of U.S. exports to the EU and 54 percent of U.S. imports from the EU.

The U.S. trade deficit with the EU decreased by 5 percent to \$132.8 billion in 2006, after reaching a five-year high in 2005. The U.S. trade deficit with the EU is the second-largest after the deficit with China.

## U.S. Exports

The largest absolute increases in U.S. exports to the EU in 2006 were in the transportation equipment, chemicals and related products, and minerals and metals sectors (table EU-1). U.S. exports of motor vehicles to the EU increased by \$4.3 billion in 2006 (table EU-2). Such exports to Germany alone amounted to \$3.1 billion. Sales of passenger vehicles in Germany were strong because customers brought forward purchases that may have otherwise been made in 2007 to avoid a 3 percentage point increase in the VAT rate introduced in January 2007.<sup>3</sup>

Precious metals and non-numismatic coin shipments from the United States to the EU increased by \$3.4 billion (154 percent) to \$5.6 billion in 2006. Most of this increase was in gold bullion, which rose by \$1.9 billion to \$2.8 billion, although exports of silver waste and scrap, platinum-group metals in unwrought forms, and silver bullion also increased. The rise in prices was a key factor contributing to this increase, as was the export of precious metals to the United Kingdom for trade on global exchanges.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> The European Union (EU) consisted of 25 member countries in 2006. These countries are Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden and the United Kingdom. The two countries that entered the EU in 2007, Bulgaria and Romania, are not included for purposes of this report.

<sup>&</sup>lt;sup>2</sup> EC, United States: Barriers to Trade and Investment, 5.

<sup>&</sup>lt;sup>3</sup> Just-auto.com editorial team, "Germany: 2006 Market Ended with Fireworks."

<sup>&</sup>lt;sup>4</sup> The London Bullion Market Association Web site. The London Final price for gold averaged \$604.33 per troy ounce in 2006, a 36-percent (\$159.45) increase over the \$444.88 per troy ounce annual average in 2005. See table MM-5 in "Precious Metals and Related Articles" in the Minerals and Metals chapter of this report for more precious metals pricing information.

**TABLE EU-1** EU-25: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major industry/commodity sectors, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
U.S. exports of domestic merchandise:			— Million dol	lars ———			
Agricultural products Forest products Chemicals and related products Energy-related products Textiles and apparel Footwear Minerals and metals Machinery Transportation equipment Electronic products Miscellaneous manufactures Special provisions	7,194 3,938 25,349 1,738 1,558 58 7,061 12,025 32,269 35,672 3,494 4,889	7,520 4,016 29,633 1,723 1,516 61 7,733 12,091 33,155 35,155 35,604 3,409 5,021	7,816 4,382 35,368 3,073 1,579 65 8,053 13,403 35,475 37,600 3,920 4,956	7,948 4,742 37,517 3,957 1,746 65 10,998 14,789 36,916 38,807 4,489 5,443	8,584 4,944 42,988 6,732 1,897 60 16,363 16,627 44,628 41,546 5,737 6,372	636 202 5,471 2,776 151 -4 5,365 1,837 7,712 2,739 1,248 929	8.0 4.3 14.6 70.1 8.7 -6.7 48.8 12.4 20.9 7.1 27.8 17.1
Total	135,244	141,483	155,690	167,416	196,478	29,062	17.4
U.S. imports of merchandise for consumption:     Agricultural products     Forest products     Chemicals and related products     Energy-related products     Textiles and apparel     Footwear     Minerals and metals     Machinery     Transportation equipment     Electronic products     Miscellaneous manufactures     Special provisions     Total	11,569 4,905 49,828 9,143 5,422 1,892 16,225 23,839 54,381 28,655 11,741 12,662 230,262	12,912 5,231 57,696 12,029 5,674 1,851 16,802 25,921 57,837 30,656 11,249 12,566	13,841 6,270 63,049 15,972 6,007 1,815 21,688 29,755 61,629 34,063 12,402 13,268	14,791 6,654 67,858 22,503 5,873 1,650 24,181 33,892 66,049 36,087 12,605 14,865	16,141 6,790 73,836 25,913 5,777 1,614 27,437 37,042 69,014 36,279 13,758 15,688	1,350 136 5,978 3,409 -96 -36 3,256 3,149 2,965 192 1,153 823	9.1 2.0 8.8 15.6 -2.2 13.5 9.3 4.5 9.2 5.5
U.S. merchandise trade balance:     Agricultural products     Forest products     Chemicals and related products     Energy-related products     Textiles and apparel     Footwear     Minerals and metals     Machinery     Transportation equipment     Electronic products     Miscellaneous manufactures     Special provisions     Total	-4,375 -967 -24,479 -7,405 -3,864 -1,835 -9,164 -11,814 -22,112 -7,016 -8,248 -7,773 -95,018	-5,392 -1,215 -28,063 -10,307 -4,159 -1,790 -9,068 -13,830 -24,682 4,948 -7,840 -7,545	-6,025 -1,889 -27,680 -12,899 -4,428 -1,750 -13,635 -16,352 -26,155 3,538 -8,482 -8,313	-6,844 -1,912 -30,341 -18,547 -4,128 -1,585 -13,183 -19,103 -29,133 2,720 -8,116 -9,422 -139,593	-7,558 -1,845 -30,849 -19,181 -3,880 -1,554 -11,073 -20,415 -24,386 5,267 -8,021 -9,316	-714 67 -508 -634 248 31 2,109 -1,312 4,748 2,547 95 106	-10.4 3.5 -1.7 -3.4 6.0 2.0 16.0 -6.9 16.3 93.6 1.2 1.1

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

TABLE EU-2 Leading changes in U.S. exports to and U.S. imports from EU-25, 2002–06<sup>a</sup>

Sector/commodity	2002	2003	2004	2005	2006	Change, 2006 from 2005				
						Absolute	Percent			
	Million dollars									
U.S. EXPORTS:										
Increases:										
Transportation equipment:										
Motor vehicles (ET009)	3,887	5,484	3,904	3,287	7,544	4,258	129.6			
Aircraft, spacecraft, and related	-,	-, -	-,	-, -	, -	,				
equipment (ET013)	12,604	12,495	15,019	13,552	15,847	2,296	16.9			
Precious metals and non-numismatic	-,-,-	,	,	,	,	_,				
coins (MM020)	1.754	2,085	1,580	2.198	5.581	3,383	154.0			
Petroleum products (CH005)	868	721	1,774	1,930	4,258	2,328	120.6			
Chemicals and related products:	000		.,	1,000	1,200	2,020	120.0			
Medicinal chemicals (CH025)	10,856	13,189	17,032	17,914	19,745	1,831	10.2			
Certain organic chemicals (CH012)	1,608	1,820	2,102	2,015	3,238	1,223	60.7			
Decreases:	1,000	1,020	2,102	2,010	0,200	1,220	00.7			
Construction and mining equipment (ET004)	1,521	1,514	1,665	2,102	1,924	-178	-8.5			
Telephone and telegraph apparatus (ET017)	3,302	2,736	3,519	4,018	3,885	-134	-3.3			
Plates, sheets, and strips of carbon and alloy	3,302	2,730	0,010	7,010	3,003	-10-	-0.0			
steels (MM025B)	56	282	143	291	170	-121	-41.6			
Cereals (AG030)	355	401	336	339	256	-84	-24.6			
All other	98,434	100,758	108,616	119,770	134,030	14,260	11.9			
All other	90,434	100,736	100,010	119,770	134,030	14,200	11.9			
TOTAL	135,244	141,483	155,690	167,416	196,478	29,062	17.4			
U.S. IMPORTS:										
Increases:										
Medicinal chemicals (CH025)	32.287	38,058	40.893	42,900	48.029	5,129	12.0			
Petroleum products (CH005)	5,818	7,629	11,702	17,037	21,215	4,178	24.5			
Transportation equipment:	0,0.0	.,020	,	,	,0	.,				
Aircraft, spacecraft, and related										
equipment (ET013)	8,332	6.755	6.577	6,214	7,990	1.777	28.6			
Aircraft engines and gas turbines (ET001)	7,138	5,659	6,098	7.274	8,357	1,084	14.9			
Precious metals and non-numismatic	7,100	5,059	0,000	1,214	0,001	1,00-	14.3			
coins (MM020)	1.042	895	1,175	1,439	2,390	951	66.1			
COINS (IVIIVIOZO)	1,042	093	1,173	1,408	2,530	301	00.1			

TABLE EU-2 Leading changes in U.S. exports to and U.S. imports from EU-25, 2002-06a—Continued

Sector/commodity		2003	2004	2005	2006	Change, 2006 from 2005				
	2002					Absolute	Percent			
Decreases: Crude petroleum (CH004) Telephone and telegraph apparatus (ET017) Textile machinery (MM082) All other	1,867 3,667 619 169,492	2,023 2,950 626 185,828	1,669 2,549 663 208,433	2,718 3,327 797 225,304	1,264 2,354 559 237,131	-1,454 -972 -238 11,827	-53.5 -29.2 -29.9 5.2			
TOTAL	230,262	250,424	279,759	307,009	329,289	22,280	7.3			

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

U.S. exports of petroleum products to the EU increased by \$2.3 billion (121 percent) to \$4.3 billion in 2006. The increase is price related, as U.S. exports increased by less than 1 percent in quantity terms. U.S. exports of aircraft, spacecraft, and related equipment to the EU increased by \$2.3 billion (17 percent) to \$15.8 billion, mostly due to airline route expansion and fleet replacement needs.

Medicinal chemical exports to the EU rose by \$1.8 billion (10 percent) to \$19.7 billion, continuing a five-year trend. Many of these exports were intracompany transfers to multinational pharmaceutical companies with manufacturing facilities in the United States and the EU.

U.S. exports to the EU of certain organic chemicals increased by \$1.2 billion (61 percent) to \$3.2 billion in 2006. This increase is partially due to exports of methyl tertiary-butyl ether (MTBE), a gasoline additive that was banned for use in the United States in May 2006, but is still used in the EU.<sup>6</sup> Another reason for the export increase in certain organic chemicals is high EU demand for soybean-based biodiesel.

## U.S. Imports

The largest absolute increases in U.S. imports from the EU in 2006 were in the chemicals and related products, energy-related products, minerals and metals, and machinery sectors (table EU-1). U.S. imports of medicinal chemicals from the EU increased by \$5.1 billion (12 percent) to \$48.0 billion in 2006, continuing a five-year trend (table EU-2). This increase was led by greater demand for active pharmaceutical ingredients used to make consumer products for domestic sale and export. Many of these imports are intracompany transfers by U.S.-based multinational pharmaceutical companies that have manufacturing facilities in the EU.

Petroleum product imports from the EU rose by \$4.2 billion (25 percent) to \$21.2 billion in 2006, while U.S. imports of crude petroleum fell by \$1.5 billion (54 percent) to \$1.3 billion. In quantity terms, U.S. imports of refined petroleum products from the EU remained stable, decreasing only slightly from 427,000 barrels per day (b/d) in 2005 to 426,000 b/d in 2006, and primarily consisted of distillate and residual fuel oils used for heating, industrial uses, and bunker fuels. Although import quantities were largely unchanged, the value of imports showed a strong increase due to rising prices. U.S. imports of crude petroleum from the EU decreased from 343,000 b/d in 2005 to 228,000 b/d in 2006 primarily because of a temporary shutdown of wells in the North Sea (Norway and the United Kingdom) for repair.

U.S. imports of aircraft, spacecraft, and related equipment, and aircraft engines and parts both increased in 2006, by \$1.8 billion (29 percent) to \$8.0 billion and by \$1.1 billion (15 percent) to \$8.4 billion, respectively. U.S. imports of aircraft, spacecraft, and related equipment were principally large civil aircraft (LCA) and parts. Although LCA imports decreased by 10 percent to \$2.7 billion, imports of parts grew 23 percent, to \$1.9 billion.

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<sup>&</sup>lt;sup>5</sup> See the Energy and Related Products chapter of this report for more information.

<sup>&</sup>lt;sup>6</sup> Chemical Week, "Gasoline Demand Drives MTBE Exports," 39.

Business jet imports also increased by \$1.2 billion (1,300 percent) to \$1.3 billion. U.S. imports of aircraft engines and parts grew by \$1.1 billion (15 percent) because of a strong increase in the production of U.S. aircraft. Boeing increased its aircraft deliveries by about 25 percent,<sup>7</sup> and general aviation aircraft manufacturers also showed higher deliveries.

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<sup>&</sup>lt;sup>7</sup> The Boeing Co., *Boeing Orders and Deliveries*.

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# India

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$904 million (8 percent) to \$12.6 billion U.S. exports: Increased by \$2.1 billion (30 percent) to \$9.0 billion U.S. imports: Increased by \$3.0 billion (16 percent) to \$21.7 billion

U.S. bilateral trade with India increased by \$5 billion (20 percent) in 2006, exceeding \$30 billion for the first time. U.S. trade with India has grown at an annual rate of approximately 15 percent during the 2002–06 period (table INDIA-1). In 2006, the U.S.-India Trade Policy Forum announced its goal of doubling bilateral trade by 2008.

India is in the midst of a major and rapid economic expansion, with growth rates exceeding 8 percent in each of the last three years, a population greater than 1 billion, and a middle class that is estimated to be nearly the size of the total U.S. population.<sup>2</sup>

The United States is India's largest individual trading partner, accounting for approximately 10 percent of India's world trade. The U.S. trade deficit with India has grown steadily during the period 2002–06, increasing 8 percent in 2006 to reach a high of \$12.6 billion.

### U.S. Exports

U.S. exports to India in 2006 continued to benefit from India's strong economic growth, increasing by \$2.1 billion (30 percent) to \$9 billion. Exports grew at an annual rate of approximately 25 percent during the period 2002–06. In 2006, the largest absolute increases in exports were registered in transportation equipment, natural and synthetic gemstones, and fertilizers (table INDIA-2).

U.S. exports of transportation equipment, including aircraft and related equipment, increased by \$915 million (154 percent) to \$1.5 billion in 2006, while exports of aircraft engines and gas turbines increased \$97 million (76 percent) to \$225 million. Increased aircraft exports were fueled by the Boeing Co.'s delivery of 11 new aircraft to India in 2006, valued at \$66–\$75 million each.<sup>3</sup>

U.S. exports of natural and synthetic gemstones, particularly diamonds that have been worked, increased by \$178 million (280 percent) to \$241 million in 2006. In recent years, India has become a major global producer of precious jewelry and gemstones and is a world leader in diamond cutting and polishing.<sup>4</sup> U.S. gemstone exports supply this growing industry.

<sup>&</sup>lt;sup>1</sup> USTR, "U.S. and India Issue Joint Statement on Trade."

<sup>&</sup>lt;sup>2</sup> IMF, World Economic Outlook Database; and Greene, U.S.-China Competition in the Indian Market, 1.

<sup>&</sup>lt;sup>3</sup> The Boeing Co., "Deliveries January 2006 through December 2006"; and The Boeing Co., "Jet Prices."

<sup>&</sup>lt;sup>4</sup> Lal Pai, "India's Metamorphosis to a Global Hub for Gems and Jewelry."

TABLE INDIA-1 India: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major industry/commodity sectors, 2002-06a

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
U.S. exports of domestic merchandise:			— Million dolla	nrs ———			
Agricultural products Forest products Chemicals and related products Energy-related products Textiles and apparel Footwear Minerals and metals Machinery Transportation equipment Electronic products Miscellaneous manufactures	277 139 761 64 44 2 206 305 545 1,206 45 85	307 166 1,122 147 54 2 235 348 600 1,219 69	251 179 1,094 316 68 4 388 547 666 1,576 90	296 225 1,470 381 78 8 719 722 1,021 1,709 167	363 239 1,849 414 101 7 902 790 2,118 1,859 182 200	67 15 379 34 24 -1 183 68 1,097 150 15	22.5 6.5 25.8 8.8 30.4 -11.2 25.4 9.4 107.5 8.8 9.2 17.5
Special provisions	3,680	4,367	5,295	6,965	9,025	2,060	29.6
U.S. imports of merchandise for consumption:     Agricultural products     Forest products     Chemicals and related products     Energy-related products     Textiles and apparel     Footwear     Minerals and metals     Machinery     Transportation equipment     Electronic products     Miscellaneous manufactures     Special provisions     Total	1,011 73 953 211 3,382 96 3,799 334 232 295 1,283 122	1,077 79 1,273 230 3,668 110 3,730 427 271 395 1,618 156	1,217 84 1,334 248 4,106 125 4,748 567 384 529 1,958 203	1,226 94 1,732 579 5,194 139 5,091 882 564 674 2,311 223	1,261 109 2,230 287 5,568 155 5,816 1,282 719 896 3,024 327	35 15 497 -292 373 16 725 400 155 222 713 105	2.9 16.1 28.7 -50.4 71.4 11.4 45.3 27.4 32.9 30.9 46.9
U.S. merchandise trade balance:     Agricultural products     Forest products     Chemicals and related products     Energy-related products     Textiles and apparel     Footwear     Minerals and metals     Machinery     Transportation equipment     Electronic products     Miscellaneous manufactures     Special provisions	-734 66 -192 -147 -3,337 -94 -3,592 -29 314 911 -1,238 -37	-771 86 -151 -84 -3,614 -107 -3,494 -79 329 824 -1,549 -57	-966 95 -240 69 -4,039 -122 -4,360 -20 282 1,047 -1,868 -85	-930 131 -263 -199 -5,117 -131 -4,372 -160 457 1,035 -2,144 -52	-898 131 -381 127 -5,467 -148 -4,915 -492 1,399 963 -2,842 -127	32 (°) -118 326 -350 -17 -543 -332 942 -71 -698 -75	3.4 -0.3 -44.9 (°) -6.8 -12.4 -208.0 206.3 -6.9 -32.5 -142.6
Total	-8,111	-8,666	-10,208	-11,745	-12,649	-904	-7.7

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export. <sup>b</sup>Less than \$500,000.

<sup>&</sup>lt;sup>c</sup>Not meaningful for purposes of comparison.

TABLE INDIA-2 Leading changes in U.S. exports to and U.S. imports from India, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Sector/commodity	2002	2003	2004	2005	2006	Absolute	Percent
			—— Million d	ollars ———			
U.S. EXPORTS:							
Increases:							
Transportation equipment:							
Aircraft, spacecraft, and related							
equipment (ET013)	282	270	286	595	1,510	915	153.8
Aircraft engines and gas turbines (ET001)	80	121	158	128	225	97	75.6
Natural and synthetic gemstones (MM019)	23	16	37	63	241	178	279.9
Fertilizers (CH016)	33	105	114	415	587	172	41.6
Decreases:							
Minerals and metals:							
Iron and steel waste and scrap (MM023)	20	21	91	221	168	-52	-23.7
Plates, sheets, and strips of carbon and							
alloy steels (MM025B)	21	22	31	109	68	-40	-37.0
Precious metals and non-numismatic							
coins (MM020)	11	11	14	47	10	-37	-79.6
All other	3,209	3,800	4,564	5,388	6,216	827	15.4
TOTAL	3,680	4,367	5,295	6,965	9,025	2,060	29.6
U.S. IMPORTS:							
Increases:							
Precious jewelry and related articles (MM051)	882	1,199	1,500	1,769	2,421	652	36.9
Steel mill products (MM025)	350	232	713	608	909	301	49.6
Medicinal chemicals (CH025)	355	528	456	575	814	239	41.5
Electric motors, generators, and related							
equipment (MM091)	36	80	80	115	351	236	205.8
Decreases:							
Petroleum products (CH005)	193	230	231	559	277	-282	-50.4
Women's and girls' suits, skirts, and							
coats (CH049G)	190	241	281	533	443	-90	-16.8
Pipes and tubes of carbon and alloy							
steels (MM025L)	50	56	91	198	117	-81	-40.9
All other	9,735	10,469	12,151	14,354	16,341	1,987	13.8
TOTAL	11,790	13,034	15,503	18,710	21,674	2,964	15.8

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

U.S. exports of fertilizer to India increased \$172 million (42 percent) to \$587 million in 2006, growing at an annual rate of approximately 78 percent during the period 2002–06. India is reported to be the third-largest consumer of fertilizer in the world, relying particularly heavily on imports of phosphate fertilizers. The United States is an important source of diammonium phosphate (DAP) and monoammonium phosphate (MAP).

#### U.S. Imports

U.S. imports from India increased by \$3 billion (16 percent) to \$21.7 billion in 2006. Imports grew at an annual rate of approximately 13 percent during the period 2002–06. In 2006, the largest absolute increases in imports were registered in precious jewelry and related articles, steel mill products, and medicinal chemicals.

Reflecting India's growing role as a manufacturer of gems and jewelry, U.S. imports of precious jewelry and related articles increased by \$652 million (37 percent) to \$2.4 billion in 2006. Special Economic Zones (SEZ) created to foster the flourishing gem and jewelry industry in India have spurred exports to the United States and other markets.<sup>6</sup>

U.S. imports of steel mill products increased by \$301 million (50 percent) to \$909 million in 2006. The increase is attributable to higher prices and high capacity utilization in the United States.<sup>7</sup>

U.S. imports of medicinal chemicals rose by \$239 million (42 percent) to \$814 million in 2006, with strong annual growth of 18 percent during the 2002–06 period. The growth is attributable in large part to greater U.S. demand for inexpensive generics made in India, and to India's large concentration of U.S. Food and Drug Administration approved manufacturing plants, more than any other foreign country.

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<sup>&</sup>lt;sup>5</sup> Lal Pai, "Fertilizer Industry Stocks in Limelight in India."

<sup>&</sup>lt;sup>6</sup> Journal of Gem Industry, "Ancient Gems Centre Jaipur Well On Its Way."

<sup>&</sup>lt;sup>7</sup> See "Steel Mill Products" in the Minerals and Metals chapter for more details.

<sup>&</sup>lt;sup>8</sup> This industry/commodity group includes pharmaceutical active ingredients and formulated products containing pharmaceutical active ingredients.

<sup>&</sup>lt;sup>9</sup> Grace, "The Effect of Changing Intellectual Property on Pharmaceutical Industry Prospects in India and China," 20.

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## Mexico

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$14.9 billion (22 percent) to \$82.5 billion U.S. exports: Increased by \$12.9 billion (13 percent) to \$114.6 billion U.S. imports: Increased by \$27.8 billion (17 percent) to \$197.1 billion

The U.S. trade deficit with Mexico, the third largest trading partner of the United States, continued to increase in 2006, rising by \$14.9 billion (22 percent) to \$82.5 billion as imports outpaced exports. In spite of a downturn in energy prices and related products in 2006 (a large component of U.S.-Mexico trade), imports from Mexico continued to increase at a record rate. The increase in U.S. imports from Mexico reflected higher prices for petroleum and expanded use of assembly in Mexico to support growing U.S. manufacturing. In 2006, U.S. imports from Mexico for all merchandise sectors increased by \$27.8 billion (17 percent) to \$197.1 billion.

### U.S. Exports

In 2006, U.S. exports to Mexico rose \$12.9 billion (13 percent) to \$114.6 billion, driven in part by economic growth in Mexico. The economy grew by 4.5 percent for the first time since 2000, bolstered by increasing consumer confidence, continued high oil prices, and a resurgence of the Maquiladora Program, or export-for-assembly industry. Mexico's robust economic expansion resulted in an upsurge of U.S. exports in such leading product sectors as miscellaneous manufactures, minerals and metals, transportation, and chemical products (table MEXICO-1). Mexico was the third-largest export destination for U.S. products, exceeded only by the EU and Canada.

In 2006, U.S. exports of miscellaneous products increased \$416 million (26 percent) to \$2 billion in response to surging Mexican demand. Leading U.S. exports were home video game cartridges (up \$131 million, or 524 percent) and parts of motor vehicle seats (up \$79 million, or 66 percent) which accounted for over one-half of the total increase in exports of miscellaneous manufactures to Mexico in 2006 (table MEXICO-2). The growth in exports of home video game cartridges reflects the spike in demand resulting from the introduction of a new generation of video game consoles. The continuing shift in the assembly of motor vehicle seats from the United States and Canada to Mexico was responsible for a \$79 million rise in exports of seat parts to Mexico in 2006. Sewing seat covers from fabric or leather is the most labor-intensive aspect of seat assembly. The seat covers sewn in Mexico are delivered to vehicle assembly plants or seat-finishing operations throughout North America.

U.S. exports of minerals and metals to Mexico increased by \$2.4 billion (26 percent) to \$11.6 billion. Steel demand in Mexico grew by 5 percent in 2006, largely as a result of a robust economy and a shortage of product capacity in the domestic steel consuming industries. Steel imports from the United States typically involve products that are destined

<sup>&</sup>lt;sup>1</sup> Mexico exports approximately 80 percent of its total exports to the United States.

<sup>&</sup>lt;sup>2</sup> Americas News Intel Publishing, Mexico Watch Monthly Report.

**TABLE MEXICO-1** Mexico: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major industry/commodity sectors, 2002–06<sup>a</sup>

U.S. exports of domestic merchandise:  Agricultural products  7,534  8,176  8,994  9,678  11,066  1,389  7,534  8,176  8,994  9,678  11,066  1,389  7,534  1,380  1,480  1							Change, 200	6 from 2005
U.S. exports of domestic merchandise: Agricultural products	Item	2002	2003	2004	2005	2006	Absolute	Percent
Agricultural products	U.S. exports of domestic merchandise:			— Million dol	lars ———			
Machinery         9,183         9,086         10,078         11,418         12,454         1,037           Transportation equipment         14,524         13,725         15,882         16,871         19,266         2,395           Electronic products         18,965         16,11         1,525         1,611         2,027         416           Special provisions         3,705         3,541         3,781         3,981         4,428         446           Total         66,076         83,108         93,018         101,667         114,562         12,896           U.S. imports of merchandise for consumption:         6,378         7,220         8,189         9,323         10,498         1,176           Agricultural products         1,038         1,075         1,274         1,420         1,559         139           Chemicals and related products         3,637         3,779         4,790         5,429         6,347         918           Energy-related products         11,567         14,792         18,966         25,029         32,116         7,087           Textiles and apparel         9,649         9,015         8,826         8,305         7,497         -808           Footwear         279 <td< td=""><td>Agricultural products Forest products Chemicals and related products Energy-related products Textiles and apparel</td><td>3,056 12,444 3,274 4,939</td><td>3,217 13,300 2,897 4,696</td><td>3,451 15,797 3,379 4,730 60</td><td>3,860 18,122 5,508 4,705</td><td>4,258 20,573 5,925 4,551</td><td>398 2,451 417</td><td>14.4 10.3 13.5 7.6 -3.3 2.6</td></td<>	Agricultural products Forest products Chemicals and related products Energy-related products Textiles and apparel	3,056 12,444 3,274 4,939	3,217 13,300 2,897 4,696	3,451 15,797 3,379 4,730 60	3,860 18,122 5,508 4,705	4,258 20,573 5,925 4,551	398 2,451 417	14.4 10.3 13.5 7.6 -3.3 2.6
U.S. imports of merchandise for consumption:  Agricultural products  Forest products  1,038 1,075 1,274 1,420 1,559 139 Chemicals and related products 3,637 3,779 4,790 5,429 6,347 918 Energy-related products 11,567 14,792 18,966 25,029 32,116 7,087 1274 1274 1274 128,966 25,029 32,116 7,087 1275 128,116 128,216 128,216 128,217 128,218 128,	Machinery Transportation equipment Electronic products Miscellaneous manufactures	9,183 14,524 18,965 1,687	9,086 13,725 16,414 1,511	10,078 15,882 17,383 1,525	11,418 16,871 16,609 1,611	12,454 19,266 18,333 2,027	1,037 2,395 1,724 416	25.7 9.1 14.2 10.4 25.8 11.2
Agricultural products 6,378 7,220 8,189 9,323 10,498 1,176 7,600 1,400 1,559 139 139 1,000 1,559 1,000	Total	86,076	83,108	93,018	101,667	114,562	12,896	12.7
U.S. merchandise trade balance:  Agricultural products	Agricultural products Forest products Chemicals and related products Energy-related products Textiles and apparel Footwear Minerals and metals Machinery Transportation equipment Electronic products Miscellaneous manufactures	1,038 3,637 11,567 9,649 279 7,013 16,321 31,117 35,029 6,356	1,075 3,779 14,792 9,015 275 7,116 16,596 30,664 34,560 6,252	1,274 4,790 18,966 8,826 242 9,623 18,029 33,025 38,945 6,555	1,420 5,429 25,029 8,305 247 11,366 20,173 34,451 40,160 6,814	1,559 6,347 32,116 7,497 274 13,266 23,036 41,291 47,044 7,042	139 918 7,087 -808 26 1,900 2,863 6,840 6,884 208	12.6 9.8 16.9 28.3 -9.7 10.7 16.7 14.2 19.9 17.1 3.1
Agricultural products         1,155         956         805         355         568         213         6           Forest products         2,018         2,142         2,177         2,440         2,698         259         2           Chemicals and related products         8,807         9,521         11,007         12,694         14,226         1,532           Energy-related products         -8,294         -11,894         -15,587         -19,522         -26,191         -6,670         -7           Textiles and apparel         -4,710         -4,319         -4,097         -3,600         -2,946         654           Footwear         -183         -185         -183         -201         -227         -25         -7           Minerals and metals         -342         -661         -1,665         -2,108         -1,631         478         2           Machinery         -7,138         -7,510         -7,951         -8,755         -10,582         -1,826         -2           Transportation equipment         -16,593         -16,939         -17,143         -17,579         -22,025         -4,446         -2           Electronic products         -16,064         -18,146         -21,562         -23,550	Total	134,121	137,199	154,959	169,216	197,056	27,839	16.5
	Agricultural products Forest products Chemicals and related products Energy-related products Textiles and apparel Footwear Minerals and metals Machinery Transportation equipment Electronic products Miscellaneous manufactures Special provisions	2,018 8,807 -8,294 -4,710 -183 -342 -7,138 -16,593 -16,064 -4,668 -2,033	2,142 9,521 -11,894 -4,319 -185 -661 -7,510 -16,939 -18,146 -4,741 -2,314	2,177 11,007 -15,587 -4,097 -183 -1,665 -7,951 -17,143 -21,562 -5,030 -2,713	2,440 12,694 -19,522 -3,600 -201 -2,108 -8,755 -17,579 -23,550 -5,204 -2,518	2,698 14,226 -26,191 -2,946 -227 -1,631 -10,582 -22,025 -28,711 -4,996 -2,677	259 1,532 -6,670 654 -25 478 -1,826 -4,446 -5,161 208 -160	60.0 10.6 12.1 -34.2 18.2 -12.5 22.6 -20.9 -25.3 -21.9 -6.4

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

**TABLE MEXICO-2** Leading changes in U.S. exports to and U.S. imports from Mexico, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Sector/commodity	2002	2003	2004	2005	2006	Absolute	Percent
			—— Million o	dollars			
U.S. EXPORTS:							
Increases:							
Transportation equipment:							
Certain motor-vehicle parts (ET010)	5,852	5,278	5,559	5,464	6,435	970	17.8
equipment (ET013)	317	600	792	801	1,581	780	97.4
Construction and mining equipment (ET004)	554	561	572	649	1,015	366	56.4
Copper and related articles (MM036)	462	467	779	959	1,594	635	66.2
Tolophone and tolograph apparetus (FT017)						489	
Telephone and telegraph apparatus (ET017)	1,328	1,229	1,573	1,459	1,949		33.5
Cereals (AG030)	1,491	1,514	1,695	1,553	2,038	485	31.2
Decreases:	2 711	2.406	2.002	4 222	2.064	250	0.0
Motor vehicles (ET009)	3,711	3,186	3,983	4,323	3,964	-358	-8.3
thereof (MM094)	56	51	260	503	208	-295	-58.6
Cathode-ray tubes (ET031)	1,595	1,103	878	503	212	-291	-57.9
All other	70,711	69,119	76,926	85,452	95,567	10,115	11.8
TOTAL	86,076	83,108	93,018	101,667	114,562	12,896	12.7
U.S. IMPORTS:							
Increases:							
Crude petroleum (CH004)	10,490	13,630	17,186	22,364	29,195	6,831	30.5
Transportation equipment:	,	•	•	,	,	,	
Motor vehicles (ET009)	20.793	19.327	19.116	18,520	23,539	5,019	27.1
Certain motor-vehicle parts (ET010)	5,121	5,492	6,487	7,576	8,991	1,415	18.7
Electronic products:	-,	-,	-,	.,	-,	1,110	
Television receivers and video monitors (ET022)	5,165	5,532	7,743	10.029	14,386	4,357	43.4
Telephone and telegraph apparatus (ET017)	4.210	4.664	5,913	5.645	7,123	1,477	26.2
Household appliances, including commercial	.,	.,00.	0,0.0	0,0.0	.,0	.,	
applications (MM073)	1.993	2,092	2,322	2,739	3,862	1,123	41.0
Precious metals and non-numismatic	.,000	_,00_	_,=	_,. 00	0,00=	.,0	
coins (MM020)	448	530	732	927	2,023	1,097	118.3
Decreases:		000		·	_,0_0	.,	
Apparel (CH049)	7,732	7,200	6,944	6,322	5,530	-792	-12.5
Electronic products:	.,	7,200	0,011	0,022	0,000	.02	.2.0
Radio and television broadcasting							
equipment (ET023)	2,364	1,556	1,348	741	531	-210	-28.3
Cathode-ray tubes (ET031)	325	378	472	409	249	-160	-39.1
All other	75,479	76,797	86,696	93,944	101,626	7,682	8.2
		· · · · · · · · · · · · · · · · · · ·	·			· · · · · · · · · · · · · · · · · · ·	
TOTAL		137,199	154,959	169,216	197,056	27,839	16.5

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

for Mexico's automotive and major appliance transplant factories and that are not produced in Mexico.<sup>3</sup> Copper and insulated wire, steel and aluminum mill products, zinc and related articles, and aluminum steel bars used in the structural construction industry registered the largest increase in U.S. exports to Mexico. U.S. exports of copper and insulated wire rose by \$635 million (66 percent) to \$1.6 billion, whereas exports of zinc and related articles increased by \$200 million (79 percent) to \$454 million. According to industry sources, Mexico's imports of steel and aluminum products are expected to continue to grow in future years as a result of domestic industry consolidation and a shortage of product capacity for certain types of specialty steels and scrap metals.<sup>4</sup>

Exports of transportation equipment and parts to Mexico, the fourth-largest market for such U.S. exports, increased by \$2.4 billion (14 percent) to \$19.3 billion in 2006. U.S. exports of original equipment auto parts rose by \$970 million (18 percent) to \$6.4 billion, due to an increase in Mexican automobile production in 2006. For the first time, Mexico's assembly plants built more than two million cars and trucks in 2006, an increase of more than 400,000 units from 2005. Lured by lower labor costs and the need to be closer to major suppliers, hundreds of auto parts firms have relocated to Mexico from the United States and Canada and to a lesser extent from Asia and Europe in recent years.<sup>6</sup>

Rising Mexican discretionary income and a major shortfall in domestic production of corn due to prolonged drought conditions in Mexico led to a \$1.2 billion (14 percent) increase in U.S. agricultural product exports which reached \$11.0 billion in 2006. Leading U.S. agricultural product exports to Mexico were cereals (corn for human and animal consumption), increasing \$485 million (31 percent) to \$2 billion, and cattle and beef products, increasing \$231 million (36 percent) to \$873 million.<sup>7</sup>

### U.S. Imports

Leading U.S. imports from Mexico in 2006 were energy-related products, machinery, transportation equipment, chemicals and related products, and minerals and metals (table MEXICO-1). Mexico was the third-largest source of U.S. imports in 2006, exceeded only by Canada and China.

U.S. imports of energy-related products from Mexico, which largely consisted of petroleum products, increased by \$7.1 billion (28 percent) to \$32.1 billion in 2006. The increased value of U.S. imports from Mexico in 2006 continued to reflect higher energy prices more than increased import quantities. The quantity of U.S. imports of crude petroleum from Mexico increased slightly from 1.56 million barrels per day (b/d) in 2005 to 1.61 million b/d in 2006. U.S. imports of refined petroleum products from Mexico remained stable, increasing slightly from 106,000 b/d in 2005 to 120, 000 b/d in 2006. During 2006, Mexico was the third-largest source of U.S. crude petroleum imports by quantity.<sup>8</sup>

<sup>&</sup>lt;sup>3</sup> Haflich, "Mexican Steel: No Bull in the China Shop," 2.

<sup>&</sup>lt;sup>4</sup> Purchasing, "Mexico's Steel Consumption Seen Soaring," 40B10.

<sup>&</sup>lt;sup>5</sup> Chappell, "U.S. Parts Market Shrinks 5 Percent in 2006," 95–96.

<sup>&</sup>lt;sup>6</sup> Cisneros, "With Ongoing Woes In The U.S. Market, Mexico Angles to Provide a Competitive Platform," 6.

<sup>&</sup>lt;sup>7</sup> Montoya, "Mexican Balancing Act," 5.

<sup>&</sup>lt;sup>8</sup> According to official statistics of the U.S. Department of Energy, Mexico was the fifth largest oil producer in the world in 2005.

Mexico has benefitted significantly from increased demand for transportation equipment from the United States. U.S. imports of transportation equipment from Mexico, which consist largely of automobiles, increased by \$6.8 billion (20 percent) to \$41.3 billion in 2006. A key factor was rising production in Mexico of new car models by Ford, General Motors, and Nissan. Although the U.S. car market as a whole has not grown significantly in the last few years, the introduction of new models (e.g., Ford Focus, Nissan Sentra and Versa) produced in Mexico has contributed to the expansion of U.S. imports in this sector.<sup>9</sup>

U.S. imports of electronic products from Mexico, such as television sets, telephone equipment, and electrical capacitors and resistors, rose by \$6.9 billion (17 percent) to \$47 billion in 2006 as a result of escalating demand. Several manufacturers, including European (Philips Corp.) and Japanese (Sharp) producers of television and video monitors, as well as Chinese (Technology Comforts Life or TCL) telephone and flat-screen television set producers, continued to expand their production capacity in Mexico to meet rising consumer demand in the United States. A sizeable portion of U.S. trade with Mexico for these products continued to reflect cross-border integration of manufacturing and foreign-based manufacturers' foreign direct investment through subsidiaries and joint-ventures.

U.S. imports of minerals and metals from Mexico continued to rise in 2006 as a result of rising prices, increasing raw material shortfalls, and a robust U.S. economy. <sup>12</sup> U.S. imports of minerals and metals rose by \$1.9 billion (17 percent) to \$13.2 billion, led primarily by steel and copper.

In 2006, U.S. imports of chemicals from Mexico increased by \$918 million (17 percent) to \$6.3 billion. A boost in production capacity in inorganic plastic resins, specialty chemicals, and pigments by multinational firms based in Mexico led to a surge in U.S. imports. With lower labor costs and a relatively large supply of hydrocarbon feedstocks, firms such as Koch Industries (U.S.) have increased their production capacity in Mexico in anticipation of increasing U.S. and Asian demand for specialty chemicals (e.g., coatings for steel).<sup>13</sup>

U.S. imports of machinery and parts from Mexico increased by \$2.9 billion (14 percent) to \$23 billion in 2006. Factors that fueled the demand for machinery imported from Mexico included liberalization of NAFTA content requirement rules, which allowed more Mexican products to qualify for duty-free access to the U.S. market. <sup>14</sup> The leading machinery and

<sup>&</sup>lt;sup>9</sup> Amiel, "Mexico Country Monitor," 52.

<sup>&</sup>lt;sup>10</sup> Hall, "Sharp Aims to Rejuvenate Its TV Brand,"9.

<sup>&</sup>lt;sup>11</sup> Owen Media Partners, "2006 Complete Twin Plant Guide."

<sup>&</sup>lt;sup>12</sup> Data Monitor, "Grupo Mexico Company Profile."

<sup>&</sup>lt;sup>13</sup> Data Monitor, "Koch Enterprises, Inc, Profile."

<sup>&</sup>lt;sup>14</sup> Downer, "Machine Sales Booming In Maquiladora Area."

equipment products imported from Mexico in 2006 were electrical transformers, static converters, and inductors (\$1.7 billion), major household appliances (\$2.5 billion), air conditioning equipment and parts (\$2.5 billion), and household and commercial appliances (\$3.9 billion).

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# **Agricultural Products**

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#### Change in 2006 from 2005:

U.S. trade deficit: Increased by \$0.2 billion (4 percent) to \$4.5 billion U.S. exports: Increased by \$8.2 billion (12 percent) to \$76.9 billion U.S. imports: Increased by \$8.4 billion (12 percent) to \$81.5 billion

Gains in U.S. exports roughly equaled the rise in U.S. imports of agricultural products in 2006. The U.S. trade deficit in agricultural products stabilized in 2006 at \$4.5 billion. U.S. exports and U.S. imports of agricultural goods each rose by 12 percent in 2006. U.S. imports of ethanol, fish, sugar, beer and distilled spirits, vegetable oils, and fresh fruits and vegetables increased. U.S. exports of bulk commodities, such as grain, oilseeds, cattle and beef, cotton, and animal feed, accounted for most of the export rise. U.S. grain exports rose because of much higher world corn prices and favorable foreign markets. U.S. corn prices rose as stocks fell with buoyant U.S. demand for corn for ethanol production. U.S. imports rose, led by surging imports of ethanol for motor fuel.

The rise in U.S. imports of agricultural goods reflected much higher U.S. ethanol imports (mostly from Brazil), additional sugar imports from Mexico, and the steadily rising U.S. demand for shellfish, beer, and vegetable oil (canola, olive, and palm oils). The EU-25 and Canada supplied \$16.1 billion (20 percent) of U.S. agricultural imports in 2006, with Mexico, the third-leading supplier, with \$10.5 billion (13 percent). U.S. imports from the fifth-leading supplier, Brazil, rose by 54 percent (\$1.2 billion), owing to higher shipments of ethanol.

### U.S. Exports

U.S. exports of agricultural products rose by \$8.2 billion (12 percent) to \$76.9 billion in 2006. The four leading markets for U.S. agricultural exports in 2006 were Canada, Mexico, Japan, and China that together accounted for 54 percent of the total (table AG-1). Exports to China, Mexico, and Canada increased respectively by \$1.6 billion (29 percent), \$1.4 billion (14 percent), and \$1.4 billion (12 percent).

<sup>&</sup>lt;sup>1</sup> The United States trade surplus in agricultural products averaged \$5 billion annually from the late 1990s through 2003. The Department of Commerce data used by the Commission includes distilled spirits, fish, shellfish, and manufactured tobacco products among these agricultural products. The U.S. Department of Agriculture excludes these products from its coverage of agricultural products, and therefore reported a positive trade surplus of \$1.1 billion for 2006. USDA, ERS, *Outlook for U.S. Agricultural Trade*, February 15, 2007.

**TABLE AG-1** Agricultural products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dolla	ars			
U.S. exports of domestic merchandise: Canada Mexico China Japan Netherlands France Italy Brazil Korea Thailand All other	9,121 7,534 2,128 10,416 1,262 477 666 305 3,085 634 22,717	9,805 8,176 5,129 10,845 1,215 505 673 361 3,307 700 23,990	10,111 8,994 5,879 10,087 1,220 520 697 247 2,863 719 25,572	11,151 9,678 5,648 9,840 1,260 573 777 203 2,646 687 26,234	12,514 11,066 7,264 10,342 1,789 632 736 265 3,279 717 28,321	1,363 1,389 1,616 502 529 58 -41 62 633 30 2,087	12.2 14.4 28.6 5.1 42.0 10.2 -5.3 30.3 23.9 4.4 8.0
Total	58,345	64,706	66,908	68,698	76,924	8,227	12.0
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan África Central and Eastern Europe	6,963 7,194 2,658 12,133 2,630 22,636 933 227	7,280 7,520 2,933 13,052 2,688 26,484 1,100 231	7,519 7,816 3,116 14,249 2,904 26,035 1,408 362	7,615 7,948 3,335 15,157 3,158 25,594 1,508 402	8,224 8,584 3,727 17,502 3,661 29,015 1,349 317	609 636 392 2,345 503 3,421 -160 -85	8.0 8.0 11.8 15.5 15.9 -10.6 -21.2
U.S. imports of merchandise for consumption: Canada Mexico China Japan Netherlands France Italy Brazil Korea Thailand All other	12,953 6,378 1,896 461 1,876 2,260 2,150 1,397 254 1,914 24,051	12,975 7,220 2,470 482 2,023 2,614 2,401 1,815 266 2,121 26,511	14,130 8,189 2,925 503 2,079 2,723 2,640 1,995 2,916 2,116 29,417	14,963 9,323 3,365 540 2,044 2,935 2,927 2,246 330 2,291 32,086	16,128 10,498 4,303 573 2,293 3,277 3,173 3,451 343 2,742 34,675	1,166 1,176 938 33 249 343 246 1,204 13 451 2,590	7.8 12.6 27.9 6.1 12.2 11.7 8.4 53.6 3.8 19.7 8.1
Total	55,591	60,899	67,012	73,050	81,456	8,407	11.5
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	11,187 11,569 1,187 16,101 3,294 8,818 912 391	12,506 12,912 1,345 18,041 3,531 10,164 1,138 428	13,428 13,841 1,532 20,092 3,669 11,369 1,149 494	14,402 14,791 1,759 22,876 4,106 12,421 1,334 479	15,762 16,141 1,813 26,589 4,703 14,418 1,285 468	1,360 1,350 54 3,714 597 1,997 -48 -11	9.4 9.1 16.2 14.5 16.1 -3.6 -2.2

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**TABLE AG-1** Agricultural products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—continued

						Change, 200	6 from 2005
Item	2002 2003	2004	2005	2006	Absolut	е	Percent
			— Million dolla	rs —			
U.S. merchandise trade balance: Canada Mexico China Japan Netherlands France Italy Brazil Korea Thailand All other	-3,833 1,155 232 9,955 -614 -1,782 -1,484 -1,092 2,831 -1,280 -1,335	-3,170 956 2,659 10,362 -808 -2,109 -1,728 -1,454 3,041 -1,420 -2,522	-4,019 805 2,954 9,583 -859 -2,203 -1,942 -1,749 2,567 -1,397 -3,845	-3,811 355 2,283 9,301 -785 -2,361 -2,150 -2,043 2,316 -1,604 -5,852	-3,614 568 2,961 9,769 -504 -2,646 -2,437 -3,186 -2,025 -6,355	197 213 678 469 280 -284 -287 -1,143 620 -421 -503	5.2 60.0 29.7 5.0 35.7 -12.0 -13.4 -55.9 26.8 -26.2 -8.6
Total	2,754	3,807	-104	-4,352	-4,532	-180	-4.1
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-4,224 -4,375 1,471 -3,968 -664 13,818 21 -164	-5,225 -5,392 1,588 -4,989 -843 16,320 -38 -197	-5,909 -6,025 1,583 -5,843 -765 14,666 259 -132	-6,787 -6,844 1,576 -7,718 -948 13,173 175 -77	-7,538 -7,558 1,914 -9,087 -1,043 14,597 63 -151	-751 -714 338 -1,369 -94 1,424 -111 -75	-11.1 -10.4 21.4 -17.7 -9.9 10.8 -63.7 -97.6

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

The largest absolute trade shift among agricultural product exports in 2006 was the \$2.2 billion (20 percent) increase in U.S. exports of grain (cereals) (table AG-2). About 85 percent of the \$13.3 billion of U.S. grain exports in 2006 consisted of corn and wheat. U.S. corn exports in 2006 rose by 28 percent to 57 million metric tons, and the corn price (unit value) rose by 16 percent. U.S. wheat and rice exports in 2006 were down slightly from 2005. Buoyant demand for corn to produce ethanol tightened U.S. corn stocks.

Oilseeds (chiefly soybeans) registered the second-largest shift in U.S. exports in 2006, increasing by \$645 million (10 percent) over 2005. The tighter supply conditions in grain markets (explained above) also were reflected in a higher volume of soybeans sold abroad. The volume of U.S. soybean exports rose by 10 percent, but the price of soybean exports was unchanged. U.S. exports of animal feeds rose by \$530 million (12 percent) to \$5.1 billion in 2006; the volume of exports rose but feed prices were flat.

U.S. cattle and beef exports partly recovered in 2006 from the very low export levels in 2004–05, resulting from import bans after the bovine spongiform encephalopathy (BSE) cattle disease outbreak in the United States in 2003.<sup>2</sup> U.S. exports of cattle and beef rose by 59 percent to \$1.7 billion in 2006, but exports were still only about one-half of the \$3 billion exported annually during 2002–03.

### U.S. Imports

U.S. imports of agricultural products rose by \$8.4 billion (12 percent) to \$81.5 billion in 2006. The EU-25, with \$16.1 billion of shipments, became the leading U.S. supplier of agricultural products in 2006, slightly surpassing Canada, which also shipped \$16.1 billion of these products to the United States. U.S. imports from those two suppliers rose by \$1.4 billion (9 percent) and \$1.2 billion (8 percent), respectively. Mexico was the third-leading supplier to the United States, and its shipments of agricultural products to the United States increased by \$1.2 billion (13 percent) to \$10.5 billion in 2006. U.S. imports from China, the fourth-leading supplier, rose by 28 percent (\$938 million).

Ethanol (ethyl alcohol) registered the largest shift among U.S. imports of agricultural products in 2006, nearly all of which came from Brazil. Total ethanol imports rose by \$1.3 billion (375 percent) to \$1.6 billion. U.S. imports of all agricultural goods from Brazil rose by 54 percent (\$1.2 billion) to \$3.5 billion in 2006. The elimination in the United States of MTBE (methyl tertiary-butyl ether) as a vehicle fuel additive, the significant increase in retail gasoline prices, and the rising consumer demand for renewable fuels such as ethanol (in part related to the renewable fuels mandate in the Energy Policy Act of 2005) greatly boosted the demand for ethanol.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Vandeveer, "Livestock and Meat Trade: A Look at the Effects of BSE."

<sup>&</sup>lt;sup>3</sup> See Schnepf, Agriculture-Based Renewable Energy Production.

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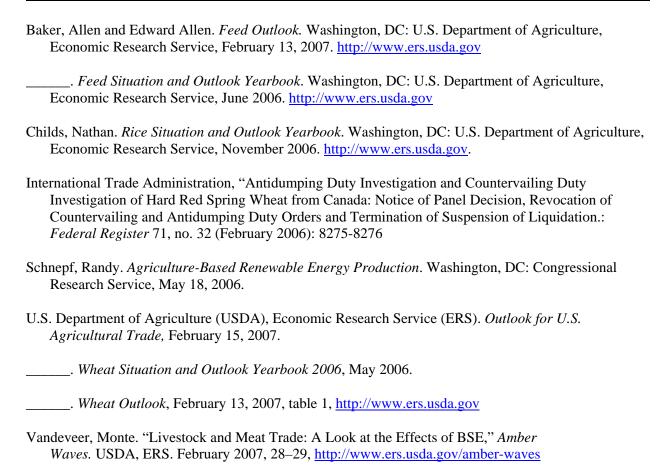
TABLE AG-2 Leading changes in U.S. exports and imports of agricultural products, 2002–06a

						Change, 200	6 from 2005
Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
			Million a	lollars			
U.S. EXPORTS:							
Increases:							
Cereals (AG030)	9,929	10,429	12,683	11,096	13,341	2,245	20.2
Oilseeds (AG032)	5,790	8,153	6,911	6,527	7,172	645	9.9
Cattle and beef (AG002)	2,952	3,501	605	1,041	1,655	614	59.0
Cotton, not carded or combed (AG049)	2,015	3,203	4,222	3,920	4,501	580	14.8
Animal feeds (AG013)	4,189	4,207	4,160	4,535	5,065	530	11.7
All other	33,470	35,212	38,326	41,578	45,191	3,613	8.7
TOTAL	58,345	64,706	66,908	68,698	76,924	8,227	12.0
U.S. IMPORTS:							
Increases:							
Ethyl alcohol for nonbeverage purposes (AG050)	170	191	259	337	1,600	1,263	374.9
Fresh or frozen fish (AG006)	3,158	3,354	3,520	3,963	4,555	593	15.0
Shellfish (AG009)	5,910	6,492	6,472	6,696	7,288	592	8.8
Sugar and other sweeteners (AG012)	961	1,035	979	1,323	1,868	544	41.1
Malt beverages (AG040)	2,566	2,664	2,752	3,081	3,563	482	15.6
Animal or vegetable fats and oils (AG033)	1,285	1,491	2,193	2,294	2,753	459	20.0
All other	41,541	45,671	50,838	55,357	59,831	4,474	8.1
TOTAL	55,591	60,899	67,012	73,050	81,456	8,407	11.5

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

# **Bibliography - Agricultural Products**



## Cereals (Food and Feed Grains)<sup>4</sup>

Change in 2006 from 2005:

U.S. trade surplus: Increased by \$1.9 billion (19 percent) to \$12.4 billion U.S. exports: Increased by \$2.2 billion (20 percent) to \$13.3 billion

U.S. imports: Increased by \$306 million (46 percent) to \$1.0 billion

Much higher world prices for corn and strong foreign markets increased the traditional U.S. surplus in grain trade in 2006. The U.S. trade surplus in grain rose by \$1.9 billion (19 percent) in 2006 to \$12.4 billion. The value of U.S. grain exports rose by \$2.2 billion (20 percent) to \$13.3 billion, whereas the volume rose at a slower rate (10 percent) to 89 million metric tons (MMT). Exports of corn (the principal grain traded) rose by 20 percent, while exports of wheat and rice, the other two leading U.S. grains, were lower or unchanged. U.S. imports of grain rose by 47 percent (\$306 million) as Canadian wheat and oats and Thai rice entered the U.S. market in larger volumes. U.S. corn prices rose as the amount of corn used in U.S. ethanol plants rose by 29 percent from 2005 to 2006.

### U.S. Exports

U.S. exports of grain rose by \$2.2 billion (20 percent) to \$13.3 billion in 2006. The five leading markets for U.S. grain exports – Japan, Mexico, Korea, Taiwan, and Egypt – accounted for 50 percent of this total (table AG-3). Among all U.S. markets, U.S. grain exports to Korea increased by \$517 million (121 percent) to \$943 million, while exports to Mexico and Japan followed with increases of \$485 million (31 percent) and \$467 million (19 percent), respectively, although both remained much larger export markets than Korea..

The increase in U.S. grain exports was largely driven by greater corn exports, which increased by \$2.2 billion (20 percent) to \$6.9 billion in 2006. About 53 percent of U.S. grain exports in 2006 consisted of corn, 32 percent of wheat, 10 percent of rice, and 5 percent of sorghum and other grains. U.S. corn exports in 2006 rose by 28 percent to 57 MMT, and the corn price (export unit value) rose by 16 percent to \$122 per metric ton. U.S. wheat exports fell by \$438 million (10 percent) to \$4.2 billion, and U.S. rice exports were unchanged at \$1.3 billion.

### U.S. Imports

U.S. imports of grain rose by \$0.3 billion (47 percent) to \$1.0 billion in 2006. Canada (mostly wheat and oats) and Thailand (rice) were the two leading U.S. grain suppliers, with \$622 million and \$184 million in U.S. imports, respectively, totaling 84 percent of all U.S. imports of grain.

<sup>&</sup>lt;sup>4</sup> Grains include rice, wheat, barley, corn, sorghum, oats, and rye. Milled grain products, such as wheat flour, are not included.

<sup>&</sup>lt;sup>5</sup> Allen Baker and Edward Allen, Feed Outlook, 1.

<sup>&</sup>lt;sup>6</sup> Export unit value (FAS basis).

**TABLE AG-3** Cereals (AG030): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			– million dolla	rs			
U.S. exports of domestic merchandise: Japan Mexico Canada Korea Taiwan Egypt Nigeria Colombia Iraq Philippines All other	2,281 1,491 474 292 654 637 263 281 0 278 3,280	2,381 1,514 459 279 682 782 271 281 19 262 3,500	2,697 1,695 349 793 812 768 390 308 51 233 4,587	2,428 1,553 345 426 749 553 513 355 312 304 3,557	2,895 2,038 355 943 747 685 457 456 435 3,984	467 485 11 517 -2 132 -56 101 123 39 426	19.2 31.2 3.0 121.4 -0.2 23.8 -10.9 28.4 39.5 13.0
Total	9,929	10,429	12,683	11,096	13,341	2,245	20.2
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	323 355 816 3,092 814 3,780 532 15	382 401 773 3,324 900 3,852 626 30	327 336 955 3,671 1,049 5,320 776 69	334 339 1,270 3,500 1,090 4,185 921 3	249 256 1,574 4,335 1,315 5,322 776 2	-84 -84 304 836 225 1,137 -145 ( <sup>b</sup> )	-25.3 -24.6 24.0 23.9 20.6 27.2 -15.8 -11.1
U.S. imports of merchandise for consumption: Japan Mexico Canada Korea Taiwan Egypt Nigeria Colombia Irag Philippines All other	(b) 470 (b) (b) (b) (b) (c) 260	(b) 88 338 (b) (b) (b) 0 (c) 298	(b) 11 399 (b) (b) (b) (b) (c) 289	(b) 7 389 (b) (b) (b) 0 0 0 (c) 260	1 14 622 (b) 10 0 (b) 316	1 7 233 (°) 10 0 (°) 0 (°) 56	256.0 89.7 60.0 -6.8 -2.9 6,369.0 0.0 (°) 0.0 -71.9 21.4
Total	735	646	699	657	963	306	46.5
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	101 101 1 6 (b) 144 (b)	90 91 1 14 ( <sup>b</sup> ) 201 ( <sup>b</sup> )	45 45 1 23 ( <sup>b</sup> ) 231 ( <sup>b</sup> )	47 47 2 9 (b) 209	13 14 2 23 (b) 291 (b)	-34 -34 (°) 14 (°) 83 (°)	-71.9 -71.4 5.5 145.6 25.1 39.7 -83.1 -47.6

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TABLE AG-3 Cereals (AG030): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002-06a-Continued

						Change, 200	6 from 2005
Item	2002 2003	2004	2005	2006	Absolut	e	Percent
			<ul><li>million dollars</li></ul>				
U.S. merchandise trade balance: Japan Mexico Canada Korea Taiwan Egypt Nigeria Colombia Iraq Philippines All other	2,281 1,487 4 292 653 637 263 281 0 278 3,019	2,380 1,506 121 279 682 782 271 281 19 262 3,201	2,697 1,684 -49 793 812 768 390 308 51 233 4,298	2,428 1,546 -44 426 749 553 513 355 312 304 3,297	2,894 2,025 -266 943 747 675 457 456 435 343 3,668	467 479 -223 517 -2 122 -56 101 123 39 371	19.2 31.0 -510.4 121.4 -0.2 22.1 -10.9 28.4 39.5 13.0 11.2
Total	9,194	9,784	11,984	10,439	12,378	1,939	18.6
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	222 254 815 3,086 814 3,636 532 15	292 310 773 3,310 900 3,650 626 29	283 291 955 3,648 1,048 5,089 776 68	287 292 1,268 3,490 1,090 3,977 921	236 242 1,572 4,312 1,314 5,031 776	-51 -50 304 822 225 1,054 -145 (°)	-17.7 -17.0 24.0 23.6 20.6 26.5 -15.7

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export. <sup>b</sup>Less than \$500,000. <sup>c</sup>Not meaningful for purposes of comparison.

U.S. imports of wheat from Canada rose by 81 percent to \$304 million; factors contributing to this increase include a result of the elimination of U.S. antidumping and countervailing duties on Canadian hard red spring wheat in 2005, lower U.S. production of wheat in 2005-06, and a higher U.S. wheat price. U.S. imports of oats rose by 54 percent to \$259 million as U.S. oat production continued its long term decline, and the price of oats surged in 2006, led by higher corn prices. U.S. oat production had declined since the early 1990s, due to downward trending of oat prices and a shift of land to corn production.

U.S. imports of rice from Thailand rose by \$34 million (23 percent) in 2006 to \$184 million; the U.S. market for aromatic (Thai jasmine) rice has increased steadily each year because of increased Asian immigration to the United States as well as a shift in U.S. food preferences toward Thai cuisine. U.S. imports of rice from all four leading suppliers (Thailand, India, China, and Pakistan) rose \$100 million (46 percent) to \$318 million in 2006. U.S. rice imports reached a record high in 2006, and the import penetration ratio amounted to 15 percent of domestic rice consumption in marketing year 2006–07.

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<sup>&</sup>lt;sup>7</sup> International Trade Association, "Investigation of Hard Red Spring Wheat from Canada," 8275-8276.

<sup>&</sup>lt;sup>8</sup> USDA, ERS, Wheat Situation and Outlook Yearbook 2006, 13–15; and USDA, ERS, Wheat Outlook, table 1.

<sup>&</sup>lt;sup>9</sup> Baker and Allen, Feed Situation and Outlook Yearbook, 15.

<sup>&</sup>lt;sup>10</sup> Childs, Rice Situation and Outlook Yearbook, table 1.

<sup>11</sup> Ibid.

TABLE AG-4 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002-06a—continued

USITC						<u>c</u>	hange, 2006	from 2005
codeb	Industry/commodity group	2002 2003	2004	2005	2006	Absolute		Percent
				Million	dollars ———			
AG001	Certain miscellaneous animals and meats:							
	Exports	1,460	1,778	1,460	1,821	2,055	234	12.8
	Imports	1,510	1,683	1,972	2,128	2,234	106	5.0
	Trade balance	-50	96	-512	-307	-179	128	41.6
AG002	Cattle and beef:							
	Exports	2,952	3,501	605	1,041	1,655	614	59.0
	Imports	4,038	3,302	3,909	4,410	4,443	33	0.7
	Trade balance	-1,086	200	-3,304	-3,369	-2,788	581	17.2
AG003	Swine and pork:							
	Exports	1,286	1,330	1,866	2,246	2,422	176	7.8
	Imports	1,026	1,143	1,335	1,314	1,205	-109	-8.3
	Trade balance	260	187	531	931	1,216	285	30.6
AG004	Sheep and meat of sheep:							
	Exports	26	17	14	17	30	13	80.0
	Imports	275	339	400	462	425	-37	-8.0
	Trade balance	-249	-321	-386	-446	-395	51	11.3
AG005	Poultry:							
	Exports	1,817	2,022	2,280	2,795	2,588	-206	-7.4
	Imports	111	126	169	169	194	24	14.4
	Trade balance	1,705	1,896	2,112	2,625	2,395	-231	-8.8
AG006	Fresh or frozen fish:	.,	1,000	_,	_,	_,		
	Exports	1.947	2,008	2,357	2,602	2,672	70	2.7
	Imports	3,158	3,354	3,520	3,963	4,555	593	15.0
	Trade balance	-1.211	-1,346	-1,162	-1,361	-1,884	-523	-38.4
AG007	Canned fish:	.,	1,010	.,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,001		
	Exports	181	185	214	223	224	1	0.5
	Imports	664	777	843	889	953	64	7.2
	Trade balance	-482	-592	-629	-666	-729	-63	-9.4
AG008	Cured and other fish:	.02	302	0_0		0		<b>.</b>
	Exports	159	161	164	170	181	10	6.1
	Imports	300	307	333	371	382	11	2.9
	Trade balance	-141	-146	-168	-201	-201	(°)	-0.2
AG009	Shellfish:		0	.00	20.	_0.	( )	5.2
	Exports	737	761	798	883	961	78	8.9
	Imports	5,910	6,492	6,472	6,696	7,288	592	8.8
	The state of the s	•	•	•				-8.8
	Trade balance	-5,172	-5,731	-5,674	-5,813	-6,327	-513	

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TABLE AG-4 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002-06a—continued

USITC						<u>c</u>	hange, 2006	from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Absolute		Percent
				Million o	dollars ——			
AG010	Dairy produce:							
	Exports	618	679	1,066	1,195	1,387	193	16.1
	Imports	1,488	1,654	1,911	2,102	2,018	-84	-4.0
	Trade balance	-870	-976	-845	-907	-630	277	30.5
AG011	Eggs:							
	Exports	155	164	196	227	235	8	3.4
	Imports	28	22	33	21	31	9	44.0
	Trade balance	127	142	163	205	204	-2	-0.8
AG012	Sugar and other sweeteners:							
	Exports	365	391	435	538	754	216	40.1
	Imports	961	1,035	979	1,323	1,868	544	41.1
	Trade balance	-596	-645	-543	-785	-1,114	-328	-41.8
AG012A	Sugar:							
	Exports	74	61	86	122	188	66	54.2
	Imports	569	592	585	908	1,351	443	48.8
	Trade balance	-495	-531	-499	-786	-1,164	-377	-48.0
AG012B	High fructose corn sweetener:							
	Exports	63	76	69	78	146	68	86.9
	Imports	34	42	43	41	48	7	15.9
	Trade balance	29	34	25	37	99	62	166.1
AG013	Animal feeds:							
	Exports	4,189	4,207	4,160	4,535	5,065	530	11.7
	Imports	670	705	873	789	905	116	14.7
	Trade balance	3,518	3,502	3,288	3,746	4,160	415	11.1
AG014	Live plants:							
	Exports	113	128	148	170	188	18	10.7
	Imports	503	539	569	558	564	6	1.2
	Trade balance	-389	-411	-421	-388	-376	12	3.0
AG015	Seeds:							
	Exports	892	859	1,066	940	893	-47	-5.0
	Imports	431	452	460	525	624	99	18.8
	Trade balance	461	407	606	415	269	-146	-35.2
AG016	Cut flowers:	_	_					
	Exports	36	33	27	25	27	2	7.8
	Imports	541	611	706	709	768	59	8.3
	Trade balance	-505	-578	-679	-684	-741	-57	-8.3

TABLE AG-4 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002-06a—continued

USITC						(	Change, 2006	from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Absolute		Percen
				Million	dollars ———			
AG017	Miscellaneous vegetable substances:							
	Exports	476	510	558	554	602	47	8.6
	Imports	760	880	921	1,038	1,193	155	14.9
	Trade balance	-284	-369	-363	-484	-592	-108	-22.2
4G018	Fresh, chilled, or frozen vegetables:							
	Exports	1,353	1,408	1,449	1,621	1,766	146	9.0
	Imports	2,758	3,250	3,650	3,871	4,310	440	11.4
	Trade balance	-1,405	-1,842	-2,201	-2,250	-2,544	-294	-13.
AG019	Prepared or preserved vegetables, mushrooms, and olives:							
	Exports	1,365	1,326	1,417	1,548	1,708	160	10.3
	Imports	1,574	1,779	2,044	2,147	2,290	144	6.7
	Trade balance	-209	-453	-626	-599	-583	16	2.7
AG020	Edible nuts:							
	Exports	1,542	1,785	2,242	2,925	3,092	167	5.
	Imports	701	775	1,079	1,121	1,101	-19	-1.1
	Trade balance	841	1,010	1,163	1,804	1,990	186	10.3
4G021	Tropical fruit:							
	Exports	46	54	63	71	80	8	11.8
	Imports	1,705	1,754	1,772	2,035	2,219	184	9.0
	Trade balance	-1,659	-1,700	-1,709	-1,964	-2,140	-176	-9.0
4G022	Citrus fruit:							
	Exports	636	679	691	664	744	80	12.0
	Imports	325	437	444	519	602	83	16.0
	Trade balance	311	242	248	145	142	-3	-2.4
AG023	Deciduous fruit:							
	Exports	788	810	813	995	1,065	71	7.1
	Imports	294	306	358	324	393	69	21.2
	Trade balance	494	504	455	670	672	2	0.3
4G024	Other fresh fruit:							
	Exports	708	775	854	1,021	1,052	30	3.0
	Imports	1,183	1,200	1,396	1,684	1,826	142	8.4
	Trade balance	-476	-425	-542	-663	-774	-111	-16.8
AG025	Dried fruit other than tropical:							
	Exports	338	366	394	382	418	36	9.5
	Imports	90	133	142	150	153	3	1.8
	Trade balance	248	234	251	232	266	34	14.5

USITC							Change, 2006	from 2005
code	Industry/commodity group	2002 2003	2004	2005	2006	Absolute		Percent
				Million	dollars ———			
AG026	Frozen fruit:							
	Exports	80	81	84	90	110	20	22.8
	Imports	152	202	225	286	356	70	24.6
	Trade balance	-72	-122	-141	-196	-246	-50	-25.5
AG027	Prepared or preserved fruit:							
	Exports	184	203	237	235	288	52	22.3
	Imports	622	688	768	858	985	127	14.7
	Trade balance	-437	-485	-531	-623	-697	-74	-11.9
AG028	Coffee and tea:							
	Exports	297	348	349	450	559	109	24.1
	Imports	1,942	2,228	2,560	3,309	3,694	385	11.6
	Trade balance	-1,645	-1,880	-2,211	-2,859	-3,135	-276	-9.7
AG029	Spices:							
	Exports	70	76	82	80	86	6	7.5
	Imports	549	682	625	503	543	40	8.0
	Trade balance	-480	-606	-543	-423	-457	-34	-8.1
AG030	Cereals:							
	Exports	9,929	10,429	12,683	11,096	13,341	2,245	20.2
	Imports	735	646	699	657	963	306	46.5
	Trade balance	9,194	9,784	11,984	10,439	12,378	1,939	18.6
AG031	Milled grains, malts, and starches:							
	Exports	594	599	610	668	858	190	28.5
	Imports	379	441	518	490	550	60	12.2
	Trade balance	215	159	92	177	308	131	73.7
AG032	Oilseeds:							
	Exports	5,790	8,153	6,911	6,527	7,172	645	9.9
	Imports	191	208	335	335	387	51	15.3
	Trade balance	5,599	7,945	6,576	6,192	6,786	594	9.6
AG033	Animal or vegetable fats and oils:							
	Exports	1,917	1,986	1,965	1,808	2,010	202	11.2
	Imports	1,285	1,491	2,193	2,294	2,753	459	20.0
	Trade balance	632	495	-228	-486	-743	-257	-52.8
AG034	Pasta, cereals, and other bakery goods:							
	Exports	1,184	1,287	1,381	1,575	1,771	197	12.5
	Imports	2,191	2,501	2,719	3,016	3,335	319	10.6
	Trade balance	-1,008	-1,214	-1,338	-1,442	-1,563	-122	-8.4

TABLE AG-4 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002-06a—continued

USITC						9	Change, 2006	from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Absolute		Percent
				Million	dollars ——			
AG035	Sauces, condiments, and soups:							
	Exports	761	813	842	869	947	78	8.9
	Imports	670	663	743	790	850	60	7.6
	Trade balance	91	150	99	80	97	18	22.0
AG036	Infant formulas, malt extracts, and other edible							
	preparations:							
	Exports	2,582	2,546	2,868	3,149	3,422	273	8.7
	Imports	795	920	1,211	1,345	1,528	182	13.6
	Trade balance	1,787	1,626	1,657	1,804	1,894	90	5.0
AG037	Cocoa, chocolate, and confectionery:							
	Exports	817	914	946	991	1,066	75	7.5
	Imports	2,662	3,535	3,627	3,927	3,846	-81	-2.1
	Trade balance	-1,846	-2,621	-2,681	-2,936	-2,781	155	5.3
AG038	Fruit and vegetable juices:							
	Exports	682	674	660	731	862	131	17.9
	Imports	675	793	835	1,029	1,145	116	11.3
	Trade balance	7	-119	-176	-298	-283	15	4.9
AG039	Nonalcoholic beverages, excluding fruit and vegetable juices:							
	Exports	334	397	407	478	554	76	15.8
	Imports	823	966	1,158	1,329	1,769	439	33.1
	Trade balance	-489	-569	-752	-851	-1,214	-364	-42.8
AG040	Malt beverages:	.00	000	.02	001	.,	00.	.2.0
	Exports	171	172	164	201	209	8	4.1
	Imports		2,664	2,752	3,081	3,563	482	15.6
	Trade balance		-2,492	-2,588	-2,879	-3,353	-474	-16.5
AG041	Wine and certain other fermented beverages:	2,000	2, 102	2,000	2,010	0,000		10.0
7.0011	Exports	541	634	793	658	842	184	27.9
	Imports	2.740	3,307	3,445	3,797	4,176	379	10.0
	Trade balance	-2,199	-2,673	-2,652	-3,139	-3,333	-195	-6.2
AG042	Distilled spirits:	2,100	2,070	2,002	0,100	0,000	100	0.2
70042	Exports	555	592	727	763	893	130	17.0
	Imports	3,111	3,453	3,734	4,106	4,527	421	10.2
	Trade balance	-2,556	-2,861	-3,007	-3,343	-3,634	-291	-8.7
AG043	Unmanufactured tobacco:	-2,000	-2,001	-3,007	-0,0 <del>-1</del> 0	-3,00-	-231	-0.7
/100 <del>1</del> 3	Exports	1,050	1,035	1,044	983	1,141	158	16.1
	Imports	716	757	702	652	751	99	15.2
	Trade balance	334	278	342	332	390	59	17.7
	Trade palatice	JJ4	210	342	332	390	59	17.7

TABLE AG-4 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002-06a—continued

USITC							Change, 2006	from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Absolute		Percen
				— Million o	dollars ——			
AG044	Cigars and certain other manufactured tobacco:							
	Exports	485	442	272	98	107	9	8.
	Imports	299	307	333	346	392	45	13.
	Trade balance	185	135	-62	-248	-285	-37	-14.
AG045	Cigarettes:							
	Exports	1,463	1,403	1,294	1,200	1,214	14	1.
	Imports	230	234	231	194	190	-4	-1.
	Trade balance	1,234	1,169	1,063	1,006	1,024	18	1.
AG046	Hides, skins, and leather:							
	Exports	2,390	2,492	2,730	2,580	2,755	175	6.
	Imports	935	817	886	896	841	-56	-6.
	Trade balance	1,456	1,675	1,844	1,684	1,915	231	13.
AG047	Furskins:							
	Exports	173	158	191	195	246	51	26.
	Imports	87	87	106	97	116	19	19.
	Trade balance	85	70	85	98	130	32	32.
AG048	Wool and other animal hair:							
	Exports	26	29	27	34	31	-3	-8.
	Imports	42	38	45	41	41	(°)	0.9
	Trade balance	-16	-10	-18	-7	-10	-3	-48.
AG049	Cotton, not carded or combed:							
	Exports	2,015	3,203	4,222	3,920	4,501	580	14.
	Imports	20	26	16	14	13	-1	-5.
	Trade balance	1,995	3,177	4,206	3,906	4,487	581	14.
AG050	Ethyl alcohol for nonbeverage purposes:							
	Exports	71	103	81	109	76	-33	-30.
	Imports	170	191	259	337	1,600	1,263	374.
	Trade balance	-99	-88	-179	-228	-1,524	-1,296	-567.

Note.—Calculations based on unrounded data.

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<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes

<sup>&</sup>lt;sup>c</sup>Less than \$500,000.

TABLE AG-5 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002–06a

USITC							Change, 20	06 from 2005
	Industry/commodity group	2002 2003	2004	2005	2006	Abso	lute	Percent
				Million	n dollars ——			
AG002	Cattle and beef:							
	Number of establishments		1,037,570	1,014,549	990,373	985,510	974,410	-1.1
	Employees (thousands)		1,109.0	1,092.0	1,070.0	1,052.0	1,044.0	-0.8
	Capacity utilization (percent)		(a)	(a)	(a)	( <sup>a</sup> )	(a)	(a)
	U.S. production (million dollars)		48,762	58,485	53,727	56,161	59,961	6.8
	U.S. exports (million dollars)		2,952	3,501	605	1,041	1,655	59.0
	U.S. imports (million dollars)		4,038	3,302	3,909	4,410	4,443	0.7
	Apparent U.S. consumption (million dollars)		49,848	58,285	57,031	59,530	62,749	5.4
	Trade balance (million dollars)		-1,086	200	-3,304	-3,369	-2,788	17.2
	Ratio of imports to consumption (percent)		8.1	5.7	6.9	7.4	7.1	-4.4
	Ratio of exports to production (percent)		6.1	6.0	1.1	1.9	2.8	48.9
AG003	Swine and pork:							
	Number of establishments		76,933	74,382	72,403	70,026	68,290	-2.5
	Employees (thousands)		202.0	207.0	205.0	200.0	196.0	-2.0
	Capacity utilization (percent)		(a)	(a)	(a)	( <sup>a</sup> )	(a)	(a)
	U.S. production (million dollars)		19,802	21,422	26,128	25,836	25,560	-1.1
	U.S. exports (million dollars)		1,286	1,330	1,866	2,246	2,422	7.8
	U.S. imports (million dollars)		1,026	1,143	1,335	1,314	1,205	-8.3
	Apparent U.S. consumption (million dollars)		19,542	21,235	25,597	24,905	24,344	-2.3
	Trade balance (million dollars)		260	187	531	931	1,216	30.6
	Ratio of imports to consumption (percent)		5.3	5.4	5.2	5.3	5.0	-6.2
	Ratio of exports to production (percent)		6.5	6.2	7.1	8.7	9.5	9.0
AG004	Sheep and meat of sheep:							
	Number of establishments		68,150	67,720	67,660	68,776	69,890	1.6
	Employees (thousands)		65.0	64.0	68.0	69.0	69.0	0.0
	Capacity utilization (percent)		(a)	(a)	(a)	( <sup>a</sup> )	(a)	(a)
	U.S. shipments (million dollars)		337	377	374	402	405	0.7
	U.S. exports (million dollars)		26	17	14	17	30	80.0
	U.S. imports (million dollars)		275	339	400	462	425	-8.0
	Apparent U.S. consumption (million dollars)		586	698	760	848	800	-5.6
	Trade balance (million dollars)		-249	-321	-386	-446	-395	11.3
	Ratio of imports to consumption (percent)		47.0	48.5	52.6	54.6	53.2	-2.6
	Ratio of exports to shipments (percent)		7.8	4.6	3.7	4.2	7.4	78.6
AG005	Poultry:							
	Number of establishments		415	410	408	407	415	2.0
	Employees (thousands)		170.0	168.0	167.0	166.0	166.0	0.0
	Capacity utilization (percent)	•	17,700	17.900	18.000	18,100	18.200	( <sup>b</sup> ) 0.6
	U.S. exports (million dollars)		1,817	2,022	2,280	2,795	2,588	-7.4
	U.S. imports (million dollars)		111	126	169	169	194	14.4
	Apparent U.S. consumption (million dollars)		15,995	16,004	15,888	15,475	15,805	2.1
	Trade balance (million dollars)		1,705	1,896	2,112	2,625	2,395	-8.8
	Datic of imports to concumption (paraont)		0.7	0.8	1.1	1.1	1.2	12.0
	Ratio of imports to consumption (percent)		10.3	11.3	12.7	15.4	14.2	-7.9

TABLE AG-5 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002–06a—continued

USITC							Change, 20	06 from 2005		
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Absol	ute	Percen		
		Million dollars								
AG006	Fresh or frozen fish:									
	Number of establishments		1,400	1,400	1,420	1,350	1,400	3.7		
	Employees (thousands)		40.0	40.0	41.0	37.0	38.0	2.7		
	Capacity utilization (percent)		(b)	(b)	(b)	(b)	(b)	(b)		
	U.S. shipments (million dollars)		5,560	5,600	5,650	5,100	5,350	4.9		
	U.S. exports (million dollars)		1,947	2,008	2,357	2,602	2,672	2.7		
	U.S. imports (million dollars)		3,158	3,354	3,520	3,963	4,555	15.0		
	Apparent U.S. consumption (million dollars)		6,771	6,946	6,812	6,461	7,234	12.0		
	Trade balance (million dollars)		-1,211	-1,346	-1,162	-1,361	-1,884	-38.4		
	Ratio of imports to consumption (percent)		46.6	48.3	51.7	61.3	63.0	2.7		
	Ratio of exports to shipments (percent)		35.0	35.9	41.7	51.0	49.9	-2.1		
AG007	Canned fish:									
	Number of establishments		30	30	29	26	25	-3.8		
	Employees (thousands)		5.0	5.0	5.0	4.0	4.0	0.0		
	Capacity utilization (percent)		75	80	80	80	80	0.0		
	U.S. shipments (million dollars)		1,016	1,200	1,150	1,100	1,200	9.1		
	U.S. exports (million dollars)		181	185	214	223	224	0.5		
	U.S. imports (million dollars)		664	777	843	889	953	7.2		
	Apparent U.S. consumption (million dollars)		1,498	1,792	1,779	1,766	1,929	9.2		
	Trade balance (million dollars)		-482	-592	-629	-666	-729	-9.4		
	Ratio of imports to consumption (percent)		44.3	43.3	47.4	50.3	49.4	-1.9		
	Ratio of exports to shipments (percent)		17.8	15.4	18.6	20.3	18.7	-7.9		
AG008	Cured and other fish:									
	Number of establishments		120	120	120	120	110	-8.3		
	Employees (thousands)		10.0	10.0	10.0	10.0	10.0	0.0		
	Capacity utilization (percent)		(b)	(b)	(b)	(b)	( <sup>b</sup> )	(b)		
	U.S. shipments (million dollars)		143	150	150	150	150	0.0		
	U.S. exports (million dollars)		159	161	164	170	181	6.1		
	U.S. imports (million dollars)		300	307	333	371	382	2.9		
	Apparent U.S. consumption (million dollars)		284	296	318	351	351	0.1		
	Trade balance (million dollars)		-141	-146	-168	-201	-201	-0.2		
	Ratio of imports to consumption (percent)		°105.7	°103.6	°104.5	°105.8	°108.8	2.8		
	Ratio of exports to shipments (percent)		°111.3	°107.1	°109.5	°113.6	°120.5	6.1		
AG009	Shellfish:									
	Number of establishments		690	690	670	650	650	0.0		
	Employees (thousands)		56.0	56.0	54.0	50.0	50.0	0.0		
	Capacity utilization (percent)		(a)	(a)	(a)	(a)	(a)	(a)		
	U.S. production (million dollars)		1,839	1,7ŠÓ	1,700	1,600	1,700	6.3		
	U.S. exports (million dollars)		737	761	798	883	961	8.9		
	U.S. imports (million dollars)		5,910	6,492	6,472	6,696	7,288	8.8		
	Apparent U.S. consumption (million dollars)		7,011	7,481	7,374	7,413	8,027	8.3		
	Trade balance (million dollars)		-5,172	-5,731	-5,674	-5,813	-6,327	-8.8		
	Ratio of imports to consumption (percent)		84.3	86.8	87.8	90.3	90.8	0.5		
	Ratio of exports to production (percent)		40.1	43.5	46.9	55.2	56.5	2.5		

TABLE AG-5 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002–06a—continued

USITC							Change, 20	06 from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Abso	lute	Percen
				Million	n dollars ——			
AG010	Dairy produce:		400.000	404.000	400.000	440.000	440.000	0.0
	Number of establishments		122,000	121,000	120,000	119,000	118,000	-0.8
	Employees (thousands)		590.0	580.0	575.0	570.0	565.0	-0.9
	Capacity utilization (percent)		(b)	(b)	(b)	(b)	(b)	(b)
	U.S. production (million dollars)		67,000	69,000	69,500	70,000	70,500	0.7
	U.S. exports (million dollars)		618	679	1,066	1,195	1,387	16.1
	U.S. imports (million dollars)		1,488	1,654	1,911	2,102	2,018	-4.0
	Apparent U.S. consumption (million dollars)		67,870 -870	69,976 -976	70,345 -845	70,907 -907	71,130 -630	0.3 30.5
	Trade balance (million dollars)		-670 2.2	-976 2.4	-645 2.7	3.0	-630 2.8	-4.3
	' ' ' ' '		0.9	1.0	2. <i>1</i> 1.5	3.0 1.7	2.0	- <del>4</del> .3 15.3
AG011	Ratio of exports to production (percent)	• •	0.9	1.0	1.5	1.7	2.0	15.3
AGUII	Eggs: Number of establishments		64	62	60	60	60	0.0
	Employees (thousands)		8.0	7.0	7.0	7.0	7.0	0.0
	Capacity utilization (percent)		( <sup>b</sup> )	7.0 ( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	(b)
	U.S. production (million dollars)		6,900	6,950	7,000	7,000	7,200	2.9
	U.S. exports (million dollars)	• •	155	164	7,000 196	227	235	3.4
	U.S. imports (million dollars)		28	22	33	21	31	44.0
	Apparent U.S. consumption (million dollars)		6,773	6,808	6,837	6,795	6,996	3.0
	Trade balance (million dollars)		127	142	163	205	204	-0.8
	Ratio of imports to consumption (percent)		0.4	0.3	0.5	0.3	0.4	39.9
	Ratio of imports to consumption (percent)		2.3	2.4	2.8	3.2	3.3	0.5
۸ <u>۵</u> 012۸	Sugar:	• •	2.3	2.4	2.0	3.2	3.3	0.0
AG0127	Number of establishments		70	70	87	87	87	0.0
	Employees (thousands)		17.0	15.0	15.0	14.0	14.0	0.0
	Capacity utilization (percent)		92	92	93	93	92	-1.1
	U.S. production (million dollars)		3.600	3,498	3,421	3,182	3,434	7.9
	U.S. exports (million dollars)		74	61	86	122	188	54.2
	U.S. imports (million dollars)		569	592	585	908	1,351	48.8
	Apparent U.S. consumption (million dollars)		4,095	4,029	3,920	3,968	4,598	15.9
	Trade balance (million dollars)		-495	-531	-499	-786	-1,164	-48.0
	Ratio of imports to consumption (percent)		13.9	14.7	14.9	22.9	29.4	28.5
	Ratio of exports to production (percent)		2.1	1.7	2.5	3.8	5.5	42.9
AG012E	B High fructose corn sweetener:							
	Number of establishments		22 11.0	30 9.0	22 4.0	22 4.0	22 4.0	0.0 0.0
	Employees (thousands)	• •	11.0 80	9.0 80	4.0 95	4.0 95	4.0 94	-1.1
	U.S. production (million dollars)		3,200	3,000	3,394	3,559	3.648	2.5
	U.S. exports (million dollars)		63	76	69	78	146	86.9
	U.S. imports (million dollars)		34	42	43	41	48	15.9
	Apparent U.S. consumption (million dollars)		3,171	2,966	3,369	3,522	3,549	0.8
	Trade balance (million dollars)		29 1.1	34 1.4	25 1.3	37 1.2	99 1.3	166.1 15.0
	Ratio of imports to consumption (percent)	• •	2.0	2.5	2.0	2.2	4.0	82.3

**TABLE AG-5** Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002–06a—continued

USITC							Change, 20	06 from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Absol	ute	Percent
				Million dollars				
AG013	Animal feeds:							
	Number of establishments		1,800	1,800	1,800	1,800	1,800	0.0
	Employees (thousands)		46.0	45.0	43.0	44.0	44.0	0.0
	Capacity utilization (percent)		73	71	71	72	72	0.0
	U.S. shipments (million dollars)		28,000	34,000	32,000	33,000	34,000	3.0
	U.S. exports (million dollars)		4,189	4,207	4,160	4,535	5,065	11.7
	U.S. imports (million dollars)		670	705	873	789	905	14.7
	Apparent U.S. consumption (million dollars)		24,482	30,498	28,712	29,254	29,840	2.0
	Trade balance (million dollars)		3,518	3,502	3,288	3,746	4,160	11.1
	Ratio of imports to consumption (percent)		2.7	2.3	3.0	2.7	3.0	12.4
	Ratio of exports to shipments (percent)		15.0	12.4	13.0	13.7	14.9	8.4
AG014	Live plants:							
	Number of establishments		30,000	29,500	29,500	29,500	29,000	-1.7
	Employees (thousands)		140.0	145.0	145.0	146.0	146.0	0.0
	Capacity utilization (percent)		( <sup>a</sup> )	(a)	(a)	( <sup>a</sup> )	( <sup>b</sup> )	(b)
	U.S. shipments (million dollars)		13,571	13,840	13,950	14,215	14,530	2.2
	U.S. exports (million dollars)		113	128	148	170	188	10.7
	U.S. imports (million dollars)		503	539	569	558	564	1.2
	Apparent U.S. consumption (million dollars)		13,960	14,251	14,371	14,603	14,906	2.1
	Trade balance (million dollars)		-389	-411	-421	-388	-376	3.0
	Ratio of imports to consumption (percent)		3.6	3.8	4.0	3.8	3.8	-0.9
				0.9	_	3.6 1.2		-0.9 8.3
A C O 1 E	Ratio of exports to shipments (percent)	•	0.8	0.9	1.1	1.2	1.3	0.3
AG015	Seeds:		40.500	40.500	40.500	40.500	40.500	0.0
	Number of establishments		12,500	12,500	12,500	12,500	12,500	0.0
	Employees (thousands)		(b)	(b)	(b)	(b)	(b)	(b)
	Capacity utilization (percent)		(a)	(a)	(a)	(a)	(b)	(b)
	U.S. production (million dollars)		7,200	7,200	7,200	7,250	7,250	0.0
	U.S. exports (million dollars)		892	859	1,066	940	893	-5.0
	U.S. imports (million dollars)		431	452	460	525	624	18.8
	Apparent U.S. consumption (million dollars)		6,739	6,793	6,594	6,835	6,981	2.1
	Trade balance (million dollars)		461	407	606	415	269	-35.2
	Ratio of imports to consumption (percent)		6.4	6.7	7.0	7.7	8.9	16.4
	Ratio of exports to production (percent)		12.4	11.9	14.8	13.0	12.3	-5.0
AG016	Cut flowers:							
	Number of establishments		1,800	1,600	1,400	1,300	1,300	0.0
	Employees (thousands)		26.0	25.0	24.0	23.0	23.0	0.0
	Capacity utilization (percent)		(a)	(a)	(a)	(a)	(b)	(b)
	U.S. shipments (million dollars)		46Ó	446	440	439	405	-7.7
	U.S. exports (million dollars)		_36	33	_27	_25	_27	7.8
	U.S. imports (million dollars)		541	611	706	709	768	8.3
	Apparent U.S. consumption (million dollars)		965	1,024	1,119	1,123	1,146	2.0
	Trade balance (million dollars)	•	-505 56.1	-578 50.7	-679	-684	-741 67.0	-8.3 6.1
	Ratio of imports to consumption (percent)		56.1	59.7	63.1	63.1	67.0	6.1
	Ratio of exports to shipments (percent)		7.9	7.5	6.1	5.7	6.6	16.9

**TABLE AG-5** Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002–06a—continued

USITC							Change, 20	06 from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Absol	ute	Percent
				Million	dollars ——			
AG017	Miscellaneous vegetable substances:		0.000	0.000	0.000	0.000	0.000	0.0
	Number of establishments		9,000	9,000	9,000	9,000	9,000	0.0
	Employees (thousands)		(3)	(3)	(3)	(3)	(b)	(b)
	Capacity utilization (percent)		(a)	(a)	(a)	(a)	(b)	
	U.S. production (million dollars)		900	900	900	900	900	0.0
	U.S. exports (million dollars)		476	510	558	554	602	8.6
	U.S. imports (million dollars)		760	880	921	1,038	1,193	14.9
	Apparent U.S. consumption (million dollars)		1,184	1,269	1,263	1,384	1,492	7.8
	Trade balance (million dollars)		-284	-369	-363	-484	-592	-22.2
	Ratio of imports to consumption (percent)		64.2	69.3	72.9	75.0	80.0	6.6
	Ratio of exports to production (percent)		52.9	56.7	62.0	61.6	66.8	8.6
AG018	Fresh, chilled, or frozen vegetables:							
	Number of establishments		29,516	29,451	29,028	29,212	28,178	-3.5
	Employees (thousands)		39.0	39.0	38.0	38.0	37.0	-2.6
	Capacity utilization (percent)		(a)	(a)	(a)	(a)	(a)	(a)
	U.S. production (million dollars)		4,600	4,550	4,500	4,450	4,705	5.7
	U.S. exports (million dollars)		1,353	1,408	1,449	1,621	1,766	9.0
	U.S. imports (million dollars)		2,758	3,250	3,650	3,871	4,310	11.4
	Apparent U.S. consumption (million dollars)		6,005	6,392	6,701	6,700	7,249	8.2
	Trade balance (million dollars)		-1,405	-1,842	-2,201	-2,250	-2,544	-13.1
	Ratio of imports to consumption (percent)		45.9	50.8	54.5	57.8	59.5	2.9
	Ratio of exports to production (percent)		29.4	30.9	32.2	36.4	37.5	3.1
AG019	Prepared or preserved vegetables, mushrooms, and	•		00.0	<b>0</b>		0.10	<b></b>
, .00.0	olives:							
	Number of establishments		1,608	1,551	1,575	1,572	1,545	-1.7
	Employees (thousands)		5.0	4.0	4.0	4.0	( <sup>b</sup> )	(b)
	Capacity utilization (percent)		85	86	87	87	91	4.6
	U.S. production (million dollars)		8,300	8,350	8,400	8,550	8.990	5.1
	U.S. exports (million dollars)		1,365	1,326	1,417	1,548	1,708	10.3
	U.S. imports (million dollars)		1,574	1,779	2,044	2,147	2,290	6.7
	Apparent U.S. consumption (million dollars)		8,509	8,803	9,026	9,149	9,573	4.6
			-209	-453	9,026 -626	-599	9,573 -583	2.7
	Trade balance (million dollars)							2.7
	Ratio of imports to consumption (percent)		18.5	20.2	22.6	23.5	23.9	
4.0000	Ratio of exports to production (percent)	•	16.4	15.9	16.9	18.1	19.0	4.9
AG020	Edible nuts:		07.000	07.000	07.500	07.550	07.550	0.0
	Number of establishments		37,000	37,000	37,500	37,550	37,550	0.0
	Employees (thousands)		380.0	380.0	382.0	383.0	383.0	0.0
	Capacity utilization (percent)		(a)	(a)	(a)	(a)	( <sup>b</sup> )	(b)
	U.S. production (million dollars)		2,513	2,989	4,281	5,019	3,642	-27.4
	U.S. exports (million dollars)		1,542	1,785	2,242	2,925	3,092	5.7
	U.S. imports (million dollars)		701	775	1,079	1,121	1,101	-1.7
	Apparent U.S. consumption (million dollars)		1,672	1,979	3,118	3,215	1,652	-48.6
	Trade balance (million dollars)		841	1,010	1,163	1,804	1,990	10.3
	Ratio of imports to consumption (percent)	_	41.9	39.2	34.6	34.9	66.7	91.3
	Ratio of exports to production (percent)					0		

TABLE AG-5 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002–06a—continued

USITC							Change, 20	06 from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Absol	ute	Percen
				Million	dollars ——			
AG021	Tropical fruit:							
	Number of establishments		7,400	7,400	7,400	7,400	7,355	-0.6
	Employees (thousands)		20.0	20.0	20.0	20.0	20.0	0.0
	Capacity utilization (percent)		( <sup>a</sup> )	(a)	(a)	(a)	(b)	(b)
	U.S. production (million dollars)		560	560	544	420	460	9.5
	U.S. exports (million dollars)		46	54	63	71	80	11.8
	U.S. imports (million dollars)		1,705	1,754	1,772	2,035	2,219	9.0
	Apparent U.S. consumption (million dollars)		2,219	2,260	2,253	2,384	2,600	9.1
	Trade balance (million dollars)		-1,659	-1,700	-1,709	-1,964	-2,140	-9.0
	Ratio of imports to consumption (percent)		76.8	77.6	78.6	85.4	85.4	-0.0
	Ratio of exports to production (percent)		8.2	9.7	11.5	17.0	17.3	2.0
AG022	Citrus fruit:							
	Number of establishments		17,727	17,727	17,727	17,000	16,000	-5.9
	Employees (thousands)		90.0	89.0	89.0	87.0	83.0	-4.6
	Capacity utilization (percent)		(a)	(a)	(a)	(a)	(a)	(a)
	U.S. production (million dollars)		2,605	2,297	2,352	2,389	2,679	12.1
	U.S. exports (million dollars)		636	679	691	664	744	12.0
	U.S. imports (million dollars)		325	437	444	519	602	16.0
	Apparent U.S. consumption (million dollars)		2,294	2,055	2,104	2,244	2,537	13.1
	Trade balance (million dollars)		311	242	248	145	142	-2.4
	Ratio of imports to consumption (percent)		14.2	21.3	21.1	23.1	23.7	2.6
	Ratio of exports to production (percent)		24.4	29.6	29.4	27.8	27.8	-0.1
AG023	Deciduous fruit:							
	Number of establishments		67,000	67,000	67,000	67,000	66,000	-1.5
	Employees (thousands)		135.0	135.0	135.0	135.0	130.0	-3.7
	Capacity utilization (percent)	•	(a)	(a)	(a)	(a)	(b)	(b)
	U.S. production (million dollars)		2,720	2,340	2,560	2,680	2,590	-3.4
	U.S. exports (million dollars)		788	810	813	995	1,065	7.1
	U.S. imports (million dollars)		294	306	358	324	393	21.2
	Apparent U.S. consumption (million dollars)		2,226	1,836	2,105	2,010	1,918	-4.6
	Trade balance (million dollars)		494	504	455	670	672	0.3
	Ratio of imports to consumption (percent)		13.2	16.7	17.0	16.1	20.5	27.0
	Ratio of exports to production (percent)		29.0	34.6	31.7	37.1	41.1	10.8
AG024	Other fresh fruit:							
	Number of establishments		50,000	50,000	50,000	50,000	50,000	0.0
	Employees (thousands)		100.0	100.0	100.0	100.0	100.0	0.0
	Capacity utilization (percent)		(a)	(a)	(a)	(a)	(b)	(b)
	U.S. production (million dollars)		2,900	3,110	3,220	3,030	3,010	-0.7
	U.S. exports (million dollars)		708	775	854	1,021	1,052	3.0
	U.S. imports (million dollars)		1,183	1,200	1,396	1,684	1,826	8.4
	Apparent U.S. consumption (million dollars)		3,376	3,535	3,762	3,693	3,784	2.5
	Trade balance (million dollars)		-476	-425	-542	-663	-774	-16.8
	Ratio of imports to consumption (percent)		35.1	34.0	37.1	45.6	48.2	5.8
	Ratio of exports to production (percent)		24.4	24.9	26.5	33.7	34.9	3.7

TABLE AG-5 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002–06a—continued

USITC							Change, 200	06 from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Absolu	ute	Percent
				Million	dollars ——			
AG025	Dried fruit other than tropical:							
	Number of establishments		40	40	40	40	40	0.0
	Employees (thousands)		9.0	9.0	9.0	9.0	9.0	0.0
	Capacity utilization (percent)		(b)	(b)	(b)	(b)	(b)	(b)
	U.S. production (million dollars)		960	870	950	1,030	1,015	-1.5
	U.S. exports (million dollars)		338	366	394	382	418	9.5
	U.S. imports (million dollars)		90	133	142	150	153	1.8
	Apparent U.S. consumption (million dollars)		712	636	699	798	749	-6.1
	Trade balance (million dollars)		248	234	251	232	266	14.5
	Ratio of imports to consumption (percent)		12.6	20.8	20.4	18.8	20.4	8.4
	Ratio of exports to production (percent)		35.2	42.1	41.5	37.1	41.2	11.1
AG026	Frozen fruit:							
	Number of establishments		36	36	36	36	36	0.0
	Employees (thousands)		5.0	5.0	5.0	5.0	5.0	0.0
	Capacity utilization (percent)		(b)	(b)	(b)	(b)	(b)	(b)
	U.S. production (million dollars)		78Ó	6 <b>3</b> 0	72Ó	7ÒÓ	72Ó	2.9
	U.S. exports (million dollars)		80	81	84	90	110	22.8
	U.S. imports (million dollars)		152	202	225	286	356	24.6
	Apparent U.S. consumption (million dollars)		852	752	861	896	966	7.8
	Trade balance (million dollars)		-72	-122	-141	-196	-246	-25.5
	Ratio of imports to consumption (percent)		17.8	26.9	26.1	31.9	36.9	15.6
	Ratio of exports to production (percent)		10.3	12.8	11.7	12.8	15.3	19.4
AG027	Prepared or preserved fruit:			_				-
	Number of establishments		190	190	190	190	185	-2.6
	Employees (thousands)		18.0	18.0	18.0	18.0	17.0	-5.6
	Capacity utilization (percent)		(b)	(b)	(b)	(b)	(b)	(b)
	U.S. production (million dollars)		5,210	4,390	4,680	4,500	4,450	-1.1
	U.S. exports (million dollars)		184	203	237	235	288	22.3
	U.S. imports (million dollars)		622	688	768	858	985	14.7
	Apparent U.S. consumption (million dollars)		5,647	4,875	5,211	5,123	5,147	0.5
	Trade balance (million dollars)		-437	-485	-531	-623	-697	-11.9
	Ratio of imports to consumption (percent)		11.0	14.1	14.7	16.8	19.1	14.2
	Ratio of exports to production (percent)		3.5	4.6	5.1	5.2	6.5	23.6
AG028	Coffee and tea:	•	0.0	4.0	0.1	0.2	0.0	20.0
710020	Number of establishments		247	247	281	281	281	0.0
	Employees (thousands)		12.0	12.0	13.0	13.0	13.0	0.0
	Capacity utilization (percent)		(b)	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )
	U.S. shipments (million dollars)		4,855	4,862		5,414	5,500	1.6
	U.S. exports (million dollars)		4,655 297	348	5,268 349	450	5,500 559	24.1
	U.S. imports (million dollars)		1,942	2,228	2,560	3,309	3,694	24.1 11.6
			,	,	,		3,69 <del>4</del> 8,635	
	Apparent U.S. consumption (million dollars)		6,500	6,742	7,479	8,273		4.4
	Trade balance (million dollars)		-1,645	-1,880	-2,211	-2,859	-3,135	-9.7
	Ratio of imports to consumption (percent)		29.9	33.0	34.2	40.0	42.8	6.9
	Ratio of exports to shipments (percent)		6.1	7.1	6.6	8.3	10.2	22.2

**TABLE AG-5** Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002–06a—continued

USITC							Change, 20	06 from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Abso	lute	Percent
				—— Millioi	n dollars —			
AG029	Spices:							
	Number of establishments		274	274	308	308	308	0.0
	Employees (thousands)		13.0	13.0	16.0	16.0	16.0	0.0
	Capacity utilization (percent)		(b)	(b)	(b)	(°)	( <sup>D</sup> )	(b)
	U.S. shipments (million dollars)		1,731	1,731	2,051	2,229	2,300	3.2
	U.S. exports (million dollars)		70	76	82	80	86	7.5
	U.S. imports (million dollars)		549	682	625	503	543	8.0
	Apparent U.S. consumption (million dollars)		2,211	2,337	2,594	2,652	2,757	4.0
	Trade balance (million dollars)		-480	-606	-543	-423	-457	-8.1
	Ratio of imports to consumption (percent)		24.8	29.2	24.1	19.0	19.7	3.9
	Ratio of exports to shipments (percent)		4.0	4.4	4.0	3.6	3.7	4.2
AG030	Cereals:							
	Number of establishments		324,000	324,000	324,000	324,000	324,000	0.0
	Employees (thousands)		(b)	(b)	(b)	(b)	(b)	(b)
	Capacity utilization (percent)		(a)	(a)	(a)	(a)	(a)	(a)
	U.S. production (million dollars)		26,8ÒÓ	29,2ŠÓ	35,6ÒÓ	35,0ÌÓ	32,560	-7.Ó
	U.S. exports (million dollars)		9,929	10,429	12,683	11,096	13,341	20.2
	U.S. imports (million dollars)		735	646	699	657	963	46.5
	Apparent U.S. consumption (million dollars)		17,606	19,466	23,616	24,571	20,182	-17.9
	Trade balance (million dollars)		9,194	9,784	11,984	10,439	12,378	18.6
	Ratio of imports to consumption (percent)		4.2	3.3	3.0	2.7	4.8	78.4
	Ratio of exports to production (percent)		37.1	35.7	35.6	31.7	41.0	29.3
AG031	Milled grains, malts, and starches:	•	0	00.7	00.0	01	11.0	20.0
7.0001	Number of establishments		440	430	420	410	( <sup>b</sup> )	(b)
	Employees (thousands)		17.0	17.0	17.0	16.0	16.0	0.0
	Capacity utilization (percent)		79	79	79	79	78	-1.3
	U.S. shipments (million dollars)		9,100	9,000	8,800	9,000	9,000	0.0
	U.S. exports (million dollars)		594	599	610	668	858	28.5
	U.S. imports (million dollars)		379	441	518	490	550	12.2
	Apparent U.S. consumption (million dollars)		8,885	8,841	8,708	8,823	8,692	-1.5
	Trade balance (million dollars)		215	159	92	177	308	73.7
	Ratio of imports to consumption (percent)		4.3	5.0	6.0	5.6	6.3	13.8
	Ratio of imports to consumption (percent)		6.5	6.7	6.9	7.4	9.5	28.5
AG032	Oilseeds:	•	0.5	0.7	0.9	7.4	9.5	20.5
AGUSZ	Number of establishments		324,000	324,000	324,000	324,000	324,000	0.0
			, .h.,	, .L.	, .L.		, .	
	Employees (thousands)		(a)	( <sup>b</sup> )	( <sup>b</sup> )	(b)	(b)	(b)
	Capacity utilization (percent)		(a)	(a)	(a)	(a)	(a)	(a)
	U.S. production (million dollars)		13,800	16,400	19,200	19,300 6,527	18,900	-2.1
	U.S. exports (million dollars)		5,790	8,153	6,911		7,172	9.9
	U.S. imports (million dollars)	•	191	208	335	335	387	15.3
	Apparent U.S. consumption (million dollars)		8,201 5,500	8,455	12,624	13,108	12,114	-7.6
	Trade balance (million dollars)		5,599	7,945	6,576	6,192	6,786	9.6
	Ratio of imports to consumption (percent)		2.3	2.5	2.7	2.6	3.2	24.8
	Ratio of exports to production (percent)	•	42.0	49.7	36.0	33.8	37.9	12.2

TABLE AG-5 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002–06a—continued

USITC							Change, 20	06 from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Absol	ute	Percent
				Million	dollars ——			
AG033	Animal or vegetable fats and oils:		<b>570</b>	570	<b>570</b>	<b>570</b>	<b>570</b>	0.0
	Number of establishments		570	570	570	570	570	0.0
	Employees (thousands)		32.0	32.0	32.0	32.0	32.0	0.0
	Capacity utilization (percent)		91	90	85	87	87	0.0
	U.S. shipments (million dollars)		9,300	10,700	12,800	11,600	12,450	7.3
	U.S. exports (million dollars)		1,917	1,986	1,965	1,808	2,010	11.2
	U.S. imports (million dollars)		1,285	1,491	2,193	2,294	2,753	20.0
	Apparent U.S. consumption (million dollars)		8,668	10,205	13,028	12,086	13,193	9.2
	Trade balance (million dollars)		632	495	-228	-486	-743	-52.8
	Ratio of imports to consumption (percent)		14.8	14.6	16.8	19.0	20.9	9.9
10001	Ratio of exports to shipments (percent)	•	20.6	18.6	15.4	15.6	16.1	3.6
AG034	Pasta, cereals, and other bakery goods:		2.700	2.700	2.700	2.700	2.700	0.0
	Number of establishments		3,700	3,700	3,700	3,700	3,700	0.0
	Employees (thousands)		247.0	247.0	247.0	246.0	245.0	-0.4
	Capacity utilization (percent)		73 50 200	72 51 000	72 52.000	71	72 54 000	1.4
	U.S. shipments (million dollars)		50,300 1,184	51,000 1,287	52,000 1,381	53,000 1,575	54,000 1,771	1.9 12.5
	U.S. exports (million dollars)		2,191	2,501	2,719	3,016	3,335	10.6
	U.S. imports (million dollars)		51,308	52,214	53,338	54,442	55,563	2.1
	Trade balance (million dollars)		-1,008	-1,214	-1,338	-1,442	-1,563	-8.4
	Ratio of imports to consumption (percent)		-1,008 4.3	-1,21 <del>4</del> 4.8	-1,336 5.1	-1, <del>44</del> 2 5.5	6.0	-6.4 8.3
	Ratio of imports to consumption (percent)		2.4	2.5	2.7	3.0	3.3	10.4
AG035	Sauces, condiments, and soups:	•	2.4	2.0	2.1	3.0	3.3	10.4
AG033	Number of establishments		530	520	510	510	510	0.0
	Employees (thousands)		32.0	32.0	32.0	31.0	31.0	0.0
	Capacity utilization (percent)		67	67	67	69	69	0.0
	U.S. shipments (million dollars)	•	13,200	13,300	13,400	13,500	13,600	0.7
	U.S. exports (million dollars)	•	761	813	842	869	947	8.9
	U.S. imports (million dollars)		670	663	743	790	850	7.6
	Apparent U.S. consumption (million dollars)		13,109	13,150	13,301	13,420	13,503	0.6
	Trade balance (million dollars)		91	150	99	80	97	22.0
	Ratio of imports to consumption (percent)		5.1	5.0	5.6	5.9	6.3	7.0
	Ratio of exports to shipments (percent)		5.8	6.1	6.3	6.4	7.0	8.1
AG036	Infant formulas, malt extracts, and other edible			• • • • • • • • • • • • • • • • • • • •				
	preparations:							
	Number of establishments		1,920	2,000	2,000	2,000	2,000	0.0
	Employees (thousands)		91.0	92.0	92.0	92.0	92.0	0.0
	Capacity utilization (percent)		73	74	74	74	74	0.0
	U.S. shipments (million dollars)		23,000	24,000	24,000	24,400	24,600	8.0
	U.S. exports (million dollars)		2,582	2,546	2,868	3,149	3,422	8.7
	U.S. imports (million dollars)		795	920	1,211	1,345	1,528	13.6
	Apparent U.S. consumption (million dollars)		21,213	22,374	22,343	22,596	22,706	0.5
	Trade balance (million dollars)		1,787	1,626	1,657	1,804	1,894	5.0
	Ratio of imports to consumption (percent)		3.7	4.1	5.4	6.0	6.7	13.0
	Ratio of exports to shipments (percent)		11.2	10.6	12.0	12.9	13.9	7.8

**TABLE AG-5** Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002–06a—continued

USITC code <sup>b</sup>							J.141190, 20	06 from 2005
code	Industry/commodity group	2002 2003	2004	2005	2006	Absol	ute	Percent
				Million	dollars ——			
AG037	Cocoa, chocolate, and confectionery:							
	Number of establishments		1,350	1,300	1,752	1,752	1,700	-3.0
	Employees (thousands)		90.0	68.0	65.0	56.0	54.0	-3.6
	Capacity utilization (percent)		87	87	69	67	67	0.0
	U.S. production (million dollars)		16,500	17,200	18,950	19,611	21,267	8.4
	U.S. exports (million dollars)		817	914	946	991	1,066	7.5
	U.S. imports (million dollars)		2,662	3,535	3,627	3,927	3,846	-2.1
	Apparent U.S. consumption (million dollars)		18,346	19,821	21,631	22,547	24,048	6.7
	Trade balance (million dollars)		-1,846	-2,621	-2,681	-2,936	-2,781	5.3
	Ratio of imports to consumption (percent)		14.5	17.8	16.8	17.4	16.0	-8.2
	Ratio of exports to production (percent)		4.9	5.3	5.0	5.1	5.0	-0.8
AG038	Fruit and vegetable juices:							
	Number of establishments		90	89	86	84	80	-4.8
	Employees (thousands)		140.0	138.0	135.0	130.0	125.0	-3.8
	Capacity utilization (percent)		83	83	83	83	80	-3.6
	U.S. production (million dollars)		3,000	2,900	3,050	2,800	3,025	8.0
	U.S. exports (million dollars)		682	674	660	731	862	17.9
	U.S. imports (million dollars)		675	793	835	1,029	1,145	11.3
	Apparent U.S. consumption (million dollars)		2,993	3,019	3,226	3,098	3,308	6.8
	Trade balance (million dollars)		7	-119	-176	-298	-283	4.9
	Ratio of imports to consumption (percent)		22.5	26.3	25.9	33.2	34.6	4.2
	Ratio of exports to production (percent)		22.7	23.2	21.6	26.1	28.5	9.1
AG039	Nonalcoholic beverages, excluding fruit and							
	vegetable juices:							
	Number of establishments		3,200	3,200	3,200	3,100	3,000	-3.2
	Employees (thousands)		110.0	110.0	110.0	105.0	105.0	0.0
	Capacity utilization (percent)		67	67	67	68	68	0.0
	U.S. shipments (million dollars)		70,370	73,000	76,000	78,000	80,000	2.6
	U.S. exports (million dollars)		334	397	407	478	554	15.8
	U.S. imports (million dollars)		823	966	1,158	1,329	1,769	33.1
	Apparent U.S. consumption (million dollars)		70,859	73,569	76,752	78,851	81,214	3.0
	Trade balance (million dollars)		-489	-569	-752	-851	-1,214	-42.8
	Ratio of imports to consumption (percent)		1.2	1.3	1.5	1.7	2.2	29.2
	Ratio of exports to shipments (percent)		0.5	0.5	0.5	0.6	0.7	12.9
AG040	Malt beverages:	-						
	Number of establishments		529	529	376	376	376	0.0
	Employees (thousands)		33.0	31.0	28.0	28.0	28.0	0.0
	Capacity utilization (percent)		80	80	78	78	78	0.0
	U.S. shipments (million dollars)		16,925	16,925	17,601	20,236	20,236	0.0
	U.S. exports (million dollars)		171	172	164	201	209	4.1
	U.S. imports (million dollars)		2,566	2,664	2,752	3,081	3,563	15.6
	Apparent U.S. consumption (million dollars)		19,320	19,417	20,189	23,115	23,589	2.0
	Trade balance (million dollars)		-2,395	-2,492	-2,588	-2,879	-3,353	-16.5
	Ratio of imports to consumption (percent)		13.3	13.7	13.6	13.3	-5,333 15.1	13.3
	Ratio of imports to consumption (percent)		1.0	1.0	0.9	1.0	1.0	4.1
	ratio of exports to shipments (percent)	•	1.0	1.0	0.9	1.0	1.0	4.1

**TABLE AG-5** Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002–06a—continued

USITC							Change, 20	06 from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Absol	ute	Percent
				Million	dollars			
AG041	Wine and certain other fermented beverages:							
	Number of establishments		2,646	2,646	1,189	1,184	1,184	0.0
	Employees (thousands)		24.0	24.0	27.0	27.0	27.0	0.0
	Capacity utilization (percent)		82	82	63	70	70	0.0
	U.S. shipments (million dollars)		7,854	8,100	9,399	9,498	9,500	( <sup>d</sup> )
	U.S. exports (million dollars)		541	634	793	658	842	27.9
	U.S. imports (million dollars)		2,740	3,307	3,445	3,797	4,176	10.0
	Apparent U.S. consumption (million dollars)		10,053	10,773	12,051	12,637	12,833	1.6
	Trade balance (million dollars)		-2,199	-2,673	-2,652	-3,139	-3,333	-6.2
	Ratio of imports to consumption (percent)		27.3	30.7	28.6	30.0	32.5	8.3
	Ratio of exports to shipments (percent)		6.9	7.8	8.4	6.9	8.9	27.9
AG042	Distilled spirits:							
	Number of establishments		57	57	82	82	82	0.0
	Employees (thousands)		8.0	8.0	6.0	6.0	6.0	0.0
	Capacity utilization (percent)		68	75	69	75	75	0.0
	U.S. shipments (million dollars)		3,929	4,050	4,057	4,893	4,900	0.1
	U.S. exports (million dollars)		555	592	727	763	893	17.0
	U.S. imports (million dollars)		3,111	3,453	3,734	4,106	4,527	10.2
	Apparent U.S. consumption (million dollars)		6,485	6,911	7,064	8,236	8,534	3.6
	Trade balance (million dollars)		-2,556	-2,861	-3,007	-3,343	-3,634	-8.7
	Ratio of imports to consumption (percent)		48.0	50.0	52.9	49.9	53.0	6.4
	Ratio of exports to shipments (percent)		14.1	14.6	17.9	15.6	18.2	16.9
AG043	Unmanufactured tobacco:	•						
	Number of establishments		20	20	16	16	16	0.0
	Employees (thousands)		4.0	4.0	3.0	3.0	3.0	0.0
	Capacity utilization (percent)		(a)	(a)	(a)	(a)	(a)	(a)
	U.S. production (million dollars)		2,300	2,186	1,077	778	780	0.3
	U.S. exports (million dollars)		1,050	1,035	1.044	983	1,141	16.1
	U.S. imports (million dollars)	•	716	757	702	652	751	15.2
	Apparent U.S. consumption (million dollars)	•	1,966	1,908	735	446	390	-12.7
	Trade balance (million dollars)		334	278	342	332	390	17.7
	Ratio of imports to consumption (percent)		36.4	39.7	95.6	°146.0	°192.6	32.0
	Ratio of exports to production (percent)		45.6	47.4	97.0	°126.4	°146.3	15.8
AG044	Cigars and certain other manufactured tobacco:	•	45.0	47.4	91.0	120.4	140.5	13.0
AG044	Number of establishments		57	57	57	57	57	0.0
			3.0	3.0	3.0	3.0	3.0	0.0
	Employees (thousands)							
	Capacity utilization (percent)		72	72	61	61	61	0.0
	U.S. shipments (million dollars)		1,010	1,010	1,000	1,000	1,000	0.0
	U.S. exports (million dollars)		485	442	272	98	107	8.7
	U.S. imports (million dollars)		299	307	333	346	392	13.1
	Apparent U.S. consumption (million dollars)		825	875	1,062	1,248	1,285	2.9
	Trade balance (million dollars)		185	135	-62	-248	-285	-14.8
	Ratio of imports to consumption (percent)		36.3	35.1	31.4	27.8	30.5	9.9
	Ratio of exports to shipments (percent)		48.0	43.8	27.2	9.8	10.7	8.7

TABLE AG-5 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002–06a—continued

USITC							Change, 20	06 from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Absol	ute	Percent
				Million	dollars ——			
AG045	Cigarettes:		40	40	4.5	4.5	4.5	0.0
	Number of establishments		10	10	15	15	15	0.0
	Employees (thousands)		18.0	18.0	15.0	15.0	15.0	0.0
	Capacity utilization (percent)		70	70	61	70	70	0.0
	U.S. shipments (million dollars)		45,696	46,000	34,582	33,252	32,000	-3.8
	U.S. exports (million dollars)		1,463	1,403	1,294	1,200	1,214	1.2
	U.S. imports (million dollars)		230	234	231	194	190	-1.9
	Apparent U.S. consumption (million dollars)		44,462	44,831	33,519	32,246	30,976	-3.9
	Trade balance (million dollars)		1,234	1,169	1,063	1,006	1,024	1.7
	Ratio of imports to consumption (percent)		0.5	0.5	0.7	0.6	0.6	2.2
	Ratio of exports to shipments (percent)		3.2	3.0	3.7	3.6	3.8	5.1
AG046	Hides, skins, and leather:							
	Number of establishments		1,220	1,220	1,220	1,146	1,100	-4.0
	Employees (thousands)		16.0	16.0	16.0	11.0	11.0	0.0
	Capacity utilization (percent)		(b)	(b)	(b)	( <sup>b</sup> )	(b)	(b)
	U.S. production (million dollars)		5,085	4,886	4,602	3,899	3,888	-0.3
	U.S. exports (million dollars)		2,390	2,492	2,730	2,580	2,755	6.8
	U.S. imports (million dollars)		935	817	886	896	841	-6.2
	Apparent U.S. consumption (million dollars)		3,629	3,211	2,758	2,215	1,973	-10.9
	Trade balance (million dollars)		1,456	1,675	1,844	1,684	1,915	13.7
	Ratio of imports to consumption (percent)		25.8	25.4	32.1	40.5	42.6	5.3
	Ratio of exports to production (percent)		47.0	51.0	59.3	66.2	70.9	7.1
AG047	Furskins:							
	Number of establishments		318	307	296	296	290	-2.0
	Employees (thousands)		2.0	2.0	2.0	2.0	2.0	0.0
	Capacity utilization (percent)		(a)	(a)	(a)	(a)	(a)	(a)
	U.S. production (million dollars)		128	178	212	227	226	-0.4
	U.S. exports (million dollars)		173	158	191	195	246	26.3
	U.S. imports (million dollars)		87	87	106	97	116	19.9
	Apparent U.S. consumption (million dollars)		43	108	127	129	96	-25.6
	Trade balance (million dollars)	•	85	70	85	98	130	32.6
	Ratio of imports to consumption (percent)		°204.6	81.1	83.3	75.0	°120.9	61.2
	Ratio of exports to production (percent)		°134.8	88.5	90.0	85.8	°108.8	26.9
AG048	Wool and other animal hair:							
	Number of establishments		64,695	67,720	67,160	68,280	69,890	2.4
	Employees (thousands)		(b)	(b) a	(b)	(b)	(a)	(b)
	Capacity utilization (percent)	•	(°) 25	31	34	31	(°) 29	-6.5
	U.S. exports (million dollars)		26 26	29	27	34	31	-8.4
	U.S. imports (million dollars)		42	38	45	41	41	0.9
	Apparent U.S. consumption (million dollars)		41	41	52	3 <u>8</u>	39	3.3
	Trade balance (million dollars)		-16	-10	-18	-7	-10	-48.5
	Ratio of imports to consumption (percent)		°101.4	93.9	86.3	°108.6	°106.0	-2.4
	Ratio of exports to production (percent)		°102.3	92.1	78.8	°110.5	°108.1	-2.1

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TABLE AG-5 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2002–06a—continued

USITC							Change, 20	06 from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Absol	ute	Percent
	-			Million	dollars			
AG049	Cotton, not carded or combed:							
	Number of establishments		30,000	30,000	30,000	30,000	28,000	-6.7
	Employees (thousands)		160.0	160.0	160.0	160.0	150.0	-6.3
	Capacity utilization (percent)		(a)	(a)	(a)	( <sup>a</sup> )	( <sup>a</sup> )	(a)
	U.S. production (million dollars)		4,678	4,110	5,985	6,717	5,949	-11.4
	U.S. exports (million dollars)		2,015	3,203	4,222	3,920	4,501	14.8
	U.S. imports (million dollars)		20	26	16	14	13	-5.8
	Apparent U.S. consumption (million dollars)		2,683	933	1,779	2,811	1,462	-48.0
	Trade balance (million dollars)		1,995	3,177	4,206	3,906	4,487	14.9
	Ratio of imports to consumption (percent)		0.7	2.8	0.9	0.5	0.9	81.1
	Ratio of exports to production (percent)		43.1	77.9	70.5	58.4	75.7	29.6
AG050	Ethyl alcohol for nonbeverage purposes:							
	Number of establishments		60	76	81	95	110	15.8
	Employees (thousands)		8.0	8.0	8.0	8.0	9.0	12.5
	Capacity utilization (percent)		79	79	94	95	94	-1.1
	U.S. production (million dollars)		2,000	2,824	5,808	7,570	12,426	64.1
	U.S. exports (million dollars)		71	103	81	109	76	-30.2
	U.S. imports (million dollars)		170	191	259	337	1,600	374.9
	Apparent U.S. consumption (million dollars)		2,099	2,912	5,987	7,798	13,950	78.9
	Trade balance (million dollars)		-99	-88	-179	-228	-1,524	-567.5
	Ratio of imports to consumption (percent)		8.1	6.6	4.3	4.3	11.5	165.5
	Ratio of exports to production (percent)		3.6	3.7	1.4	1.4	0.6	-57.5

Source: These data have been estimated by the Commission's international trade analysts on the basis of primary and secondary data sources including discussions with various Government and industry contacts. These estimated data are subject to change either from secondary sources or from detailed surveys the Commission often conducts in the course of statutory investigations or other work. Further, these data may undergo adjustments based on revisions in tariff nomenclature, classification practices, or redefinitions of industry classes.

<sup>&</sup>lt;sup>a</sup>Capacity utilization could not be meaningfully calculated for this industry.

bNot available

<sup>&</sup>lt;sup>c</sup>Inventory changes, for which data are not available, likely account for ratios that exceed 100 percent.

dLess than 0.05 percent.

# **Forest Products**

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Change in 2006 from 2005:

U.S. trade deficit: Decreased by \$1.9 billion (9 percent) to \$20.3 billion U.S. exports: Increased by \$2.3 billion (8 percent) to \$30.2 billion U.S. imports: Increased by \$413 million (1 percent) to \$50.4 billion

Total trade in forest products in 2006 continued to increase with imports and exports posting small to moderate gains. Most notable in 2006, the trade deficit in forest products decreased, reversing a six year trend (table FP-1). The deficit decreased by \$1.9 billion (9 percent) in 2006 compared to increases of \$24 million (1 percent) and \$6.8 billion (15 percent) in 2005 and 2004, respectively. U.S. exports of forest products posted a fifth consecutive increase and the third consecutive increase in excess of \$2 billion. Exports across all commodity groups continued to benefit from favorable exchange rates, and the commodity group with the largest gain in exports in 2006 was wood pulp and wastepaper (table FP-2). With respect to U.S. imports of forest products, moderate declines in imports of both lumber and wood panels (e.g., plywood and oriented strand board) were the biggest shifts and had the largest impact on the decrease in the forest products trade deficit in 2006.

### U.S. Imports

Both the value and quantity of lumber and wood panel imports declined in 2006, driven by a drop in demand from the U.S. residential housing market.<sup>2</sup> After five consecutive annual increases, during which annual U.S. housing starts rose by 500,000 units or 32 percent, U.S. housing starts declined by 13 percent to 1.8 million units in 2006.<sup>3</sup> Rising mortgage rates and higher prices dampened demand for housing, especially among investors,<sup>4</sup> and U.S. inventories of both new and existing homes rose.<sup>5</sup> In 2006, imports from Canada (which supplied 87 percent of U.S. imports of lumber) fell by 7 percent, and most European and

<sup>&</sup>lt;sup>1</sup> As forest products are relatively low value and low margin products, trade is influenced by exchange rate trends. During the 2002-06 period, the value of the U.S. dollar declined by 28 percent and 25 percent, respectively, against the Canadian dollar and euro. Since 2002, the value of U.S. forest products exports has increased at an average annual rate of 7 percent. Foreign exchange rates found at <a href="http://www.federalreserve.gov/releases/g5a/20060103/">http://www.federalreserve.gov/releases/g5a/20060103/</a> and <a href="http://www.federalreserve.gov/releases/g5a/current/">http://www.federalreserve.gov/releases/g5a/current/</a> (accessed March 15, 2007).

<sup>&</sup>lt;sup>2</sup> As it is largely based on wood frame construction, the U.S. residential housing market is the world's largest market for softwood lumber and wood panels.

<sup>&</sup>lt;sup>3</sup> In contrast to housing starts, U.S. expenditures for repair and remodeling were 9.7 percent higher than in 2005 through the third quarter of 2006, but the gain was not enough to offset the impact of the large decline in new construction. U.S. Census Bureau, "New Privately Owned Housing Starts" and U.S. Census Bureau, "Expenditures for Residential Improvements and Repairs."

<sup>&</sup>lt;sup>4</sup> Crow's Weekly Market Report, "Housing Starts Confirm Expectations," 1, and Crow's Weekly Market Report, "First Quarter Exhibits a Slower Pace," 11.

<sup>&</sup>lt;sup>5</sup> Crow's Weekly Market Report, "Housing: The Worst Is Behind?" 11.

**TABLE FP-1** Forest products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			<ul><li>Million dolla</li></ul>	rs ———			
U.S. exports of domestic merchandise: Canada China Mexico Brazil Japan Germany United Kingdom Italy Korea Finland All other	7,502 1,058 3,056 204 2,017 558 1,047 627 659 21 6,075	7,960 1,314 3,217 190 1,887 565 1,014 674 699 22 6,025	8,536 1,651 3,451 212 1,963 608 1,118 718 696 22 6,663	9,111 1,995 3,860 241 1,907 685 1,191 788 688 23 7,322	9,846 2,572 4,258 251 1,964 7,17 1,220 839 683 19 7,787	735 577 398 11 58 32 29 51 -5 -4 465	8.1 28.9 10.3 4.4 3.0 4.7 2.4 6.5 -0.8 -15.6 6.3
Total	22,825	23,566	25,637	27,809	30,156	2,346	8.4
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	3,852 3,938 465 4,769 945 5,473 120 77	3,921 4,016 418 4,844 906 5,571 135 88	4,265 4,382 494 5,341 999 6,052 140 108	4,593 4,742 524 6,014 1,139 6,403 164 135	4,798 4,944 546 6,645 1,300 7,090 185 134	205 202 21 631 162 688 21	4.5 4.3 4.1 10.5 14.2 10.7 12.9 -0.8
U.S. imports of merchandise for consumption: Canada China Mexico Brazil Japan Germany United Kingdom Italy Korea Finland All other	22,311 2,749 1,038 1,288 600 1,031 729 392 404 773 5,733	22,640 3,362 1,075 1,569 610 1,057 751 396 467 948 5,895	27,584 4,398 1,274 2,203 683 1,461 784 416 517 1,107 7,164	28,224 5,463 1,420 2,305 692 1,664 825 424 544 1,024 7,418	26,717 6,630 1,559 2,365 649 1,733 702 455 601 1,210 7,795	-1,507 1,167 139 60 -43 70 -122 30 56 186 377	-5.3 21.4 9.8 2.6 -6.2 -14.9 7.2 10.3 18.2 5.1
Total	37,048	38,769	47,591	50,003	50,416	413	0.8
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	4,778 4,905 547 3,268 124 5,662 121 56	5,109 5,231 537 3,680 123 6,317 139 61	6,090 6,270 562 4,935 124 7,651 178 98	6,394 6,654 603 5,180 134 8,806 191 167	6,571 6,790 698 5,603 132 10,213 166 147	176 136 94 423 -3 1,407 -25 -20	2.8 2.0 15.7 8.2 -2.0 16.0 -13.1 -12.2

See footnote(s) at end of table.

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**TABLE FP-1** Forest products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—Continued

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dolla	ars ———			
U.S. merchandise trade balance:     Canada     China     Mexico     Brazil     Japan     Germany     United Kingdom     Italy     Korea     Finland     All other	-14,809 -1,691 2,018 -1,083 1,417 -473 318 235 255 -752 342	-14,680 -2,048 2,142 -1,380 1,278 -493 263 278 232 -926 130	-19,047 -2,747 2,177 -1,991 1,280 -853 334 302 178 -1,084 -501	-19,113 -3,468 2,440 -2,064 1,214 -978 366 363 143 -1,001 -96	-16,871 -4,058 2,698 -2,113 1,315 -1,016 518 384 82 -1,191	2,242 -590 259 -49 101 -38 152 21 -61 -190 88	11.7 -17.0 10.6 -2.4 8.3 -3.8 41.4 5.7 -42.9 -19.0 91.8
Total	-14,223	-15,204	-21,953	-22,194	-20,260	1,933	8.7
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-926 -967 -82 1,500 821 -189 -1	-1,188 -1,215 -120 1,164 783 -747 -4 27	-1,825 -1,889 -68 406 8,75 -1,598 -38	-1,801 -1,912 -79 833 1,004 -2,404 -28 -32	-1,773 -1,845 -152 1,041 1,169 -3,123 19 -13	28 67 -73 208 164 -719 46 19	1.6 3.5 -92.8 24.9 16.4 -29.9 (b) 60.2

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Not meaningful for purposes of comparison.

TABLE FP-2 Leading changes in U.S. exports and imports of forest products, 2002–06<sup>a</sup>

						Change, 200	006 from 2005	
Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent	
			—— Million a	lollars				
U.S. EXPORTS: Increases:								
Wood pulp and wastepaper (AG059)	3,853	4,112	4,521	5,081	5,749	668	13.2	
All other	18,972	19,453	21,117	22,729	24,407	1,678	7.4	
TOTAL  Decreases:	22,825	23,566	25,637	27,809	30,156	2,346	8.4	
Lumber (AG052)	6,647	6,007	8,808	9,005	8,335	-670	-7.4	
Wood veneer and wood panels (AG054)	3,730	4,938	7,115	7,218	6,623	-595	-8.2	
All other	26,671	27,825	31,667	33,781	35,459	1,678	5.0	
TOTAL	37,048	38,769	47,591	50,003	50,416	413	0.8	

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

South American producers retreated from the U.S. market. Relatively strong European demand, lower U.S. prices,<sup>6</sup> and the continued strength of the euro accounted for declining U.S. imports of European lumber.<sup>7</sup> South American suppliers were reportedly seeking alternative markets in Mexico and China.<sup>8</sup>

Although U.S. demand for moldings, millwork, and joinery was diminished by the slumping housing market, the value of U.S. imports nevertheless increased in 2006, with imports from China, Brazil, and Chile all posting annual increases of over 20 percent. Relatively low production costs reportedly allowed large foreign producers or remanufacturers to sustain their U.S. sales of finished molding in the face of lower U.S. prices in 2006. However, smaller foreign producers were reportedly unable to withstand the lower prices and left the U.S. market in 2006. Because the small- to medium-sized producers supplied a substantial portion of the raw material used by U.S. remanufacturers to make moldings, millwork, and joinery, their absence from the U.S. market had a dampening effect on U.S. production in 2006.

#### U.S. Exports

As in 2005, the commodity group with the largest gain in U.S. exports in 2006 was wood pulp and wastepaper, which are used primarily as raw materials in the production of paper products (table FP-2). From 2002 through 2006, the quantity of wastepaper exported to China increased at an average annual rate of 29 percent, accounting for virtually all growth in U.S. wastepaper exports. In 2006, China accounted for 57 percent of all U.S. exports of wastepaper. Factors affecting exports of wastepaper to China include a U.S. wastepaper supply that is in excess of domestic consumption, China's rapidly expanding paper industry coupled with its limited domestic supply of raw materials, and favorable westbound trans-Pacific transportation rates. Because rising U.S. wastepaper recoveries and exports have also been accompanied by steadily increasing prices, the value of U.S. exports to China increased at an average annual rate of 50 percent during the 2002–06 period.

U.S. trade in both industrial papers and paperboard and printed matter increased in 2006, and the United States posted small trade surpluses in both commodity groups. With respect to paperboard, cross-border trade with Canada and Mexico accounts for most U.S. trade. <sup>12</sup> In 2006, the quantity of paperboard exported to Canada, the largest market, decreased slightly, but the quantity shipped to Mexico, the second-largest market, increased by 1.2 million metric tons (12 percent). The value of U.S. paperboard imports and exports increased in 2006, as U.S. mill closures tightened domestic paperboard supply, resulting in higher prices. <sup>13</sup> Likewise, U.S. trade in printed matter (e.g., books and magazines) expanded in 2006. The continued expansion of China's printing and publishing industry propelled China past Canada to become the top supplier to the U.S. market in 2006. Canada, traditionally the

<sup>&</sup>lt;sup>6</sup> The average U.S. prices of framing lumber and structural panels continued to retreat in 2006, declining by 16 percent and 23 percent, respectively. Random Lengths Publications, Inc., 2006 Yearbook, 266, 279.

<sup>&</sup>lt;sup>7</sup> Random Lengths International, "European Suppliers Retreating from the U.S. Lumber Market," 1.

<sup>&</sup>lt;sup>8</sup> Random Lengths International, "South American Suppliers Cultivate Alternatives to the U.S.," 1.

<sup>&</sup>lt;sup>9</sup> Crow's Weekly Market Report, "A Year of Profit and Loss for Imported Mouldings," 11.

<sup>&</sup>lt;sup>10</sup> Industry officials, telephone interview with Commission staff, March 20, 2007.

<sup>&</sup>lt;sup>11</sup> U.S. producers reportedly concentrate their efforts on smaller production runs and timely deliveries and a thus able to obtain somewhat higher prices for their products. Industry officials, telephone interview with Commission staff, March 20, 2007.

<sup>&</sup>lt;sup>12</sup> Paperboard is used primarily to manufacture paper packaging.

<sup>&</sup>lt;sup>13</sup> RISI, "Pratt, at Least Two Majors, Plan Box Price Increases."

largest supplier to the U.S. market for printed matter, is also the largest U.S. foreign market. Although cross-border trade remains healthy, the strength of the Canadian dollar relative to the U.S. dollar is reflected in the trade data; the value of U.S. imports from Canada decreased by 3 percent in 2006, whereas U.S. exports to Canada increased by 11 percent.

In 2006, the trade deficit in forest products with Canada decreased by \$2.2 billion. Canada nevertheless remained the largest sector trading partner, accounting for 45 percent of total U.S. sector trade in 2006 (table FP-2). China retained its position, achieved in 2003, as the second-largest sector trading partner, accounting for 11 percent of all U.S. trade in forest products. Mexico and Brazil accounted for 7 percent and 3 percent, respectively. In 2006, the United States had trade surpluses in forest products with one-half of its top 10 trading partners (Mexico, Japan, the United Kingdom, Korea, and Italy), although all surpluses combined were far smaller than the U.S. deficit with Canada.

Although total U.S.-Canadian trade in forest products decreased by \$772 million to \$36.6 billion in 2006, Canada still accounted for \$26.7 billion (53 percent) of U.S. sector imports. Canadian producers benefit from Canada's significant forest resources, capacity in excess of domestic requirements, and close proximity to U.S. markets. The decline in trade was due principally to the decline in U.S. imports of lumber and wood panels, which are ranked first and third, respectively, by value among forest products supplied by Canada. Canada remained the largest market for U.S. forest products, taking 33 percent of all U.S. exports in 2006.

U.S. forest products trade with China continued to expand rapidly. Bilateral trade in forest products between China and the United States posted the largest gain of all U.S. trading partners, increasing by \$1.7 billion and exceeding the 2005 increase by \$300 million. From 2002 through 2006, forest products trade with China increased at an average annual rate of 25 percent. Because China is not well-endowed with forest resources, its developing industry is dependent on supplies of raw materials from around the world. U.S. exports to China are concentrated in wood pulp and wastepaper, industrial papers and paperboards, lumber, and logs and rough wood products. U.S. exports of paperboard are driven by China's growth as a global manufacturing center and its consequent increased demand for paper packaging. As noted above, the growth of U.S. exports of wood pulp and wastepaper to China is due to the rapid expansion of China's paper manufacturing. Chinese imports of logs and lumber from global suppliers have allowed China to expand production of a variety of wood products (e.g., doors and flooring) suitable for export. Not coincidentally, U.S. imports from China of wood veneer and wood panels, and moldings, millwork, and joinery ranked second and third behind printed matter among top commodity groups in 2006.

In 2006, the U.S. trade surplus in forest products with Latin America grew by \$208 million (25 percent), increasing for the second straight year. The trade deficit with Brazil (third-largest behind Canada and China) continued to grow in 2006 due to the expanding forest products industry in Brazil. However, the expanding deficit with Brazil was more than offset by the increased trade surplus with Mexico (\$259 million or 11 percent).

<sup>&</sup>lt;sup>14</sup> Paperboard Packaging, "China's Packaging Needs Won't Diminish;" RISI, "U.S. Linerboard Export Prices Still Rising in Most World Markets;" and RISI, "U.S. Containerboard Prices and Demand Remain Steady at Year End."

<sup>15</sup> Wood Markets Monthly, "China's Wood Industry," 1.

## **Bibliography - Forest Products**

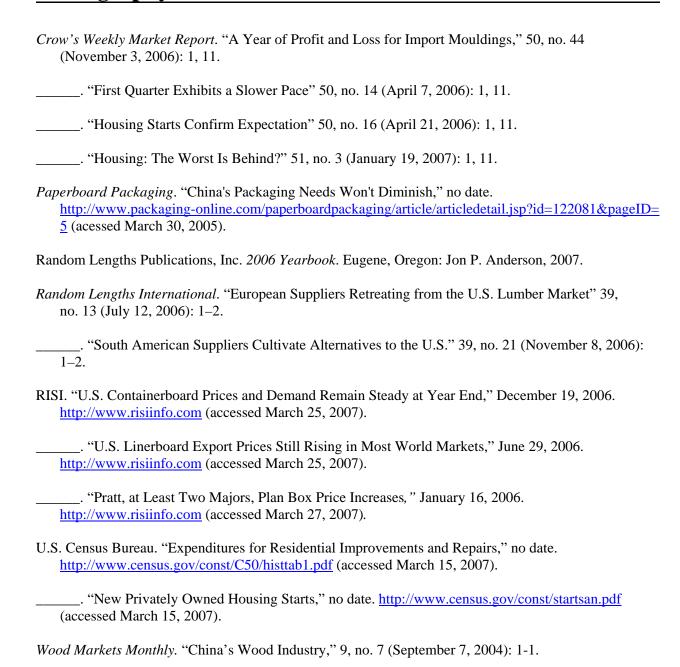


TABLE FP-3 Forest products: U.S. trade for industry/commodity groups and subgroups, 2002-06a

USITC							Change, 200	6 from 2005
code	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				—— Million	dollars ———			
AG051	Logs and rough wood products:							
	Exports	1,490	1,468	1,708	1,741	1,744	3	0.2
	Imports	582	577	658	782	832	49	6.3
	Trade balance	907	891	1,051	959	913	-46	-4.8
AG052	Lumber:							
	Exports	1,720	1,725	1,930	2,026	2,275	248	12.3
	Imports	6,647	6,007	8,808	9,005	8,335	-670	-7.4
	Trade balance	-4,927	-4,282	-6,879	-6,978	-6,060	918	13.2
AG053	Moldings, millwork, and joinery:							
	Exports	443	495	551	585	633	48	8.2
	Imports	2,866	3,057	4,184	4,433	4,750	317	7.1
	Trade balance	-2,423	-2,563	-3,633	-3,848	-4,116	-269	-7.0
AG054	Wood veneer and wood panels:							
	Exports	928	905	1,037	1,028	1,128	100	9.7
	Imports	3,730	4,938	7,115	7,218	6,623	-595	-8.2
	Trade balance	-2,801	-4,033	-6,078	-6,190	-5,495	695	11.2
AG055	Wooden containers:							
	Exports	135	154	145	176	210	33	19.0
	Imports	612	605	635	698	737	39	5.6
	Trade balance	-477	-451	-490	-522	-527	-5	-1.0
AG056	Tools and tool handles of wood:							
	Exports	42	50	51	37	46	8	22.2
	Imports	131	139	151	171	173	2	1.3
	Trade balance	-89	-89	-99	-133	-127	6	4.6
AG057	Miscellaneous articles of wood:							
	Exports	167	167	188	218	224	5	2.5
	Imports	1,152	1,236	1,359	1,465	1,462	-3	-0.2
	Trade balance	-985	-1,069	-1,171	-1,246	-1,239	8	0.6
AG058	Cork and rattan:							
	Exports	61	65	57	70	90	20	28.6
	Imports	570	616	643	673	678	5	0.7
	Trade balance	-509	-551	-586	-602	-587	15	2.5
AG059	Wood pulp and wastepaper:							
	Exports	3,853	4,112	4,521	5,081	5,749	668	13.2
	Imports	2,371	2,603	2,953	3,074	3,194	120	3.9
	Trade balance	1,482	1,509	1,567	2,006	2,554	548	27.3

See footnote(s) at end of table.

**TABLE FP-3** Forest products: U.S. trade for industry/commodity groups and subgroups, 2002–06a—Continued

USITC							Change, 200	6 from 2005
code	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million o	dollars ———			
AG060	Paper boxes and bags:							
	Exports	1,315	1,348	1,490	1,492	1,625	132	8.9
	Imports	1,121	1,231	1,357	1,492	1,710	219	14.7
	Trade balance	195	117	133	1	-85	-86	(°)
AG061	Industrial papers and paperboards:							``
	Exports	5,228	5,312	5,733	6,287	6,788	501	8.0
	Imports	3,464	3,492	4,240	4,388	4,713	325	7.4
	Trade balance	1,764	1,819	1,492	1,900	2,075	176	9.3
AG061A	Paperboard:							
	Exports	3,538	3,723	3,993	4,432	4,769	337	7.6
	Imports	1,829	1,731	2,063	2,021	2,320	299	14.8
	Trade balance	1,709	1,992	1,930	2,411	2,449	38	1.6
AG061B	Tissue and tissue products:	·	·	•	,	•		
	Exports	1,211	1,094	1,166	1,240	1,363	123	9.9
	Imports	1,237	1,283	1,544	1,695	1,724	29	1.7
	Trade balance	-26	-188	-377	-455	-361	94	20.6
AG061C	Industrial paper:							
	Exports	480	494	573	615	656	41	6.7
	Imports	398	479	634	672	669	-3	-0.4
	Trade balance	81	15	-60	-57	-13	44	77.5
AG062	Newsprint:							
	Exports	330	325	322	383	355	-28	-7.3
	Imports	3,039	2,991	2,975	3,074	3,074	( <sup>d</sup> )	(e)
	Trade balance	-2,709	-2,667	-2,653	-2,691	-2,719	- <u>2</u> 8	-1.Ó
AG063	Printing and writing papers:	•	•	,	,	,		
	Exports	620	625	692	811	902	91	11.2
	Imports	4,372	4,549	5,564	5,972	6,149	176	3.0
	Trade balance	-3,752	-3,924	-4,872	-5,162	-5,247	-85	-1.7
AG064	Certain specialty papers:	-, -	-,-	, -	-, -	-,		
	Exports	1,056	1,114	1,232	1,304	1,360	56	4.3
	Imports	909	1,046	817	859	1,033	174	20.3
	Trade balance	147	68	415	445	327	-118	-26.5
AG065	Miscellaneous paper products:							_0.0
	Exports	1.431	1,541	1,551	1,663	1,811	148	8.9
	Imports	1,740	1,779	1,900	2,041	2,113	72	3.5
	Trade balance	-309	-238	-350	-378	-302	76	20.1

See footnote(s) at end of table.

TABLE FP-3 Forest products: U.S. trade for industry/commodity groups and subgroups, 2002-06a—Continued

USITC	Change, 2006									
USITC code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent		
				Million o	dollars ———					
AG066	Printed matter:									
	Exports	4,006	4,160	4,431	4,906	5,217	311	6.3		
	Imports	3,742	3,901	4,230	4,660	4,842	182	3.9		
	Trade balance	263	259	200	246	375	129	52.3		

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes

<sup>°</sup>Not meaningful for purposes of comparison.

dLess than \$500,000.

eLess than 0.05 percent.

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TABLE FP-4 Forest products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
AG051	Logs and rough wood products:						
A0001	Number of establishments	13,500	13,500	13,500	13,500	13,500	0.0
	Employees (thousands)	84.0	84.0	84.0	84.0	84.0	0.0
	Capacity utilization (percent)	(a)	(a)	(a)	(a)	(a)	(a)
	U.S. production (million dollars)	44.300	49.100	57,800	63.300	62.700	-0.9
	U.S. exports (million dollars)	1,490	1,468	1,708	1,741	1,744	0.2
	U.S. imports (million dollars)	582	577	658	782	832	6.3
	Apparent U.S. consumption (million dollars)	43,393	48,209	56,749	62,341	61,787	-0.9
	Trade balance (million dollars)	907	891	1,051	959	913	-4.8
	Ratio of imports to consumption (percent)	1.3	1.2	1.2	1.3	1.3	7.3
	Ratio of exports to production (percent)	3.4	3.0	3.0	2.8	2.8	1.1
AG052	Lumber:	0.1	0.0	0.0	2.0	2.0	
10002	Number of establishments	5,000	5,000	5,000	5,000	5,000	0.0
	Employees (thousands)	108.0	104.0	106.0	105.0	102.0	-2.9
	Capacity utilization (percent)	(a)	(a)	(a)	(a)	(a)	(a)
	U.S. shipments (million dollars)	25,900	26,8ÒÓ	30,5ÒÓ	32,800	29,7ÒÓ	-9.5
	U.S. exports (million dollars)	1,720	1,725	1,930	2,026	2,275	12.3
	U.S. imports (million dollars)	6,647	6,007	8,808	9,005	8,335	-7.4
	Apparent U.S. consumption (million dollars)	30,827	31,082	37,379	39,778	35.760	-10.1
	Trade balance (million dollars)	-4,927	-4,282	-6,879	-6,978	-6,060	13.2
	Ratio of imports to consumption (percent)	21.6	19.3	23.6	22.6	23.3	3.0
	Ratio of exports to shipments (percent)	6.6	6.4	6.3	6.2	7.7	24.0
AG053	Moldings, millwork, and joinery:	0.0	<b>.</b>	0.0	·-		
.0000	Number of establishments	5,200	5,200	5,200	5,200	5,200	0.0
	Employees (thousands)	151.0	149.0	158.0	158.0	159.0	0.6
	Capacity utilization (percent)	(a)	(a)	(a)	(a)	(a)	
	U.S. shipments (million dollars)	22,6ÒÓ	24,0ÒÓ	27,1ÒÓ	28,6ÒÓ	28,4ÒÓ	(a) -0.7
	U.S. exports (million dollars)	443	495	551	585	633	8.2
	U.S. imports (million dollars)	2,866	3,057	4,184	4,433	4,750	7.1
	Apparent U.S. consumption (million dollars)	25,023	26,563	30,733	32,448	32,516	0.2
	Trade balance (million dollars)	-2,423	-2,563	-3,633	-3,848	-4,116	-7.0
	Ratio of imports to consumption (percent)	11.5	11.5	13.6	13.7	14.6	6.9
	Ratio of exports to shipments (percent)	2.0	2.1	2.0	2.0	2.2	8.9
\G054	Wood veneer and wood panels:			_	_		
	Number of establishments	780	780	780	780	780	0.0
	Employees (thousands)	67.0	62.0	60.0	60.0	57.0	-5.0
		07.0 /a\	02.0 /a\	/a\	/a\	37.0 /a\	
	Capacity utilization (percent)	40.700	44.000	40.500	47.400	40.000	(a)
	U.S. shipments (million dollars)	13,700	14,600	16,500	17,100	16,300	-4.7
	U.S. exports (million dollars)	928	905	1,037	1,028	1,128	9.7
	U.S. imports (million dollars)	3,730	4,938	7,115	7,218	6,623	-8.2
	Apparent U.S. consumption (million dollars)	16,501	18,633	22,578	23,290	21,795	-6.4
	Trade balance (million dollars)	-2,801	-4,033	-6,078	-6,190	-5,495	11.2
		,	,		,		-2.0
							15.1
	Ratio of imports to consumption (percent)	22.6 6.8	26.5 6.2	31.5 6.3	31.0 6.0	30.4 6.9	

TABLE FP-4 Forest products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
code	industry/commodity group		2003				
AG055	Wooden containers:						
	Number of establishments	2,800	2,800	2,800	2,800	2,800	0.0
	Employees (thousands)	51.0	47.0	50.0	48.0	48.0	0.0
	Capacity utilization (percent)	(a)	(a)	(a)	(a)	(a)	(a)
	U.S. shipments (million dollars)	5.100	5.000	5,300	5,300	5,300	0.0
	U.S. exports (million dollars)	135	154	145	176	210	19.0
	U.S. imports (million dollars)	612	605	635	698	737	5.6
	Apparent U.S. consumption (million dollars)	5,577	5,451	5,790	5,822	5,827	0.1
	Trade balance (million dollars)	-477	-451	-490	-522	-527	-1.0
			_		-	_	
	Ratio of imports to consumption (percent)	11.0	11.1	11.0	12.0	12.6	5.5
AG056	Ratio of exports to shipments (percent)	2.6	3.1	2.7	3.3	4.0	19.0
AGUSO	Number of establishments	110	110	110	110	110	0.0
		1.0			1.0	1.0	0.0
	Employees (thousands)		1.0	1.0			
	Capacity utilization (percent)	(a)	(a)	(a)	(a)	(a)	(a)
	U.S. shipments (million dollars)	100	105	120	133	128	-3.8
	U.S. exports (million dollars)	42	50	51	37	46	22.2
	U.S. imports (million dollars)	131	139	151	171	173	1.3
	Apparent U.S. consumption (million dollars)	189	194	219	266	255	-4.2
	Trade balance (million dollars)	-89	-89	-99	-133	-127	4.6
	Ratio of imports to consumption (percent)	69.2	71.8	68.7	64.1	67.7	5.7
	Ratio of exports to shipments (percent)	41.7	47.8	42.9	28.1	35.7	27.0
AG058	Cork and rattan:						
	Number of establishments	30	30	30	30	30	0.0
	Employees (thousands)	1.0	1.0	1.0	1.0	1.0	0.0
	Capacity utilization (percent)	(a)	( <sup>a</sup> )	( <sup>a</sup> )	( <sup>a</sup> )	(a)	(a)
	U.S. shipments (million dollars)	126	131	1ŠÍ	1 <u>6</u> 7	1 <u>6</u> 0	-4.2
	U.S. exports (million dollars)	61	65	57	70	90	28.6
	U.S. imports (million dollars)	570	616	643	673	678	0.7
	Apparent U.S. consumption (million dollars)	635	682	737	769	747	-2.9
	Trade balance (million dollars)	-509	-551	-586	-602	-587	2.5
	Ratio of imports to consumption (percent)	89.8	90.4	87.2	87.4	90.7	3.7
	Ratio of exports to shipments (percent)	48.5	49.9	37.4	42.1	56.5	34.2
AG059	Wood pulp and wastepaper:	+0.0	40.0	<i>57</i> . <del>∓</del>	72.1	50.5	04.2
	Number of establishments	66	65	65	63	62	-1.6
	Employees (thousands)	(b)	(b)	(b)	(b)	(b)	(p.
	Capacity utilization (percent)	èó	<del>7</del> 9	<u>8</u> 5	<b>8</b> 3	<u>8</u> 5	( <sup>b</sup> 2.4
	U.S. production (million dollars)	7,600	7,600	8,500	8,800	9,500	8.0
	U.S. exports (million dollars)	3,853	4,112	4,521	5,081	5,749	13.2
	U.S. imports (million dollars)	2,371	2,603	2,953	3,074	3,194	3.9
	Apparent U.S. consumption (million dollars)	6,118	6,091	6,933	6,794	6,946	2.2
	Trade balance (million dollars)	1,482	1,509	1,567	2,006	2,554	27.3
	Ratio of imports to consumption (percent)	38.8	42.7	42.6	45.3	46.0	1.6
	Ratio of exports to production (percent)	50.7	54.1	53.2	57.7	60.5	4.8

TABLE FP-4 Forest products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
AG060	Paper boxes and bags:						
710000	Number of establishments	2.787	2,752	2,719	2.686	2.655	-1.2
	Employees (thousands)	197.0	192.0	187.0	183.0	179.0	-2.2
	Capacity utilization (percent)	(a)	(a)	(a)	(a)	(a)	
	U.S. shipments (million dollars)	45,500	51,900	53,400	55.0ÒÓ	56,500	(a) 2.7
	U.S. exports (million dollars)	1,315	1,348	1,490	1,492	1,625	8.9
	U.S. imports (million dollars)	1,121	1,231	1,357	1,492	1,710	14.7
	Apparent U.S. consumption (million dollars)	45,305	51,783	53,267	54,999	56,585	2.9
	Trade balance (million dollars)	195	117	133	1	-85	(°)
	Ratio of imports to consumption (percent)	2.5	2.4	2.5	2.7	3.0	11.4
	Ratio of imports to consumption (percent)	2.9	2.4	2.8	2.7	2.9	6.0
A C 0 C 1 A		2.9	2.0	2.0	2.1	2.9	6.0
AGUOTA	Paperboard:	202	200	400	404	400	1.0
	Number of establishments	203	200	199	194	192	-1.0
	Employees (thousands)	48.0	43.0	40.0	37.0	37.0	0.0
	Capacity utilization (percent)	90	91	94	94	94	0.0
	U.S. production (million dollars)	24,600	25,500	27,900	28,200	29,200	3.5
	U.S. exports (million dollars)	3,538	3,723	3,993	4,432	4,769	7.6
	U.S. imports (million dollars)	1,829	1,731	2,063	2,021	2,320	14.8
	Apparent U.S. consumption (million dollars)	22,891	23,508	25,970	25,789	26,751	3.7
	Trade balance (million dollars)	1,709	1,992	1,930	2,411	2,449	1.6
	Ratio of imports to consumption (percent)	8.0	7.4	7.9	7.8	8.7	10.7
	Ratio of exports to production (percent)	14.4	14.6	14.3	15.7	16.3	3.9
AG061B	Tissue and tissue products:						
	Number of establishments	82	84	85	86	85	-1.2
	Employees (thousands)	(b)	(b)	(b)	(b)	(b)	(b)
	Capacity utilization (percent)	89	88	<b>8</b> 7	<b>9</b> Ó	<b>9</b> Ó	0.0
	U.S. próduction (million dollárs)	14,100	12,800	13,300	14,300	14,500	1.4
	U.S. exports (million dollars)	1,211	1,094	1,166	1,240	1,363	9.9
	Apparent U.S. consumption (million dollars)	14,126	12,988	13,677	14,755	14,861	0.7
	Trade balance (million dollars)	-26	-188	-377	-455	-361	20.6
	Ratio of imports to consumption (percent)	8.8	9.9	11.3	11.5	11.6	1.0
	Ratio of exports to production (percent)	8.6	8.5	8.8	8.7	9.4	8.4
AG061C	Industrial paper:	0.0	0.0	0.0	0.7	0.1	0.1
7100010	Number of establishments	70	69	69	68	68	0.0
	Employees (thousands)	( <sup>b</sup> )	(b)	(b)		(b)	
	Capacity utilization (percent)	86	78	( <sup>b</sup> ) 83	( <sup>b</sup> ) 83	84	( <sup>b</sup> ) 1.2
	U.S. production (million dollars)	5,100	5,000	5,000	4,800	5,400	12.5
		,	,	,	,	656	6.7
	U.S. exports (million dollars)	480	494 479	573 624	615	669	
	U.S. imports (million dollars)	398		634	672		-0.4
	Apparent U.S. consumption (million dollars)	5,019	4,985	5,060	4,857	5,413	11.4
	Trade balance (million dollars)	81	15	-60	-57	-13	77.5
	Ratio of imports to consumption (percent)	7.9	9.6	12.5	13.8	12.4	-10.6
	Ratio of exports to production (percent)	9.4	9.9	11.5	12.8	12.2	-5.1

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TABLE FP-4 Forest products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
AG062	Newsprint:						
710002	Number of establishments	20	19	19	19	19	0.0
	Employees (thousands)	8.0	7.0	7.0	7.0	6.0	-14.3
	Capacity utilization (percent)	85	92	96	95	95	0.0
	U.S. shipments (million dollars)	2,440	2,473	2,697	2,851	3,014	5.7
	U.S. exports (million dollars)	330	325	322	383	355	-7.3
	U.S. imports (million dollars)	3,039	2,991	2,975	3,074	3,074	( <sup>d</sup> ) 3.4
	Apparent U.S. consumption (million dollars)	5,149	5,140	5,350	5,542	5,733	
	Trade balance (million dollars)	-2,709	-2,667	-2,653	-2,691	-2,719	-1.0
	Ratio of imports to consumption (percent)	59.0	58.2	55.6	55.5	53.6	-3.3
	Ratio of exports to shipments (percent)	13.5	13.1	11.9	13.4	11.8	-12.3
AG063	Printing and writing papers:						
	Number of establishments	105	100	100	95	95	0.0
	Employees (thousands)	(b)	(b)	(b)	(b)	(b)	(°)
	Capacity utilization (percent)	(6)	(5)	(5)	(")	(6)	(b)
	U.S. shipments (million dollars)	21,600	20,900	23,000	22,600	23,600	4.4
	U.S. imports (million dollars)	4,372	4,549	5,564	5,972	6,149	3.0
	Apparent U.S. consumption (million dollars)	25,352	24,824	27,872	27,762	28,847	3.9
	Trade balance (million dollars)	-3,752	-3,924	-4,872	-5,162	-5,247	-1.7
	Ratio of imports to consumption (percent)	17.2	18.3	20.0	21.5	21.3	-0.9
A COC 4	Ratio of exports to shipments (percent)	2.9	3.0	3.0	3.6	3.8	6.5
AG064	Certain specialty papers:	/b\	<b>/b</b> \	<b>/b</b> \	(b)	(b)	/b\
	Number of establishments	\ <sub>b</sub> \	\ <sub>b</sub> \	\ <sub>b</sub> \	\ <sub>p</sub> \	\ <sub>b</sub> {	\ <sub>b</sub> \
	Employees (thousands)	(b)	\b\	\b\	\ <sub>b</sub> \	\ <sub>b</sub> \	\b\ \b\
	Capacity utilization (percent)	5,700	5,900	6,200	6,400	6,600	3.1
	U.S. exports (million dollars)	1,056	1,114	1,232	1,304	1,360	4.3
	U.S. imports (million dollars)	909	1,046	817	859	1,033	20.3
	Apparent U.S. consumption (million dollars)	5,553	5,832	5,785	5,955	6,273	5.3
	Trade balance (million dollars)	147	68	415	445	327	-26.5
	Ratio of imports to consumption (percent)	16.4	17.9	14.1	14.4	16.5	14.2
	Ratio of exports to shipments (percent)	18.5	18.9	19.9	20.4	20.6	1.1

TABLE FP-4 Forest products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
AG066	Printed matter: Number of establishments Employees (thousands) Capacity utilization (percent) U.S. shipments (million dollars) U.S. exports (million dollars) U.S. imports (million dollars) Apparent U.S. consumption (million dollars) Trade balance (million dollars) Ratio of imports to consumption (percent) Ratio of exports to shipments (percent)	60,000 1,400.0 69 246,000 4,006 3,742 245,737 263 1.5 1.6	60,000 1,400.0 68 254,000 4,160 3,901 253,741 259 1.5 1.6	60,000 1,300.0 75 265,000 4,431 4,230 264,800 200 1.6 1.7	60,000 1,300.0 73 274,000 4,906 4,660 273,754 246 1.7 1.8	50,000 1,300.0 (b) 283,000 5,217 4,842 282,625 375 1.7 1.8	-16.7 0.0 (b) 3.3 6.3 3.9 3.2 52.3 0.6 2.9

Source: These data have been estimated by the Commission's international trade analysts on the basis of primary and secondary data sources including discussions with various Government and industry contacts. These estimated data are subject to change either from secondary sources or from detailed surveys the Commission often conducts in the course of statutory investigations or other work. Further, these data may undergo adjustments based on revisions in tariff nomenclature, classification practices, or redefinitions of industry classes.

<sup>&</sup>lt;sup>a</sup>Capacity utilization could not be meaningfully calculated for this industry.

<sup>&</sup>lt;sup>b</sup>Not available.

<sup>&</sup>lt;sup>c</sup>Not meaningful.

dLess than 0.05 percent.

# **Chemicals and Related Products**

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Change in 2006 from 2005:

U.S. trade deficit: Decreased by \$0.8 billion (3 percent) to \$29.6 billion U.S. exports: Increased by \$17.1 billion (13 percent) to \$149.8 billion U.S. imports: Increased by \$16.4 billion (10 percent) to \$179.4 billion

In 2006, the U.S. trade deficit in chemicals and related products declined slightly after increasing in 2005 (table CH-1). This trade deficit decrease resulted from expanding demand, driven primarily by the continuing growth in the U.S. and other major global economies; the decline of the U.S. dollar relative to the currencies of a number of trading partners; a decline in payrolls along with increased worker productivity; domestic outsourcing; and inventory growth. Natural gas feedstock price increases moderated somewhat in 2006, but the price of crude oil continued to rise, peaking in July, resulting in higher production costs. Prices and demand for chemicals continued to increase, especially during the summer months, creating growth in sales and profits during this period. Medicinal chemicals, miscellaneous plastic products, certain organic chemicals, and miscellaneous inorganic chemicals together accounted for over 52 percent of the total increase in U.S. exports of chemicals and related products in 2006 (table CH-2). Medicinal chemicals, miscellaneous plastic products, pneumatic tires and tubes, and miscellaneous inorganic chemicals together accounted for nearly 76 percent of the total increase in U.S. imports of chemicals and related products in 2006 (table CH-2).

### U.S. Exports

U.S. exports increased by \$17.1 billion (13 percent) to \$149.8 billion in 2006. The rise in exports of these products was driven by a number of factors, including the relatively weak U.S. dollar, particularly with respect to the Euro; price increases on goods included in the product mix that led to an increase in the average unit price; changes in U.S. environmental regulations which freed some products for export that had been used domestically; the expansion of joint ventures between U.S. and foreign firms; and some inventory rationalization. Canada and Mexico continued to be the most important U.S. trading partners in 2006 as a result of their proximity to the United States. These two markets together consumed about one-third of sector exports in 2006, owing to the relatively weak U.S. dollar.

### U.S. Imports

U.S. imports increased by \$16.4 billion (10 percent) to \$179.4 billion during 2006. Canada was the largest individual supplier of chemicals and related products to the U.S. market, with sales of \$28 billion. Major country groups supplying the U.S. market in 2006 included the EU-25 (principally Ireland, Germany, and the United Kingdom) and Asia (principally China). These groups together accounted for about 64 percent of U.S. imports in 2006.

**TABLE CH-1** Chemicals and related products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dolla	ars ———			
U.S. exports of domestic merchandise: Canada Mexico Ireland China Germany United Kingdom Japan France Belgium Netherlands All other	20,115 12,444 1,270 3,069 2,886 5,179 5,762 3,185 5,240 4,127 28,425	21,516 13,300 1,391 3,816 3,769 5,089 6,176 3,488 6,856 5,219 31,710	23,495 15,797 1,591 5,061 4,922 5,413 7,153 4,142 7,295 7,294 39,220	26,412 18,122 1,656 5,831 5,235 6,183 7,797 4,311 7,457 7,659 42,071	28,475 20,573 1,475 6,863 6,601 7,492 8,383 4,418 8,793 8,956 47,819	2,063 2,451 -181 1,033 1,367 1,309 586 107 1,337 1,297 5,747	7.8 13.5 -10.9 17.7 26.1 21.2 7.5 2.5 17.9 16.9
Total	91,702	102,330	121,383	132,734	149,848	17,114	12.9
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan África Central and Eastern Europe	25,058 25,349 1,761 20,713 2,188 19,754 699 278	29,275 29,633 1,621 21,913 2,225 22,490 717 333	34,954 35,368 2,195 26,557 2,467 27,513 867 365	37,047 37,517 2,664 29,910 2,833 29,618 958 438	42,357 42,988 3,447 35,134 3,334 32,443 1,235 493	5,310 5,471 783 5,224 501 2,825 276 55	14.3 14.6 29.4 17.5 17.7 9.5 28.8 12.6
U.S. imports of merchandise for consumption: Canada Mexico Ireland China Germany United Kingdom Japan France Belgium Netherlands All other	16,673 3,637 16,282 6,262 8,892 8,195 9,099 5,119 2,054 1,523 29,188	18,440 3,779 19,117 7,438 9,497 9,450 10,121 6,338 1,895 1,681 36,165	21,996 4,790 19,488 9,287 11,064 9,843 10,684 7,333 2,569 1,867 42,762	25,535 5,429 20,409 12,240 12,116 9,772 11,100 8,171 2,376 1,969 53,933	28,036 6,347 20,884 14,389 13,370 12,207 10,739 8,262 3,444 2,280 59,452	2,502 918 474 2,149 1,254 2,435 -361 91 1,068 311 5,518	9.8 16.9 2.3 17.6 10.4 24.9 -3.3 1.1 44.9 15.8 10.2
Total	106,924	123,922	141,683	163,050	179,410	16,359	10.0
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan África Central and Eastern Europe	48,700 49,828 5,024 7,904 1,109 22,768 448 1,199	56,408 57,696 6,944 8,917 1,724 26,810 598 1,385	62,016 63,049 9,741 11,315 2,049 30,487 716 1,198	66,942 67,858 12,237 13,950 2,747 36,805 875 1,228	72,866 73,836 12,385 14,453 3,053 41,739 778 1,228	5,924 5,978 148 502 307 4,934 -97 ( <sup>b</sup> )	8.8 8.8 1.2 3.6 11.2 13.4 -11.1

See footnote(s) at end of table.

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**TABLE CH-1** Chemicals and related products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>—*Continued* 

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dolla	ars ———			
U.S. merchandise trade balance: Canada	3,442	3.076	1,499	878	439	-439	-50.0
Mexico Ireland Çhina	8,807 -15,012 -3,193	9,521 -17,727 -3,622	11,007 -17,897 -4,225	12,694 -18,754 -6,409	14,226 -19,409 -7,526	1,532 -655 -1,117	12.1 -3.5 -17.4
Germany United Kingdom Japan	-6,007 -3,016 -3.337	-5,7 <u>28</u> -4,361 -3.945	-6, <u>142</u> -4,429 -3,531	-6,881 -3,588 -3.304	-6,769 -4,714 -2.356	-1,126 -1,126 947	1.6 -31.4 28.7
France Belgium Netherlands All other	-1,934 3,186 2,605 -763	-2,850 4,961 3,537 -4,455	-3,191 4,726 5,427 -3,541	-3,860 5,081 5,689 -11,862	-3,844 5,349 6,676 -11,633	16 269 986 229	0.4 5.3 17.3 1.9
Total	-15,222	-21,592	-20,299	-30,317	-29,562	755	2.5
EU-15 EU-25 OPEC Latin America CBERA	-23,642 -24,479 -3,263 12,809 1,079	-27,133 -28,063 -5,322 12,996	-27,062 -27,680 -7,546 15,242 418	-29,895 -30,341 -9,574 15,960	-30,509 -30,849 -8,938 20,681	-614 -508 635 4,721	-2.1 -1.7 6.6 29.6 225.4
Asia Sub-Saharan Africa Central and Eastern Europe	-3,015 251 -921	-4,320 118 -1,052	-2,973 151 -832	-7,187 83 -790	-9,295 457 -735	-2,108 374 55	-29.3 449.7 7.0

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Less than \$500,000.

<sup>&</sup>lt;sup>c</sup>Less than 0.05 percent.

**TABLE CH-2** Leading changes in U.S. exports and imports of chemicals and related products, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
			Million o	dollars			
U.S. EXPORTS:							
Increases:							
Medicinal chemicals (CH025)	18,742	22,527	27,098	29,296	32,460	3,164	10.8
Certain organic chemicals (CH012)	7,668	8,857	11,283	11,991	14,263	2,271	18.9
Miscellaneous plastic products (CH041)	12,567	13,041	14,307	15,826	17,570	1,744	11.0
Miscellaneous inorganic chemicals (CH013)	4,820	4,903	5,608	7,003	8,737	1,734	24.8
All other	47,904	53,002	63,087	68,617	76,819	8,202	12.0
TOTAL	91,702	102,330	121,383	132,734	149,848	17,114	12.9
U.S. IMPORTS:							
Increases:							
Medicinal chemicals (CH025)	40,699	49,284	52,677	56,104	65,218	9,115	16.2
Miscellaneous plastic products (CH041)	13,459	14,979	17,342	19,994	21,738	1,744	8.7
Miscellaneous inorganic chemicals (CH013)	4,948	5,038	5,714	6,626	7,310	684	10.3
All other	47,818	54,621	65,950	80,327	85,143	4,817	6.0
TOTAL	106,924	123,922	141,683	163,050	179,410	16,359	10.0

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

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## Certain Organic Chemicals<sup>1</sup>

Change in 2006 from 2005:

U.S. trade surplus: Increased by \$2.4 billion (52 percent) to \$7.2 billion U.S. exports: Increased by \$2.3 billion (19 percent) to \$14.3 billion U.S. imports: Decreased by \$159 million (2 percent) to \$7.1 billion

The 2006 increase in the certain organic chemicals trade surplus was attributable to the rise in exports, slightly augmented by a decrease in imports of certain organic chemicals. U.S. exports increased by \$2.3 billion (19 percent) to \$14.3 billion, largely as a result of the increased exports by U.S. producers of methyl tertiary-butyl ether (MTBE), since domestic use of MTBE was being phased out after May 2006. U.S. sector imports decreased by \$159 million (2 percent) to \$7.1 billion

#### U.S. Exports

The largest identifiable sector exports were organic acids, esters, and salts, which increased by \$2.5 billion (20 percent) in 2006, and ether functionality chemicals, which increased by \$2.1 billion (75 percent). The principal export destinations for certain organic chemicals in 2006 were Latin America, accounting for \$4.7 billion in U.S. exports, up 26 percent; Asia, \$3.8 billion, up 5 percent; and the EU-25, \$3.3 billion, up 61 percent (table CH-3). These increases were mostly attributable to exports of MTBE for which domestic demand had disappeared. MTBE was being used as a gasoline additive to satisfy a mandate to replace lead in gasoline. This mandate was rescinded by the Energy Policy Act of 2005 because MTBE was found to be ineffective in reducing air pollution and posed a health risk, and the use of MTBE was banned in several states. Consequently, MTBE manufacturers, mostly petrochemical subsidiaries of major oil companies, started aggressively exporting MTBE to make use of their production capacity.<sup>2</sup>

### U.S. Imports

The most important sector chemical imports in 2006 were alcohols and polyols, valued at \$2.4 billion (up 9 percent over 2005), and organic acids, esters, and salts, valued at \$0.9 billion (down 2 percent). The principal import sources of these products in 2006 included the EU-25, with U.S. imports valued at \$2.1 billion, down 4 percent; Asia, \$1.9 billion, up 24 percent; and Latin America, \$1.8 billion, up 8 percent. The small decrease in U.S. imports of certain organic chemicals is associated with reduced imports of

<sup>&</sup>lt;sup>1</sup> This large commodity group includes a broad miscellany of intermediate noncommodity organic chemicals unrelated to each other by production process or manufacturer, end-uses or markets, or channels of distribution or sales.

<sup>&</sup>lt;sup>2</sup> MTBE was originally mandated by Congress in the Clean Air Act Amendments of 1990 as an oxygenate to reduce ground level ozone pollution in reformulated gasoline. It did not prove effective in that use, according to a National Academy of Sciences/National Research Council report. In addition, MTBE was spreading through underground aquifers in some parts of the country because underground petroleum storage tanks were leaking. MTBE is toxic and a carcinogen and imparts a taste to drinking water some people find objectionable. The mandate to use MTBE was rescinded by Congress in the Energy Policy Act of 2005, and several States banned its use within their borders.

**TABLE CH-3** Certain organic chemicals (CH012): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			<ul><li>Million dolla</li></ul>	rs			
U.S. exports of domestic merchandise:  Mexico Canada Netherlands China Japan Trin & Tobago Venezuela Belgium Korea Germany All other	996 1,233 499 276 493 9 140 400 565 123 2,935	1,262 1,315 549 469 648 7 58 582 758 155 3,055	1,848 1,533 662 717 836 8 71 613 1,004 156 3,835	2,160 1,980 582 724 828 11 313 649 819 189 3,737	2,378 1,779 1,145 716 717 12 732 868 867 226 4,821	218 -201 564 -8 -111 2 419 219 48 37 1,085	10.1 -10.2 96.8 -1.1 -13.4 15.3 134.0 33.7 5.9 19.8 29.0
Total	7,668	8,857	11,283	11,991	14,263	2,271	18.9
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	1,602 1,608 233 2,027 112 2,304 78	1,810 1,820 173 2,241 97 2,926 76 5	2,089 2,102 181 3,096 115 3,884 78 5	2,005 2,015 506 3,747 124 3,569 96 8	3,160 3,238 880 4,714 219 3,761 120	1,155 1,223 374 967 95 192 24	57.6 60.7 74.0 25.8 76.4 5.4 24.6 28.4
U.S. imports of merchandise for consumption: Mexico Canada Netherlands China Japan Trin & Tobago Venezuela Belgium Korea Germany All other	137 786 167 176 397 221 294 89 67 400 1,965	167 524 161 251 458 341 293 69 50 439 2,127	160 637 216 370 495 468 455 76 53 457 2,424	230 744 275 564 529 715 388 102 81 560 3,075	274 698 216 596 533 1,041 289 83 64 661 2,648	44 -46 -59 32 4 326 -100 -19 -16 102 -426	19.2 -6.2 -21.6 5.7 0.8 45.6 -25.7 -18.6 -20.4 18.2 -13.9
Total	4,699	4,878	5,811	7,263	7,103	-159	-2.2
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	1,326 1,338 826 954 223 864 74 13	1,358 1,367 809 1,121 344 1,000 129 6	1,730 1,743 991 1,364 472 1,126 143	2,042 2,054 1,166 1,673 719 1,529 232 17	1,958 1,968 651 1,806 1,046 1,890 153	-84 -86 -515 133 327 361 -80 -5	-4.1 -4.2 -44.1 8.0 45.5 23.6 -34.3 -29.0

**TABLE CH-3** Certain organic chemicals (CH012): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—Continued

						Change, 2006 from 2005		
Item	2002	2003	2004	2005	2006	Absolute	Percent	
			<ul><li>Million dolla</li></ul>	rs ———				
U.S. merchandise trade balance:    Mexico    Canada    Netherlands    China    Japan    Trin & Tobago    Venezuela    Belgium    Korea    Germany    All other	859 447 331 101 95 -212 -153 311 498 -277 970	1,095 791 389 218 190 -334 -235 513 708 -285 929	1,688 896 445 347 341 -460 -384 537 951 -301 1,411	1,930 1,236 307 160 300 -704 -75 547 738 -371 662	2,104 1,081 930 120 184 -1,029 444 785 803 -435 2,173	174 -155 623 -40 -115 -324 519 238 65 -64	9.0 -12.5 203.1 -24.9 -38.5 -46.1 (b) 43.4 8.17.3 228.4	
Total	2,969	3,979	5,472	4,729	7,159	2,430	51.4	
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	276 270 -593 1,073 -111 1,440 5 -6	451 453 -636 1,121 -247 1,926 -52	359 359 -810 1,732 -357 2,758 -65 -10	-37 -39 -660 2,073 -594 2,040 -136 -10	1,202 1,270 229 2,907 -826 1,871 -33	1,239 1,309 889 834 -232 -169 103	(b) (b) 40.2 -39.0 -8.3 75.9 75.8	

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export. <sup>b</sup>Not meaningful for purposes of comparison.

MTBE,<sup>3</sup> regulation-induced reductions in ozone depleting substances under the Montreal Protocol, and EPA regulations regarding volatile organic chemicals.<sup>4</sup>

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 <sup>&</sup>lt;sup>3</sup> Chemical Week, "Gasoline Demand Drives MTBE Exports."
 <sup>4</sup> Air Pollution Consultant, "ODS Essential Use Allowances for 2006 Finalized."

### **Miscellaneous Inorganic Chemicals**

Change in 2006 from 2005:

U.S. trade surplus: Increased by \$1.0 billion (279 percent) to \$1.4 billion

U.S. exports: Increased by \$1.7 billion (25 percent) to \$8.7 billion U.S. imports: Increased by \$684 million (10 percent) to \$7.3 billion

The U.S. trade surplus in miscellaneous inorganic chemicals rose from \$377 million in 2005 to \$1.4 billion in 2006. Factors that accounted for the rise in the U.S. trade surplus include a relatively weak U.S. dollar and stronger demand for some U.S.-made inorganic chemicals, which resulted in higher domestic and export prices. In addition, higher prices for many metals were reflected in higher domestic and export prices for many inorganic chemicals containing a metal component.

#### U.S. Exports

In 2006, U.S. exports of certain catalytic preparations (up by \$510 million), semiconductor grade silicon metal (up by \$407 million), precious metal compounds (up by \$210 million), and aluminum oxide (up by \$183 million) accounted for the dominant portion (\$1.3 billion) of the \$1.7 billion rise in U.S. exports of this product grouping. U.S. exports of certain catalytic preparations were spurred by the activity of U.S.-owned companies that assisted in the construction and maintenance of overseas chemical and related plants, particularly in the petroleum and petrochemical areas. These plants make heavy use of catalyst-related technology. In addition, according to an industry source, U.S. catalyst exports rose in value because many catalysts contain metals that experienced commodity price increases in 2006. Increased shipments to China, Germany, Mexico, Taiwan, Belgium, and India accounted for most of the increased value of U.S. exports for these catalytic preparations in 2006 (table CH-4).

In 2006, U.S. exports of semiconductor grade silicon rose in value by 49 percent to \$1.2 billion, but only 13 percent by volume to 16,571 metric tons. Thus, an increase in the average unit value was responsible for most of the rise in the value of these exports in 2006. According to an industry source, semiconductor grade silicon registered sharp price increases in 2006 largely because of increased demand for electronic-grade silicon used in solar panels (and for the starting material for this silicon, polysilicon), supplies of which were inadequate. Increased shipments to Japan, China, Germany, Norway, and Korea accounted for most of the increased value of U.S. exports of semiconductor grade silicon.

<sup>&</sup>lt;sup>5</sup> USGS, Mineral Commodity Summaries, 2007.

<sup>&</sup>lt;sup>6</sup> E-mail from a Representative of the U.S. trade association Semiconductor Equipment and Materials International (SEMI), Washington, DC, March 21, 2007.

**TABLE CH-4** Miscellaneous inorganic chemicals (CH013): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			<ul> <li>Million dollar</li> </ul>	rs			
U.S. exports of domestic merchandise: Japan Canada China Germany Mexico Korea Australia Taiwan United Kingdom Netherlands	629 921 179 243 487 248 57 226 227	716 930 196 315 361 266 68 218 223	812 843 393 313 420 304 52 287 182 196	1,042 1,181 449 374 534 393 77 264 274	1,280 1,343 846 497 625 497 110 396 287 289	238 162 396 123 91 103 33 132 13 -56	22.8 13.7 88.2 33.0 17.0 26.2 43.2 50.0 4.8 -16.2
All other	1,402 4,820	1,422 4,903	1,805 5,608	2,069 7,003	2,567 8,737	498 1,734	24.1 24.8
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	1,072 1,084 171 755 54 1,715 53 11	1,177 1,189 144 638 58 1,805 35 16	1,240 1,264 223 774 70 2,238 54 23	1,675 1,721 215 896 76 2,633 73 46	1,921 1,967 263 1,070 86 3,634 69 32	247 246 48 174 9 1,001 -4 -14	14.7 14.3 22.5 19.4 11.9 38.0 -5.2 -29.8
U.S. imports of merchandise for consumption: Japan Canada China Germany Mexico Korea Australia Taiwan United Kingdom Netherlands All other	953 806 387 701 158 109 313 47 146 79 1,250	984 875 422 677 181 105 218 45 110 77 1,346	1,124 972 533 705 211 127 208 61 159 96 1,517	1,254 996 683 781 258 144 286 59 148 121 1,896	1,329 1,002 888 897 293 167 350 62 147 130 2,046	75 7 205 116 34 23 64 2 -1 9	6.0 0.7 30.0 14.8 13.3 15.8 22.3 4.1 -0.9 7.1 7.9
Total	4,948	5,038	5,714	6,626	7,310	684	10.3
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	1,397 1,421 15 579 62 1,594 69 20	1,360 1,385 25 664 93 1,639 93 21	1,547 1,571 28 689 36 1,952 111 27	1,715 1,748 42 865 59 2,274 169 36	1,921 1,959 35 928 78 2,605 140 38	206 211 -7 63 19 331 -30	12.0 12.0 -16.1 7.2 32.9 14.5 -17.6 5.8

**TABLE CH-4** Miscellaneous inorganic chemicals (CH013): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—*Continued* 

Item						Change, 2006 from 2005	
	2002	2003	2004	2005	2006	Absolute	Percent
	Million dollars ————————————————————————————————————						
U.S. merchandise trade balance:							
Japan Canada China Germany Mexico Korea Australia Taiwan United Kingdom Netherlands All other	-324 115 -208 -458 329 139 -255 179 81 123 153	-268 56 -225 -363 181 161 -150 173 113 111 77	-312 -129 -139 -392 208 177 -156 226 24 100 288	-212 185 -233 -407 276 250 -209 205 126 224 173	-49 340 -42 -400 332 330 -240 334 140 159 521	162 155 192 7 56 80 -31 130 15 -65 348	76.7 83.8 82.1 1.8 20.4 32.2 -14.6 63.3 11.7 -28.9 200.9
Total	-128	-135	-106	377	1,426	1,049	278.5
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-324 -337 156 176 -8 121 -16	-183 -196 118 -26 -35 166 -58	-307 -308 195 86 34 286 -56	-40 -28 172 31 17 359 -96 10	(b) 8 228 142 7 1,029 -70 -6	40 35 55 111 -10 670 26 -16	(°) 32.0 358.9 -59.0 186.4 27.0

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Less than \$500,000.

<sup>&</sup>lt;sup>c</sup>Not meaningful for purposes of comparison.

### U.S. Imports

In 2006, U.S. imports of certain chemicals doped for use in electronics (up by \$165 million), zinc oxides (up by \$116 million), aluminum oxide (up by \$111 million), and ammonium tungstate (up by \$48 million) accounted for \$440 million (64 percent) of the \$684 million rise in U.S. imports of this product grouping. One factor accounting for the rise, particularly for inorganic chemicals containing metals, was the aforementioned sharp increase in commodity metal prices in 2006. According to price estimates compiled by the U.S. Geological Survey, the average prices of zinc, aluminum, and tungsten rose by an estimated 116 percent, 32 percent, and 40 percent, respectively, during 2005–06.

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<sup>&</sup>lt;sup>7</sup> USGS, Mineral Commodity Summaries, 2007.

## Medicinal Chemicals<sup>8</sup>

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$6.0 billion (22 percent) to \$32.8 billion U.S. exports: Increased by \$3.2 billion (11 percent) to \$32.5 billion U.S. imports: Increased by \$9.1 billion (16 percent) to \$65.2 billion

In 2006, the U.S. trade deficit in medicinal chemicals continued to rise as U.S. imports increased by 16 percent, outstripping the 11 percent rise in U.S. medicinal exports. Continued strong domestic demand, despite rising raw material costs and the declining dollar, contributed to the increase in the deficit.

The increased U.S. demand for medicinal chemicals in 2006 was the result of the start of the Medicare Part D prescription drug program in January 2006, which increased the number of patients covered by this program. Since its implementation, the volume of retail prescriptions has grown each quarter, and this increased volume contributed to the rise in U.S. medicinal imports by 16 percent to \$65.2 billion. The importation of new generic products was a factor in the widening deficit, as six drugs with sales of more than \$1 billion lost U.S. patent exclusivity in 2006.

### U.S. Exports

U.S. medicinal exports increased by 11 percent to \$32.5 billion in 2006. This increase resulted from the strengthened global economy, which fueled the continuing demand in major U.S. export markets (e.g., the United Kingdom, Switzerland, Germany, and Belgium) for medicinals; the declining value of the U.S. dollar relative to other currencies, especially the Euro; and increasing demand for generic products (table CH-5). In 2006, the EU-25 accounted for \$19.7 billion, or 61 percent, of total U.S. exports of medicinal chemicals, an increase of 10 percent over the 2005 level.

### U.S. Imports

U.S. imports of medicinal chemicals increased by \$9.1 billion (16 percent) to \$65.2 billion in 2006. The major suppliers to the U.S. market by value were the same as in 2005, namely Ireland (\$17.1 billion), the United Kingdom (\$8.6 billion), and Germany (\$6.5 billion), accounting for approximately 49 percent of total U.S. medicinal imports in 2006, slightly less than the 51 percent share registered in 2005. The EU-25 as a whole accounted for 74 percent of U.S. imports, again slightly less than its 76 percent share in 2005.

<sup>&</sup>lt;sup>8</sup> This industry/commodity group includes pharmaceutical active ingredients and formulated products containing pharmaceutical active ingredients.

<sup>&</sup>lt;sup>9</sup> Grimley, Pharma Challenged, 22.

<sup>10</sup> Ibid.

**TABLE CH-5** Medicinal chemicals (CH025): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			— Million dolla	ars ———			
U.S. exports of domestic merchandise: Ireland United Kingdom Germany France Canada Netherlands Belgium Switzerland Japan Singapore All other	541 2,646 966 1,775 2,349 1,542 1,756 592 1,448 113 5,014	604 2,342 1,656 2,017 2,706 2,459 2,190 1,057 1,492 116 5,887	683 2,574 2,608 2,495 2,825 4,071 2,182 1,309 1,679 137 6,536	841 3,138 2,599 2,580 2,937 4,185 2,084 1,496 1,892 344 7,200	703 4,027 3,196 2,377 3,200 4,716 2,574 1,874 2,077 210 7,505	-138 889 597 -203 263 531 491 378 186 -134 305	-16.4 28.3 23.0 -7.9 9.0 12.7 23.5 25.3 9.8 -39.0
Total	18,742	22,527	27,098	29,296	32,460	3,164	10.8
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	10,765 10,856 197 1,359 218 2,611 66 98	13,078 13,189 210 1,491 240 2,928 113 114	16,883 17,032 233 1,622 260 2,905 117 140	17,768 17,914 251 1,955 338 3,446 162 132	19,611 19,745 307 2,314 310 3,663 201 107	1,843 1,831 56 359 -28 217 39 -25	10.4 10.2 22.4 18.4 -8.4 6.3 23.8 -19.1
U.S. imports of merchandise for consumption: Ireland United Kingdom Germany France Canada Netherlands Belgium Switzerland Japan Singapore All other	14,235 5,445 4,260 2,491 1,326 578 1,319 1,658 2,536 5,995	16,199 6,426 4,344 3,405 1,946 701 1,167 1,900 3,166 1,632 8,399	16,091 6,793 5,267 3,982 2,228 548 1,739 1,968 3,007 1,512 9,542	16,536 6,240 5,712 4,664 2,500 502 1,302 2,325 2,816 1,632 11,874	17,088 8,627 6,532 4,600 3,618 2,318 2,871 2,327 2,922 13,698	552 2,386 820 -64 1,118 113 1,017 546 -489 1,290 1,825	3.3 38.2 14.4 -1.4 44.7 22.6 78.1 23.5 -17.3 79.0 15.4
Total	40,699	49,284	52,677	56,104	65,218	9,115	16.2
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	31,761 32,287 3 297 10 4,138 6 591	37,214 38,058 3 319 11 5,819 10 903	40,362 40,893 544 12 5,549 12 619	42,605 42,900 3 421 12 5,756 11 408	47,614 48,029 5 441 8 6,917 9 526	5,009 5,129 2 20 -4 1,161 -1 118	11.8 12.0 66.9 4.7 -31.5 20.2 -13.3 28.8

TABLE CH-5 Medicinal chemicals (CH025): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002-06a-continued

						Change, 200	6 from 2005
Item	2002 2003	2004	2005	2006	Absolu	te	Percent
			— Million dolla	rs			
U.S. merchandise trade balance: Ireland United Kingdom Germany France Canada Netherlands Belgium Switzerland Japan Singapore All other	-13,694 -2,798 -3,294 -716 1,023 963 436 -1,066 -1,087 -743 -980	-15,595 -4,084 -2,687 -1,388 761 1,758 1,023 -843 -1,674 -1,516 -2,512	-15,408 -4,220 -2,658 -1,486 -3,597 3,523 443 -659 -1,328 -1,376 -3,006	-15,695 -3,103 -3,114 -2,084 437 3,683 782 -829 -924 -1,288 -4,674	-16,385 -4,600 -3,336 -2,223 -418 4,100 256 -997 -250 -2,712 -6,193	-691 -1,497 -223 -139 -854 418 -526 -168 -674 -1,424 -1,520	-4.4 -48.3 -7.2 -6.7 11.3 -67.3 -20.3 73.0 -110.5 -32.5
Total	-21,957	-26,757	-25,578	-26,808	-32,758	-5,951	-22.2
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-20,996 -21,431 194 1,063 208 -1,527 61 -494	-24,136 -24,869 207 1,172 229 -2,891 104 -789	-23,479 -23,860 231 1,078 248 -2,645 105 -479	-24,838 -24,986 248 1,533 326 -2,311 152 -276	-28,004 -28,283 302 1,873 302 -3,254 192 -419	-3,166 -3,298 54 339 -25 -944 40 -143	-12.7 -13.2 21.9 22.1 -7.5 -40.9 26.5 -51.7

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export. <sup>b</sup>Not meaningful for purposes of comparison.

Ireland remained the dominant supplier of medicinal chemicals to the United States in 2006 because of its well-established manufacturing base, highly skilled workers, and favorable tax policy. U.S. imports from Ireland increased by more than 3 percent in 2006, while medicinal imports from the United Kingdom and Germany rose by 38 and 14 percent, respectively. These increases were due, in part, to the implementation of Medicare Part D, <sup>11</sup> and demand for certain branded drugs covered in Part D, as well as for generic products.

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<sup>&</sup>lt;sup>11</sup> Medicare Part D is that portion of the Medicare program relating to prescription drugs.

### Miscellaneous Plastic Products<sup>12</sup>

Change in 2006 from 2005:

U.S. trade deficit: No change, \$4.2 billion

U.S. exports: Increased by \$1.7 billion (11 percent) to \$17.6 billion U.S. imports: Increased by \$1.7 billion (9 percent) to \$21.7 billion

After several consecutive years of rises in the U.S. trade deficit for miscellaneous plastic products (MPP), there was virtually no change in the deficit in 2006. The U.S. deficit with China continued to expand, reaching a record \$5.7 billion, 38 percent above the total U.S. trade deficit in this sector (table CH-6). On the other hand, the U.S. dollar, which was relatively weak compared to the currencies of most major trading partners, together with the stronger economic performance of these countries, were largely responsible for a significant decline in the U.S. trade deficit with Canada and rising U.S. trade surpluses with Mexico, other Latin American counties, and Hong Kong. In 2006, world demand continued to strengthen for a myriad of plastic consumer items and construction products purchased through mass merchandising discount outlets and retail chains. U.S.-owned firms continued to invest abroad, especially in new primary plastics and MPP projects in Asia. Many of these U.S.-owned production facilities will reportedly export to the U.S. market in the future.

### U.S. Exports

U.S. MPP exports rose by 11 percent to a record \$17.6 billion in 2006, principally because of the improving U.S. and trading partner economies, <sup>19</sup> <sup>20</sup> growing trade with Canada and Mexico, and the generally lower value of the U.S. dollar relative to foreign currencies. <sup>21</sup> Exports were also spurred by U.S. and multinational participation in joint venture projects,

<sup>&</sup>lt;sup>12</sup> This industry/commodity group includes fabricated and semifabricated MPPs used for a wide variety of consumer and industrial products classified in Chapter 39 of the Harmonized Tariff Schedule of the United States (HTS). Selected examples of MPPs include food/commodity packaging films and containers; grocery and shopping bags; miscellaneous household and tableware items; buckets, pails, tarpaulins and other coverings; sporting goods components; Naugahyde® upholstery and flexible case materials; scrap plastics and scrap foam for carpet and other padding; floor and wall coverings; medical goods and gloves; polyester tire cord and strapping; plumbing supplies and fixtures; container closures; belts and hoses; electrical, packaging, and sealing tapes; and vinyl siding, flooring, window frames, doors, and decking products and components.

<sup>&</sup>lt;sup>13</sup> The change was less than 0.05 percent.

<sup>&</sup>lt;sup>14</sup> Some of the reasons cited for the rise in the trade deficit with China include the slow progress of China to adopt more market-oriented foreign exchange policies, outsourcing, and the movement of U.S. manufacturing to low-wage locations in China. Esposito, *Paradigm Shift*, 1, 20.

<sup>&</sup>lt;sup>15</sup> Frank Esposito, (Plastics News), telephone interview by Commission staff, March 30, 2006.

<sup>&</sup>lt;sup>16</sup> Council of Economic Advisers, Economic Report of the President, 284 (Table B-3).

<sup>&</sup>lt;sup>17</sup> The United States is typically a net importer of certain MPPs from labor-intensive industries compared to the large net export plastic resins sector, which is generally more automated and relatively less labor intensive.

<sup>&</sup>lt;sup>18</sup> Blaige, "How to Survive Consolidation," 6–7.

<sup>&</sup>lt;sup>19</sup> OMB, Overview of the President's 2008 Budget.

<sup>&</sup>lt;sup>20</sup> Storck, et al., "World Chemical Outlook," 13–27.

<sup>&</sup>lt;sup>21</sup> Federal Reserve, Foreign Exchange Rates.

**TABLE CH-6** Miscellaneous plastic products (CH041): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			<ul> <li>Million dolla</li> </ul>	ars ———			
U.S. exports of domestic merchandise: Canada China Mexico Germany Japan Taiwan United Kingdom Korea Hong Kong Belgium All other	3,568 291 3,752 374 420 197 449 204 275 202 2,835	3,766 354 3,773 368 481 177 472 202 318 243 2,887	3,983 514 4,105 409 522 271 497 216 368 301 3,121	4,523 547 4,544 439 538 235 557 226 429 357 3,433	4,894 714 4,930 497 546 252 620 269 570 378 3,899	371 167 387 58 8 17 64 43 141 21 467	8.2 30.5 8.5 13.2 1.6 7.2 11.5 18.8 32.9 6.0 13.6
Total	12,567	13,041	14,307	15,826	17,570	1,744	11.0
EU-15 EU-25 OPEC Latin America CBERA Asia Central and Eastern Europe	1,829 1,869 153 4,692 483 1,901	1,889 1,922 136 4,710 535 2,060 39	2,150 2,197 166 5,036 489 2,453 45	2,314 2,377 210 5,628 557 2,580 59	2,573 2,648 242 6,195 645 3,003 70	259 271 32 567 87 423 11	11.2 11.4 15.3 10.1 15.7 16.4 19.2
U.S. imports of merchandise for consumption: Canada China Mexico Germany Japan Taiwan United Kingdom Korea Hong Kong Belgium All other	4,122 3,273 1,021 661 701 836 380 363 153 82 1,867	4,465 3,742 1,105 769 768 872 386 440 178 80 2,176	5,037 4,480 1,387 822 887 940 437 551 205 106 2,491	5,645 5,600 1,633 883 936 982 471 601 214 126 2,904	5,869 6,456 1,783 989 894 1,032 477 666 173 172 3,227	224 856 150 106 -41 50 6 65 -41 47 323	4.0 15.3 9.2 12.0 -4.4 5.1 1.2 10.8 -19.2 37.3 11.1
Total	13,459	14,979	17,342	19,994	21,738	1,744	8.7
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	1,933 1,968 89 1,265 124 5,730 18 34	2,136 2,175 98 1,434 170 6,501 26 41	2,364 2,422 117 1,765 178 7,672 28 58	2,554 2,599 151 2,069 197 9,178 34 48	2,783 2,839 191 2,293 234 10,200 34 59	230 240 40 223 37 1,023 1	9.0 9.2 26.5 10.8 18.6 11.1 2.0 24.1

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**TABLE CH-6** Miscellaneous plastic products (CH041): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>—continued

						Change, 200	6 from 2005
Item	2002 2003	2004	2005	2006	Absolute	9	Percent
			– Million dolla	rs			
U.S. merchandise trade balance: Canada China Mexico Germany Japan Taiwan United Kingdom Korea Hong Kong Belgium All other	-555 -2,982 2,731 -286 -281 -639 -159 -159 123 120 968	-699 -3,388 2,668 -401 -287 -695 87 -238 141 162 712	-1,054 -3,966 2,718 -413 -365 -668 60 -335 163 196 630	-1,122 -5,053 2,911 -444 -398 -747 86 -375 215 231 529	-975 -5,742 3,147 -492 -348 -780 144 -397 397 206 673	147 -689 237 -48 50 -33 58 -22 182 -25 144	13.1 -13.6 8.1 -10.8 12.5 -4.5 68.0 -6.0 84.9 -11.0 27.2
Total	-892	-1,938	-3,035	-4,167	-4,168	(b)	(°)
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-103 -99 63 3,426 359 -3,829 56 4	-247 -252 38 3,275 365 -4,441 43 -2	-214 -224 49 3,271 311 -5,218 46 -13	-239 -221 59 3,559 360 -6,598 47 11	-210 -191 50 3,902 411 -7,197 71 11	29 30 -8 344 51 -600 24 ( <sup>2</sup> )	12.2 13.7 -13.8 9.7 14.1 -9.1 52.1

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Less than \$500,000.

<sup>&</sup>lt;sup>c</sup>Less than 0.05 percent.

especially in Asia.<sup>22</sup> About \$14 billion (90 percent) of U.S. MPP exports were attributable to three major product areas: consumer goods sold at the retail level in department stores, pharmacies, and hardware stores; packaging articles, particularly plastic bags and sacks of many varieties; and sheet and film used for the packaging of products and other purposes.<sup>23</sup> In 2006, Mexico and Canada were the main markets for MPP, accounting for \$9.8 billion (56 percent) of U.S. MPP exports.<sup>24</sup> Asian countries, in the aggregate, accounted for \$3 billion (17 percent) of U.S. exports, followed by the EU-25 with \$2.6 billion (15 percent).<sup>25</sup>

### U.S. Imports

In 2006, U.S. imports of MPP increased by \$1.7 billion (9 percent) to a record \$21.7 billion, continuing the upward movement that has prevailed for several years. China and Canada were the principal sources of U.S. imports of MPP in 2006, together accounting for \$12.3 billion, or 57 percent. China accounted for 49 percent of the increase. Industry sources cite a number of reasons for the large increases in imports in 2006, including relatively strong consumer demand, the continued movement of U.S.-owned firms offshore, <sup>26</sup> high U.S. energy prices, outsourcing to low wage areas, and China's undervalued currency. <sup>27,28</sup> More than 70 percent of U.S. imports of MPP in 2006 consisted of a variety of consumer goods sold at retail and discount establishments, including packaging articles, particularly plastic bags and sacks of many varieties; sheet and film used for the packaging of products and other applications; various containers, boxes and crates; and tableware, kitchenware, and other household articles. <sup>29</sup>

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<sup>&</sup>lt;sup>22</sup> Blaige, "How to Survive Consolidation," 6–7.

<sup>&</sup>lt;sup>23</sup> USITC, Dataweb.

<sup>&</sup>lt;sup>24</sup> Mexico is the only country with which the United States enjoys a significant trade surplus in MPP.

<sup>&</sup>lt;sup>25</sup> Ying Sun, "U.S. Plastics Scrap Feeds Processors in China."

<sup>&</sup>lt;sup>26</sup> Toloken, "Eastek Plans to Add Design at China Plan."

<sup>&</sup>lt;sup>27</sup> Esposito, "Paradigm Shift," 1, 20.

<sup>&</sup>lt;sup>28</sup> Frank Esposito, (Plastics News), telephone interview by Commission staff, March 30, 2006.

<sup>&</sup>lt;sup>29</sup> USITC, Dataweb.

TABLE CH-7 Chemicals and related products: U.S. trade for industry/commodity groups and subgroups, 2002-06a

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				— Million	dollars ———			
CH007	Major primary olefins:							
	Exports	245	217	474	451	611	160	35.5
	Imports	3.397	4.144	5.908	7.774	8.062	288	3.7
	Trade balance	-3,152	-3,927	-5,434	-7,324	-7,451	-128	-1.7
CH008	Other olefins:	,	•	•	,	,		
	Exports	260	343	430	420	556	135	32.2
	Imports	113	127	158	261	442	181	69.4
	Trade balance	147	217	272	159	114	-46	-28.7
CH009	Primary aromatics:							
	Exports	148	368	782	548	375	-173	-31.6
	Imports	1,159	1,450	2,202	2,802	3,101	299	10.7
	Trade balance	-1,011	-1,082	-1,420	-2,254	-2,726	-472	-20.9
CH010	Organic commodity chemicals:	,	•	·	,	,		
	Exports	2,010	2,692	4,631	4,295	4,360	66	1.5
	Imports	1,111	1,319	1,997	2,398	2,736	338	14.1
	Trade balance	898	1,373	2,635	1,897	1,625	-272	-14.4
CH011	Organic specialty chemicals:		•	•	,	,		
	Exports	5,050	6,004	6,731	6,999	8,089	1,090	15.6
	Imports	6,781	6,675	6,852	7,744	7,981	237	3.1
	Trade balance	-1,731	-671	-121	-744	108	852	(°)
CH012	Certain organic chemicals:							. ,
	Exports	7,668	8,857	11,283	11,991	14,263	2,271	18.9
	Imports	4,699	4,878	5,811	7,263	7,103	-159	-2.2
	Trade balance	2,969	3,979	5,472	4,729	7,159	2,430	51.4
CH013	Miscellaneous inorganic chemicals:							
	Exports	4,820	4,903	5,608	7,003	8,737	1,734	24.8
	Imports	4,948	5,038	5,714	6,626	7,310	684	10.3
	Trade balance	-128	-135	-106	377	1,426	1,049	278.5
CH014	Inorganic acids:							
	Exports	214	219	267	296	323	27	9.2
	Imports	246	229	337	362	415	53	14.7
	Trade balance	-32	-10	-70	-66	-91	-26	-39.5
CH015	Chlor-alkali chemicals:							
	Exports	851	897	953	1,269	1,479	211	16.6
	Imports	166	206	252	452	460	8	1.8
	Trade balance	685	691	701	817	1,020	203	24.8

TABLE CH-7 Chemicals and related products: U.S. trade for industry/commodity groups and subgroups, 2002–06ª—Continued

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars ———			
CH016	Fertilizers:							
	Exports	2,184	2,429	2,718	3,005	3,014	9	0.3
	Imports	3,043	4,395	5,510	7,439	7,525	86	1.2
	Trade balance	-859	-1,966	-2,792	-4,434	-4,512	-77	-1.7
CH017	Paints, inks, and related items, and certain components thereof:							
	Exports	3,614	3,918	4,200	4,509	4,988	479	10.6
	Imports	1,996	2,078	2,241	2,598	2,825	226	8.7
	Trade balance	1,618	1,840	1,959	1,911	2,164	253	13.2
CH018	Synthetic organic pigments:							
	Exports	331	332	376	400	405	5	1.2
	Imports	319	333	368	396	411	15	3.9
	Trade balance	12	-1	8	5	-6	-10	(°)
CH019	Synthetic dyes and azoic couplers:							
	Exports	249	226	287	283	304	21	7.5
	Imports	393	395	415	407	389	-18	-4.5
	Trade balance	-143	-169	-128	-125	-85	39	31.5
CH020	Synthetic tanning agents:							
	Exports	18	32	35	28	29	1	2.5
	Imports	7	8	8	8	7	( <sup>d</sup> )	-3.5
	Trade balance	12	24	27	21	22	1	4.6
CH021	Natural tanning and dyeing materials:							
	Exports	27	26	44	77	67	-11	-13.6
	Imports	54	63	70	74	76	2	2.4
	Trade balance	-27	-36	-26	3	-9	-12	(°)
CH022	Photographic chemicals and preparations:							
	Exports	522	475	435	460	512	52	11.3
	Imports	435	382	409	446	476	31	6.8
	Trade balance	87	93	26	14	36	22	154.8
CH023	Pesticide products and formulations:							
	Exports	2,028	2,316	2,674	2,708	3,105	396	14.6
	Imports	1,185	1,419	1,589	1,898	1,882	-16	-0.8
	Trade balance	842	897	1,085	811	1,223	412	50.9

TABLE CH-7 Chemicals and related products: U.S. trade for industry/commodity groups and subgroups, 2002–06ª—Continued

USITC code <sup>b</sup>							Change, 200	6 from 2005
	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars			
CH024	Adhesives and glues:							
	Exports	588	600	702	807	911	104	12.9
	Imports	206	251	305	333	338	4	1.3
	Trade balance	382	349	397	473	573	100	21.0
CH025	Medicinal chemicals:							
	Exports	18,742	22,527	27,098	29,296	32,460	3,164	10.8
	Imports	40,699	49,284	52,677	56,104	65,218	9,115	16.2
	Trade balance	,	-26,757	-25,578	-26,808	-32,758	-5,951	-22.2
CH026	Essential oils and other flavoring materials:	,	-, -	-,	.,	,	-,	
	Exports	1,211	1,389	1,462	1,420	1,525	104	7.3
	Imports	786	1,754	2,540	3,019	3,089	70	2.3
	Trade balance	425	-365	-1,078	-1,598	-1,564	34	2.2
CH027	Perfumes, cosmetics, and toiletries:			,	•	,		
	Exports	3,160	3,435	3,900	4,418	5,018	600	13.6
	Imports	2,716	3,111	3,652	4,099	4,374	275	6.7
	Trade balance	444	324	248	319	643	324	101.6
CH028	Soaps, detergents, and surface-active agents:							
	Exports	2,282	2,524	2,929	3,192	3,608	416	13.0
	Imports	1,273	1,369	1,568	1,680	1,835	154	9.2
	Trade balance	1,009	1,156	1,361	1,511	1,773	262	17.3
CH029	Miscellaneous chemicals and specialties:							
	Exports	2,901	3,149	3,444	3,708	4,249	541	14.6
	Imports	1,957	2,150	2,497	2,907	3,249	342	11.8
	Trade balance	944	999	947	801	1,000	198	24.7
CH030	Explosives, propellant powders, and related items:							
	Exports	286	385	472	476	542	67	14.0
	Imports	302	353	402	459	534	75	16.3
	Trade balance	-17	33	70	16	8	-8	-50.5
CH031	Polyethylene resins in primary forms:	• •		. •		· ·	· ·	00.0
J. 100 1	Exports	2,590	2,817	3,698	4,448	5,103	655	14.7
	Imports	1,651	2,158	2,505	3,227	3,712	486	15.0
	Trade balance	938	658	1,192	1,221	1,391	170	13.9

TABLE CH-7 Chemicals and related products: U.S. trade for industry/commodity groups and subgroups, 2002–06ª—Continued

USITC							Change, 200	6 from 2005
code	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars ———			
CH032	Polypropylene resins in primary forms:							
	Exports	1.188	1,416	1,767	2,202	2,648	446	20.2
	Imports	259	298	359	415	395	-20	-4.8
	Trade balance	929	1,118	1,408	1,787	2,253	466	26.1
CH033	Polyvinyl chloride resins in primary forms:							
	Exports	781	837	1,044	1,112	1,323	211	19.0
	Imports	247	287	383	593	546	-47	-7.9
	Trade balance	534	550	661	519	777	259	49.9
CH034	Styrene polymers in primary forms:							
	Exports	752	783	929	1,039	1,322	283	27.2
	Imports	580	628	833	1,153	1,102	-52	-4.5
	Trade balance	172	155	96	-114	220	334	(°)
CH035	Saturated polyester resins:							
	Exports	712	814	1,014	1,059	1,159	101	9.5
	Imports	537	656	728	1,199	1,329	130	10.8
	Trade balance	175	158	285	-141	-170	-29	-20.6
CH036	Other plastics in primary forms:							
	Exports	7,189	7,694	9,106	10,531	11,746	1,215	11.5
	Imports	2,823	3,022	3,488	4,050	4,244	194	4.8
	Trade balance	4,366	4,673	5,618	6,481	7,502	1,021	15.8
CH037	Styrene-butadiene rubber in primary forms:							
	Exports	273	324	374	505	596	91	18.1
	Imports	232	231	235	415	380	-34	-8.3
	Trade balance	41	93	139	90	215	126	140.0
CH038	Other synthetic rubber:							
	Exports	1,361	1,478	1,801	2,160	2,524	364	16.9
	Imports	725	741	858	1,117	1,140	23	2.0
	Trade balance	636	737	943	1,043	1,384	342	32.8
CH039	Pneumatic tires and tubes (new):							
	Exports	2,233	2,212	2,550	2,810	3,011	201	7.2
	Imports	4,694	5,170	6,163	7,583	8,522	939	12.4
	Trade balance	-2,460	-2,957	-3,613	-4,773	-5,511	-738	-15.5
CH040	Other tires:							
	Exports	94	98	108	116	152	36	31.2
	Imports	123	137	158	203	220	17	8.4
	Trade balance	-29	-39	-50	-87	-68	19	21.9

TABLE CH-7 Chemicals and related products: U.S. trade for industry/commodity groups and subgroups, 2002–06ª—Continued

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				— Million	dollars ———			
CH041	Miscellaneous plastic products:							
	Exports	12,567	13,041	14,307	15,826	17,570	1,744	11.0
	Imports	13,459	14,979	17,342	19,994	21,738	1,744	8.7
	Trade balance	-892	-1,938	-3,035	-4,167	-4,168	(d)	(e)
CH042	Miscellaneous rubber products:						.,	` `
	Exports	2,437	2,400	2,623	2,743	3,055	312	11.4
	Imports	2,752	3,040	3,568	3,884	4,074	190	4.9
	Trade balance	-315	-641	-945	-1,141	-1,019	122	10.7
CH043	Gelatin:							
	Exports	75	92	89	88	76	-12	-13.3
	Imports	96	115	113	116	138	22	18.8
	Trade balance	-21	-23	-24	-28	-62	-34	-118.2
CH044	Natural rubber:							
	Exports	40	59	37	34	33	-1	-3.1
	Imports	751	1,047	1,466	1,552	2,029	478	30.8
	Trade balance	-712	-988	-1,429	-1,517	-1,996	-479	-31.6

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>b</sup>This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes

<sup>&</sup>lt;sup>c</sup>Not meaningful for purposes of comparison.

dLess than \$500,000.

<sup>&</sup>lt;sup>e</sup>Less than 0.05 percent.

TABLE CH-8 Chemicals and related products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
CH007	Major primary olefins:						
	Number of establishments	37	37	37	35	33	-5.7
	Employees (thousands)	5.0	5.0	5.0	5.0	4.0	-20.0
	Capacity utilization (percent)	95	95	97	91	95	4.4
	U.S. shipments (million dollars)	19,000	19,500	21,800	20,500	22,500	9.8
	U.S. exports (million dollars)	245	217	474	451	611	35.5
	U.S. imports (million dollars)	3,397	4,144	5,908	7,774	8,062	3.7
	Apparent U.S. consumption (million dollars)	22,152	23,427	27,234	27,824	29,951	7.6
	Trade balance (million dollars)	-3,152	-3,927	-5,434	-7,324	-7,451	-1.7
	Ratio of imports to consumption (percent)	15.3	17.7	21.7	27.9	26.9	-3.7
	Ratio of exports to shipments (percent)	1.3	1.1	2.2	2.2	2.7	23.4
CH008	Other olefins:						
	Number of establishments	23	23	23	21	19	-9.5
	Employees (thousands)	1.0	1.0	1.0	1.0	1.0	0.0
	Capacity utilization (percent)	97	97	98	90	95	5.6
	U.S. shipments (million dollars)	1,650	1,800	2,000	1,850	2,100	13.5
	U.S. exports (million dollars)	260	343	430	420	556	32.2
	U.S. imports (million dollars)	113	127	158	261	442	69.4
	Apparent U.S. consumption (million dollars)	1,503	1,583	1,728	1,691	1,986	17.5
	Trade balance (million dollars)	147	217	272	159	114	-28.7
	Ratio of imports to consumption (percent)	7.5	8.0	9.1	15.4	22.3	44.2
	Ratio of exports to shipments (percent)	15.7	19.1	21.5	22.7	26.5	16.5
CH009	Primary aromatics:						
	Number of establishments	31	31	31	29	27	-6.9
	Employees (thousands)	2.0	2.0	2.0	2.0	2.0	0.0
	Capacity utilization (percent)	85	85	85	75	80	6.7
	U.S. shipments (million dollars)	5,000	5,300	6,890	5,900	6,100	3.4
	U.S. exports (million dollars)	148	368	782	548	375	-31.6
	U.S. imports (million dollars)	1,159	1,450	2,202	2,802	3,101	10.7
	Apparent U.S. consumption (million dollars)	6,011	6,382	8,310	8,154	8,826	8.2
	Trade balance (million dollars)	-1,011	-1,082	-1,420	-2,254	-2,726	-20.9
	Ratio of imports to consumption (percent)	19.3	22.7	26.5	34.4	35.1	2.2
	Ratio of exports to shipments (percent)	3.0	6.9	11.3	9.3	6.1	-33.8
CH014	Inorganic acids:						
	Number of establishments	(a)	(a)	(a)	(a)	(a)	(a)
	Employees (thousands)	(a)	( <sup>a</sup> )	( <sup>a</sup> )	( <sup>a</sup> )	(a)	( <sup>a</sup> )
	Capacity utilization (percent)	( <sup>a</sup> )	( <sup>a</sup> )	( <sup>a</sup> )	( <sup>a</sup> )	(a)	(a)
	U.S. shipments (million dollars)	2,201	2,557	( <sup>a</sup> )	( <sup>a</sup> )	( <sup>a</sup> )	(a)
	U.S. exports (million dollars)	214	219	267	296	323	9.2
	U.S. imports (million dollars)	246	229	337	362	415	14.7
	Apparent U.S. consumption (million dollars)	2,233	2,567	(a)	(a)	(a)	(a)
	Trade balance (million dollars)	-32	-10	- <b>?</b> Ó	-66	-91	-39.5
	Ratio of imports to consumption (percent)	11.0	8.9	(a)	(a)	(a) (a)	(a) (a)
	Ratio of exports to shipments (percent)	9.7	8.6	(a)	( <sup>a</sup> )	(a)	(a)
				` '	` '	` '	( )

TABLE CH-8 Chemicals and related products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

CH015 Cr	dustry/commodity group	2002	2003	2004	2005	2006	2006 from 2005
r E ( U U	nlor-alkali chemicals:						
E ( U U	Number of establishments	(a)	(a)	(a)	(a)	(a)	(a)
(     	Employees (thousands)	(a)	(a)	( <sup>a</sup> ) ( <sup>a</sup> )	(a)	(a)	(a)
( (	Capacity utilization (percent)	(a)	(a)	(a)	(a)	(a)	(a) (a)
l l	U.S. shipments (million dollars)	(a)	(a)	(a)	(a)	(a)	(a)
l	U.S. exports (million dollars)	851	897	953	1,269	1,479	16.6
	U.S. imports (million dollars)	166	206	252	452	460	1.8
	Apparent U.S. consumption (million dollars)	(a)	(a)	(a)	(a)	(a)	(a)
	Trade balance (million dollars)	6 <u>8</u> 5	691	7Ò1	8ÌŹ	1,02Ó	24.8
	Ratio of imports to consumption (percent)	( <sup>a</sup> )	(a)	(a)	(a)	(a)	(a)
	Ratio of exports to shipments (percent)	(a)	(a)	(a)	(a)	(a)	(a)
	ertilizers:	( )	( )	( )	( )	( )	( )
	Number of establishments	350	350	348	345	345	0.0
	Employees (thousands)	20.0	20.0	20.0	19.0	18.0	-5.3
	Capacity utilization (percent)	90	81	89	89	86	-3.4
	U.S. shipments (million dollars)	10,200	11,300	12,900	13,800	14,500	5.1
	U.S. exports (million dollars)	2.184	2,429	2.718	3,005	3,014	0.3
į	U.S. imports (million dollars)	3,043	4,395	5,510	7,439	7,525	1.2
	Apparent U.S. consumption (million dollars)	11,059	13,266	15,692	18,234	19,012	4.3
	Trade balance (million dollars)	-859	-1,966	-2,792	-4,434	-4,512	-1.7
F	Ratio of imports to consumption (percent)	27.5	33.1	35.1	40.8	39.6	-3.0
	Ratio of exports to shipments (percent)	21.4	21.5	21.1	21.8	20.8	-4.5
	aints, inks, and related items, and certain						
	components thereof:						
1	Number of establishments	1,450	1,445	1,450	1,437	1,443	0.4
E	Employees (thousands)	15.0	16.0	16.0	16.0	16.0	0.0
(	Capacity utilization (percent)	85	86	85	87	86	-1.1
l	U.S. shipments (million dollars)	26,000	26,600	28,000	29,400	31,100	5.8
Į	U.S. exports (million dollars)	3,614	3,918	4,200	4,509	4,988	10.6
l	U.S. imports (million dollars)	1,996	2,078	2,241	2,598	2,825	8.7
A	Apparent U.S. consumption (million dollars)	24,382	24,760	26,041	27,489	28,936	5.3
٦	Trade balance (million dollars)	1,618	1,840	1,959	1,911	2,164	13.2
F	Ratio of imports to consumption (percent)	8.2	8.4	8.6	9.5	9.8	3.3
F	Ratio of exports to shipments (percent)	13.9	14.7	15.0	15.3	16.0	4.6
CH018 Sy	nthetic organic pigments:						
1	Number of establishments	32	32	32	8	8	0.0
E	Employees (thousands)	6.0	6.0	6.0	6.0	6.0	0.0
(	Capacity utilization (percent)	80	75	80	85	85	0.0
l	U.S. shipments (million dollars)	1,110	1,100	1,210	1,250	1,225	-2.0
l	U.S. exports (million dollars)	331	332	376	400	405	1.2
	U.S. imports (million dollars)	319	333	368	396	411	3.9
	Apparent U.S. consumption (million dollars)	1,098	1,101	1,202	1,245	1,231	-1.2
	Trade balance (million dollars)	12	-1	8	5	-6	(b)
	Ratio of imports to consumption (percent)	29.0	30.3	30.6	31.8	33.4	5.1
F	Ratio of exports to shipments (percent)	29.8	30.2	31.1	32.0	33.1	3.3

TABLE CH-8 Chemicals and related products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
CH019	Synthetic dyes and azoic couplers:						
011010	Number of establishments	32	32	32	13	13	0.0
	Employees (thousands)	8.0	8.0	8.0	8.0	8.0	0.0
	Capacity utilization (percent)	80	75	80	80	80	0.0
	U.S. shipments (million dollars)	1,320	1,320	1,450	1,500	1,450	-3.3
	U.S. exports (million dollars)	249	226	287	283	304	7.5
	U.S. imports (million dollars)	393	395	415	407	389	-4.5
	Apparent U.S. consumption (million dollars)	1,463	1,489	1,578	1,625	1,535	-5.5
	Trade balance (million dollars)	-143	-169	-128	-125	-85	31.5
	Ratio of imports to consumption (percent)	26.8	26.5	26.3	25.1	25.3	1.1
	Ratio of exports to shipments (percent)	18.9	17.1	19.8	18.8	21.0	11.2
CH020	Synthetic tanning agents:						
	Number of establishments	5	5	5	5	5	0.0
	Employees (thousands)	1.0	1.0	1.0	1.0	1.0	0.0
	Capacity utilization (percent)	80	75	80	80	85	6.3
	U.S. shipments (million dollars)	24	42	46	46	46	0.0
	U.S. exports (million dollars)	18	32	35	28	29	2.5
	U.S. imports (million dollars)	7	8	8	8	7	-3.5
	Apparent U.S. consumption (million dollars)	12	18	19	25	24	-3.9
	Trade balance (million dollars)	12	24	27	21	22	4.6
	Ratio of imports to consumption (percent)	53.6	46.6	42.2	30.0	30.1	0.3
	Ratio of exports to shipments (percent)	76.5	77.1	76.4	61.7	63.3	2.5
CH021	Natural tanning and dyeing materials:						
	Number of establishments	10	10	10	10	10	0.0
	Employees (thousands)	1.0	1.0	1.0	1.0	1.0	0.0
	Capacity utilization (percent)	80	75	80	80	85	6.3
	U.S. shipments (million dollars)	30	35	45	45	45	0.0
	U.S. exports (million dollars)	27	26	44	77	67	-13.6
	U.S. imports (million dollars)	54	63	70	74	76	2.4
	Apparent U.S. consumption (million dollars)	57	71	71	42	54	29.6
	Trade balance (million dollars)	-27	-36	-26	3	-9	(b)
	Ratio of imports to consumption (percent)	95.4	87.9	98.7	°177.7	°140.4	-21.0
	Ratio of exports to shipments (percent)	91.3	75.4	97.9	°172.1	°148.7	-13.6
CH022	Photographic chemicals and preparations:						
	Number of establishments	5	5	5	5	5	0.0
	Employees (thousands)	1.0	1.0	1.0	1.0	1.0	0.0
	Capacity utilization (percent)	80	75	75	75	75	0.0
	U.S. shipments (million dollars)	( <sup>a</sup> )	( <sup>a</sup> )	( <sup>a</sup> )	( <sup>a</sup> )	( <sup>a</sup> )	(a)
	U.S. exports (million dollars)	522	475	435	460	512	11.3
	U.S. imports (million dollars)	435	382	409	446	476	6.8
	Apparent U.S. consumption (million dollars)	(a)	(a)	(a)	( <sup>a</sup> )	(a)	(a)
	Trade balance (million dollars)	87	93	26	14	36	154.8
	Ratio of imports to consumption (percent)	(a) (a)	(a) (a)	( <sup>a</sup> ) ( <sup>a</sup> )	( <sup>a</sup> ) ( <sup>a</sup> )	(a) (a)	(a) (a)
	Ratio of exports to shipments (percent)	(a)	(a)	(a)	(a)	(a)	(a)

TABLE CH-8 Chemicals and related products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
CH023	Pesticide products and formulations:		40	40	00	00	0.0
	Number of establishments	55	43	43	20	20	0.0
	Employees (thousands)	14.0	14.0	14.0	14.0	14.0	0.0
	Capacity utilization (percent)	85	80	85	85	85	0.0
	U.S. shipments (million dollars)	9,350	9,100	9,550	9,550	9,550	0.0
	U.S. exports (million dollars)	2,028	2,316	2,674	2,708	3,105	14.6
	U.S. imports (million dollars)	1,185	1,419	1,589	1,898	1,882	-0.8
	Apparent U.S. consumption (million dollars)	8,508	8,203	8,465	8,739	8,327	-4.7
	Trade balance (million dollars)	842	897	1,085	811	1,223	50.9
	Ratio of imports to consumption (percent)	13.9	17.3	18.8	21.7	22.6	4.1
	Ratio of exports to shipments (percent)	21.7	25.5	28.0	28.4	32.5	14.6
CH024	Adhesives and glues:						
	Number of establishments	585	564	543	522	520	-0.4
	Employees (thousands)	20.0	21.0	21.0	21.0	21.0	0.0
	Capacity utilization (percent)	80	80	80	80	80	0.0
	U.S. shipments (million dollars)	7,400	7,900	8,200	8,900	9,200	3.4
	U.S. exports (million dollars)	588	600	702	807	911	12.9
	U.S. imports (million dollars)	206	251	305	333	338	1.3
	Apparent U.S. consumption (million dollars)	7,018	7,551	7,803	8,427	8,627	2.4
	Trade balance (million dollars)	382	349	397	473	573	21.0
	Ratio of imports to consumption (percent)	2.9	3.3	3.9	4.0	3.9	-1.1
	Ratio of exports to shipments (percent)	7.9	7.6	8.6	9.1	9.9	9.2
CH025	Medicinal chemicals:						
	Number of establishments	715	715	715	715	710	-0.7
	Employees (thousands)	208.0	208.0	212.0	210.0	209.0	-0.5
	Capacity utilization (percent)	85	75	85	88	89	1.1
	U.S. shipments (million dollars)	107,000	107,010	113,500	113,850	119,550	5.0
	U.S. exports (million dollars)	18,742	22,527	27,098	29,296	32,460	10.8
	U.S. imports (million dollars)	40,699	49,284	52,677	56,104	65,218	16.2
	Apparent U.S. consumption (million dollars)	128,957	133,767	139,078	140,658	152,308	8.3
	Trade balance (million dollars)	-21,957	-26,757	-25,578	-26,808	-32,758	-22.2
	Ratio of imports to consumption (percent)	31.6	36.8	37.9	39.9	42.8	7.4
	Ratio of exports to shipments (percent)	17.5	21.1	23.9	25.7	27.2	5.5
CH026	Essential oils and other flavoring materials:						
	Number of establishments	53	53	53	53	53	0.0
	Employees (thousands)	50.0	50.0	50.0	48.0	51.0	6.3
	Capacity utilization (percent)	82	82	79	75	75	0.0
	U.S. shipments (million dollars)	3,700	3,900	4,100	4,200	4,600	9.5
	U.S. exports (million dollars)	1,211	1,389	1,462	1,420	1,525	7.3
	U.S. imports (million dollars)	786	1,754	2,540	3,019	3,089	2.3
	Apparent U.S. consumption (million dollars)	3,275	4,265	5,178	5,798	6,164	6.3
	Trade balance (million dollars)	425	-365	-1,078	-1,598	-1,564	2.2
	Ratio of imports to consumption (percent)	24.0	41.1	49.1	52.1	50.1	-3.8
	Ratio of exports to shipments (percent)	32.7	35.6	35.7	33.8	33.1	-2.0

TABLE CH-8 Chemicals and related products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
				200-			2000 110111 2000
CH027	Perfumes, cosmetics, and toiletries:	705	700	740	700	700	0.0
	Number of establishments	725	720	710	700	700	0.0
	Employees (thousands)	46.0	48.0	46.0	45.0	45.0	0.0
	Capacity utilization (percent)	68	59	67	64	70	9.4
	U.S. shipments (million dollars)	30,850	30,300	34,000	37,800	40,000	5.8
	U.S. exports (million dollars)	3,160	3,435	3,900	4,418	5,018	13.6
	U.S. imports (million dollars)	2,716	3,111	3,652	4,099	4,374	6.7
	Apparent U.S. consumption (million dollars)	30,406	29,976	33,752	37,481	39,357	5.0
	Trade balance (million dollars)	444	324	248	319	643	101.6
	Ratio of imports to consumption (percent)	8.9	10.4	10.8	10.9	11.1	1.6
	Ratio of exports to shipments (percent)	10.2	11.3	11.5	11.7	12.5	7.3
CH028	Soaps, detergents, and surface-active agents:						
	Number of establishments	822	825	815	810	800	-1.2
	Employees (thousands)	67.0	62.0	54.0	54.0	53.0	-1.9
	Capacity utilization (percent)	87	85	88	87	89	2.3
	U.S. shipments (million dollars)	30,600	33,000	35,900	39,600	41,000	3.5
	U.S. exports (million dollars)	2,282	2,524	2,929	3,192	3,608	13.0
	U.S. imports (million dollars)	1,273	1,369	1,568	1,680	1,835	9.2
	Apparent U.S. consumption (million dollars)	29,591	31,844	34,539	38,089	39,227	3.0
	Trade balance (million dollars)	1,009	1,156	1,361	1,511	1,773	17.3
	Ratio of imports to consumption (percent)	4.3	4.3	4.5	4.4	4.7	6.0
	Ratio of exports to shipments (percent)	7.5	7.6	8.2	8.1	8.8	9.2
CH030	Explosives, propellant powders, and related items:						
	Number of establishments	118	115	115	112	113	0.9
	Employees (thousands)	13.0	13.0	13.0	13.0	13.0	0.0
	Capacity utilization (percent)	85	85	85	86	87	1.2
	U.S. shipments (million dollars)	2,200	2,285	2,400	2,590	2,605	0.6
	U.S. exports (million dollars)	286	385	472	476	542	14.0
	U.S. imports (million dollars)	302	353	402	459	534	16.3
	Apparent U.S. consumption (million dollars)	2,217	2,252	2,330	2,574	2,597	0.9
	Trade balance (million dollars)	-17	33	70	16	2,337	-50.5
	Ratio of imports to consumption (percent)	13.6	15.7	17.2	17.8	20.6	15.3
	Ratio of exports to shipments (percent)	13.0	16.9	19.7	18.4	20.8	13.4
CH031	Polyethylene resins in primary forms:	13.0	10.9	19.7	10.4	20.0	13.4
CI 103 I	Number of establishments	46	46	46	46	46	0.0
		46			46		0.0
	Employees (thousands)	22.0	22.0	22.0	22.0	22.0	0.0
	Capacity utilization (percent)	87	85	94	86	90	4.7
	U.S. shipments (million dollars)	9,000	10,500	13,600	15,600	17,900	14.7
	U.S. exports (million dollars)	2,590	2,817	3,698	4,448	5,103	14.7
	U.S. imports (million dollars)	1,651	2,158	2,505	3,227	3,712	15.0
	Apparent U.S. consumption (million dollars)	8,062	9,842	12,408	14,379	16,509	14.8
	Trade balance (million dollars)	938	658	1,192	1,221	1,391	13.9
	Ratio of imports to consumption (percent)	20.5	21.9	20.2	22.4	22.5	0.2
	Ratio of exports to shipments (percent)	28.8	26.8	27.2	28.5	28.5	-0.0

TABLE CH-8 Chemicals and related products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
CH032							
CI 1032	Polypropylene resins in primary forms:  Number of establishments	28	28	29	29	29	0.0
	Employees (thousands)	6.0	6.0	6.0	6.0	6.0	0.0
	Capacity utilization (percent)	93	93	95	89	90	1.1
	U.S. shipments (million dollars)	4,500	5,000	6,200	7,200	8,100	12.5
	U.S. exports (million dollars)	1,188	1,416	1,767	2,202	2,648	20.2
	U.S. imports (million dollars)	259	298	359	2,202 415	395	-4.8
	Apparent U.S. consumption (million dollars)	3,571	3,882	4,792	5,413	5,847	8.0
	Trade balance (million dollars)	929	3,002 1,118	4,792 1,408	1,787	2,253	26.1
		7.2	7.7		7.7		
	Ratio of imports to consumption (percent)	7.2 26.4	28.3	7.5 28.5	30.6	6.8 32.7	-11.9 6.9
CHOSS	Ratio of exports to shipments (percent)	20.4	20.3	20.3	30.6	32.7	0.9
CH033	Polyvinyl chloride resins in primary forms:	27	27	27	27	27	0.0
	Number of establishments	27 7.0	27	27 7.0	27 7.0	27 7.0	0.0 0.0
	Employees (thousands)	-	7.0	_	-	_	
	Capacity utilization (percent)	91	88	95	90	88	-2.2 -1.6
	U.S. shipments (million dollars)	4,000	4,500	6,200	6,300	6,200	
	U.S. exports (million dollars)	781	837	1,044	1,112	1,323	19.0
	U.S. imports (million dollars)	247	287	383	593	546	-7.9
	Apparent U.S. consumption (million dollars)	3,466	3,950	5,539	5,781	5,423	-6.2
	Trade balance (million dollars)	534	550	661	519	777	49.9
	Ratio of imports to consumption (percent)	7.1	7.3	6.9	10.3	10.1	-1.8
01.100.4	Ratio of exports to shipments (percent)	19.5	18.6	16.8	17.7	21.3	20.9
CH034	Styrene polymers in primary forms:	7.4	7.4	7.4	7.4	74	0.0
	Number of establishments	71	71	71	71	71	0.0
	Employees (thousands)	12.0	12.0	12.0	12.0	12.0	0.0
	Capacity utilization (percent)	82	82	86	84	84	0.0
	U.S. shipments (million dollars)	5,700	5,900	7,400	8,300	8,900	7.2
	U.S. exports (million dollars)	752	783	929	1,039	1,322	27.2
	U.S. imports (million dollars)	580	628	833	1,153	1,102	-4.5
	Apparent U.S. consumption (million dollars)	5,528	5,745	7,304	8,414	8,680	3.2
	Trade balance (million dollars)	172	155	96	-114	220	_(b)
	Ratio of imports to consumption (percent)	10.5	10.9	11.4	13.7	12.7	-7.4
	Ratio of exports to shipments (percent)	13.2	13.3	12.6	12.5	14.9	18.6
CH035	Saturated polyester resins:						
	Number of establishments	54	55	55	55	_55	0.0
	Employees (thousands)	7.0	7.0	7.0	7.0	7.0	0.0
	Capacity utilization (percent)	85	85	90	90	90	0.0
	U.S. shipments (million dollars)	5,500	5,800	6,800	7,800	8,700	11.5
	U.S. exports (million dollars)	712	814	1,014	1,059	1,159	9.5
	U.S. imports (million dollars)	537	656	728	1,199	1,329	10.8
	Apparent U.S. consumption (million dollars)	5,325	5,642	6,515	7,941	8,870	11.7
	Trade balance (million dollars)	175	158	285	-141	-170	-20.6
	Ratio of imports to consumption (percent)	10.1	11.6	11.2	15.1	15.0	-0.8
	Ratio of exports to shipments (percent)	13.0	14.0	14.9	13.6	13.3	-1.8

TABLE CH-8 Chemicals and related products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
					2005		2000 110111 2003
CH037	Styrene-butadiene rubber in primary forms:	4.4	4.4	4.4	4.4	4.4	0.0
	Number of establishments	11	11	11	11	11	0.0
	Employees (thousands)	5.0	5.0	5.0	5.0	5.0	0.0
	Capacity utilization (percent)	92	93	94	95	95	0.0
	U.S. shipments (million dollars)	1,490	1,600	1,700	1,900	2,000	5.3
	U.S. exports (million dollars)	273	324	374	505	596	18.1
	U.S. imports (million dollars)	232	231	235	415	380	-8.3
	Apparent U.S. consumption (million dollars)	1,449	1,507	1,561	1,810	1,785	-1.4
	Trade balance (million dollars)	41	93	139	90	215	140.0
	Ratio of imports to consumption (percent)	16.0	15.4	15.1	22.9	21.3	-7.0
	Ratio of exports to shipments (percent)	18.3	20.3	22.0	26.6	29.8	12.2
CH038	Other synthetic rubber:						
	Number of establishments	34	(a)	34	34	34	0.0
	Employees (thousands)	11.0	(a)	11.0	11.0	11.0	0.0
	Capacity utilization (percent)	83	(a)	85	86	88	2.3
	U.S. shipments (million dollars)	4,300	(a)	4,600	4,800	5,300	10.4
	U.S. exports (million dollars)	1,361	1,478	1,801	2,160	2,524	16.9
	U.S. imports (million dollars)	725	741	858	1,117	1,140	2.0
	Apparent U.S. consumption (million dollars)	3,664	(a)	3,657	3,757	3,916	4.2
	Trade balance (million dollars)	636	737	943	1,043	1,384	32.8
	Ratio of imports to consumption (percent)	19.8	(a)	23.5	29.7	29.1	-2.1
	Ratio of exports to shipments (percent)	31.7	( <sup>a</sup> )	39.1	45.0	47.6	5.8
CH039	Pneumatic tires and tubes (new):		( )				
	Number of establishments	42	42	42	42	42	0.0
	Employees (thousands)	64.0	64.0	64.0	64.0	64.0	0.0
	Capacity utilization (percent)	90	92	92	92	93	1.1
	U.S. shipments (million dollars)	13,500	14,000	14,500	14,700	15,000	2.0
	U.S. exports (million dollars)	2,233	2,212	2,550	2,810	3,011	7.2
	U.S. imports (million dollars)	4.694	5,170	6.163	7,583	8.522	12.4
	Apparent U.S. consumption (million dollars)	15,960	16,957	18,113	19,473	20,511	5.3
	Trade balance (million dollars)	-2,460	-2,957	-3,613	-4,773	-5,511	-15.5
	Ratio of imports to consumption (percent)	29.4	30.5	34.0	38.9	41.5	6.7
	Ratio of exports to shipments (percent)	16.5	15.8	17.6	19.1	20.1	5.0
CH040	Other tires:	10.0	10.0	17.0	10.1	20.1	0.0
011040	Number of establishments	1,400	1,400	1,400	1,400	1,400	0.0
	Employees (thousands)	8.0	8.0	8.0	8.0	8.0	0.0
	Capacity utilization (percent)	90	90	90	90	85	-5.6
	U.S. shipments (million dollars)	1,100	1,100	1,100	1,100	1.000	-5.0 -9.1
	U.S. exports (million dollars)	94	98	1,100	1,100	1,000	31.2
		123	137	158	203	220	8.4
	U.S. imports (million dollars)		-				-10.0
	Apparent U.S. consumption (million dollars)	1,129	1,139	1,150	1,187	1,068	
	Trade balance (million dollars)	-29	-39	-50	-87	-68	21.9
	Ratio of imports to consumption (percent)	10.9	12.0	13.7	17.1	20.6	20.5
	Ratio of exports to shipments (percent)	8.6	8.9	9.8	10.6	15.2	44.3

TABLE CH-8 Chemicals and related products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
CH044	Natural rubber: Number of establishments Employees (thousands) Capacity utilization (percent) U.S. shipments (million dollars) U.S. exports (million dollars) U.S. imports (million dollars) Trade balance (million dollars) Ratio of imports to consumption (percent) Ratio of exports to shipments (percent)	(a) (a) (a) (a) 40 751 (a) -712 (a) (a)	(a) (a) (a) (a) (b) 59 1,047 (a) -988 (a) (a)	(a) (a) (a) (a) 37 1,466 (a) -1,429 (a) (a)	(a) (a) (a) (a) (a) 34 1,552 (a) -1,517 (a) (a)	(a) (a) (a) (a) (a) (a) 33 2,029 (a) (a) (a) (a)	(a) (a) (a) (a) -3.1 30.8 (a) -31.6 (a)

Source: These data have been estimated by the Commission's international trade analysts on the basis of primary and secondary data sources including discussions with various Government and industry contacts. These estimated data are subject to change either from secondary sources or from detailed surveys the Commission often conducts in the course of statutory investigations or other work. Further, these data may undergo adjustments based on revisions in tariff nomenclature, classification practices, or redefinitions of industry classes.

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Not available.

<sup>&</sup>lt;sup>b</sup>Not meaningful.

<sup>&</sup>lt;sup>c</sup>Inventory changes, for which data are not available, likely account for ratios that exceed 100 percent.

# **Energy and Related Products**

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Change in 2006 from 2005:

U.S. trade deficit: Increased by \$36.9 billion (15 percent) to \$280.2 billion U.S. exports: Increased by \$9.1 billion (31 percent) to \$39.0 billion U.S. imports: Increased by \$46.0 billion (17 percent) to \$319.2 billion

Historically, the United States has had a growing trade deficit in the energy sector<sup>1</sup> because of steadily increasing consumption coupled with continued stagnant domestic production. In 2006, the overall U.S. trade deficit in energy-related products increased by 15 percent primarily because of increasing prices for crude petroleum, which is the feedstock for the production of refined petroleum products (table EP-1). World prices for crude petroleum increased by an average of 20 percent from 2005 to an average of \$60.12 per barrel in 2006. During the same period, U.S. imports of crude petroleum declined by 43,000 barrels per day (b/d) (0.4 percent).

The rise in crude petroleum prices is attributable to continued tight supplies on the world market resulting from several factors, including production cuts by members of the Organization of Petroleum Exporting Countries (OPEC); continued labor unrest in Venezuela and Nigeria; and the ongoing war in Iraq. Increased global demand for crude petroleum has outstripped supply in recent years, decreasing the surplus of production capacity. For example, in 2006, global surplus production capacity was approximately 1.3 million b/d compared with 1.6 million b/d in 2005 (in 2003, there was more than 3 million b/d of surplus capacity).<sup>2</sup>

The energy-related products with the largest year-to-year shifts (table EP-2), in terms of value, included increased U.S. exports of petroleum products and increased imports of crude petroleum and petroleum products. Analyses of these shifts are presented later in this chapter.

<sup>&</sup>lt;sup>1</sup> The data presented in this chapter are derived primarily from official statistics of the U.S. Department of Energy.

<sup>&</sup>lt;sup>2</sup> U.S. Department of Energy, Energy Information Administration, *Short-Term Energy Outlook*, March 2007.

**TABLE EP-1** Energy-related products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dolla	ars ———			
U.S. exports of domestic merchandise: Canada Mexico Venezuela Saudi Arabia Nigeria Algeria Angola Russia Iraq United Kingdom All other	2,889 3,274 121 34 37 19 3 231 0 201 7,622	4,296 2,897 184 38 22 23 3 125 (°) 206 8,843	5,754 3,379 170 48 28 25 1 26 (°) 464 11,887	8,487 5,508 202 57 38 30 2 81 ( <sup>b</sup> ) 834 14,655	8,953 5,925 636 49 120 47 3 48 1 1,126 22,091	466 417 434 -8 83 17 2 -33 1 292 7,436	5.5 7.6 214.7 -14.1 218.8 58.0 109.0 -41.2 645.3 35.0 50.7
Total	14,431	16,639	21,783	29,892	38,999	9,107	30.5
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	1,731 1,738 300 5,290 1,213 3,305 193 30	1,714 1,723 384 6,159 2,271 3,348 166 50	3,068 3,073 384 7,249 2,331 4,442 187 102	3,891 3,957 518 11,644 3,264 4,117 233 253	6,645 6,732 1,089 15,311 4,823 5,258 548 311	2,754 2,776 570 3,666 1,559 1,140 315 58	70.8 70.1 110.0 31.5 47.8 27.7 135.5 22.9
U.S. imports of merchandise for consumption: Canada Mexico Venezuela Saudi Arabia Nigeria Algeria Angola Russia Iraq United Kingdom All other	29,903 11,567 11,798 10,264 5,773 1,827 3,204 2,591 2,748 4,399 25,726	41,579 14,792 13,791 14,538 10,028 3,365 4,137 3,932 3,297 5,436 32,288	49,278 18,966 20,261 17,851 16,233 5,435 4,432 4,935 6,496 6,071 45,596	66,116 25,029 28,016 23,268 23,713 8,517 8,393 8,471 7,008 8,298 66,367	73,748 32,116 32,598 28,154 27,800 12,062 11,467 10,195 9,253 7,478 74,297	7,633 7,087 4,582 4,887 4,087 3,546 3,074 1,723 2,244 -820 7,930	11.5 28.3 16.4 21.0 17.2 41.6 36.6 20.3 32.0 -9.9 11.9
Total	109,800	147,183	195,553	273,197	319,168	45,972	16.8
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan África Central and Eastern Europe	8,778 9,143 34,506 32,598 2,900 2,284 11,713 201	11,453 12,029 47,416 41,240 4,600 2,611 17,674 168	15,007 15,972 69,981 56,061 6,342 3,928 26,299 233	21,352 22,503 95,878 77,970 9,387 5,348 40,327 297	24,755 25,913 115,899 90,843 9,583 7,311 47,814 308	3,404 3,409 20,021 12,873 196 1,963 7,487	15.9 15.2 20.9 16.5 2.1 36.7 18.6 3.8

TABLE EP-1 Energy-related products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002-06a-Continued

						Change, 2006 from 200	
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dol	lars ———			
U.S. merchandise trade balance: Canada Mexico Venezuela Saudi Arabia Nigeria Algeria Angola Russia Iraq United Kingdom All other	-27,014 -8,294 -11,677 -10,230 -5,736 -1,808 -3,201 -2,360 -2,748 -4,197 -18,103	-37,283 -11,894 -13,607 -14,500 -10,006 -3,342 -4,133 -3,806 -3,297 -5,230 -23,445	-43,524 -15,587 -20,090 -17,803 -16,205 -5,410 -4,430 -4,910 -6,495 -5,607 -33,709	-57,629 -19,522 -27,814 -23,211 -23,675 -8,487 -8,391 -8,390 -7,464 -51,712	-64,796 -26,191 -31,962 -28,106 -27,679 -12,015 -11,464 -10,147 -9,252 -6,352 -52,206	-7,167 -6,670 -4,148 -4,895 -4,004 -3,528 -3,072 -1,757 -2,244 1,113 -494	-12.4 -34.2 -14.9 -21.1 -16.9 -41.6 -20.9 -32.0 14.9
Total	-95,369	-130,544	-173,770	-243,304	-280,170	-36,865	-15.2
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-7,048 -7,405 -34,206 -27,308 -1,687 1,022 -11,520 -171	-9,738 -10,307 -47,033 -35,081 -2,328 737 -17,508 -118	-11,939 -12,899 -69,596 -48,812 -4,011 -514 -26,112 -131	-17,460 -18,547 -95,360 -66,326 -6,123 -1,230 -40,094 -44	-18,110 -19,181 -114,810 -75,532 -4,766 -2,053 -47,266	-650 -634 -19,450 -9,206 1,363 -823 -7,172 47	-3.7 -3.4 -20.4 -13.9 22.3 -66.9 -17.9

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export. <sup>b</sup>Less than \$500,000. <sup>c</sup>Not meaningful for purposes of comparison.

TABLE EP-2 Leading changes in U.S. exports and imports of energy-related products, 2002-06a

						Change, 200	6 from 2005
Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
			Million o	dollars			
U.S. EXPORTS:							
Increases:	0.000	0.700	10.051	40.000	00.407	0.404	440
Petroleum products (CH005)	8,662	9,783	12,651	18,302	26,407	8,104	44.3
All other	5,768	6,856	9,131	11,590	12,592	1,002	8.6
TOTAL	14,431	16,639	21,783	29,892	38,999	9,107	30.5
U.S. IMPORTS:							
Increases:							
Crude petroleum (CH004)	54,704	73,527	100,338	137,331	171,243	33,912	24.7
Petroleum products (CH005)	30,594	37,280	51,579	77,684	89,448	11,764	15.1
All other	24,503	36,375	43,636	58,182	58,477	295	0.5
TOTAL	109,800	147,183	195,553	273,197	319,168	45,972	16.8

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

In terms of quantity, U.S. trade in natural gas showed little change. U.S. exports of natural gas increased slightly to 750 billion cubic feet in 2006 from 730 billion cubic feet in 2005 (2.7 percent), while U.S. imports decreased from 4.3 trillion cubic feet in 2005 to 4.2 trillion cubic feet in 2006 (0.5 percent). However, because the price of natural gas decreased to \$6.41 per thousand cubic feet in 2006 from \$7.27 per thousand cubic feet in 2005, the value of both imports and exports fell noticeably. The price decline was attributable to the relatively mild winter in 2006 and increased supply as pipelines that had been shut down during the 2005 hurricane season resumed running full out. Most of the U.S. trade in natural gas is via pipelines shared with Canada and, to a lesser extent, Mexico, with imports and exports fluctuating from year to year based on market demand and product availability along the pipeline. Liquefied natural gas is also traded, accounting for a much smaller share of total trade.

U.S. exports of coal remained stable at 50 million short tons in 2006.<sup>3</sup> U.S. imports of coal increased by about 19 percent to 36 million short tons in 2006. The price of U.S. coal trade increased by only \$3 per short ton from 2005 levels to \$55 per short ton in 2006. Nearly all of the rise in imports was accounted for by increased demand from Gulf Coast and West Coast power plants, which continued to increase coal consumption in response to rising crude petroleum prices. Colombia and Canada remain the leading suppliers of low-sulfur coals to the U.S. market.

<sup>&</sup>lt;sup>3</sup> The United States accounts for the largest share of the world's recoverable coal reserves (25 percent) and is a major world exporter of coal.

# **Bibliography - Energy and Related Products**

U.S. Department of Energy (USDOE), Energy Information Administration (EIA), *Short-Term Energy Outlook*, March 2007

### **Crude Petroleum**

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$33.7 billion (25 percent) to \$170.4 billion U.S. exports: Increased by \$225 million (36 percent) to \$852 million U.S. imports: Increased by \$33.9 billion (25 percent) to \$171.2 billion

The U.S. trade deficit in crude petroleum increased by 25 percent from 2005 to 2006 primarily because of rising crude petroleum prices, which increased from an average of \$50.24 per barrel in 2005 to \$60.12 per barrel in 2006. In terms of quantity, U.S. imports of crude petroleum actually decreased slightly in 2006.

### U.S. Exports

Although the value of U.S. exports of crude petroleum increased by 36 percent because of the increasing price of crude, the quantity of these exports actually decreased from 32,000 b/d in 2005 to 24,000 b/d in 2006.<sup>4</sup> Historically, Canada, which accounted for 99 percent of the total quantity of U.S. crude petroleum exports in 2006, has been the only consistent market for these exports, with the level of exports fluctuating based on refinery needs on either side of the border.

### U.S. Imports

U.S. imports of crude petroleum declined less than 1 percent from 2005 to 2006, remaining about 10.1 million b/d. As was the case during the 2002–05 period, Canada, Mexico, Nigeria, Venezuela, and Saudi Arabia were the leading sources of U.S. imports of crude petroleum in 2006. OPEC, which accounts for nearly 70 percent of the world's reserves and 40 percent of the world's production of crude petroleum, was again the largest supplier to the U.S. market, accounting for 48 percent of the total quantity of U.S. imports of crude petroleum. U.S. imports of crude petroleum continued to account for more than 60 percent of domestic consumption.

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<sup>&</sup>lt;sup>4</sup> U.S. exports of crude petroleum have been prohibited since 1973, except as approved by the U.S. government. Canada has been the only consistent market for these exports, which are part of a commercial exchange agreement between U.S. and Canadian refiners that has been approved by the secretary of the Department of Energy. In May 1996, the president determined that allowing exports of Alaskan North Slope (ANS) crude was in the national interest, thus ending the 23 year ban on ANS crude exports. However, the president can impose new export restrictions in the event of severe crude petroleum supply shortages.

**TABLE EP-3** Crude petroleum (CH004): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
_			— Million dolla	ars ———			
U.S. exports of domestic merchandise: Canada Mexico Nigeria Venezuela Saudi Arabia Angola Ecuador Algeria Iraq Colombia All other	90 1 0 0 0 0 0 0 0 0 0	154 (b) 0 (b) 0 0 0 0 0	237 (°) 0 0 0 0 0 0 0 0	606 (b) 0 0 0 20 0 0 (b)	850 (°) 0 0 0 0 0 0 0	243 (b) 0 0 0 0 -20 0 (b)	40.2 496.3 0.0 0.0 0.0 -100.0 -100.0 238.5
Total	92	155	265	627	852	225	35.9
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	(b) (b) (b) (2) (b) (b) (0)	(b) (b) (b) (b) (c)	(b) 0 (b) 28 0	(b) (b) 0 20 (b) (b) 0	0 0 0 0 0 0 0 0	(b) 0 -20 (b) 1 0	-100.0 -100.0 0.0 -98.6 -100.0 289.7 0.0
U.S. imports of merchandise for consumption: Canada Mexico Nigeria Venezuela Saudi Arabia Angola Ecuador Algeria Iraq Colombia All other	11,196 10,490 5,388 6,760 4,742 3,060 831 281 1,686 1,161 9,108	14,086 13,630 9,275 8,040 7,378 3,981 1,355 885 1,813 2,135 10,947	18,888 17,186 15,377 11,645 9,178 4,240 2,709 1,673 2,631 2,634 13,985	24,120 22,364 21,911 16,023 11,612 8,115 4,274 2,436 2,808 3,140 20,528	32,889 29,195 25,968 19,296 13,796 11,086 5,065 4,849 4,842 3,431 20,827	8,769 6,831 4,056 3,273 2,184 2,971 791 2,413 2,034 291 298	36.4 30.5 18.5 20.4 18.8 36.6 18.5 99.0 72.4 9.3
Total	54,704	73,527	100,338	137,331	171,243	33,912	24.7
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	1,867 1,867 19,805 20,875 760 458 10,770	2,023 2,023 28,282 27,209 930 390 16,388 0	1,669 1,669 42,298 36,656 1,039 646 24,614 0	2,718 2,718 57,019 49,482 1,277 758 37,069 55	1,264 1,264 71,159 62,229 1,925 1,312 44,606	-1,454 -1,454 14,140 12,746 648 555 7,537	-53.5 -53.5 24.8 25.8 50.7 73.2 20.3 -100.0

**TABLE EP-3** Crude petroleum (CH004): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—Continued

						Change, 2006 from 2005	
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million doll	ars ———			
U.S. merchandise trade balance:     Canada     Mexico     Nigeria     Venezuela     Saudi Arabia     Angola     Ecuador     Algeria     Iraq     Colombia     All other	-11,106 -10,488 -5,388 -6,760 -4,742 -3,060 -831 -281 -1,686 -1,161	-13,932 -13,630 -9,275 -8,040 -7,378 -3,981 -1,355 -1,813 -2,135 -10,947	-18,651 -17,186 -15,377 -11,645 -9,178 -4,240 -2,709 -1,673 -2,821 -2,634 -13,958	-23,514 -22,364 -21,911 -16,023 -11,612 -8,115 -4,254 -2,436 -2,808 -3,140 -20,528	-32,040 -29,195 -25,968 -19,296 -13,796 -11,086 -5,065 -4,849 -4,842 -3,431 -20,825	-8,526 -6,831 -4,056 -3,273 -2,184 -2,971 -811 -2,413 -2,034 -291 -297	-36.3 -30.5 -18.5 -20.4 -18.8 -36.6 -19.1 -99.0 -72.4 -9.3 -1.4
Total  EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-54,612 -1,867 -1,867 -19,805 -20,874 -760 -457 -10,770 0	-73,372 -2,023 -2,023 -28,282 -27,209 -930 -389 -16,388 0	-100,073 -1,669 -1,669 -42,298 -36,656 -1,039 -618 -24,614	-136,704 -2,718 -2,718 -57,019 -49,462 -1,277 -757 -37,069 -55	-170,391 -1,264 -1,264 -71,159 -62,229 -1,925 -1,310 -44,606	-33,687 1,454 1,454 -14,140 -12,766 -648 -553 -7,537	-24.6 53.5 53.5 -24.8 -25.8 -50.8 -73.1 -20.3 100.0

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Less than \$500,000.

### **Petroleum Products**

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$3.7 billion (6 percent) to \$63.0 billion U.S. exports: Increased by \$8.1 billion (44 percent) to \$26.4 billion U.S. imports: Increased by \$11.8 billion (15 percent) to \$89.4 billion

The U.S. trade deficit in petroleum products increased by \$3.7 billion, or 6 percent, in 2006, as a result of the rise in the average per barrel price for crude petroleum on the world market. The United States is a major world producer and consumer of petroleum products but is not a major world exporter, as U.S. refineries are generally geared toward product specifications for the domestic market.

### U.S. Exports

In terms of quantity, U.S. exports of petroleum products are minimal, accounting for less than 4 percent of total U.S. production in 2006. The quantity of U.S. exports of petroleum products, primarily distillate and residual fuel oils to Mexico and Canada, increased from 1.1 million b/d in 2005 to 1.3 million b/d in 2006. These exports generally fluctuate based on refinery output on either side of the borders.<sup>5</sup>

### U.S. Imports

Although the quantity of U.S. imports of petroleum products decreased by 2 percent in 2006, the value of these U.S. imports actually increased by 15 percent because of the increased price for crude petroleum, the primary feedstock. U.S. imports of petroleum products, on average, account for less than 10 percent of domestic consumption. The primary sources of U.S. imports of petroleum products in 2006 continued to be Canada, Venezuela, and Saudi Arabia. Residual fuel oils (used primarily as industrial heating and bunker fuels used for heating and power), motor fuels, and jet fuels accounted for nearly all of the quantity decrease in U.S. imports. Decreased demand for these fuels in 2006 was due to a mild winter requiring less heating fuels, decreased demand for gasoline because of high prices at the pump, and a decrease in air travel brought on by high jet fuel costs.<sup>6</sup>

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<sup>&</sup>lt;sup>5</sup> For example, if a refinery in Canada initiates routine maintenance or product turnaround, U.S. exports of petroleum products could increase to supplement the decrease in Canadian production.

<sup>&</sup>lt;sup>6</sup> U.S. Department of Energy, Energy Information Administration, Short-Term Energy Outlook, March 2007.

**TABLE EP-4** Petroleum products (CH005): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dolla	ars ———			
U.S. exports of domestic merchandise: Canada Venezuela Saudi Arabia Mexico Russia Netherlands United Kingdom Algeria Iraq Aruba All other	1,240 116 33 2,346 21 202 82 3 0 55 4,565	1,432 177 36 2,318 23 148 54 (°) 25 5,567	1,725 165 45 2,799 22 547 198 1 (b) 74 7,074	2,605 185 52 4,781 38 497 471 (b) 63 9,609	3,272 629 45 5,024 40 1,716 466 23 (b) 125 15,065	667 444 -7 242 2 1,219 -4 22 (b) 62 5,456	25.6 240.4 -13.6 5.1 5.3 245.4 -0.9 1,803.2 374.0 99.3 56.8
Total	8,662	9,783	12,651	18,302	26,407	8,104	44.3
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	862 868 262 4,066 1,138 1,654 172	713 721 337 5,281 2,174 1,610 139 23	1,770 1,774 340 6,251 2,261 2,010 157 36	1,885 1,930 441 10,378 3,174 2,360 211 30	4,218 4,258 1,013 13,738 4,669 3,012 512 75	2,333 2,328 571 3,361 1,495 653 300 45	123.8 120.6 129.5 32.4 47.1 27.7 142.1 149.0
U.S. imports of merchandise for consumption: Canada Venezuela Saudi Arabia Mexico Russia Netherlands United Kingdom Algeria Iraq Aruba All other	4,258 3,950 3,833 806 1,445 638 1,764 898 689 605 11,706	5,479 4,152 4,734 1,086 2,107 1,000 2,315 1,235 957 752 13,463	6,747 6,382 5,739 1,698 2,929 1,662 3,352 1,742 2,194 1,530 17,602	8,977 9,161 8,073 2,500 5,741 3,421 4,432 2,857 2,660 2,715 27,147	10,131 10,452 9,734 2,697 7,392 4,434 4,689 3,993 2,643 2,464 30,820	1,154 1,291 1,661 197 1,650 1,013 257 1,136 -17 -251 3,673	12.9 14.1 20.6 7.9 28.7 29.6 5.8 39.8 -0.6 -9.2 13.5
Total	30,594	37,280	51,579	77,684	89,448	11,764	15.1
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	5,464 5,818 10,441 8,868 1,510 1,318 725 190	7,067 7,629 12,605 9,891 1,862 1,594 862 159	10,925 11,702 17,881 13,575 2,624 2,053 1,149 57	16,020 17,037 26,281 20,722 4,751 3,484 2,528 125	20,138 21,215 30,412 20,988 4,664 5,126 2,041 229	4,118 4,178 4,131 266 -87 1,642 -487 104	25.7 24.5 15.7 1.3 -1.8 47.1 -19.3 83.2

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TABLE EP-4 Petroleum products (CH005): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002-06a-Continued

						Change, 2006 from 200	
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dolla	ars ———			
U.S. merchandise trade balance: Canada Venezuela Saudi Arabia Mexico Russia Netherlands United Kingdom Algeria Iraq Aruba All other Total	-3,019 -3,834 -3,800 1,540 -1,424 -436 -1,682 -895 -689 -551 -7,141	-4,047 -3,975 -4,698 1,232 -2,084 -853 -2,261 -1,231 -957 -728 -7,896	-5,022 -6,217 -5,694 1,101 -2,907 -1,115 -3,155 -1,741 -2,194 -1,455 -10,528	-6,372 -8,976 -8,021 2,281 -5,703 -2,924 -3,962 -2,856 -2,660 -2,652 -17,538	-6,859 -9,823 -9,688 2,327 -7,351 -2,718 -4,223 -3,970 -2,643 -2,338 -15,755	-487 -847 -1,668 45 -1,648 206 -262 -1,114 17 313 1,784	-7.6 -9.4 -20.8 2.0 -28.9 7.0 -6.6 -39.0 0.6 11.8 10.2
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-21,931 -4,602 -4,950 -10,179 -4,803 -373 -373 336 -553 -174	-27,497 -6,354 -6,908 -12,267 -4,610 312 16 -722 -136	-38,928 -9,155 -9,928 -17,541 -7,324 -363 -42 -992 -22	-59,382 -14,135 -15,107 -25,840 -10,345 -1,577 -1,124 -2,316 -95	-63,042 -15,920 -16,958 -29,399 -7,250 6 -2,113 -1,529 -154	-3,660 -1,785 -1,850 -3,559 3,095 1,583 -989 787 -59	-0.2 -12.6 -12.2 -13.8 29.9 (°) -88.0 34.0 -62.4

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export. <sup>b</sup>Less than \$500,000. <sup>c</sup>Not meaningful for purposes of comparison.

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TABLE EP-5 Energy-related products: U.S. trade for industry/commodity groups and subgroups, 2002-06a

ductru/commodituarous							Change, 2006 from 2005	
dustry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent	
			Millio	on dollars ——				
ectrical energy:								
Exports						13	1.2	
Imports					2,518 1,466	39 26	1.6 -1.8	
	-057	-000	-432	-1,440	-1,400	-20	-1.0	
	1,510	1,551	1,575	1,562	1,822	260	16.7	
Imports	2,144	2,892	2,625	3,175	3,910	736	23.2	
Trade balance	-635	-1,341	-1,050	-1,613	-2,088	-475	-29.5	
	2 100	2.260	2 556	1 210	E 170	061	10.0	
							19.9 9.7	
	-401	-857					12.4	
rude petroleum:			,	,	, -			
Exports							35.9	
							24.7 -24.6	
	-54,612	-13,312	-100,073	-130,704	-170,391	-33,007	-24.0	
	8 662	9 783	12 651	18 302	26 407	8 104	44.3	
		37,280	51,579	77,684	89,448	11,764	15.1	
	-21,931	-27,497	-38,928	-59,382	-63,042	-3,660	-6.2	
	4 075	0.074	0.000	4.045	2.000	257	0.0	
							-8.8 -2.4	
							1.7	
- כ כ	ectrical energy: Exports Imports Trade balance clear materials: Exports Imports Trade balance al, coke, and related chemical products: Exports Imports Trade balance ade petroleum: Exports Imports Trade balance troleum products: Exports Imports Imports Exports Imports Imports Trade balance tural gas and components: Exports Imports	ectrical energy:  Exports 304 Imports 1,160 Trade balance -857 clear materials:  Exports 1,510 Imports 2,144 Trade balance -635 al, coke, and related chemical products:  Exports 2,188 Imports 2,188 Imports 2,188 Imports 2,589 Trade balance -401 ude petroleum:  Exports 92 Imports 54,704 Trade balance -54,612 troleum products:  Exports 8,662 Imports 30,594 Trade balance -21,931	ectrical energy: Exports	Exports 304 716 829 Imports 1,160 1,382 1,261 Trade balance -857 -666 -432 clear materials:  Exports 1,510 1,551 1,575 Imports 2,144 2,892 2,625 Trade balance -635 -1,341 -1,050 al, coke, and related chemical products:  Exports 2,188 2,360 3,556 Imports 2,188 2,360 3,556 Imports 2,589 3,217 5,555 Trade balance -401 -857 -1,998 Jide petroleum:  Exports 92 155 265 Imports 92 155 265 Imports 54,704 73,527 100,338 Trade balance -54,612 -73,372 -100,073 troleum products:  Exports 8,662 9,783 12,651 Imports 30,594 37,280 51,579 Trade balance -21,931 -27,497 -38,928 tural gas and components:  Exports 1,675 2,074 2,906 Imports 1,675 2,074 2,906 Imports 1,675 2,074 2,906 Imports 1,669 28,885 34,195	Captrical energy:   Seports   304   716   829   1,039     Imports   1,160   1,382   1,261   2,479     Trade balance   -857   -666   -432   -1,440     Clear materials:   Exports   1,510   1,551   1,575   1,562     Imports   2,144   2,892   2,625   3,175     Trade balance   -635   -1,341   -1,050   -1,613     al, coke, and related chemical products:   Exports   2,188   2,360   3,556   4,318     Exports   2,188   2,360   3,556   4,318     Exports   2,589   3,217   5,555   6,316     Trade balance   -401   -857   -1,998   -1,998     ude petroleum:   Exports   92   155   265   627     Imports   54,704   73,527   100,338   137,331     Trade balance   -54,612   -73,372   -100,073   -136,704     troleum products:   Exports   8,662   9,783   12,651   18,302     Imports   30,594   37,280   51,579   77,684     Trade balance   -21,931   -27,497   -38,928   -59,382     tural gas and components:   Exports   1,675   2,074   2,906   4,045     Imports   18,609   28,885   34,195   46,211     Trade balance   1,675   2,074   2,906   4,045     Imports   18,609   28,885   34,195   46,211	Control of the property of t	Cetrical energy:   Cetrical en	

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>b</sup>This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes

TABLE EP-6 Energy-related products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
CH001	Electrical energy:						
CHOOT	Number of establishments	3,225	3,225	3,225	3,225	3,225	0.0
	Employees (thousands)	(a)	(a)	(a)	(a)	(a)	(a)
	Capacity utilization (percent)	100	100	100	100	100	0.0
	U.S. shipments (million dollars)	229,664	340,400	316,600	320,300	350,330	9.4
	U.S. exports (million dollars)	304	716	829	1,039	1.052	1.2
	U.S. imports (million dollars)	1,160	1,382	1,261	2,479	2,518	1.6
	Apparent U.S. consumption (million dollars)	230,521	341,066	317,032	321,740	351,796	9.3
	Trade balance (million dollars)	-857	-666	-432	-1,440	-1,466	-1.8
	Ratio of imports to consumption (percent)	0.5	0.4	0.4	0.8	0.7	-7.1
	Ratio of exports to shipments (percent)	0.1	0.4	0.3	0.3	0.3	-7.4
CH003	Coal, coke, and related chemical products:	0.1	0.2	0.0	0.0	0.0	7.7
011003	Number of establishments	520	520	520	520	520	0.0
	Employees (thousands)	150.0	150.0	150.0	150.0	150.0	0.0
	Capacity utilization (percent)	90	90	90	90	90	0.0
	U.S. shipments (million dollars)	38,496	36,582	35,120	50,300	54,800	8.9
	U.S. exports (million dollars)	2.188	2,360	3,556	4,318	5.179	19.9
	U.S. imports (million dollars)	2,589	3,217	5,555	6,316	6,930	9.7
	Apparent U.S. consumption (million dollars)	38,897	37,439	37,118	52,298	56,551	8.1
	Trade balance (million dollars)	-401	-857	-1,998	-1,998	-1,751	12.4
	Ratio of imports to consumption (percent)	6.7	8.6	15.0	12.1	12.3	1.5
	Ratio of exports to shipments (percent)	5.7 5.7	6.5	10.1	8.6	9.5	10.1
CH004	Crude petroleum:	5.1	0.5	10.1	0.0	3.5	10.1
01100+	Number of establishments	18.000	18.000	18.000	18,000	18.000	0.0
	Employees (thousands)	204.0	204.0	204.0	204.0	204.0	0.0
	Capacity utilization (percent)	100	100	100	100	100	0.0
	U.S. shipments (million dollars)	55,203	57,550	73,334	100,290	115,100	14.8
	U.S. exports (million dollars)	92	155	265	627	852	35.9
	U.S. imports (million dollars)	54,704	73,527	100,338	137,331	171,243	24.7
	Apparent U.S. consumption (million dollars)	109,815	130,922	173,407	236,994	285.491	20.5
	Trade balance (million dollars)	-54,612	-73,372	-100,073	-136,704	-170,391	-24.6
	Ratio of imports to consumption (percent)	49.8	56.2	57.9	57.9	60.0	3.5
	Ratio of imports to consumption (percent)	0.2	0.3	0.4	0.6	0.7	18.4
CH005	Petroleum products:	0.2	0.5	0.4	0.0	0.7	10.4
CI 1003	Number of establishments	190	190	190	190	190	0.0
	Employees (thousands)	75.0	75.0	75.0	75.0	75.0	0.0
	Capacity utilization (percent)	90	90	90	90	90	0.0
	U.S. shipments (million dollars)	193,710	200,475	280,500	346,800	392,800	13.3
	U.S. exports (million dollars)	8,662	9,783	12,651	18,302	26.407	44.3
	U.S. imports (million dollars)	30,594	37,280	51,579	77,684	89,448	44.3 15.1
	Apparent U.S. consumption (million dollars)	215,641	227,972	319,428	406,182	455,842	12.2
	Trade balance (million dollars)	-21,931	-27,497	-38,928	-59,382	-63,042	-6.2
	Ratio of imports to consumption (percent)	-21,931 14.2	-27, <del>4</del> 97 16.4	-30,920 16.1	-59,362 19.1	-63,042 19.6	2.6
	Ratio of imports to consumption (percent)	4.5	4.9	4.5	5.3	6.7	27.4
	ratio of exports to shipments (percent)	4.0	4.3	4.0	0.3	0.7	21.4

TABLE EP-6 Energy-related products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
CH006	Natural gas and components:  Number of establishments  Employees (thousands)  Capacity utilization (percent)  U.S. shipments (million dollars)  U.S. exports (million dollars)  U.S. imports (million dollars)  Apparent U.S. consumption (million dollars)  Trade balance (million dollars)  Ratio of imports to consumption (percent)  Ratio of exports to shipments (percent)	(a) 200.0 80 115,000 1,675 18,609 131,934 -16,934 14.1 1.5	(a) 200.0 80 165,000 2,074 28,885 191,811 -26,811 15.1 1.3	(a) 200.0 80 174,000 2,906 34,195 205,289 -31,289 16.7 1.7	(a) 200.0 80 150,380 4,045 46,211 192,546 -42,166 24.0 2.7	(a) 200.0 80 140,200 3,688 45,118 181,630 -41,430 24.8 2.6	(a) 0.0 0.0 -6.8 -8.8 -2.4 -5.7 1.7 3.5 -2.2

Source: These data have been estimated by the Commission's international trade analysts on the basis of primary and secondary data sources including discussions with various Government and industry contacts. These estimated data are subject to change either from secondary sources or from detailed surveys the Commission often conducts in the course of statutory investigations or other work. Further, these data may undergo adjustments based on revisions in tariff nomenclature, classification practices, or redefinitions of industry classes.

Note.—Calculations based on unrounded data.

<sup>a</sup>Not available.

# Textiles, Apparel and Footwear

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Change in 2006 from 2005:

U.S. trade deficit: Increased by \$3.9 billion (5 percent) to \$86.5 billion U.S. exports: Increased by \$224 million (1 percent) to \$18.1 billion U.S. imports: Increased by \$4.1 billion (4 percent) to \$104.6 billion

The U.S. trade deficit in textiles and apparel widened as U.S. imports rose faster than U.S. exports (table TX-1). Much of the increase in imports reflects the continued effects of the elimination of quotas that occurred on January 1, 2005, for U.S. imports of textiles and apparel from 39 WTO-member countries, as required under the WTO Agreement on Textiles and Clothing (ATC). A weak U.S. dollar, relative to most major currencies, played a part in limiting imports and aiding exports. Apparel accounted for 76 percent of sector imports in 2006 (table TX-2).

The widening of the trade deficit in textiles and apparel in 2006 principally stemmed from the growth of imports from Asia, particularly China, that occurred when quotas were eliminated. The trade deficit with Asia widened by \$6.2 billion (10 percent) to \$67.2 billion, as the \$6.4 billion increase in U.S. imports from the region far exceeded the \$169 million gain in U.S. exports to the region (table TX-1). U.S. imports from China rose by 16 percent in 2006 to \$31.3 billion, making China again the largest supplier by far with 30 percent of sector imports, up from 27 percent in 2005. Much of the growth in China's shipments was concentrated in cotton apparel, specifically, cotton knit shirts and blouses; cotton trousers and slacks, cotton sweaters, and robes, dressing gowns, and nightwear. Significant growth also occurred in China's shipments of wool apparel, especially wool sweaters. U.S. retailers and apparel companies continue to source a substantial portion of sector goods from China because of the country's abundant labor force, low production costs, ability to make almost any type of textile product or garment at any quality level and in large volumes, and strong customer service.<sup>2</sup> However, some of the growth in U.S. imports from China is expected to be moderated in the near term because a U.S.-China Memorandum of Understanding that imposes safeguards on certain textile and apparel import categories from China exported on or after January 1, 2006, through December 31, 2008.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> This industry/commodity group includes North American Industry Classification System (NAICS) numbers 313 (textile mills—i.e., firms that prepare and spin fiber, knit or weave fabric, and finish the textile), 314 (textile product mills—i.e., establishments that manufacture textile products—except apparel from purchased fabric), and 315 (apparel manufacturing—i.e., establishments that cut and sew fabric to make garments or that knit and then cut and sew the fabric into a garment). Footwear is covered separately in this chapter.

<sup>&</sup>lt;sup>2</sup> Some industry sources indicate that U.S. retailers and apparel companies are likely to continue to diversify their sourcing as China's wage rates rise and as labor shortages increase because of demographic shifts in the population.

<sup>&</sup>lt;sup>3</sup> The Governments of the United States of America and the People's Republic of China established restraint levels for certain textile products produced or manufactured in China and exported to the United States during three one-year periods, beginning on January 1, 2006 and extending through December 31, 2008, through the Memorandum of Understanding (MOU) concerning Trade in Textile and Apparel Products, signed and dated November 8, 2005, and Paragraph 242 of the Report of the Working Party for the Accession of China to the World Trade Organization.

**TABLE TX-1** Textiles and apparel: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dolla	ars			
U.S. exports of domestic merchandise:	339	405	501	629	731	102	16.2
Mexico	4,939	4,696	4,730	4,705	4,551 3,561	-154	-3.3
Canada	3,193 44	3,121 54	3,275 <u>68</u>	3,471 <u>7</u> 8	101	89 24	2.6 30.4
Indonesia	55 1.523	59 1.522	77 1.547	79 1.459	91 1,416	12 -42	15.5 -2.9
Pakistan	14 18	13 16	15 19	24 21	27 33	12	9.2
Vietnam	324	313	331	305	346	41	59.9 13.5
Banğladesh	10 6,838	7 6,826	7,092	11 7,082	12 7,219	1 137	4.9 1.9
Total	17,298	17,033	17,663	17,864	18,088	224	1.3
EU-15	1,520	1, <del>4</del> 73	1,533	1,703	1,839	136	8.9
OPEC	1,338	1,310	1,379 0,016	1,740 2,80 6,80	1,097	173	48: <u>4</u>
Latin America CBERA	4,761	4,688	3,680	3,3 <u>7</u> 3	3 <u>,</u> 564	- <u>248</u>	- <u>5</u> .8
Asia Sub-Saharan Africa Central and Eastern Europe	1,123	',131	<sup>2</sup> ,139	<sup>2</sup> ,133	2,744	109	4. <del>7</del> 26.8
U.Ş, imports of merchandise for consumption:	40	30	72	72	33		20.0
China	12,602 9,649	15, <u>426</u> 9,015	18,902 8,826	26,937 8,305	3 <u>1,284</u>	4,347 -808	16.1 -9.7
Canada India	3,859 3,382	3,788 3,668	3,8 <u>34</u> 4,106	3,633 5,194	3,395 5,568	- <u>238</u> 373	- <u>6</u> .6
Indonesia Honduras	2,40 <u>5</u> 2,509	2,462 2,578	2',714 2.754	3 <u>;2</u> 30 2:701	4,073 2,535	843 -166	26.7 -6.2
Pakistan Vietnam	2;129 918	2',347 2.426	2,671 2,644	3,042 2,807	3,397 3,326	355 520	11. <del>7</del> 18.5
Hong Kong	4,081 2.006	3,863 1.961	4,012 2,092	3,630 2,486	2,892 3.025	-738 539	-20.3 21.7
All offner	38,045	39,709	41,490	38,520	37,571	-949	-2.5
Total	81,585	87,241	94,045	100,485	104,563	4,078	4.1
EU-15	5,163 5.422	5,391 5.674	5,720 6.007	5,590 5.873	5,460 5.777	-130 -96	-2.3 -1.6
OPEC	2,981 20,639	3,016 20,553	3,217 21.058	3,674 20,274	4,447 18.721	773 1 552	21.0
Latin AmericaCBERA	9,711	9,865	10,213	9,856	9,206	-1,552 -650	-7.7 -6.6
Asia	44,666 1,136	49,371 1.552	54,783 1.802	63,395 1.504	69,796 1.339	6,401 -165	10.1 -11.0
Central and Eastern Europe	515	562	565	488	500	12	2.4

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**TABLE TX-1** Textiles and apparel: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>—*Continued* 

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dolla	ars ———			
U.S. merchandise trade balance: China Mexico Canada India Indonesia Honduras Pakistan Vietnam Hong Kong Bangladesh All other	-12,263 -4,710 -666 -3,337 -2,350 -986 -2,115 -900 -3,757 -1,996 -31,207	-15,021 -4,319 -666 -3,614 -2,402 -1,056 -2,333 -2,410 -3,549 -1,953 -32,883	-18,401 -4,097 -559 -4,039 -2,636 -1,207 -2,656 -2,655 -3,681 -2,083 -34,398	-26,308 -3,600 -162 -5,117 -3,151 -1,243 -3,018 -2,786 -3,325 -2,474 -31,438	-30,553 -2,946 166 -5,467 -3,982 -1,118 -3,371 -3,293 -2,546 -3,013 -30,352	-4,245 654 327 -350 -831 124 -353 -507 779 -539 1,086	-16.1 18.2 (b) -6.8 -26.4 10.0 -11.7 -18.2 23.4 -21.8
Total	-64,288	-70,208	-76,382	-82,621	-86,476	-3,854	-4.7
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-3,644 -3,864 -2,759 -10,563 -4,950 -42,783 -1,012 -474	-3,918 -4,159 -2,814 -10,750 -5,176 -47,408 -1,421 -523	-4,187 -4,428 -2,951 -11,141 -5,532 -52,612 -1,663 -523	-3,887 -4,128 -3,394 -10,724 -5,543 -61,042 -1,370 -446	-3,620 -3,880 -4,054 -9,475 -5,142 -67,273 -1,198 -447	266 248 -660 1,249 401 -6,232 172 (°)	6.8 6.0 -19.4 11.7 7.2 -10.2 12.5 -0.1

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Not meaningful for purposes of comparison.

<sup>&</sup>lt;sup>c</sup>Less than \$500,000.

TABLE TX-2 Leading changes in U.S. exports and imports of textiles and apparel, 2002-06a

						Change, 200	6 from 2005
Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
			— Million o	dollars ———			
U.S. EXPORTS:							
Increases:							
Fibers and yarns, except raw cotton and raw							
wool (CH045)	2,656	2,872	3,192	3,328	3,780	452	13.6
Miscellaneous textile products (CH050)	1,619	1,534	1,701	1,825	2,037	212	11.6
Other fabrics (CH046F)	744	914	1,027	1,240	1,392	152	12.3
Decreases:			,	,	,		
Apparel (CH049)	5,491	4,965	4,414	4,129	3,854	-275	-6.7
Broadwoven fabrics (CH046A)	3,003	2,575	2,754	2,478	2,210	-268	-10.8
Knit fabrics (CH046B)	1,082	1,392	1,624	1.778	1,611	-167	-9.4
All other	2,702	2,780	2,951	3,086	3,205	118	3.8
TOTAL	17,298	17,033	17,663	17,864	18,088	224	1.3
U.S. IMPORTS:							
Increases:							
Apparel (CH049)	63,927	68,274	72.404	76,503	79,299	2,796	3.7
Home furnishings (CH048)	4,226	5,021	6,107	7,448	8,249	801	10.8
Miscellaneous textile products (CH050)	3,340	3.754	4,319	4.651	5,104	453	9.7
All other	10,093	10,192	11,215	11,883	11,911	28	0.2
TOTAL	81.585	87,241	94.045	100.485	104.563	4.078	4.1

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

The U.S. trade deficit with other Asian suppliers in textiles and apparel continued to increase in 2006. The deficit with India totaled \$5.5 billion, up by 7 percent from \$5.1 billion in 2005. According to industry sources, India is a preferred apparel supplier because of its raw material availability and spinning, weaving, and apparel production capacity. The U.S. trade deficits with low-labor-cost suppliers Indonesia and Vietnam also rose, by 26 percent and 18 percent, respectively.

The U.S. trade deficit with Mexico narrowed to \$3.1 billion in 2006 from \$3.6 billion in 2005. U.S. sector imports from Mexico have declined steadily since 2000, reflecting increased competition from the Caribbean Basin Economic Recovery Act (CBERA) countries that are benefitting from new U.S. trade preferences and from lower-cost countries in Asia, particularly China, as noted. However, the sector trade deficit with CBERA countries declined by \$401 million (7 percent) to \$5.1 billion in 2006 due to intensified competition from China and other low-cost suppliers. According to industry sources, foreign investment in Mexico's textile and apparel sector has declined in recent years, as high energy costs have hampered the competitiveness of Mexico's textile and apparel sector.<sup>4</sup> Furthermore, despite their proximity to the U.S. market, Mexican factories reportedly cannot compete with Chinese labor costs that are about one-fourth of Mexico's. Industry sources indicate that the elimination of quotas has led to much more competition from apparel imports from China and other Asian countries, which has reportedly resulted in declines in employment and factory closings in Mexico.<sup>5</sup>

#### U.S. Exports

U.S. exports of textiles and apparel increased by \$224 million (1 percent) to \$18.1 billion in 2006 (table TX-1). In 2006, Latin American and CBERA countries consumed about 74 percent of U.S. exports of these goods. The increase in total U.S. exports is largely attributable to the weaker U.S. dollar and to increased use of U.S.-made fabric in finished apparel which would qualify for duty-free entry to the United States under provisions of CBTPA and CAFTA. Mexico and Canada are the largest individual country markets for U.S.-made textiles and apparel as a result of their relative proximity, which reduces shipping costs and transit time. The United States had a positive trade balance with Canada and a deficit with Mexico in 2006. U.S. exports to Mexico declined slightly to \$4.6 billion in 2006 from \$4.7 billion in 2005. The Mexican apparel manufacturers that are consumers of U.S.-produced fabrics, yarns, and fibers continue to face stiff competition from lower-cost Asian and CBERA apparel producers. U.S. exports to Canada increased slightly to \$3.6 billion in 2006 from \$3.5 billion in 2005. The most important U.S. exports of textile and apparel products (table TX-2) were fabric, fibers, and yarn, which are used to make finished apparel products.

<sup>&</sup>lt;sup>4</sup> U.S. Department of State, U.S. Embassy, Mexico, "Embassy Mexico Reply."

<sup>&</sup>lt;sup>5</sup> Ibid.

### U.S. Imports

U.S. imports of textiles and apparel increased by \$4.1 billion (4 percent) to \$104.6 billion in 2006 from \$100.5 billion in 2005 (table TX-1). Asian countries accounted for \$69.8 billion (67 percent) of such imports in 2006, representing an increase of \$6.4 billion. U.S. imports from China accounted for about 45 percent of imports from Asia and about 30 percent of total imports in 2006. China and other Asian countries continue to offer low labor and other production costs, the ability to make almost any type of textile product or garment at any quality level and in large volumes, and strong customer service.

# Bibliography - Textiles, Apparel, and Footwear

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## Footwear<sup>6</sup>

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$1.1 billion (7 percent) to \$18.5 billion U.S. exports: Increased by \$66 million (13 percent) to \$573 million U.S. imports: Increased by \$1.2 billion (7 percent) to \$19.0 billion

The U.S. trade deficit (table TX-3) in footwear widened in 2006, primarily because of a continued increase in imports (\$1.2 billion), which accounted for more than 90 percent of the U.S. footwear market. The domestic footwear industry consists primarily of niche manufacturers that compete on the basis of such nonprice factors as specialized types of footwear (e.g., sizes/widths and hand-sewn items), quality, exclusive channels of distribution, new product introductions, and brand differentiation. Consumer spending on footwear rose an estimated 5 percent in 2006,<sup>7</sup> due to strong holiday sales and the introduction of new footwear styles and trends. Industry observers have indicated that average selling prices for most footwear items have continued to decline because of an increase in the market share accounted for by discounters, increased imports of lower-priced shoes, and retail promotions.

#### U.S. Exports

The value of U.S. exports of footwear increased by \$66 million (13 percent) to \$573 million in 2006 (table TX-4). This rise continues the upward trend started in 2005, reversing a steady decrease in exports from 2000 through 2004. The growth in U.S. footwear exports can be attributed, in part, to the weaker U.S. dollar which made high-end U.S. Specialty footwear more competitive in some Asian markets.

### U.S. Imports

China is the largest source of U.S. footwear imports, accounting for 72 percent of imports by value in 2006. Italy (6 percent), Vietnam (5 percent), and Brazil (5 percent) were secondary suppliers of footwear to the United States. China's continued dominance in the U.S. market is largely attributable to its price competitiveness, owing to low wages and to established and efficient production and shipping infrastructures. U.S. imports of footwear from China rose by \$1.1 billion (9 percent) to \$13.8 billion in 2006. Vietnam passed Brazil to become the third-largest supplier of U.S. imports of footwear in 2006; U.S. imports of

<sup>&</sup>lt;sup>6</sup> The goods in this sector are classified under NAICS number 3162 (Footwear Manufacturing—i.e., establishments primarily engaged in manufacturing footwear, except orthopedic extension footwear).

<sup>&</sup>lt;sup>7</sup> USDOC, BEA, Table 2.4.5U—Personal Consumption Expenditures.

<sup>&</sup>lt;sup>8</sup> According to Nate Herman, Director of International Trade, American Apparel & Footwear Association (AAFA), U.S. footwear export data may be overstated, as they may reflect not only exports of U.S. manufactured products, but also footwear items that are imported into the United States, repackaged, and then re-exported to other markets.

**TABLE TX-3** Footwear: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—*Continued* 

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			<ul><li>Million dolla</li></ul>	ars —			
U.S. exports of domestic merchandise: China Italy Vietnam Brazil Indonesia Mexico Thailand Spain India Canada All other	35 5 18 15 95 4 6 2 65 274	36 6 23 2 12 90 5 6 2 57 256	31 6 24 3 9 60 4 2 4 59 248	41 9 31 1 12 46 5 1 8 65 288	57 8 34 2 10 47 4 2 7 7 73 329	16 -1 3 1 -2 1 -1 -1 8 41	39.2 -13.4 9.8 65.9 -15.1 2.6 -27.9 114.8 -11.2.8 14.1
Total	520	495	450	507	573	66	12.9
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	57 58 35 196 75 164 13	59 61 26 177 67 158 15	62 65 23 127 53 157 13	62 65 28 134 69 196 17	59 60 35 140 67 238 21	-4 -4 7 7 -2 42 4 -1	-5.8 -6.7 26.0 5.0 -2.2 21.4 24.3 -27.0
U.S. imports of merchandise for consumption: China Italy Vietnam Brazil Indonesia Mexico Thailand Spain India Canada All other	10,242 1,182 224 1,080 731 279 278 269 96 68 931	10,546 1,241 325 1,040 570 275 285 235 110 64 868	11,348 1,250 473 1,081 493 242 287 225 125 77 896	12,654 1,137 717 1,019 510 247 292 192 199 94 833	13,795 1,110 952 896 471 274 293 198 155 79 815	1,141 -27 235 -123 -39 26 1 6 16 -14	9.0 -2.4 32.8 -12.1 -7.6 10.7 0.4 3.2 11.4 -15.3
Total	15,379	15,560	16,498	17,834	19,038	1,204	6.8
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan África Central and Eastern Europe	1,826 1,892 731 1,516 148 11,797 1	1,764 1,851 570 1,475 149 12,046 1	1,723 1,815 494 1,484 149 12,963 2 192	1,558 1,650 512 1,432 151 14,495 3 198	1,504 1,614 472 1,317 137 15,852 4 214	-54 -36 -40 -116 -14 1,358 2 15	-3.5 -2.2 -7.7 -8.1 -9.4 9.8 7.8

**TABLE TX-3** Footwear: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06ª—*Continued* 

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dolla	ars ———			
U.S. merchandise trade balance: China Italy Vietnam Brazil Indonesia Mexico Thailand Spain India Canada All other	-10,207 -1,178 -206 -1,078 -716 -183 -274 -263 -94 -3 -657	-10,510 -1,235 -302 -1,038 -558 -185 -280 -229 -107 -8 -612	-11,317 -1,244 -449 -1,078 -484 -183 -283 -223 -122 -18 -649	-12,613 -1,128 -685 -1,018 -498 -201 -287 -191 -131 -29 -545	-13,738 -1,102 -917 -894 -461 -227 -289 -197 -148 -6 -486	-1,125 26 -232 124 37 -25 -3 -5 -17 23 59	-8.9 23 -33.8 12.2 7.4 -12.5 -0.9 -2.7 -12.8 78.8 10.8
Total	-14,860	-15,065	-16,048	-17,327	-18,465	-1,138	-6.6
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-1,769 -1,835 -696 -1,320 -73 -11,632 11 -124	-1,705 -1,790 -544 -1,298 -81 -11,888 14 -155	-1,661 -1,750 -471 -1,357 -97 -12,806 11 -187	-1,496 -1,585 -484 -1,299 -83 -14,299 15 -196	-1,445 -1,554 -437 -1,176 -70 -15,614 17 -212	51 31 47 122 13 -1,316 2 -16	3.4 2.0 9.7 9.4 15.4 -9.2 16.4 -8.1

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

**TABLE TX-4** Footwear: Leading changes in U.S. exports and imports, 2002–06

						Change, 200	6 from 2005
USITC code and industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
			Million a	lollars			
U.S. EXPORTS: Increases: CH051 Footwear	520	495	450	507	573	66	12.9
U.S. IMPORTS: Increases: CH051 Footwear	15,379	15,560	16,498	17,834	19,038	1,204	6.8

Note.—Calculations based on unrounded data.

footwear from Vietnam increased by \$235 million (33 percent) to \$952 million. U.S. imports of footwear from Vietnam have risen steadily since the United States granted the country NTR status in December 2001. In addition, production facilities in the country have expanded and production costs are low.

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TABLE TX-5 Textiles, apparel, and footwear: U.S. trade for industry/commodity groups and subgroups, 2002-06a

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percen
				Million o	dollars ———			
CH045	Fibers and yarns, except raw cotton and raw wool:							
	Exports	2,656	2,872	3,192	3,328	3,780	452	13.6
	Imports	2,641	2,676	3,160	3,538	3,582	44	1.2
	Trade balance	16	196	32	-211	198	409	(°
CH046	Fabrics:							
	Exports	6,485	6,641	7,228	7,285	7,015	-270	-3.7
	Imports	5,922	5,854	6,227	6,352	6,202	-150	-2.4
	Trade balance	563	786	1,001	934	813	-120	-12.9
CH046A	Broadwoven fabrics:							
	Exports	3,003	2,575	2,754	2,478	2,210	-268	-10.8
	Imports	3,243	3,036	3,154	2,989	2,833	-156	-5.2
	Trade balance	-240	-462	-400	-511	-623	-112	-21.9
CH046B	Knit fabrics:							
	Exports	1,082	1,392	1,624	1,778	1,611	-167	-9.4
	Imports	1,080	1,026	979	1,026	965	-61	-6.0
	Trade balance	3	365	645	752	646	-106	-14.1
CH046C	Specialty fabrics:							
	Exports	572	489	579	545	506	-40	-7.3
	Imports	383	410	465	541	550	9	1.7
	Trade balance	190	79	114	5	-44	-49	(°
CH046D	Coated and other fabrics:							
	Exports	995	1,154	1,098	1,097	1,119	22	2.1
	Imports	679	743	891	967	1,021	54	5.5
	Trade balance	316	411	207	130	99	-31	-23.9
CH046E	Glass fiber fabrics:							
	Exports	87	118	146	147	178	31	21.1
	Imports	105	96	108	119	133	14	11.9
	Trade balance	-18	21	38	28	44	17	60.9
CH046F	Other fabrics:							
	Exports	744	914	1,027	1,240	1,392	152	12.3
	Imports	432	543	630	710	701	-9	-1.3
	Trade balance	312	371	397	530	691	161	30.4
CH047	Carpets and rugs:							
	Exports	684	681	763	881	960	79	9.0
	Imports	1,531	1,662	1,829	1,993	2,127	134	6.7
	Trade balance	-846	-981	-1,066	-1,112	-1,167	-55	-4.9

TABLE TX-5 Textiles, apparel, and footwear: U.S. trade for industry/commodity groups and subgroups, 2002-06a

USITC							Change, 200	6 from 2005
code	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars			
CH048	Home furnishings:							
	Exports	363	339	365	417	442	25	6.0
	Imports	4,226	5,021	6,107	7,448	8,249	801	10.8
	Trade balance	-3,863	-4,682	-5,742	-7,031	-7,808	-776	-11.0
CH048A	Blankets:							
	Exports	32	29	31	31	30	-2	-5.3
	Imports	353	391	459	514	606	92	17.8
	Trade balance	-321	-362	-428	-483	-576	-93	-19.3
CH048B	Pillowcases and sheets:							
	Exports	76	78	81	91	83	-8	-9.0
	Imports	903	1,046	1,353	1,904	2,204	300	15.8
	Trade balance	-826	-968	-1,271	-1,813	-2,121	-308	-17.0
CH048C	Table/kitchen linens and towels:							
	Exports	93	85	71	70	73	3	3.6
	Imports	1,236	1,418	1,646	1,864	1,951	87	4.7
	Trade balance	-1,143	-1,333	-1,574	-1,794	-1,879	-85	-4.7
CH048D	Curtains:							
	Exports	39	30	39	49	58	9	17.4
	Imports	576	725	858	1,017	1,088	71	7.0
	Trade balance	-537	-695	-819	-968	-1,030	-63	-6.5
CH048E	Bedspreads and other furnishing articles:							
	Exports	41	43	49	59	65	6	11.1
	Imports	735	1,001	1,144	1,284	1,424	141	11.0
	Trade balance	-694	-958	-1,096	-1,225	-1,359	-134	-11.0
CH048F	Pillows, cushions, and sleeping bags:							
	Exports	81	74	93	108	130	23	20.9
	Imports	417	437	645	860	971	112	13.0
	Trade balance	-336	-363	-552	-752	-841	-89	-11.8
CH048G	Tapestries and other wall hangings:							
	Exports	1	1	1	9	4	-5	-56.7
	Imports	6	4	3	6	5	-1	-16.5
	Trade balance	-5	-2	-2	3	-1	-4	( <sup>3</sup> )
CH049	Apparel:							
	Exports	5,491	4,965	4,414	4,129	3,854	-275	-6.7
	Imports	63,927	68,274	72,404	76,503	79,299	2,796	3.7
	Trade balance	-58,436	-63,308	-67,989	-72,374	-75,445	-3,071	-4.2

TABLE TX-5 Textiles, apparel, and footwear: U.S. trade for industry/commodity groups and subgroups, 2002-06a

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percen
				Million	dollars			
CH049A	Men's and boys' suits and sports coats:							
	Exports	46	39	28	30	32	2	7.3
	Imports	974	1,143	1,139	1,359	1,336	-22	-1.6
	Trade balance	-928	-1,104	-1,111	-1,329	-1,304	24	1.8
CH049B	Men's and boys' coats and jackets:		•	,	•	•		
	Exports	92	91	89	75	71	-4	-6.0
	Imports	1,876	2,001	2,134	2,255	2,441	186	8.2
	Trade balance	-1.784	-1,910	-2,045	-2,180	-2,370	-190	-8.7
CH049C	Men's and boys' trousers:	•	•	,	•	•		
	Exports	625	573	437	405	292	-113	-27.9
	Imports		7,459	7,568	7,776	8,014	238	3.1
	Trade balance	•	-6,887	-7,131	-7,371	-7,722	-352	-4.8
CH049D	Women's and girls' trousers:	•	•	,	•	•		
	Exports	357	287	267	239	268	29	12.2
	Imports		8,925	9,327	9,664	9,889	226	2.3
	Trade balance	,	-8,637	-9,060	-9,425	-9,621	-196	-2.1
CH049E	Shirts and blouses:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-,	2,020	٠, ٠=٠	-,		
	Exports	1.219	1,097	800	841	802	-40	-4.7
	Imports	,	21,285	22,474	23,664	25,073	1,409	6.0
	Trade balance		-20,188	-21,674	-22,822	-24,272	-1,449	-6.3
CH049F	Sweaters:	. 0,0 . 0	_0,.00	,	,=_	,	.,	0.0
	Exports	38	32	33	28	35	7	26.1
	Imports		2,729	2,632	2,809	2,658	-151	-5.4
	Trade balance		-2,697	-2,599	-2,781	-2,623	158	5.7
CH049G	Women's and girls' suits, skirts, and coats:	_, :	_,	_,	_,	_,,		
	Exports	154	136	146	155	148	-7	-4.8
	Imports		4,803	5,866	6,941	6,663	-278	-4.0
	Trade balance		-4,667	-5,720	-6,786	-6,515	271	4.0
CH049H	Women's and girls' dresses:	.,	.,	0,. =0	٥,. ٥٥	0,0.0		
	Exports	62	59	61	61	87	27	43.8
	Imports	1.470	1,550	1,524	1,465	1,841	376	25.7
	Trade balance	, -	-1,491	-1,463	-1,404	-1,753	-349	-24.9
CH049I	Robes, nightwear, and underwear:	.,	.,	.,	.,	.,. 55	2.3	
	Exports	744	715	700	479	394	-84	-17.6
	Imports		5,044	5,246	5,418	5,478	60	1.1
	Trade balance		-4,329	-4.546	-4,939	-5,084	-145	-2.9

TABLE TX-5 Textiles, apparel, and footwear: U.S. trade for industry/commodity groups and subgroups, 2002-06a

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percen
				Million	dollars ———			
CH049J	Hosiery:							
	Exports	344	339	356	343	383	40	11.8
	Imports	1,031	1,091	1,316	1,366	1,459	93	6.8
	Trade balance	-687	-751	-959	-1,023	-1,076	-53	-5.1
CH049K	Body-supporting garments:							
	Exports	385	289	310	275	166	-109	-39.8
	Imports	1,648	1,579	1,800	1,854	2,071	217	11.7
	Trade balance	-1,263	-1,290	-1,490	-1,579	-1,905	-326	-20.7
CH049L	Neckwear, handkerchiefs, and scarves:							
	Exports	24	23	24	26	23	-3	-12.0
	Imports	432	494	698	748	656	-93	-12.4
	Trade balance	-408	-471	-674	-722	-633	90	12.4
CH049M	Gloves, including gloves for sports:							
	Exports	122	109	104	101	100	-2	-1.8
	Imports	2,176	2,386	2,533	2,757	2,989	232	8.4
	Trade balance	-2,054	-2,277	-2,430	-2,656	-2,889	-233	-8.8
CH049N	Headwear:							
	Exports	91	89	102	111	114	3	2.5
	Imports	1,279	1,358	1,526	1,509	1,621	112	7.4
	Trade balance	-1,188	-1,269	-1,424	-1,398	-1,506	-109	-7.8
CH049O	Leather apparel and accessories:							
	Exports	95	92	108	175	165	-11	-6.0
	Imports	1,869	1,743	1,605	1,512	1,496	-17	-1.1
	Trade balance	-1,775	-1,651	-1,497	-1,337	-1,331	6	0.5
CH049P	Fur apparel and other fur articles:							
	Exports	25	19	18	16	22	6	34.5
	Imports	245	285	334	314	274	-39	-12.6
	Trade balance	-220	-265	-316	-298	-253	45	15.1
CH049Q	Rubber, plastic, and coated-fabric apparel:							
	Exports	99	95	129	142	165	23	16.2
	Imports	349	371	462	470	382	-88	-18.7
	Trade balance	-250	-276	-334	-328	-217	111	33.8
CH049R	Nonwoven apparel:							
	Exports	47	37	34	27	25	-2	-7.4
	Imports	401	401	395	419	479	60	14.2
	Trade balance	-353	-364	-361	-392	-454	-62	-15.7

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TABLE TX-5 Textiles, apparel, and footwear: U.S. trade for industry/commodity groups and subgroups, 2002-06a

USITC							Change, 200	6 from 2005
code	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars			
CH049S	Other wearing apparel:							
	Exports	922	845	668	599	564	-36	-5.9
	Imports	3,285	3,628	3,825	4,204	4,479	276	6.6
	Trade balance	-2,364	-2,784	-3,157	-3,604	-3,916	-311	-8.6
CH050	Miscellaneous textile products:							
	Exports	1,619	1,534	1,701	1,825	2,037	212	11.6
	Imports	3,340	3,754	4,319	4,651	5,104	453	9.7
	Trade balance	-1,721	-2,220	-2,618	-2,826	-3,067	-241	-8.5
CH051	Footwear:							
	Exports	520	495	450	507	573	66	12.9
	Imports	15,379	15,560	16,498	17,834	19,038	1,204	6.8
	Trade balance	-14,860	-15,065	-16,048	-17,327	-18,465	-1,138	-6.6

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes

<sup>&</sup>lt;sup>c</sup>Not meaningful for purposes of comparison.

TABLE TX-6 Textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06

USITC	In director (so more a difference on	2002	2002	2004	2005	2000	Percent change,
code	Industry/commodity group	2002	2003	2004	2005	2006	2006 from 2005
CH045	Fibers and yarns, except raw cotton and raw wool:						
	Number of establishments	569	569	(a)	(a)	(a)	(a)
	Employees (thousands)	63.0	57.0	54 <u>.</u> 0	66.Ó	65 <u>.</u> 0	-1.Ś
	Capacity utilization (percent)	75	77	80	(a)	(a)	(a)
	U.S. shipments (million dollars)	18,241	18,887	18,416	20,435	20,590	0.8
	U.S. exports (million dollars)	2,656	2,872	3,192	3,328	3,780	13.6
	U.S. imports (million dollars)	2,641	2,676	3,160	3,538	3,582	1.2
	Apparent U.S. consumption (million dollars)	18,225	18,691	18,384	20,646	20,392	-1.2
	Trade balance (million dollars)	16	196	32	-211	198	(b)
	Ratio of imports to consumption (percent)	14.5	14.3	17.2	17.1	17.6	2.5
	Ratio of exports to shipments (percent)	14.6	15.2	17.3	16.3	18.4	12.7
CH046	Fabrics:						
	Number of establishments	3,476	3,271	3,096	(a)	(a)	(a)
	Employees (thousands)	228.0	204.0	183.0	168 <u>.</u> 0	148 <u>.</u> 0	-11.9
	Capacity utilization (percent)	65	66	71	69	(a)	(a)
	U.S. shipments (million dollars)	32,170	30,453	28,886	29,176	27,226́	-6.7
	U.S. exports (million dollars)	6,485	6,641	7,228	7,285	7,015	-3.7
	U.S. imports (million dollars)	5,922	5,854	6,227	6,352	6,202	-2.4
	Apparent U.S. consumption (million dollars)	31,607	29,667	27,885	28,242	26,413	-6.5
	Trade balance (million dollars)	563	786	1,001	934	813	-12.9
	Ratio of imports to consumption (percent)	18.7	19.7	22.3	22.5	23.5	4.4
	Ratio of exports to shipments (percent)	20.2	21.8	25.0	25.0	25.8	3.2
CH047	Carpets and rugs:						
•	Number of establishments	538	511	487	480	470	-2.1
	Employees (thousands)	55.0	50.0	49.0	47.0	45.0	-4.3
	Capacity utilization (percent)	75	78	82	82	80	-2.4
	U.S. shipments (million dollars)	12,758	12,864	13,179.3	13,994.3	14,274	2.0
	U.S. exports (million dollars)	684	681	763	881	960	9.0
	U.S. imports (million dollars)	1,531	1,662	1,829	1,993	2,127	6.7
	Apparent U.S. consumption (million dollars)	13,604	13,845	14,245	15,107	15,441	2.2
	Trade balance (million dollars)	-846	-981	-1,066	-1,112	-1,167	-4.9
	Ratio of imports to consumption (percent)	11.3	12.0	12.8	13.2	13.8	4.4
	Ratio of exports to shipments (percent)	5.4	5.3	5.8	6.3	6.7	6.8
CH048	Home furnishings:	0.1	0.0	0.0	0.0	0	0.0
011010	Number of establishments	( <sup>a</sup> )	(a)	(a)	(a)	( <sup>a</sup> )	(a)
	Employees (thousands)	60.0	57.0	55.0	51.0	(a)	(a)
	Capacity utilization (percent)	(a)	(a)	(a)	(a)	(a)	(a) (a)
	U.S. production (million dollars)	9,800	10,000	(a)	(a)	(a)	(a)
	U.S. exports (million dollars)	363	339	365	417	442	6.0
	U.S. imports (million dollars)	4,226	5,021	6,107	7,448	8,249	10.8
	Apparent U.S. consumption (million dollars)	13,663	14,682	(a)	/ , <del>1 10</del> /a\	(a)	(a)
	Trade balance (million dollars)	-3,863	-4,682	-5,742	-7,031	-7,808	-11.0
	Ratio of imports to consumption (percent)	30.9	34.2	-3,7 42 (a)	-7,031 (a)	-7,000 (a)	(a)
	Ratio of imports to consumption (percent)	3.7	3.4	( ) ( <sup>a</sup> )	( ) ( <sup>a</sup> )	( ) ( <sup>a</sup> )	( ) ( <sup>a</sup> )
	ratio of exports to production (percent)	5.7	5.4	( )	( )	()	( )

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TABLE TX-6 Textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
CH049	Apparel:						
	Number of establishments	14,182	13,376	12,640	11,400	10,365	-9.1
	Employees (thousands)	360.0	312.0	285.0	260.0	234.0	-10.0
	Capacity utilization (percent)	72	66	74	71	68	-4.2
	U.S. shipments (million dollars)	41,901	38,645	32,873	31,650	30,520	-3.6
	U.S. exports (million dollars)	5,491	4,965	4,414	4,129	3,854	-6.7
	U.S. imports (million dollars)	63,927	68,274	72,404	76,503	79,299	3.7
	Apparent U.S. consumption (million dollars)	100,337	101,953	100,862	104,024	105,965	1.9
	Trade balance (million dollars)	-58,436	-63,308	-67,989	-72,374	-75,445	-4.2
	Ratio of imports to consumption (percent)	63.7	67.0	71.8	73.5	74.8	1.8
	Ratio of exports to shipments (percent)	13.1	12.8	13.4	13.0	12.6	-3.2
CH051	Footwear:						
	Number of establishments	364	343	326	310	295	-4.8
	Employees (thousands)	22.0	20.0	19.0	18.0	17.0	-5.6
	Capacity utilization (percent)	(1)	52	62	59	58	-1.7
	U.S. shipments (million dollars)	3,498	2,718	2,500	2,400	2,300	-4.2
	U.S. exports (million dollars)	520	495	450	507	573	12.9
	U.S. imports (million dollars)	15,379	15,560	16,498	17,834	19,038	6.8
	Apparent U.S. consumption (million dollars)	18,358	17,783	18,548	19,727	20,765	5.3
	Trade balance (million dollars)	-14,860	-15,065	-16,048	-17,327	-18,465	-6.6
	Ratio of imports to consumption (percent)	83.8	87.5	88.9	90.4	91.7	1.4
	Ratio of exports to shipments (percent)	14.9	18.2	18.0	21.1	24.9	17.8

Source: These data have been estimated by the Commission's international trade analysts on the basis of primary and secondary data sources including discussions with various Government and industry contacts. These estimated data are subject to change either from secondary sources or from detailed surveys the Commission often conducts in the course of statutory investigations or other work. Further, these data may undergo adjustments based on revisions in tariff nomenclature, classification practices, or redefinitions of industry classes.

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Not available.

<sup>&</sup>lt;sup>b</sup>Not meaningful.

# Minerals and Metals<sup>1</sup>

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Change in 2006 from 2005:

U.S. trade deficit: Increased by \$12.1 billion (16 percent) to \$86.6 billion U.S. exports: Increased by \$20.0 billion (32 percent) to \$82.9 billion U.S. imports: Increased by \$32.1 billion (23 percent) to \$169.5 billion

The rising costs of global energy and raw materials exerted strong upward pressure on global prices for minerals and metals in 2006. These price effects were largely responsible for the significant increases in both U.S. imports and exports in this sector (table MM-1). Strong economic growth in the United States as well as in most of the key U.S. trading partners in 2006 further contributed to the higher global demand and prices for sector products.<sup>2</sup>

Among U.S. key trading partners, China, in particular, continued its robust economic growth, expanding by 11 percent in 2006.<sup>3</sup> Much of this growth was in infrastructure development and industrial fixed assets, which require the extensive utilization of metal equipment and structures. Prior domestic supply shortage of many major commodities<sup>4</sup> has compelled China to rely on imports to satisfy demand, contributing to global price increases for many basic sector products.<sup>5</sup> Certain other countries in Asia were also key export markets for U.S. products owing to the rapid growth of these economies.

Overall, Canada and Mexico have traditionally been the leading U.S. trading partners in the minerals and metals sector, owing largely to NAFTA tariff preferences and market proximity. However, because of the strong demand from the rapidly expanding Chinese economy and China's emergence as a leading global supplier, China has replaced Mexico as the second-largest trading partner for the United States behind only Canada (table MM-1). In this sector, China's trade surplus with the United States, at \$3.4 billion, was the largest of any single country in 2006.

Steel mill products were an important category in the minerals and metals sector, accounting for a trade deficit of over \$21 billion in 2006. In the carbon and alloy steel plate, sheet, and

<sup>&</sup>lt;sup>1</sup> Steel mill products, copper and related articles, precious metals and non-numismatic coins, unwrought aluminum, and certain base metals and chemical elements are leading groups in terms of absolute trade changes in the minerals and metals sector and are discussed separately in this chapter.

<sup>&</sup>lt;sup>2</sup> In 2006, the global economy grew by 5.1 percent, the second strongest growth in a quarter of a century. Mandel and Henry, "It's a Low, Low, Low-rate World."

<sup>&</sup>lt;sup>3</sup> Chinese National Bureau of Statistics, *GDP Growth 1952-2006*. In 2004 and 2005, the Chinese economy grew by 10.1 percent and 9.9 percent, respectively.

<sup>&</sup>lt;sup>4</sup> These commodities included steel, copper, zinc, aluminum, and precious metals.

<sup>&</sup>lt;sup>5</sup> Pui, "The Mineral Industry of China," 2.

**TABLE MM-1** Minerals and metals: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dolla	ars ———			
U.S. exports of domestic merchandise: Canada China Mexico Israel United Kingdom Germany Japan Russia Taiwan India All other	13,447 1,539 6,671 677 2,622 1,196 1,590 62 647 206 11,266	13,820 2,636 6,454 231 3,112 1,338 1,654 71 758 235 12,669	16,835 3,197 7,958 457 2,788 1,513 1,955 90 914 388 14,493	19,110 5,215 9,258 1,359 3,429 1,848 2,385 91 1,092 719 18,405	22,687 7,736 11,635 2,026 6,587 2,569 3,221 136 1,491 902 23,954	3,577 2,521 2,377 666 3,158 721 836 45 400 183 5,549	18.7 48.3 25.7 49.0 92.1 39.0 35.1 49.2 36.6 25.4 30.1
Total	39,924	42,980	50,588	62,911	82,944	20,033	31.8
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	6,951 7,061 754 8,394 749 6,622 265 121	7,589 7,733 687 8,233 846 8,346 269 115	7,876 8,053 997 10,073 910 10,285 344 205	10,748 10,998 1,557 11,745 1,035 13,447 405 278	16,099 16,363 1,860 14,716 1,259 18,380 655 278	5,351 5,365 303 2,971 224 4,932 251 (°)	49.8 48.8 19.5 25.3 21.7 36.7 61.9 (°)
U.S. imports of merchandise for consumption: Canada China Mexico Israel United Kingdom Germany Japan Russia Taiwan India All other	17,797 8,656 7,013 6,073 2,174 3,438 4,123 2,505 3,003 3,799 27,036	18,003 10,054 7,116 6,365 2,190 3,654 4,036 2,407 3,058 3,730 28,591	22,636 13,890 9,623 7,527 2,942 4,637 4,724 4,679 4,190 4,748 41,301	25,590 17,553 11,366 8,543 3,093 5,495 5,013 4,687 4,282 5,091 46,653	32,155 23,462 13,266 9,069 3,748 6,611 5,871 6,915 5,243 5,816 57,354	6,565 5,909 1,900 526 655 1,116 858 2,227 960 725 10,701	25.7 33.7 16.7 6.2 21.2 20.3 17.1 47.5 22.4 14.2 22.9
Total	85,616	89,204	120,897	137,367	169,510	32,143	23.4
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan África Central and Eastern Europe	15,589 16,225 1,311 13,261 657 23,501 2,705 780	16,239 16,802 1,282 14,277 689 24,657 2,995 729	20,834 21,688 1,846 21,239 1,008 32,610 4,344 1,233	23,200 24,181 1,978 25,402 930 37,898 4,565 1,306	26,382 27,437 2,015 30,991 1,278 47,885 5,961 1,454	3,182 3,256 37 5,589 348 9,988 1,395 149	13.7 13.5 1.9 22.0 37.4 26.4 30.6 11.4

TABLE MM-1 Minerals and metals: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002-06a-Continued

						Change, 2006 from 2005		
Item	2002	2003	2004	2005	2006	Absolute	Percent	
			— Million dolla	ars ———				
U.S. merchandise trade balance: Canada	-4,350	-4,183 -7,448	-5,801	-6,480 -12.339	-9,468	-2,988 -3.388	-46.1	
China	-7,117 -342 -5,396 448	-7,418 -661 -6,134 922	-10,692 -1,665 -7,070 -153	-2,108 -7,184 335	-15,726 -1,631 -7,043 2,839	478 141 2,503	-27.5 22.6 2.0 746.5	
Germany Tuber State Stat	-2,242 -2,534 -2,443 -2.356	-2,317 -2,382 -2,336 -2,300	-3,124 -2,770 -4,589 -3,276	-3,646 -2,628 -4,596 -3,191	-4,041 -2,650 -6,779 -3,752	-395 -22 -2,183 -561	-10.8 -0.8 -47.5 -17.6	
India All other	-3,592 -15,770	-3,494 -15,922	-4,360 -26,808	-4,372 -28,248	-4,915 -33,400	-543 -5,152	-12.4 -18.2	
Total	-45,692	-46,224	-70,309	-74,456	-86,567	-12,110	-16.3	
EU-15 EU-25 OPEC	-8,637 -9,164 -558	-8,650 -9,068 -596	-12,958 -13,635 -848	-12,453 -13,183 -420	-10,283 -11,073 -154	2,169 2,109 266	17.4 16.0 63.3	
Latin America CBERA	-4,866 92	-6,044 157	-11,166 -98	-13,657 104	-16,274 -19	-2,618 -123	-19.2 (°) -20.7	
Asia Sub-Saharan África Central and Eastern Europe	-16,879 -2,440 -660	-16,311 -2,727 -614	-22,325 -4,000 -1,029	-24,451 -4,161 -1,028	-29,506 -5,306 -1,176	-5,055 -1,145 -149	-20.7 -27.5 -14.5	

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export. <sup>b</sup>Less than \$500,000. <sup>c</sup>Less than 0.05 percent. <sup>d</sup>Not meaningful for purposes of comparison.

strip category, the trade deficit increased by nearly 120 percent (\$3.5 billion). The increase in imports of these products can be attributed to a rise in steel prices as well as strong demand in the domestic construction, automotive, and energy and petrochemical industries. Also in 2006, rising prices for oil and natural gas spawned increased exploration activities, creating stronger global demand for exploration equipment, including carbon and alloy steel pipe and tubes, which constitute an important part of the steel mill products group. During the 2005–06 period, the average Baker Hughes rig counts<sup>6</sup> in the world and in the United States increased by 11 percent and 19 percent, respectively. The value of U.S. imports of carbon and alloy steel pipes and tubes increased by over 32 percent in 2006, resulting in a trade deficit of \$1.3 billion, an increase of 37 percent.

Driven by higher prices owing to China's robust industrial growth as well as improving global economic conditions, the value of both exports and imports of copper and related articles (table MM-2) increased significantly in 2006, resulting in a 78 percent rise in the trade deficit for these goods, to \$7.8 billion. In particular, the increase in the value of copper trade can be attributed to the 80 percent price increase for copper, copper-related articles, and copper scrap during the 2005–06 period. Unwrought aluminum accounted for over \$6.8 billion of the sectoral trade deficit in 2006. As previously stated, China's increasing demand for raw materials (including aluminum) in support of its rapidly growing economy contributed to a strong rise in overall global demand, resulting in higher prices for aluminum. Increased prices played an important role in the rise of the U.S. trade deficit in unwrought aluminum.

With respect to precious metals and non-numismatic coins, increases in U.S. trade values were also primarily attributable to higher price levels and stronger demand stemming from strong global economic conditions. The U.S. trade deficit in these products declined by 65 percent to \$872 million.

Incorporated Oil Field Service, a U.S. leading provider of drilling, formation evaluation, completion and production products and services to the worldwide oil and gas industry. Baker Hughes Incorporated Oil Field Service website.

<sup>&</sup>lt;sup>6</sup> The Baker Hughes rig count is a general indicator of drilling activities published by Baker Hughes

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TABLE MM-2 Leading changes in U.S. exports and imports of minerals and metals, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
			—— Million o	dollars ———			
U.S. EXPORTS:							
Increases:							
Precious metals and non-numismatic			0.004	7.500	40.000	= 000	0
coins (MM020)	5,070	6,299	6,204	7,522	13,360	5,839	77.6
Copper and related articles (MM036)	1,744	2,086	3,006	3,405	6,052	2,647	77.7
Unwrought aluminum (MM037)	950	1,000	1,397	2,087	3,508	1,421	68.1
Natural and synthetic gemstones (MM019)	1,331	469	1,129	2,765	4,087	1,321	47.8
Steel mill products (MM025)	4,533	5,525	7,015	9,331	10,479	1,148	12.3
All other	26,295	27,601	31,837	37,801	45,457	7,656	20.3
TOTAL	39,924	42,980	50,588	62,911	82,944	20,033	31.8
U.S. IMPORTS:							
Increases:							
Steel mill products (MM025)	12,203	10,499	21,559	23,534	31.500	7,966	33.8
Copper and related articles (MM036)	3,715	3,893	5,565	7.766	13,803	6,037	77.7
Precious metals and non-numismatic	0,1.10	0,000	0,000	7,700	10,000	0,001	
coins (MM020)	6,263	6,759	9,055	10,029	14,232	4,203	41.9
Certain base metals and chemical	0,200	0,7.00	0,000	10,020	,202	1,200	11.0
elements (MM041)	1,952	2,248	3,825	4,417	5,924	1,507	34.1
Zinc and related articles (MM040)	908	845	1.135	1.139	2,524	1.385	121.6
All other	60,574	64,962	79,758	90,483	101,529	11,046	12.2
		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	·	·····	· · · · · · · · · · · · · · · · · · ·	00.4
TOTAL	85,616	89,204	120,897	137,367	169,510	32,143	23.4

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

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# **Precious Metals and Non-numismatic Coins**<sup>7</sup>

Change in 2006 from 2005:

U.S. trade deficit: Decreased by \$1.6 billion (65 percent) to \$872 million U.S. exports: Increased by \$5.8 billion (78 percent) to \$13.4 billion U.S. imports: Increased by \$4.2 billion (42 percent) to \$14.2 billion

The U.S. trade deficit in precious metals and non-numismatic coins narrowed in 2006, as the United States exported more of several key products—particularly nonmonetary gold (\$1.6 billion net export gain) and waste and scrap (\$824 million net export gain), which together overshadowed the declining trend for platinum-group metals (\$824 million net import gain). Sharply higher precious metals prices in 2006 enhanced the values of U.S. trade flows above increased quantities (table MM-3). For example, the export value of gold bullion and doré <sup>8</sup> increased by 54 percent in 2006, whereas the quantity exported increased by only 20 percent (table MM-4). Likewise, the import value of unwrought rhodium increased by 115 percent, but the quantity imported increased by only 8 percent. Global precious metals prices have been rising since 2002–03, reflecting heightened investment and speculative interests as well as sustained fabrication demand. Compared with 2005 prices, average annual prices in 2006 for gold rose by 36 percent, silver by 58 percent, platinum by 27 percent, and palladium by 59 percent, whereas prices for certain other precious metals more than doubled.

#### U.S. Exports

The overall increase in U.S. exports of precious metals and non-numismatic coins in 2006 is primarily attributable to increased exports of nonmonetary gold, which accounted for 44 percent of the overall shift. Nearly all (96 percent) of the increase in gold exports were of refined bullion and unrefined doré, which together increased by \$2.6 billion (54 percent) to \$7.4 billion in 2006 (table MM-4). Mine output rose in 2006 to propel the United States to become the world's second largest producer. <sup>10</sup> In addition to increased mine-smelter production of doré, both primary (from doré) and secondary (from scrap) production of

<sup>&</sup>lt;sup>7</sup> This industry/commodity group includes gold, silver, and platinum-group metals (platinum, palladium, rhodium, iridium, ruthenium, and osmium) in unwrought or semi-manufactured forms; precious metal waste and scrap; and precious-metal non-numismatic coins. Monetary gold held as official reserves by central banks is specifically excluded from this group.

<sup>&</sup>lt;sup>8</sup> Doré gold, containing silver and various base metals, is produced from the smelting of gold-bearing ores and concentrates.

<sup>&</sup>lt;sup>9</sup> See e.g., Klapwijk, "Palladium Jewellery Fabrication Forecast to Rise in 2006"; Lerner, "After Sixteen Years of Down and Out"; Lerner, "Gold Funds' Demand Expected to Strengthen"; Lerner, "Investor Buying Could Drive Silver to \$15/oz"; Lerner, "PGMs Grow on Fabrication, Investment: CPM"; *Metal Bulletin*, "Gold Rising on Geopolitical Tensions—Greenspan"; *Metal Bulletin*, "Platinum Hits Fresh High on Weak Yen, Haven Buying"; and Stundza, "Gold Bugs Remain Bullish on Price"; among others.

<sup>&</sup>lt;sup>10</sup> In 2006, U.S. mined gold output increased by 4 metric tons (1.6 percent) over the previous year's level to reach 260 metric tons, or 10 percent of the world's output (2,500 metric tons) in that year. George, "Gold," 71

**Table MM-3** Average annual precious-metals prices, 2002–06 *Dollars per troy ounce* 

		_	Platinum-group metals								
Year	Golda	Silverb	Platinum <sup>c</sup>	Palladium <sup>c</sup>	Rhodium <sup>c</sup>	lridium <sup>c</sup>	Osmium <sup>c</sup>	Ruthenium			
Change in 2006 from 2005:											
Absolute	\$159.32	\$4.24	\$244.91	\$119.39	\$2,501.33	\$179.94	( <sup>d</sup> )	\$118.68			
Percent	35.8	58.0	27.2	58.7	121.4	106.2	(d)	159.5			
2006	603.77	11.55	1,144.42	322.93	4,561.06	349.45	(e)	193.09			
2005	444.45	7.31	899.51	203.54	2,059.73	169.51	(e)	74.41			
2004	409.17	6.65	848.76	232.93	983.24	185.33	(e)	64.22			
2003	363.32	4.88	694.44	203.00	530.28	93.02	(e)	35.43			
2002	309.68	4.60	542.56	339.68	838.88	294.62	(e)	66.33			

Source: Statistics of the London Bullion Market Association; and compiled by the U.S. Geological Survey from statistics of *Platts Metals Week*.

Table MM-4 Changes in U.S. exports of precious metals and non-numismatic coins, 2002-06

						Change, 2006 from 2005		
Item	2002	2003	2004	2005	2006	Absolute	Percent	
Gold	2,820	4,248	3,591	4,834	7,429	2,594	53.7	
Waste and scrap	1,226	1,360	1,763	1,749	3,065	1,316	75.2	
Platinum-group metals	722	481	542	610	1,739	1,129	185.1	
Silver	265	177	271	286	1,011	725	253.5	
Non-numismatic coins	37	33	38	42	116	74	176.2	
Total	5,070	6,299	6,204	7,522	13,360	5,839	77.6	

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.—Calculations based on unrounded data.

bullion by domestic refineries also increased in 2006.<sup>11</sup> The leading U.S. market for bullion, which also registered the largest increased U.S. shipments, was the United Kingdom (up by \$1.9 billion, or 212 percent, to \$2.8 billion), a major precious metals fabricating country and host to the world's premiere precious-metals trading center, London, where global reference prices are set for gold (table MM-5).<sup>12</sup> Switzerland, also a major center for precious-metals fabrication and trading, was the principal market for doré and registered the largest increased U.S. shipments (up by \$676 million, or 34 percent, to \$2.7 billion).

<sup>&</sup>lt;sup>a</sup>London Final price.

<sup>&</sup>lt;sup>b</sup>London daily (noon) price.

<sup>&</sup>lt;sup>c</sup>Englehard Industries price.

<sup>&</sup>lt;sup>d</sup>Not applicable.

<sup>&</sup>lt;sup>e</sup>Not reported.

<sup>&</sup>lt;sup>11</sup> In 2006, U.S. refinery output of primary gold rose by 17 metric tons (9 percent) over the previous year's level to reach 180 metric tons. Similarly, refinery output of secondary gold rose 4 metric tons (5 percent) to reach 80 metric tons. George, "Gold," 70.

<sup>&</sup>lt;sup>12</sup> The London Bullion Market Association Web site.

**TABLE MM-5** Precious metals and non-numismatic coins (MM020): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
<del>-</del>			<ul><li>Million dolla</li></ul>	rs ———			
U.S. exports of domestic merchandise: United Kingdom Switzerland Canada South Africa Mexico Peru Germany Russia Japan Chile All other	1,299 1,979 568 2 212 54 176 (b) 161 2 618	1,706 2,827 658 9 152 24 193 1 161 2 565	1,179 2,401 1,131 2 176 3 217 (b) 204 5 887	1,567 2,894 802 16 133 4 359 (°) 333 8 1,406	4,403 4,205 1,563 2 237 3 685 (b) 504 8 1,750	2,836 1,311 761 -15 104 -1 327 (²) 171 -1 344	181.0 45.3 94.9 -90.6 78.2 -17.5 91.1 254.7 51.3 -11.2 24.5
Total	5,070	6,299	6,204	7,522	13,360	5,839	77.6
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	1,753 1,754 50 346 48 333 2	2,084 2,085 40 264 58 354 9	1,578 1,580 133 300 53 531 7 2	2,197 2,198 347 227 40 969 17	5,580 5,581 235 350 43 1,216 2	3,383 3,383 -112 123 3 248 -15 (°)	154.0 154.0 -32.3 54.3 8.4 25.6 -89.9 55.8
U.S. imports of merchandise for consumption: United Kingdom Switzerland Canada South Africa Mexico Peru Germany Russia Japan Chile All other	510 88 1,990 1,186 448 163 240 509 53 63 1,013	459 114 1,778 1,314 530 431 222 456 51 86 1,316	690 144 2,080 1,764 732 1,195 212 476 80 146 1,536	917 83 1,960 1,845 927 1,739 285 565 68 259 1,380	1,284 233 2,660 2,711 2,023 1,635 575 699 138 424 1,849	367 150 699 866 1,097 -104 290 134 70 165 469	40.0 180.5 35.7 47.0 118.3 -6.0 101.5 23.7 101.6 63.9 34.0
Total	6,263	6,759	9,055	10,029	14,232	4,203	41.9
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	1,037 1,042 3 1,196 163 138 1,195	885 895 45 1,954 134 1,315	1,160 1,175 42 3,058 254 182 1,766	1,426 1,439 18 3,726 255 203 1,851	2,358 2,390 13 5,052 407 298 2,715	932 951 -5 1,326 152 95 864 -1	65.4 66.1 -27.9 35.6 59.5 46.9 46.7 -4.3

**TABLE MM-5** Precious metals and non-numismatic coins (MM020): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—Continued

		2003	2004	2005		Change, 2006 from 2005	
Item	2002				2006	Absolute	Percent
			— Million dolla	rs ———			
U.S. merchandise trade balance:    United Kingdom    Switzerland    Canada    South Africa    Mexico    Peru    Germany    Russia    Japan    Chile    All other	788 1,891 -1,423 -1,185 -236 -109 -64 -509 108 -61 -394	1,247 2,712 -1,120 -1,304 -378 -407 -29 -455 110 -85 -751	489 2,256 -948 -1,762 -556 -1,192 -476 124 -141 -649	650 2,810 -1,158 -1,829 -794 -1,736 73 -565 265 -250 26	3,120 3,971 -1,096 -2,710 -1,787 -1,632 110 -699 366 -417 -99	2,469 1,161 62 -881 -993 103 37 -134 101 -166 -125	379.8 41.3 5.3 -48.2 -125.1 6.0 50.4 -23.7 38.3 -66.4 (°) 65.2
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	716 712 47 -849 -115 195 -1,193	1,199 1,190 -6 -1,690 -140 220 -1,306	418 404 90 -2,758 -202 349 -1,759	771 759 329 -3,500 -215 765 -1,834 -12	3,222 3,191 222 -4,702 -364 918 -2,713 -11	2,451 2,432 -107 -1,203 -149 152 -879	317.7 320.6 -32.5 -34.4 -69.1 19.9 -47.9 7.5

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Less than \$500,000.

<sup>°</sup>Not meaningful for purposes of comparison.

Increased exports of precious metals waste and scrap accounted for another 23 percent of the overall export increase of precious metals and non-numismatic coins in 2006. The United States is among the world's largest generators and exporters of waste and scrap of all precious metals due to the size of the national economy and the high recycling rate for precious metals. Gold and silver accounted for 46 percent and 43 percent, respectively, of the overall export increase. Gold waste and scrap exports rose by \$601 million (90 percent) to \$1.3 billion, primarily to Canada, followed by Germany. Silver waste and scrap exports rose by \$560 million (97 percent) to \$1.1 billion, primarily to Germany, followed by Italy and Canada. These markets, much like the United States, are locations for precious metals recovery and refining, with extensive global trade links among precious metal refineries and fabricators.

### U.S. Imports

The overall increase in U.S. imports of precious metals and non-numismatic coins in 2006 is primarily attributable to increased imports of platinum-group metals (PGMs), which accounted for 46 percent of the overall shift (table MM-6). Most of the increase in PGM imports was of unwrought forms, attributable to continued robust demand for PGM catalysts in emissions control, petroleum refining, and chemical synthesis applications. The largest increase was for imports of unwrought rhodium, which rose by \$932 million (115 percent) to \$1.7 billion, followed by unwrought platinum, which rose by \$359 million (18 percent) to \$2.4 billion. With only two producing mines, the United States is highly dependent upon foreign sources to meet its domestic consumption needs. South Africa, the world's leading mine producer of PGMs, continued as the top U.S. source in 2006 for both rhodium (up by \$441 million, or 93 percent to \$914 million) and platinum (up by \$198 million, or 17 percent to \$1.3 billion) in unwrought forms.

Increased imports of nonmonetary gold accounted for another 23 percent of the overall import increase in 2006 of precious metals and non-numismatic coins. Nearly all (99 percent) of the increased gold imports was bullion and doré, which together increased by \$961 million (27 percent) to \$4.5 billion in 2006. Gold bullion imports from all sources increased by \$1.0 billion (68 percent) to \$2.5 billion. The predominant foreign sources exhibiting the largest increases were NAFTA partners Mexico and Canada. By contrast,

<sup>&</sup>lt;sup>13</sup> Germany is the largest recoverer of both precious and base metals in the European Union, with a highly developed secondary recovery (recycling) industry that benefitted from advances in recovery technologies and new capacity additions, but is highly dependent upon imports of nonferrous metal waste and scrap. Anderson, "The Mineral Industry of Germany," 12.4–12.5.

<sup>&</sup>lt;sup>14</sup> U.S. net import reliance as a share of apparent consumption was 95 percent in 2006. George, "Platinum-Group Metals," 122.

<sup>&</sup>lt;sup>15</sup> South Africa, the world's largest platinum producer, accounted for 172 metric tons, or 77 percent of the world's output (223 metric tons). As the world's second largest palladium producer, South Africa accounted for 87 metric tons, or 39 percent of the world's output (222 metric tons) in 2006. George, "Platinum-Group Metals," 123.

Table MM-6 Changes in U.S. imports of precious metals and non-numismatic coins, 2002-06

						Change, 2006 f	rom 2005			
Item	2002	2003	2004	2005	2006	Absolute	Percent			
		Million dollars								
Platinum-group metals	2,825	2,623	3,505	3,885	5,838	1,953	50.3			
Gold	2,352	2,797	3,827	4,202	5,171	969	23.1			
Silver	687	801	1,013	1,178	1,900	722	61.3			
Waste and scrap	256	331	466	525	1,017	492	93.7			
Non-numismatic coins	143	207	244	237	305	68	28.7			
Total	6,263	6,759	9,055	10,029	14,232	4,203	41.9			

Note.—Calculations based on unrounded data.

doré imports from all sources declined by \$70 million (3 percent) to \$2.0 biillion, with the largest declines among doré sources being Colombia and Peru, and the largest increase being Chile All three mine gold from gold ores or as a co- or byproduct of copper mining.<sup>16</sup>

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<sup>&</sup>lt;sup>16</sup> Anderson, "The Minieral Industry of Chile," 7.0 and 7.16–7.17; Torres, "The Mineral Industry of Colombia," 8.2 and 8.8; and Gurmendi, "The Mineral Industry of Peru," 15.5 and 15.13.

### **Steel Mill Products**

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$6.8 billion (48 percent) to \$21.0 billion U.S. exports: Increased by \$1.1 billion (12 percent) to \$10.5 billion U.S. imports: Increased by \$8.0 billion (34 percent) to \$31.5 billion

Both U.S. imports and exports of steel mill products increased in 2006; however, the increase in imports greatly overshadowed the increase in exports, resulting in a 48-percent increase in the trade deficit to \$6.8 billion in 2006. The average unit value of imported steel mill products declined by 5 percent from the previous year, whereas the quantity of imports increased by 41 percent. In addition to the rise in imports of \$8.0 billion (34 percent), an increase in U.S. production contributed to growth in the domestic supply of steel mill products; however, much of the increased supply contributed to inventory increases held by service centers and end users in 2006. This was the opposite of the situation in 2005, when the quantities of steel mill products imported and in inventories both fell.

#### U.S. Exports

The growth in U.S. exports of steel mill products was the result of a 19-percent increase in the quantity of exports and an 11-percent increase in average unit value. Carbon and alloy steel pipe and tube exports accounted for the largest share (38 percent) of the year-to-year increase in overall sector exports (Table MM-7). The increase in exports of pipe and tube was due to high demand for products used in petroleum and natural-gas production, particularly for seamless pipe and for products used in oil and gas wells. Canada was the largest country of destination, accounting for \$169 million (38 percent) of the growth in pipe and tube exports; China accounted for \$27 million (6 percent) in increased exports (table MM-8). Over the period 2002–06, exports of pipe and tube to China increased by almost 900 percent (to \$138 million), and China became the third-largest country destination, after Canada (\$1.1 billion) and Mexico (\$195 million), for U.S. pipe and tube exports. The value of U.S. exports of bar, rod, and shape products, which were primarily sent to Canada and Mexico, increased because of higher prices in 2006.

### U.S. Imports

U.S. demand for steel mill products was strong during the early months of 2006, but U.S. producers, already at a high operating rate, were reportedly unable to sufficiently increase the supply of domestic steel to meet that demand. Delays in the restart of a major producing unit, unplanned outages at several major steel producers, a labor dispute at a major mill, and extended lead times for delivery of orders from domestic mills added to market perceptions of domestic supply tightness, allowing U.S. prices to remain firm. When U.S. demand faltered later in the year, domestic mills responded by cutting back on

<sup>&</sup>lt;sup>17</sup> CRU Monitor, Steel: Finished Products, Semis and Raw Materials, 6.

<sup>18</sup> Ibid.

TABLE MM-7 Changes in U.S. exports of steel mill products, 2002-06

						Change, 2006	from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			Mill	ion dollars-			
Carbon and alloy steel pipe and							
tube	1,016	977	1,360	1,904	2,347	443	23
Carbon and alloy steel bar, rod,							
and light shapes	415	479	697	837	999	162	19
Carbon and alloy steel angle,							
shapes and sections	154	217	372	467	603	135	29
All other steel mill products	2,948	3,852	4,486	6,123	6,530	407	7
Total	4,533	5,525	7,015	9,331	10,479	1,148	12

Note.—Calculations based on unrounded data.

production; however, imported steel continued to arrive at a high rate through the end of the year, contributing to a growth in inventory in the hands of service centers and end users. Imports of carbon and alloy steel plate, sheet, and strip accounted for about 45 percent of the increase in imports in this sector (Table MM-9). Such products account for over 60 percent of all U.S. steel mill product demand and are utilized by all major steel-consuming sectors, including construction, automotive, and equipment. They are also consumed to produce pipe and tube products for use in construction and in oil, gas, and petrochemical production, which has become a strong growth area given the rise in fuel prices. The largest increases in imports were from China (\$647 million), India (\$363 million), Korea (\$404 million), Russia (\$368 million), and Taiwan (\$405 million). Increases in steel production in China exceeded growth in Chinese domestic consumption in 2006, and China became a major exporter of steel products, reversing its status as a major importer only 2 years earlier.

Imports of carbon and alloy steel pipe and tube accounted for 21 percent of the growth in imports of steel mill products. Imports from China accounted for about 46 percent of the total increase. This increase in U.S. imports from China was due to growing U.S. demand as well as increased Chinese supply of these products, particularly seamless pipe and seamless oil country tubular goods. New seamless pipe producing mills have come on line in China, resulting in capacity that exceeds local demand.

**TABLE MM-8** Steel mill products (MM025): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			— Million dolla	nrs			
U.S. exports of domestic merchandise: Canada Mexico China Japan Korea Russia Brazil Germany Taiwan Turkey All other	2,267 1,085 52 33 24 9 33 68 32 10 919	2,567 1,120 429 34 46 8 28 88 60 13 1,130	3,887 1,338 228 39 73 13 47 107 67 8 1,209	5,009 1,690 402 79 94 13 61 176 77 19	5,600 1,998 321 63 104 21 75 168 68 26 2,037	591 308 -81 -16 10 8 14 -8 -9 7 325	11.8 18.2 -20.2 -20.1 10.2 59.2 22.4 -4.7 -11.6 38.6 19.0
Total	4,533	5,525	7,015	9,331	10,479	1,148	12.3
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	389 394 149 1,326 107 300 58 7	554 603 105 1,317 87 805 72 13	475 507 168 1,637 120 721 65 18	708 749 259 2,124 1,014 106 40	810 838 324 2,500 168 909 202 33	102 89 65 375 44 -105 96	14.3 11.8 25.2 17.7 35.4 -10.4 90.6 -17.7
U.S. imports of merchandise for consumption: Canada Mexico China Japan Korea Russia Brazil Germany Taiwan Turkey All other	2,784 1,232 264 940 638 363 779 773 249 316 3,866	2,693 1,224 269 744 475 134 573 686 185 282 3,235	3,700 2,410 1,104 1,015 957 1,195 1,382 1,074 754 990 6,978	4,334 2,600 1,687 1,392 1,285 860 1,374 1,384 673 623 7,323	4,702 2,437 3,605 1,886 1,813 1,763 1,629 1,428 1,511 1,047 9,678	368 -163 1,918 494 528 903 255 44 838 425 2,355	8.5 -6.3 113.7 35.5 41.1 105.0 18.6 3.2 124.5 68.2 32.2
Total	12,203	10,499	21,559	23,534	31,500	7,966	33.8
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	2,817 3,003 186 2,456 140 2,603 146 284	2,439 2,602 121 2,167 78 2,030 133 252	4,424 4,730 296 4,499 187 4,884 244 554	5,523 5,792 281 4,619 83 5,983 222 435	6,170 6,524 194 4,566 114 10,410 344 590	646 732 -87 -53 32 4,428 122 155	11.7 12.6 -30.9 -1.1 38.4 74.0 54.7 35.5

**TABLE MM-8** Steel mill products (MM025): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—continued

						Change, 200	6 from 2005
Item	2002 2003	2004	2005	2006	Absolu	te	Percent
_			— Million dolla	rs —			
U.S. merchandise trade balance: Canada Mexico China Japan Korea Russia Brazil Germany Taiwan Turkey	-516 -147 -212 -907 -614 -353 -746 -705 -217	-125 -103 160 -710 -429 -125 -545 -597 -125 -269	187 -1,072 -876 -975 -885 -1,182 -1,335 -968 -687 -982	675 -910 -1,284 -1,313 -1,191 -847 -1,313 -1,208 -596 -604	898 -440 -3,284 -1,823 -1,709 -1,743 -1,554 -1,261 -1,443	222 471 -1,999 -510 -518 -896 -241 -52 -847 -418	32.9 51.7 -155.7 -38.8 -43.5 -105.7 -18.4 -4.3 -142.1
All other	-2,947 -7,670	-2,105 -4,974	-5,768 -14,544	-5,612 -14,203	-7,641 -21,020	-2,029 -6,818	-36.2 -48.0
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-2,428 -2,609 -37 -1,130 -33 -2,304 -88 -277	-1,885 -1,999 -17 -850 9 -1,225 -61 -239	-3,950 -4,223 -128 -2,862 -67 -4,163 -179 -536	-4,815 -5,042 -22 -2,495 41 -4,968 -116 -396	-5,360 -5,686 130 -2,066 54 -9,501 -142 -557	-545 -644 152 428 12 -4,533 -25 -162	-11.3 -12.8 (b) 17.2 29.6 -91.2 -22.0 -40.8

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Not meaningful for purposes of comparison.

Table MM-9 Changes in U.S. imports of steel mill products, 2002-06

						Change, 2006	from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			Millio	n dollars—			
Carbon and alloy steel pipe and							
tube	2,136	2,098	3,483	5,259	6,953	1,694	32.2
Carbon and alloy steel							
semifinished products	1,601	1,078	2,700	2,944	3,836	892	30.3
Carbon and alloy steel bar, rod,	4 000	4 000	0.700	0.007	4 0 40	740	04.5
and light shapes	1,928	1,669	3,769	3,327	4,043	716	21.5
Stainless steel plate, sheet, and	553	624	1 120	1 206	1 760	562	46.6
Strip	553	024	1,139	1,206	1,768	302	40.0
shapes, and sections	338	286	448	512	769	257	50.2
Tool steels	184	220	271	466	405	-61	-13.1
All other steel mill products	1,603	1,496	2,343	2,858	3,216	358	
Total	12,203	10,499	21,559	23,534	31,500	7,966	

Note.—Calculations based on unrounded data.

Carbon and alloy steel semifinished products accounted for about 11 percent of the increase in imports. These products are used as inputs to produce other steel mill products such as sheet and strip, which were needed to respond to the high level of demand. Imports of semifinished products from Russia (\$833 million) and Ukraine (\$604 million) increased by 141 percent and 389 percent, respectively, whereas imports from Mexico (\$860 million) and Brazil (\$564 million), previously the largest sources, each declined by 16 percent.

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# Copper and Related Articles<sup>19</sup>

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$3.4 billion (78 percent) to \$7.8 billion U.S. exports: Increased by \$2.6 billion (78 percent) to \$6.1 billion U.S. imports: Increased by \$6.0 billion (78 percent) to \$13.8 billion

The U.S. trade deficit in copper and related articles widened in 2006, as the United States imported greater values of several key products—particularly refined cathodes and other unalloyed unwrought forms of copper (\$3.0 billion net import gain), but also unrefined anodes (\$522 million), tubes, pipes, and fittings (\$518 million), wire rods and wire (\$452 million), and plates, sheets, strips, and foils (\$198 million). The deficit grew despite strongly increased exports of waste, scrap, ash, and residues, which increased by \$1.4 billion. Values of both U.S. exports and imports were enhanced by near-continuously rising copper prices in recent years, attributable to continued robust worldwide demand that could not be met by primary (mine) production and secondary (scrap) recovery without drawing down commodity exchange, merchant, and industry inventories (table MM-10).<sup>20</sup> For example, the value of copper waste, scrap, ash, and residue exports increased by 126 percent in 2006, whereas the quantity exported increased by only 26 percent (table MM-11). Likewise, the value of refined cathodes and other unalloyed unwrought forms of copper imports increased by 144 percent, but the quantity imported increased by only 7 percent. Average annual prices for refined copper cathodes, the benchmark for pricing of other unwrought, semimanufactured, and waste and scrap forms of copper, 21 rose by over 80 percent from 2005 to 2006 (table MM-10).

#### U.S. Exports

The overall increase in U.S. exports of copper and related articles in 2006 is primarily attributable to increased exports of copper waste, scrap, ash, and residues, which accounted for 51 percent of the overall export shift (table MM-11). In addition to increased copper prices, the rise in U.S. exports of this material to record levels in 2006 is attributable in part to weakness of the U.S. dollar. China was both the predominant market destination and registered the largest increase in U.S. exports of copper waste, scrap, ash, and residues (up by \$763 million, or 113 percent to \$1.4 billion), followed by Canada (up by \$161 million, or 191 percent to \$246 million) and Taiwan (up by \$103 million, or 196 percent to \$156 million) (table MM-12). The robust pace of China's economic expansion in recent

<sup>&</sup>lt;sup>19</sup> This industry/commodity group includes unrefined and refined copper and copper alloys in unwrought forms, copper and copper alloys in various semi-manufactured forms (e.g., bars, rods, profiles, and wires; plates, sheets, strips, and foils; tubes, pipes, and fittings) and copper and copper alloy waste, scrap, ash, and residues.

<sup>&</sup>lt;sup>20</sup> Compiled from World Bureau of Metal Statistics, World Metal Statistics.

<sup>&</sup>lt;sup>21</sup> Unwrought and fabricated copper products are set at a premium, reflecting conversion charges, over the producers' delivered price of copper cathodes, which in turn, are set at a premium over the First-Position (current-month) price on the New York Commodity Mercantile Exchange (COMEX). Daniel Edelstein, copper commodity specialist, U.S. Geological Survey, Reston, VA, telephone interview by Commission staff, January 31, 2006.

<sup>&</sup>lt;sup>22</sup> Marley, "Ups and Downs."

**TABLE MM-10** Average annual refined copper cathode prices Cents per pound

Year	<b>COMEX</b> <sup>a</sup>	<b>LME</b> <sup>b</sup>	U.S. producers'
Change in 2006 from 2005:			
Absolute	140.710	138.013	141.258
percent	83.6	82.7	81.4
2006	308.937	304.850	314.751
2005	168.227	166.837	173.493
2004	128.972	129.958	133.938
2003	81.050	80.684	85.012
2002	71.672	70.721	75.805

Source: Compiled by the U.S. Geological Survey.

TABLE MM-11 Changes in U.S. exports of copper and related articles, 2002–06

						Change, 2006	from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			—— Millio	on dollars -			
Waste, scrap, ash, and residues	514	674	904	1,079	2,434	1,355	125.6
Wire rods and wire	236	235	521	664	1,228	564	84.9
Bars, rods, and profiles	145	181	199	235	386	152	64.3
Tubes, pipes, and fittings	207	217	266	314	462	148	47.1
Refined cathodes and other							
unalloyed unwrought forms	48	178	233	97	237	140	144.3
Mattes and cements	12	15	5	26	118	93	353.8
Plates, sheets, strips, and foils	248	293	419	537	606	70	12.8
Unrefined anodes	51	44	121	97	84	-14	-13.4
All others	282	249	339	356	496	140	39.3
Total	1,744	2,086	3,006	3,405	6,052	2,647	77.7

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>New York Commodities Exchange (COMEX) first-position price.

<sup>&</sup>lt;sup>b</sup>London Metals Exchange (LME) grade-A cash price.

**TABLE MM-12** Copper and related articles (MM036): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			<ul> <li>Million dollar</li> </ul>	rs			
U.S. exports of domestic merchandise: Canada Chile Mexico China Peru Germany Russia Japan Brazil Taiwan All other	405 2 462 274 1 66 1 71 7 53 403	396 1 467 596 1 50 (b) 71 5 62 437	578 1 779 608 1 88 2 97 9 150 693	663 3 959 852 1 76 3 103 11 99 636	1,241 2 1,594 1,665 1 185 8 167 18 223 948	578 -1 635 813 1 109 5 64 7 124 312	87.2 -18.5 66.2 95.5 165.4 142.8 185.6 61.5 61.5 49.1
Total	1,744	2,086	3,006	3,405	6,052	2,647	77.7
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	182 183 15 491 11 623 3	174 176 17 497 14 977 3 2	262 264 34 822 23 1,268 6	240 246 35 1,016 22 1,416 4 7	425 438 48 1,672 34 2,603 11	185 192 14 656 12 1,187 7	77.3 78.1 39.6 64.5 54.4 83.9 147.8 108.4
U.S. imports of merchandise for consumption: Canada Chile Mexico China Peru Germany Russia Japan Brazil Taiwan All other	1,074 446 416 119 468 204 110 132 131 107 508	1,057 685 329 160 466 217 103 125 105 110 535	1,606 1,014 509 263 468 357 142 155 170 122 760	2,073 1,788 774 319 592 381 389 155 254 112 929	3,364 4,145 1,060 653 1,045 592 742 223 338 133 1,507	1,291 2,357 286 334 454 211 353 68 84 21 578	62.3 131.8 36.9 104.5 76.7 55.5 90.9 44.0 33.1 18.4 62.3
Total	3,715	3,893	5,565	7,766	13,803	6,037	77.7
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	462 488 6 1,477 10 472 18 29	496 518 5 1,598 9 514 38 26	725 773 9 2,182 16 723 30 60	854 927 10 3,435 21 801 8	1,153 1,233 13 6,633 37 1,345 17	298 307 3 3,198 17 545 8 29	34.9 33.1 30.8 93.1 81.2 68.0 99.5 33.9

TABLE MM-12 Copper and related articles (MM036): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002-06a—Continued

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			<ul><li>Million dolla</li></ul>	rs			
U.S. merchandise trade balance: Canada Chile Mexico China Peru Germany Russia Japan Brazil Taiwan All other Total	-669 -444 46 155 -467 -138 -109 -61 -124 -54 -105	-661 -684 138 435 -465 -167 -103 -54 -100 -48 -98	-1,028 -1,013 271 345 -467 -270 -140 -58 -161 28 -67	-1,410 -1,785 184 532 -591 -305 -386 -51 -243 -13 -293	-2,123 -4,142 533 1,012 -1,044 -407 -734 -56 -321 90 -559	-713 -2,357 349 479 -453 -102 -348 -4 -77 103 -266	-50.6 -132.1 189.2 90.0 -76.6 -33.6 -90.2 -8.8 -31.8 -90.9
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-280 -305 9 -986 2 151 -15	-322 -342 12 -1,101 5 463 -35 -23	-463 -509 25 -1,360 7 546 -25 -57	-615 -681 24 -2,418 2 615 -4 -78	-727 -795 35 -4,961 -3 1,258 -6 -99	-113 -114 -11 -2,543 -5 642 -2 -21	-18.3 -16.8 43.3 -105.1 (°) 104.4 -46.2 -27.3

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export. <sup>b</sup>Less than \$500,000. <sup>c</sup>Not meaningful for purposes of comparison.

years has driven up its imports of waste, scrap, ash, and residues for use by its copper industry to meet growing Chinese demand for copper-containing products, particularly in the electrical transmission, electrical machinery and equipment, and transportation equipment sectors.<sup>23</sup>

#### U.S. Imports

The overall increase in U.S. imports of copper and related articles in 2006 is primarily attributable to increased imports of refined cathodes and other unalloyed unwrought forms of copper, which accounted for 52 percent of the overall import shift (table MM-13). Almost all (94 percent) of the increase in imports of unalloyed unwrought forms was of refined copper cathodes and sections thereof, which increased by \$2.9 billion (90 percent) to \$6.2 billion in 2006. Although the United States is the world's second largest producer of mined copper,<sup>24</sup> it relies upon foreign sources for copper cathodes to meet its domestic consumption needs. Closure of a copper smelter in October 2005<sup>25</sup> reduced the domestic supply of unrefined anodes for subsequent electrolytic refining into cathodes, and the closure of a major refining facility in October 2005<sup>26</sup> further constrained copper cathode output by the United States in 2006. Chile, the world's largest producer of mined copper, was the leading source of U.S. imports of copper cathodes in 2006 and also registered the largest increases in U.S. imports, up by \$1.7 billion (118 percent) to \$3.2 billion. Other major suppliers included Canada (up by \$437 million, or 50 percent to \$1.3 billion), Peru (up by \$437 million, or 79 percent to \$993 million), and Kazakhstan (up by \$290 million, or 1,268 percent to \$313 million).<sup>27</sup>

Among the fabricated forms of copper and copper alloys imported by the United States in 2006, wire rods and wire accounted for the largest portion (19 percent), followed by tubes, pipes, and fittings (11 percent). Domestic demand remained robust for these fabricated copper products in electrical wiring and plumbing applications, respectively, despite the decline in residential construction activity through much of 2006, as the value of overall (residential and commercial) construction activity grew by nearly 5 percent in 2006. <sup>28</sup> U.S. imports of wire rods and wire rose by \$1.0 billion (65 percent) to \$2.6 billion in 2006. Canada was the predominant source of these imports and also registered the largest increase (up by \$565 million, or 95 percent, to \$1.2 billion), followed by Russia (up by \$332 million,

<sup>&</sup>lt;sup>23</sup> See e.g., Barry, "What's Behind the Waning of China's Insatiable Appetite for Copper?"

<sup>&</sup>lt;sup>24</sup> U.S. mined copper output increased by 1.1 million metric tons (7 percent) to reach 1.2 million metric tons in 2006, or 8 percent of the world's output (15.3 million metric tons) in that year. Edelstein, "Copper," 53

<sup>&</sup>lt;sup>25</sup> Closure of this facility reduced U.S. copper smelting capacity by 190,000 metric tons (21 percent) to 710,000 metric tons for 2006. International Copper Study Group, "Table 1, World Copper Smelters Capacities 2004 to 2009," 77.

<sup>&</sup>lt;sup>26</sup> Closure of this facility reduced U.S. copper refining capacity by 172,000 metric tons (7 percent) to 2.1 million metric tons for 2006. International Copper Study Group, "Table 1, World Copper Refineries Capacities 2004 to 2009," 100–101.

<sup>&</sup>lt;sup>27</sup> In 2006, Chile produced 5.4 million metric tons of mined copper or 35 percent of the global total (15.3 million metric tons). Peru produced 1.1 million metric tons, Canada produced 600,000 metric tons, and Kazakhstan produced 430,000 metric tons. Edelstein, "Copper," 53.

<sup>&</sup>lt;sup>28</sup> U.S. Census Bureau, "Table 2, Value of Construction Put in Place in the United States, Not Seasonally Adjusted."

TABLE MM-13 Changes in U.S. imports of copper and related articles, 2002-06

						Change, 2006	from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			—— millio	on dollars -			
Refined cathodes and other							
unalloyed unwrought forms	1,453	1,548	2,142	3,496	6,620	3,124	89.4
Wire rods and wire	516	544	934	1,559	2,575	1,016	65.2
Tubes, pipes, and fittings	448	476	717	829	1,496	666	80.5
Unrefined anodes	366	390	419	420	928	508	121.0
Plates, sheets, strips, and foils	358	337	504	473	740	267	56.4
Waste, scrap, ash, and residues	125	122	188	275	481	206	74.9
Bars, rods, and profiles	145	152	266	289	397	108	37.4
All others	304	324	395	424	565	141	33.3
Total	3,715	3,893	5,565	7,766	13,803	6,037	77.7

Note.—Calculations based on unrounded data.

or 86 percent, to \$719 million). Over this same period, U.S. imports of tubes, pipes, and fittings rose by \$666 million (80 percent) to \$1.5 billion. China registered the largest increase (up by \$265 million, or 161 percent, to \$429 million), followed by Mexico (up by \$121 million, or 51 percent, to \$360 million).

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# **Unwrought Aluminum**

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$742 million (12 percent) to \$6.8 billion U.S. exports: Increased by \$1.4 billion (68 percent) to \$3.5 billion U.S. imports: Increased by \$2.2 billion (27 percent) to \$10.3 billion

The trade deficit in unwrought aluminum rose to an historical high in 2006, as the value of U.S. imports of unwrought aluminum (\$2.2 billion) outpaced U.S. exports (\$1.4 billion) (table MM-14). The value of both U.S. imports and U.S. exports rose substantially during 2006, by 26 percent and 68 percent, respectively. This reflected a combination of continued robust economic growth worldwide and continued strong demand for aluminum in most major industrial markets, which led to significantly higher prices for aluminum. Largely because of the price increases, the growth in the value of U.S. imports of unwrought aluminum for 2006 occurred despite a slowdown in domestic aluminum consumption (by volume), which was attributable to a decline in housing and other construction-related demand by the end of the year. The most notable increase in the trade deficit in 2006 was with Canada, the dominant supplier to the U.S. market.

#### U.S. Exports

The value of U.S. exports of unwrought aluminum registered a third consecutive year of very strong growth in 2006, increasing by 68 percent over 2005 levels to \$3.5 billion. The overall export increase was largely fueled by growth in exports of aluminum waste and scrap, which accounted for nearly 80 percent of the total increase by value (table MM-15). China is a significant consumer of aluminum scrap globally as a result of the rapid industrialization of the Chinese economy, the consequent increased use of aluminum, and the lack of aluminum scrap in the country. Most scrap in China is consumed by Chinese aluminum diecasters to produce ingots. Exports to China constituted the largest value increase, rising by 111 percent, and accounting for 57 percent of the total increase in U.S. exports of unwrought aluminum in 2006. Exports to Mexico grew by 49 percent and accounted for 16 percent of the total increase in 2006.

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<sup>&</sup>lt;sup>29</sup> Hui, "Sizing Up China's Scrap Resources."

**TABLE MM-14** Unwrought aluminum (MM037): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
_			<ul> <li>Million dollar</li> </ul>	rs ———			
U.S. exports of domestic merchandise:							
Canada	358	370	454	480	568	88	18.3
China	170	240	356	730	1,540	810	111.0
Russia	(b)	(b)	2	2	4	2	82.2
Mexico	250	190	327	452	675	222	49.2
Brazil	(p)	( <sub>p</sub> )	3	3	2	-1	-26.7
Venezuela	(b)	(b)	1	(b)	(b)	(b)	8.6
United Arab Em	3	2	2	1	2	1	96.0
Korea	50	55	74	164	261	97	59.0
Bahrain	0	( <sub>p</sub> )	0	0	0	0	0.0
South Africa	1	(b)	(b)	(b)	(b)	(b)	2,218.5
All other	117	143	180	253	455	201	79.6
Total	950	1,000	1,397	2,087	3,508	1,421	68.1
<u>EU-15</u>	20	17	16	20	30	10	49.5
EU-25	20	17	16	20 14	37	16	80.8
Latin America	254	2 193	11 337	468	22 702	234	54.5 50.0
ÇBERA	2	1	3	3	7	4	137.4
Asia	311	411	568	1,089	2,167	1,078	99.0
Sub-Saharan Africa	(b)	0	3 ( <sup>b</sup> )	(b)	7	6	384.5 6,940.7
U.Ş. imports of merchandise for consumption:							
Canada	2,658 14	3,008	3,507 54	4,197 158	5,874 184	1,678	40.0 16.1
China	924	15 931	1,633	1.586	1.691	25 105	6.6
Mexico	70	82	106	143	231	88	61.5
Brazil	110	154	484	481	421	-60	-12.5
Venezuela	303 96	267 82	203 102	297 165	329 270	32 105	10.7 63.7
Korea	5 27	82 ( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	- 3	3	624.8
Bahrain	27 21	<u> </u>	`5	47	208	161	345.9
South Africa	545	13 442	69 594	149 930	201 905	52 -26	34.7 -2.7
Total	4,774	5,000	6,837	8,153	10,317	2,163	26.5
EU-15	39	45	63	88	140	52	59.8
EÜ-25	58	45	64	89	140	, <u>5</u> 1	57.1
OPEC Latin America	404 709	352 725	395 1,114	470 1.182	626 1.283	156 102	33.1 8.6
CBERA	100	725 104	1113	1,102	1,203	8	6.5
Asia	23	18	66	186	202	16	8.5
Sub-Saharan Africa	23 85 2	72 2	123	210 0	296	86	40.9
Central and Eastern Europe	2	2	( )	U	( )	( )	(*)

**TABLE MM-14** Unwrought aluminum (MM037): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—*Continued* 

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			— Million dolla	ars ———			
U.S. merchandise trade balance:     Canada     China     Russia     Mexico     Brazil     Venezuela     United Arab Em     Korea     Bahrain     South Africa     All other     Total	-2,300 156 -924 180 -109 -303 -94 45 -27 -20 -428	-2,638 225 -930 108 -154 -266 -80 55 -5 -13 -299	-3,053 302 -1,631 221 -481 -283 -101 74 -5 -69 -413	-3,716 572 -1,584 309 -478 -297 -164 164 -47 -149 -677	-5,307 1,356 -1,687 444 -419 -329 -267 258 -208 -201 -450	-1,590 785 -103 134 59 -32 -104 94 -161 -52 227	-42.8 137.3 -6.5 43.5 12.4 -10.8 -63.5 57.5 -345.6 33.5 -12.2
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-19 -38 -401 -455 -97 288 -84	-28 -28 -350 -532 -103 -393 -71	-47 -48 -385 -777 -111 502 -121	-67 -69 -456 -714 -124 903 -209 (b)	-110 -103 -604 -581 -128 1,965 -290	-42 -34 -148 132 -4 1,062 -81	-62.9 -50.1 -32.4 18.5 -3.3 117.6 -38.9 6,778.3

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Less than \$500,000.

<sup>&</sup>lt;sup>c</sup>Not meaningful for purposes of comparison.

TABLE MM-15 Changes in U.S. exports of unwrought aluminum, 2002–06

						Change, 2006	from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			——— Milli	ion dollars -		_	
Aluminum waste and scrap Aluminum (alloy), unwrought All other unwrought aluminum	509 348 93 950	608 282 110 1,000	730 427 240 1,397	1,324 562 201 2,087	2,448 771 289 3,508	1,124 209 88 1,421	84.9 37.2 43.8 68.1

Note.—Calculations based on unrounded data.

#### U.S. Imports

The value of U.S. imports of unwrought aluminum registered a third consecutive year of double-digit increase, rising to \$10.3 billion in 2006, or by 27 percent. The increase in the total value of aluminum imports was attributable to a 32-percent rise in the average price of aluminum ingot (from \$0.91/lb. in 2005 to \$1.20/lb. in 2006),<sup>30</sup> as demand for aluminum worldwide continued to grow faster than aluminum smelting capacity. The total value of U.S. imports increased despite a 5-percent decline in the quantity of imports of unwrought pure and alloy aluminum ingot, the two principal product categories (table MM-16). Imports of ingot declined in quantity due to the rise in aluminum prices and the sluggish domestic residential construction and transportation markets in 2006, two markets which had provided strong growth for aluminum since 2002. Imports from Canada, traditionally the leading U.S. supplier, constituted the largest volume increase, rising by 40 percent, and accounted for 57 percent of total imports in 2006. Imports from Russia grew by 7 percent and accounted for 17 percent of the total in 2006.

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TABLE MM-16 Changes in U.S. imports of unwrought aluminum, 2002-06

						Change, 2006	from 2005	
Item	2002	2003	2004	2005	2006	Absolute	Percent	
			— Million	dollars ——				
Aluminum (alloy), unwrought	2,276	2,025	2,885	3,468	4,852	1,384	39.9	
Aluminum (non alloy), unwrought	1,917	2,372	3,109	3,726	4,249	523	14.0	
All other unwrought aluminum	581	603	843	959	1,216	257	26.8	
Total	4,774	5,000	6,837	8,153	10,317	2,164	26.5	

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>30</sup> U.S. Geological Survey, *Minerals Information*, "Aluminum," 18.

## **Certain Base Metals and Chemical Elements**

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$597 million (39 percent) to \$2.1 billion U.S. exports: Increased by \$910 million (32 percent) to \$3.8 billion U.S. imports: Increased by \$1.5 billion (34 percent) to \$5.9 billion

The U.S. trade deficit in certain base metals and chemical elements expanded in 2006 as price increases in certain import categories caused imports to expand more than exports during the period. The increase in imports largely reflected higher prices paid for nickel metal due to strong demand globally. In China, there was particularly strong demand for nickel for use in the production of stainless steel. The increase in the value of U.S. exports was largely attributable to an increase in exports of wrought titanium and semi-finished nickel to the EU-25, China, and Japan. The most notable increases in the trade deficit in 2006 were with Russia, Canada, and Australia (table MM-17).

#### U.S. Exports

The increase in the total value of sector exports resulted primarily from a rise in exports of wrought titanium products and of semi-finished nickel alloy products (bars and rods), together accounting for 47 percent of the increase in 2006 (table MM-18). Wrought titanium exports benefitted from strong aerospace and/or defense-related demand from the EU-25, China, and Japan, along with rising titanium prices, which rose almost 20 percent to \$25/lb by December 2006. Strong worldwide demand for nickel for the production of stainless steel, primarily by China, certain a doubling in the price of nickel and the increase in semi-finished nickel exports from the United States. Combined titanium and nickel exports climbed 63 percent in value and 22 percent in quantity in 2006. U.S. exports of miscellaneous waste and scrap (gallium, hafnium, indium, niobium, and rhenium) continued to increase sharply in 2006, reflecting continued sharp increases in commodity prices. The price of indium, in particular, has increased from \$97/kg in 2002 to \$855/kg<sup>33</sup> in 2006 due to a supply shortage of and strong demand for indium for use in liquid crystal displays (LCDs).

### U.S. Imports

The increase in the value of total sector imports (table MM-19) resulted largely from the rise in imports of unwrought nickel metal as strong worldwide demand, primarily by China, resulted in a doubling in the price of nickel from \$6.41/lb in January 2006 to \$15.90/lb at the end of 2006.<sup>34</sup> At the same time, nickel stockpiles worldwide reached record low levels

<sup>&</sup>lt;sup>31</sup> American Metal Market, "Titanium Pricing."

<sup>&</sup>lt;sup>32</sup> Harman, "China's Nickel Demand to Remain Strong Amidst High Prices." In 2006, the volume of nickel demand by China increased nearly 8 percent and China consumed nearly 60 percent of all nickel produced worldwide.

<sup>&</sup>lt;sup>33</sup> U.S. Geological Survey, *Minerals Information*, "Indium," 78.

<sup>34</sup> American Metal Market, "Nickel and Titanium Pricing."

**TABLE MM-17** Certain base metals and chemical elements (MM041): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			– Million dollar	rs			
U.S. exports of domestic merchandise: Canada China Russia United Kingdom Germany Japan France Australia Norway	179 30 1 259 148 119 134 12	168 47 1 297 138 165 124 11 ( <sup>2</sup> )	195 106 1 308 129 196 168 10	237 545 3 346 192 264 264 13	320 769 2 484 242 350 349 22	84 224 -1 138 50 86 84 9	35.3 41.0 -19.7 40.0 26.1 32.5 31.9 70.8 150.1
Belgium	69 546	534	114 683	172 846	188 1,062	17 217	9.7 25.6
Total	1,498	1,571	1,913	2,882	3,792	910	31.6
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	731 735 7 140 3 297 7	755 760 12 110 4 382 7 5	845 872 17 137 12 526 10 25	1,138 1,203 25 184 17 1,052 10 67	1,504 1,538 30 235 26 1,439 14 36	366 335 4 51 9 386 3 -31	32.1 27.8 17.5 27.7 51.0 36.7 30.4 -45.9
U.S. imports of merchandise for consumption: Canada China Russia United Kingdom Germany Japan France Australia Norway Belgium All other	538 106 257 67 140 119 87 82 84 24	478 118 367 95 141 113 97 107 196 26 510	1,039 249 472 130 241 159 129 177 272 47 910	1,094 264 515 157 332 236 226 202 373 47 972	1,448 353 951 199 430 274 220 381 369 48 1,250	354 89 436 42 99 38 -7 179 -4 2	32.4 33.9 84.7 26.9 29.8 15.9 -2.9 88.3 -1.0 3.8 28.6
Total	1,952	2,248	3,825	4,417	5,924	1,507	34.1
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	429 440 12 170 ( <sup>b</sup> ) 256 40	511 514 12 195 (b) 275 44	759 768 38 320 (b) 570 89 3	981 995 44 318 2 631 102 4	1,227 1,242 39 418 ( <sup>b</sup> ) 782 97 6	245 247 -4 101 -1 151 -5	25.0 24.9 -10.1 31.7 -83.3 23.9 -4.6 36.4

**TABLE MM-17** Certain base metals and chemical elements (MM041): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06°—*Continued* 

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			<ul><li>Million dolla</li></ul>	rs			
U.S. merchandise trade balance: Canada China Russia United Kingdom Germany Japan France Australia Norway Belgium All other Total	-359 -76 -256 192 8 ( <sup>b</sup> ) 47 -70 -83 46 97	-310 -70 -365 202 -3 52 27 -96 -195 58 25	-843 -143 -471 178 -112 37 39 -167 -271 68 -227	-857 281 -512 189 -140 28 38 -189 -371 125 -126	-1,127 416 -949 285 -188 76 129 -359 -365 140 -188	-271 134 -437 96 -49 48 91 -169 6 15 -61	-31.6 47.7 -85.3 50.9 -34.9 175.0 237.7 -89.5 1.7 11.9 -48.6
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	302 295 -4 -30 3 41 -33	245 246 1 -84 4 107 -37	86 103 -21 -183 12 -45 -79 22	156 208 -19 -133 16 421 -91 63	277 296 -10 -183 26 656 -84 30	120 87 9 -50 10 235 8 -32	77.0 41.9 47.2 -37.2 65.1 55.9 8.6 -51.7

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export. <sup>b</sup>Less than \$500,000.

TABLE MM-18 Changes in U.S. exports of certain base metals and chemical elements, 2002–06

						Change, 2006	from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			Millio	n dollars			
Titanium, wrought	184 6 56 43 1,209 1,498	182 17 63 48 1,261 1,571	227 55 97 74 1,487	380 457 172 131 1,742 2,882	632 579 271 208 2,102 3,792	252 122 99 77 360 910	26.7 57.6 58.8 20.7

Note.—Calculations based on unrounded data.

TABLE MM-19 Changes in U.S. imports of certain base metals and chemical elements, 2002-06

						Change, 2006	from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-				dollars —			<u> </u>
Nickel (non alloy), unwrought Titanium, unwrought	648 93 1,211 1.952	863 79 1,306 2,248	1,451 106 2,268 3.825	1,617 185 2,615 4,417	2,565 351 3,008 5,924	948 166 393 1,507	58.6 89.7 15.0 34.1

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.—Calculations based on unrounded data.

in 2006.<sup>35</sup> U.S. nickel imports increased by 59 percent in value and 13 percent in quantity in 2006. The increase in U.S. imports of unwrought nickel in 2006 was fed by strong growth in demand for nickel domestically due to increasing U.S. production of stainless steel. In addition, the rise in imports of unwrought titanium and titanium waste scrap, by 90 percent in volume and 25 percent in quantity in 2006, also contributed to a rise in the total value of sector imports. The gains were due to a combination of rising titanium prices worldwide and strong commercial and defense-related aerospace demand in the United States.

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<sup>&</sup>lt;sup>35</sup> Harman, "China's Nickel Demand to Remain Strong Amidst High Prices."

TABLE MM-20 Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2002-06a

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million o	dollars ———			
MM001	Clays and related mineral products:	941	986	1,069	1 107	1 226	109	9.7
	Exports	158	180	210	1,127 231	1,236 281	50	9.7 21.7
	Imports	782	806	210 859	231 896	261 955	50 59	21.7 6.6
MM002	Trade balance	102	000	009	090	900	59	0.0
IVIIVIUUZ	Exports	39	30	36	40	37	-3	-7.9
	Imports	147	147	167	192	202	11	5.6
	Trade balance	-109	-117	-131	-151	-165	-14	-9.2
MM003	Iron ores and concentrates:	-109	-117	-131	-131	-105	-14	-9.2
IVIIVIOOS	Exports	249	248	334	584	636	52	8.9
	Imports	313	328	370	532	610	79	14.8
	Trade balance	-64	-80	-36	52 52	25	-27	-51.5
MM004	Copper ores and concentrates:	-04	-00	-30	32	25	-21	-51.5
IVIIVIOO	Exports	79	73	134	363	770	408	112.4
	Imports	105	73 18	25	(°)	(°)	(°)	-58.4
	Trade balance	-26	55	109	362	770	408	112.6
MM005	Lead ores, concentrates, and residues:	-20	33	103	302	770	700	112.0
WIIWIOOO	Exports	133	197	215	230	362	132	57.2
	Imports	(°)	0	(°)	(°)	(°)	(°)	861.2
	Trade balance	133	197	215	230	362	132	57.2
MM005A	Lead ores and concentrates:	100	101	210	200	002	102	01.2
	Exports	117	144	207	224	347	123	55.1
	Imports	(°)	0	0	0	(°)	(°)	(d)
	Trade balance	117	144	207	224	347	123	55.1
MM006	Zinc ores, concentrates, and residues:			201		0	.20	00.1
	Exports	339	349	426	490	1,076	586	119.7
	Imports	53	68	109	129	229	100	77.5
	Trade balance	286	281	317	361	846	486	134.8
MM006A	Zinc ores and concentrates:		_0.	<b>.</b>		0.0		
	Exports	328	340	417	483	1,068	586	121.3
	Imports	45	60	99	117	183	66	56.5
	Trade balance	283	280	319	366	885	520	142.1
MM007	Certain ores, concentrates, ash, and residues:		_00	0.0		220	3_3	
	Exports	183	289	507	1,643	1,687	44	2.7
	Imports	728	685	962	1,537	1,364	-173	-11.3
	Trade balance	-545	-396	-454	107	324	217	203.0

TABLE MM-20 Minerals and metals : U.S. trade for industry/commodity groups and subgroups, 2002–06ª—Continued

USITC							Change, 200	6 from 2005
code	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars ———			
MM007A	Molybdenum ores and concentrates:							
	Exports	112	194	358	1,447	1,457	10	0.7
	Imports	37	51	268	746	395	-351	-47.1
	Trade balance	76	143	90	701	1,062	361	51.6
800MM	Precious metal ores and concentrates:							
	Exports	68	32	40	27	49	22	82.1
	Imports	43	23	21	20	14	-6	-28.7
	Trade balance	26	8	19	7	35	28	380.2
MM008A	Gold ores and concentrates:							
	Exports	10	13	16	16	40	23	142.9
	Imports	28	22	19	19	13	-6	-33.5
	Trade balance	-18	-9	-3	-3	27	30	(d)
MM008B	Silver ores and concentrates:							
	Exports	57	16	2	2	4	2	73.8
	Imports	13	1	2	(°)	0	(°)	-100.0
	Trade balance	44	15	(°)	2	4	2	100.3
MM009	Cement, stone, and related products:							
	Exports	1,279	1,405	1,648	1,853	2,399	546	29.5
	Imports	4,611	4,945	5,897	7,144	8,151	1,008	14.1
	Trade balance	-3,332	-3,540	-4,248	-5,291	-5,753	-462	-8.7
MM009A	Cement:							
	Exports	58	62	63	68	114	46	67.1
	Imports	939	940	1,139	1,563	1,842	280	17.9
	Trade balance	-881	-879	-1,076	-1,494	-1,728	-234	-15.6
MM010	Industrial ceramics:							
	Exports	645	600	625	702	784	82	11.7
	Imports	497	551	672	749	880	131	17.5
	Trade balance	148	49	-48	-47	-96	-49	-102.5
MM011	Ceramic bricks and similar articles:							
	Exports	23	26	46	39	43	4	9.2
	Imports	34	38	50	67	94	27	40.3
	Trade balance	-12	-12	-4	-27	-51	-23	-84.6
MM012	Ceramic floor and wall tiles:							
	Exports	28	27	27	31	37	6	18.7
	Imports	1,290	1,430	1,631	1,800	1,919	119	6.6
	Trade balance	-1,262	-1,403	-1,604	-1,768	-1,881	-113	-6.4

TABLE MM-20 Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2002-06a—Continued

USITC							Change, 200	6 from 2005
code	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars			
MM013	Ceramic household articles:							
	Exports	83	88	107	104	99	-4	-4.2
	Imports	1,691	1,757	1,683	1,687	1,737	50	3.0
	Trade balance	-1,608	-1,669	-1,577	-1,583	-1,638	-55	-3.5
MM014	Flat glass:							
	Exports	1,694	1,747	1,882	1,987	2,204	217	10.9
	Imports	1,553	1,699	1,959	2,041	2,143	103	5.0
	Trade balance	140	49	-77	-53	61	114	( <sup>d</sup> )
MM015	Glass containers:							.,
	Exports	165	161	185	180	180	(°)	0.1
	Imports	608	607	659	700	794	94	13.4
	Trade balance	-443	-446	-474	-520	-614	-93	-18.0
MM016	Household glassware:							
	Exports	177	165	183	183	205	22	11.9
	Imports	888	919	947	908	895	-14	-1.5
	Trade balance	-711	-753	-764	-725	-689	35	4.9
MM017	Miscellaneous glass products:							
	Exports	729	748	812	702	866	164	23.4
	Imports	653	701	822	806	916	111	13.7
	Trade balance	76	46	-10	-104	-51	53	51.1
MM018	Fiberglass insulation products:							
	Exports	75	88	92	93	73	-20	-21.2
	Imports	131	155	214	249	272	23	9.2
	Trade balance	-56	-67	-122	-156	-198	-43	-27.4
MM019	Natural and synthetic gemstones:							
	Exports	1,331	469	1,129	2,765	4,087	1,321	47.8
	Imports	13,063	13,854	15,690	17,352	18,452	1,100	6.3
	Trade balance		-13,386	-14,562	-14,587	-14,366	221	1.5
MM020	Precious metals and non-numismatic coins:	·	,	·	,	·		
	Exports	5,070	6,299	6,204	7,522	13,360	5,839	77.6
	Imports	6,263	6,759	9,055	10,029	14,232	4,203	41.9
	Trade balance		-460	-2,851	-2,507	-872	1,635	65.2
MM020A	Unrefined and refined gold:	•		,	•		•	
	Exports	2,639	4,130	3,465	4,636	7,171	2,536	54.7
	Imports	2,143	2,689	3,680	4,112	5,029	918	22.3
	Trade balance	496	1,441	-215	524	2,142	1,618	308.9

TABLE MM-20 Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2002-06a—Continued

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars			
MM021	Primary iron products:							
	Exports	7	11	10	12	12	-1	-5.0
	Imports	729	815	1,898	2,033	2,227	194	9.5
	Trade balance	-722	-804	-1,887	-2,021	-2,215	-194	-9.6
MM022	Ferroalloys:							
	Exports	50	51	81	162	146	-15	-9.5
	Imports	713	899	1,885	1,834	1,954	119	6.5
	Trade balance	-663	-848	-1,805	-1,673	-1,807	-135	-8.1
MM023	Iron and steel waste and scrap:							
	Exports	1,307	1,960	2,923	3,451	4,256	805	23.3
	Imports	397	518	1,244	921	1,255	334	36.2
	Trade balance	911	1,442	1,680	2,529	3,001	471	18.6
MM024	Abrasive and ferrous products:							
	Exports	445	466	543	597	621	24	4.0
	Imports	746	769	889	984	1,048	63	6.4
	Trade balance	-301	-304	-346	-387	-427	-39	-10.2
MM024A	Abrasive products:							
	Exports	284	310	345	390	417	27	7.0
	Imports	505	540	631	658	712	54	8.2
	Trade balance	-222	-230	-286	-268	-295	-27	-10.0
MM025	Steel mill products:							
	Exports	4,533	5,525	7,015	9,331	10,479	1,148	12.3
	Imports	12,203	10,499	21,559	23,534	31,500	7,966	33.8
	Trade balance	-7,670	-4,974	-14,544	-14,203	-21,020	-6,818	-48.0
MM025A	Ingots, blooms, billets, and slabs of carbon and alloy steels:							
	Exports	55	121	169	171	163	-7	-4.3
	Imports	1.601	1,078	2,700	2,944	3,836	892	30.3
	Trade balance	-1,546	-957	-2,531	-2,774	-3,673	-899	-32.4
MM025B	Plates, sheets, and strips of carbon and alloy steels:	,		,	,	,		
	Exports	1.799	2,476	2,853	4,045	4,137	92	2.3
	Imports	3,860	3,028	7,406	6,962	10,510	3,548	51.0
	Trade balance	-2.062	-552	-4,554	-2,917	-6,373	-3,456	-118.5

TABLE MM-20 Minerals and metals : U.S. trade for industry/commodity groups and subgroups, 2002–06ª—Continued

USITC							Change, 2006 from 2	
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars ———			
MM025C	Bars, rods, and light shapes of carbon and alloy							
	steels:							
	Exports	415	479	697	837	999	162	19.3
	Imports	1,928	1,669	3,769	3,327	4,043	716	21.5
	Trade balance	-1,513	-1,190	-3,072	-2,490	-3,044	-554	-22.3
MM025D	Angles, shapes, and sections of carbon and alloy steels:							
	Exports	154	217	372	467	603	135	29.0
	Imports	338	286	448	512	769	257	50.2
	Trade balance	-184	-69	-76	-45	-166	-122	-273.0
MM025E	Wire of carbon and alloy steels:							
	Exports	159	172	275	226	243	17	7.4
	Imports	467	463	731	743	782	39	5.3
	Trade balance	-308	-291	-456	-517	-540	-22	-4.3
MM025F	Ingots, blooms, billets, and slabs of stainless steels:							
	Exports	59	27	46	41	60	19	45.4
	Imports	306	242	388	407	411	4	0.9
	Trade balance	-247	-214	-342	-366	-351	15	4.1
MM025G	Plates, sheets, and strips of stainless steels:							
	Exports	410	575	632	853	919	66	7.7
	Imports	553	624	1,139	1,206	1,768	562	46.6
	Trade balance	-142	-49	-507	-354	-849	-496	-140.2
MM025H	Bars, rods, and light shapes of stainless steels:							
	Exports	82	89	131	165	252	87	53.0
	Imports	284	215	378	572	588	16	2.8
	Trade balance	-202	-126	-247	-407	-336	71	17.5
MM025I	Angles, shapes, and sections of stainless steels:							
	Exports	6	5	7	12	15	3	24.0
	Imports	12	9	16	18	31	13	75.5
	Trade balance	-6	-3	-9	-6	-16	-10	-185.2
MM025J	Wire of stainless steels:							
	Exports	67	52	56	44	52	8	17.4
	Imports	92	96	143	174	209	35	20.1
	Trade balance	-25	-44	-87	-130	-157	-27	-21.1

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TABLE MM-20 Minerals and metals : U.S. trade for industry/commodity groups and subgroups, 2002–06ª—Continued

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars ———			
MM025K	Rails and accessories of carbon and alloy steels:							
	Exports	73	67	104	134	169	35	26.4
	Imports	167	163	221	286	374	88	30.9
	Trade balance	-93	-96	-117	-152	-205	-53	-34.9
MM025L	Pipes and tubes of carbon and alloy steels:							
	Exports	1,016	977	1,360	1,904	2,347	443	23.3
	Imports	2,136	2,098	3,483	5,259	6,953	1,694	32.2
	Trade balance	-1,120	-1,120	-2,123	-3,354	-4,605	-1,251	-37.3
MM025N	1 Pipes and tubes of stainless steels:							
	Exports	118	148	160	232	282	50	21.6
	Imports	274	309	465	657	821	163	24.9
	Trade balance	-156	-161	-305	-425	-538	-113	-26.6
MM025N	I Tool steels:							
	Exports	118	119	153	200	239	38	19.2
	Imports	184	220	271	466	405	-61	-13.1
	Trade balance	-65	-101	-118	-266	-166	100	37.5
MM026	Steel pipe and tube fittings and certain cast products:							
	Exports	669	705	900	1,017	1,277	260	25.6
	Imports	669	609	838	1,052	1,307	255	24.2
	Trade balance	(°)	95	62	-35	-30	5	15.5
MM027	Fabricated structurals:	. ,						
	Exports	166	160	203	278	376	98	35.1
	Imports	627	501	508	776	1,176	399	51.5
	Trade balance	-460	-341	-305	-498	-800	-302	-60.6
MM028	Metal construction components:							
	Exports	497	561	675	773	970	196	25.4
	Imports	1,135	1,212	1,501	1,692	2,074	382	22.6
	Trade balance	-638	-652	-826	-918	-1,104	-186	-20.3
MM029	Metallic containers:							
	Exports	661	616	716	904	1,088	184	20.4
	Imports	645	660	760	828	898	70	8.5
	Trade balance	16	-45	-44	76	190	114	149.7
MM030	Wire products of base metal:							
	Exports	732	760	853	966	1,104	138	14.3
	Imports	1,416	1,591	2,191	2,473	2,538	65	2.6
	Trade balance	-684	-831	-1,338	-1,507	-1,434	73	4.9
				,	•	•		

TABLE MM-20 Minerals and metals : U.S. trade for industry/commodity groups and subgroups, 2002–06ª—Continued

USITC code <sup>b</sup>				Change, 2006 from 200				
	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars ———			
MM031	Miscellaneous products of base metal:							
	Exports	5,283	5,227	5,255	5,893	6,865	972	16.5
	Imports	7,773	8,403	10,163	11,619	12,852	1,234	10.6
	Trade balance	-2,491	-3,176	-4,908	-5,726	-5,987	-262	-4.6
MM032	Industrial fasteners of base metal:							
	Exports	1,496	1,520	1,672	1,894	2,218	324	17.1
	Imports	2,085	2,348	2,977	3,443	3,684	241	7.0
	Trade balance	-589	-828	-1,305	-1,548	-1,466	82	5.3
MM033	Cooking and kitchen ware:							
	Exports	201	199	198	204	225	21	10.4
	Imports	1,933	2,070	2,170	2,431	2,581	150	6.2
	Trade balance	-1,732	-1,871	-1,972	-2,227	-2,355	-129	-5.8
MM034	Metal and ceramic sanitary ware:							
	Exports	134	142	159	162	180	19	11.5
	Imports	742	863	1,062	1,230	1,371	140	11.4
	Trade balance	-608	-721	-903	-1,069	-1,190	-122	-11.4
MM035	Construction castings and other cast-iron articles:							
	Exports	25	23	30	39	48	8	21.6
	Imports	112	124	180	217	223	6	2.8
	Trade balance	-87	-101	-151	-177	-175	2	1.4
MM036	Copper and related articles:							
	Exports	1,744	2,086	3,006	3,405	6,052	2,647	77.7
	Imports	3,715	3,893	5,565	7,766	13,803	6,037	77.7
	Trade balance	-1,972	-1,807	-2,559	-4,360	-7,751	-3,390	-77.7
MM036A	Unrefined and refined copper:							
	Exports	92	214	339	157	255	98	62.3
	Imports	1,740	1,854	2,411	3,659	7,093	3,434	93.9
	Trade balance	-1,648	-1,640	-2,071	-3,501	-6,838	-3,336	-95.3
MM036B	Copper alloy plate, sheet, and strip:	,	,	•	,	,	,	
	Exports	117	144	198	275	284	8	3.1
	Imports	118	104	176	168	252	84	49.8
	Trade balance	-1	40	22	107	32	-75	-70.3
MM037	Unwrought aluminum:		-		-		-	
	Exports	950	1,000	1,397	2,087	3,508	1,421	68.1
	Imports	4,774	5,000	6,837	8,153	10,317	2,163	26.5
	Trade balance	-3.824	-3,999	-5,440	-6,067	-6,809	-742	-12.2

TABLE MM-20 Minerals and metals : U.S. trade for industry/commodity groups and subgroups, 2002–06ª—Continued

USITC							Change, 200	Change, 2006 from 2005		
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent		
				Million	dollars ———					
MM037A	A Primary and secondary aluminum:									
	Exports	431	376	608	716	1,004	288	40.2		
	Imports	4,188	4,401	6,001	7,199	9,114	1,915	26.6		
	Trade balance	-3,757	-4,025	-5,393	-6,483	-8,110	-1,627	-25.1		
MM038	Aluminum mill products:									
	Exports	2,519	2,564	3,171	3,757	4,592	835	22.2		
	Imports	2,516	2,768	3,512	4,696	5,768	1,072	22.8		
	Trade balance	3	-203	-342	-938	-1,176	-237	-25.3		
MM038A	A Aluminum bars, rods, and profiles:									
	Exports	226	243	304	417	553	136	32.7		
	Imports	417	435	581	774	1,049	275	35.5		
	Trade balance	-191	-192	-277	-357	-496	-139	-38.8		
MM038E	3 Aluminum wire:									
	Exports	77	80	97	115	148	32	28.0		
	Imports	190	269	359	432	571	139	32.2		
	Trade balance	-114	-189	-263	-316	-423	-107	-33.7		
MM0380	C Aluminum plate, sheet, and strip:									
	Exports	1,652	1,655	2,077	2,489	3,025	536	21.5		
	Imports	1,331	1,411	1,817	2,568	3,079	511	19.9		
	Trade balance	321	244	260	-79	-54	25	31.9		
MM038E	O Aluminum foil:									
	Exports	319	338	403	442	538	96	21.7		
	Imports	468	500	565	715	822	107	15.0		
	Trade balance	-150	-162	-163	-273	-284	-11	-4.1		
MM038E	Aluminum tubes, pipes, and fittings:									
	Exports	205	198	237	247	287	40	16.2		
	Imports	95	134	171	181	216	35	19.5		
	Trade balance	111	64	66	66	71	5	7.4		
MM039	Lead and related articles:		•			• •	· ·			
	Exports	68	117	108	110	137	27	24.5		
	Imports	125	113	203	335	451	116	34.6		
	Trade balance	-57	5	-95	-226	-315	-89	-39.5		
MM039A	A Refined lead:	٠.	•		3	2.0		20.0		
	Exports	14	48	38	35	52	18	51.1		
	Imports	82	65	128	242	322	81	33.4		
	Trade balance	-68	-18	-90	-207	-270	-63	-30.5		
	Trade balance	-08	-18	-90	-207	-270	-63	•		

TABLE MM-20 Minerals and metals : U.S. trade for industry/commodity groups and subgroups, 2002–06ª—Continued

2005  illion dollars  148 5 1,139 6 -991	246 2,524 -2,278	98 1,385	Percent 66.5
9 148 5 1,139	2,524		66.5
1,139	2,524		66.5
1,139	2,524		66.5
,	•	1 385	
991	-2.278	1,000	121.6
		-1,286	-129.8
	•	·	
5 1	4	2	153.6
7 920	2,181	1,261	137.1
-918	-2,177	-1,258	-137.0
	•	•	
3 2,882	3,792	910	31.6
5 4,417	5,924	1,507	34.1
2 -1,535	-2,131	-597	-38.9
,	•		
1 33	41	9	26.7
39	59	20	52.1
) -6	-18	-11	-188.6
,			
2,508	2,880	372	14.8
4,226	4,770	544	12.9
-1,717	-1,889	-172	-10.0
,	,		
592	592	(°)	(e)
1,243	1,358	115	9.2
·	-765	-114	-17.6
1 37	35	-2	-4.2
563	572	9	1.6
-526	-536	-11	-2.0
	5 1 7 920 1 -918 3 2,882 5 4,417 2 -1,535 4 33 5 39 6 1 2,508 6 4,226 6 -1,717 3 592 3 1,243 0 -651 4 37 8 563	-991 -2,278  1 4 1 920 2,181 1 -918 -2,177  3 2,882 3,792 5 4,417 5,924 2 -1,535 -2,131  4 33 41 5 39 59 7 -6 -18  1 2,508 2,880 6 4,226 4,770 6 -1,717 -1,889  3 592 592 3 1,243 1,358 0 -651 -765  4 37 35 8 563 572	-991 -2,278 -1,286  1

TABLE MM-20 Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2002-06ª—Continued

USITC			Change, 2006 from 2005					
code	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars ———			
MM045	Certain builders' hardware:							
	Exports	907	911	982	1,035	1,052	16	1.6
	Imports	2,197	2,405	3,063	3,593	4,155	562	15.6
	Trade balance	-1,289	-1,494	-2,080	-2,558	-3,103	-545	-21.3

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes

<sup>&</sup>lt;sup>c</sup>Less than \$500,000.

<sup>&</sup>lt;sup>d</sup>Not meaningful for purposes of comparison.

eLess than 0.05 percent.

TABLE MM-21 Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06

USITC code	Industry/commodity group 2002	2003	2004	2005	2006					Percent change, 2006 from 2005
MM001	Clays and related mineral products:									
	Number of establishments				240	240	240	220	220	0.0
	Employees (thousands)				6.0	6.0	6.0	6.0	6.0	0.0
	Capacity utilization (percent)				(a)	(a)	(a)	(a)	(a)	(a)
	U.S. shipments (million dollars)				1,5 <b>8</b> Ó	1,6 <b>6</b> Ó	1,6 <b>8</b> Ó	1,6ŠÓ	1,6 <b>Š</b> Ó	0.0
	U.S. exports (million dollars)				941	986	1,069	1,127	1,236	9.7
	U.S. imports (million dollars)				158	180	210	231	281	21.7
	Apparent U.S. consumption (million dollars				798	854	821	754	695	-7.9
	Trade balance (million dollars)	, 			782	806	859	896	955	6.6
	Ratio of imports to consumption (percent)				19.9	21.1	25.6	30.7	40.5	32.0
	Ratio of exports to shipments (percent)				59.5	59.4	63.6	68.3	74.9	9.7
MM003	Iron ores and concentrates:									
	Number of establishments				10	10	10	10	10	0.0
	Employees (thousands)				5.0	5.0	4.0	4.0	4.0	0.0
	Capacity utilization (percent)				93	87	96	96	93	-3.1
	U.S. shipments (million dollars)				1,900	1,700	2,200	2,700	4,100	51.9
	U.S. exports (million dollars)				249	248	334	584	636	8.9
	U.S. imports (million dollars)				313	328	370	532	610	14.8
	Apparent U.S. consumption (million dollars				1,964	1,780	2,236	2,648	4,075	53.9
	Trade balance (million dollars)				<sup>-64</sup>	-80	-36	52	25	-51.5
	Ratio of imports to consumption (percent)				15.9	18.4	16.6	20.1	15.0	-25.4
	Ratio of exports to shipments (percent)				13.1	14.6	15.2	21.6	15.5	-28.3
MM004	Copper ores and concentrates:									
	Number of establishments				22	22	22	24	27	12.5
	Employees (thousands)				7.0	6.8	7.0	7.3	7.2	-1.4
	Capacity utilization (percent)				72.4	71.8	73.9	71.1	73.3	3.1
	U.S. shipments (million dollars)				1,422	1,594	2,660	3,411	6,822	100.0
	U.S. exports (million dollars)				<sup>′</sup> 79	<sup>^</sup> 73	134	363	770	112.4
	U.S. imports (million dollars)				105	18	25	(b)	(b)	-58.4
	Apparent U.S. consumption (million dollars				1,448	1,539	2,551	3,049	6,052	98.5
	Trade balance (million dollars)				-26	55	109	362	770	112.6
	Ratio of imports to consumption (percent)				7.3	1.2	1.0	(°)	(°)	-79.0
	Ratio of exports to shipments (percent)				5.5	4.6	5.0	10.6	11.3	6.2
MM005/	A Lead ores and concentrates:									
	Number of establishments				11	10	11	11	11	0.0
	Employees (thousands)				0.9	0.8	0.9	0.9	0.9	0.0
	Capacity utilization (percent)				84	86	89	88	91	3.4
	U.S. shipments (million dollars)				350	393	426	417	509	22.1
	U.S. exports (million dollars)				117	144	207	224	347	55.1
	U.S. imports (million dollars)				(b)	0	0	(b)	0	(d)
	Apparent U.S. consumption (million dollars				233	249	219	193	162	-16.1
	Trade balance (million dollars)				117	144	207	224	347	55.1
	Ratio of imports to consumption (percent)				(°)	0.0	0.0	0.0	(°)	(d)
	Ratio of exports to shipments (percent)				33.5	36.7	48.5	53.6	68 <u>`</u> 1	27 <u>.</u> ó

TABLE MM-21 Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
code	maustry/commounty group	2002	2003	2004	2005	2000	2000 110111 2005
MM006	A Zinc ores and concentrates:						
	Number of establishments	12	10	10	10	11	10.0
	Employees (thousands)	1.5	1.0	0.6	0.6	0.7	16.7
	Capacity utilization (percent)	98	96	92	95	98	3.2
	U.S. shipments (million dollars)	352	364	453	561	1,228	118.9
	U.S. exports (million dollars)	328	340	417	483	1,068	121.3
	U.S. imports (million dollars)	(b)	60	99	(b)	183	56.5
	Apparent U.S. consumption (million dollars)	( <sup>b</sup> ) 69	84	134	195	343	75.5
	Trade balance (million dollars)	283	280	319	366	885	142.1
	Ratio of imports to consumption (percent)	64.6	71.4	73.5	59.9	53.4	-10.8
	Ratio of exports to consumption (percent)	93.1	93.4	73.3 92.1	86.0	87.0	1.1
MMAGGZ	A Molybdenum ores and concentrates:	33.1	33.4	32.1	00.0	07.0	1.1
IVIIVIOO7	Number of establishments	6	6	7	8	9	12.5
	Employees (thousands)	0.5	0.5	0.6	0.9	0.9	0.0
		49	51	57	77	79	2.6
	Capacity utilization (percent)						
	U.S. shipments (million dollars)	267 112	390	1,231	4,101	3,201	-21.9 0.7
	U.S. exports (million dollars)		194	358	1,447	1,457	
	U.S. imports (million dollars)	(b)	51	268	2 400	395	-47.1
	Apparent U.S. consumption (million dollars)	191	247	1,141	3,400	2,139	-37.1
	Trade balance (million dollars)	76	143	90	701	1,062	51.6
	Ratio of imports to consumption (percent)	19.2	20.8	23.5	21.9	18.5	-15.9
	Ratio of exports to shipments (percent)	42.1	49.8	29.1	35.3	45.5	29.0
MM008	A Gold ores and concentrates:	400	470	404	404	400	
	Number of establishments	180	178	181	181	182	0.6
	Employees (thousands)	9.0	9.0	9.0	9.0	9.0	0.0
	Capacity utilization (percent)	87	88	88	88	91	3.4
	U.S. shipments (million dollárs)	2,376	2,590	2,715	2,929	4,041	38.0
	U.S. exports (million dollars)	10	13	16	16	40	142.9
	U.S. imports (million dollars)	(b)	22	19	(b)	13	-33.5
	Apparent U.S. consumption (million dollars)	2,394	2,599	2,718	2,932	4,014	36.9
	Trade balance (million dollars)	-18	-9	-3	-3	27	( <sup>d</sup> )
	Ratio of imports to consumption (percent)	1.2	0.8	0.7	0.6	0.3	-51.5
	Ratio of exports to shipments (percent)	0.4	0.5	0.6	0.6	1.0	76.1
MM008	B Silver ores and concentrates:						
	Number of establishments	11	11	11	11	11	0.0
	Employees (thousands)	0.6	0.5	0.6	0.6	0.5	-16.7
	Capacity utilization (percent)	87	88	88	88	91	3.4
	U.S. shipments (million dollars)	140	136	187	203	286	40.9
	U.S. exports (million dollars)	57	16	2	2	4	73.8
	U.S. imports (million dollars)	(b)	1	2	(b)	0	-100.0
	Apparent U.S. consumption (million dollars)	96	121	187	2Ò1	282	40.3
	Trade balance (million dollars)	44	15	( <sup>2</sup> )	2	4	100.3
	Ratio of imports to consumption (percent)	13.7	1.1	0.9	0.2	0.0	-100.0
	Ratio of exports to shipments (percent)	41.0	12.0	0.8	1.2	1.5	23.4
	radio of outporte to originorite (percent)	11.0	12.0	0.0	1.2	1.0	20.4

TABLE MM-21 Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

MM009A Cement:  Number of establishments  Employees (thousands)  Capacity utilization (percent)  U.S. shipments (million dollars)  U.S. exports (million dollars)  U.S. imports (million dollars)  Apparent U.S. consumption (million dollars)  Trade balance (million dollars)  Ratio of imports to consumption (percent)  Ratio of exports to shipments (percent)	 116 16.0 (a) 8,300 58 (b) 9,181 -881 10.2 0.7	116 17.0 (a) 8,300 62 940 9,179 -879 10.2 0.7	114 16.0 (a) 9,500 63 1,139 10,576 -1,076 10.8 0.7	113 16.0 (a) 11,600 68 (b) 13,094 -1,494 11.9 0.6	113 16.0 (a) 12,000 114 1,842 13,728 -1,728 13.4 1.0	0.0 0.0 (a) 3.4 67.1 17.9 4.8 -15.6
Number of establishments  Employees (thousands)  Capacity utilization (percent)  U.S. shipments (million dollars)  U.S. exports (million dollars)  U.S. imports (million dollars)  Apparent U.S. consumption (million dollars)  Trade balance (million dollars)  Ratio of imports to consumption (percent)	 16.0 (a) 8,300 58 (b) 9,181 -881 10.2 0.7	17.0 (a) 8,300 62 940 9,179 -879 10.2	16.0 (a) 9,500 63 1,139 10,576 -1,076 10.8	16.0 (a) 11,600 68 (b) 13,094 -1,494 11.9	16.0 (a) 12,000 114 1,842 13,728 -1,728 13.4	0.0 (a) 3.4 67.1 17.9 4.8 -15.6
Employees (thousands) Capacity utilization (percent) U.S. shipments (million dollars) U.S. exports (million dollars) U.S. imports (million dollars) Apparent U.S. consumption (million dollars) Trade balance (million dollars) Ratio of imports to consumption (percent)	 16.0 (a) 8,300 58 (b) 9,181 -881 10.2 0.7	17.0 (a) 8,300 62 940 9,179 -879 10.2	16.0 (a) 9,500 63 1,139 10,576 -1,076 10.8	16.0 (a) 11,600 68 (b) 13,094 -1,494 11.9	16.0 (a) 12,000 114 1,842 13,728 -1,728 13.4	0.0 (a) 3.4 67.1 17.9 4.8 -15.6
Capacity utilization (percent) U.S. shipments (million dollars) U.S. exports (million dollars) U.S. imports (million dollars) Apparent U.S. consumption (million dollars) Trade balance (million dollars) Ratio of imports to consumption (percent)	 (a) 8,300 58 (b) 9,181 -881 10.2 0.7	(a) 8,300 62 940 9,179 -879 10.2	9,500 63 1,139 10,576 -1,076 10.8	(a) 11,600 68 (b) 13,094 -1,494 11.9	12,000 114 1,842 13,728 -1,728 13.4	(a) 3.4 67.1 17.9 4.8 -15.6
U.S. shipments (million dollars) U.S. exports (million dollars) U.S. imports (million dollars) Apparent U.S. consumption (million dollars) Trade balance (million dollars) Ratio of imports to consumption (percent)	 58 (b) 9,181 -881 10.2 0.7	62 940 9,179 -879 10.2	63 1,139 10,576 -1,076 10.8	68 (°) 13,094 -1,494 11.9	114 1,842 13,728 -1,728 13.4	67.1 17.9 4.8 -15.6
U.S. exports (million dollars) U.S. imports (million dollars) Apparent U.S. consumption (million dollars) Trade balance (million dollars) Ratio of imports to consumption (percent)	 58 (b) 9,181 -881 10.2 0.7	62 940 9,179 -879 10.2	63 1,139 10,576 -1,076 10.8	68 (°) 13,094 -1,494 11.9	114 1,842 13,728 -1,728 13.4	67.1 17.9 4.8 -15.6
U.S. imports (million dollars) Apparent U.S. consumption (million dollars) Trade balance (million dollars) Ratio of imports to consumption (percent)	 (b) 9,181 -881 10.2 0.7	940 9,179 -879 10.2	1,139 10,576 -1,076 10.8	(b) 13,094 -1,494 11.9	1,842 13,728 -1,728 13.4	17.9 4.8 -15.6
Apparent U.S. consumption (million dollars) Trade balance (million dollars)	 -881 10.2 0.7	9,179 -879 10.2	10,576 -1,076 10.8	-1,494 11.9	13,728 -1,728 13.4	4.8 -15.6
Trade balance (million dollars) Ratio of imports to consumption (percent)	 -881 10.2 0.7	-879 10.2	-1,076 10.8	-1,494 11.9	-1,728 13.4	-15.6
Ratio of imports to consumption (percent)	 10.2 0.7	10.2	10.8	11.9	13.4	
	 0.7					
		0.7	0.7			
				0.0	1.0	61.5
MM010 Industrial ceramics:		400	400	400	400	0.0
Number of establishments	190	190	190	190	190	0.0
Employees (thousands)	11.0	10.0	10.0	10.0	10.0	0.0
Capacity utilization (percent)	 (a)	(a)	0 000	2 222	( )	(a)
U.S. shipments (million dollárs)	 2,800	1,874	2,800	2,900	2,900	0.0
U.S. exports (million dollars)	 645	600	625	702	784	11.7
U.S. imports (million dollars)	 2 252	551	672	(5)	880	17.5
Apparent U.S. consumption (million dollars)	 2,652	1,825	2,848	2,947	2,996	1.6
Trade balance (million dollars)	 148	49	-48	-47	-96	-102.5
Ratio of imports to consumption (percent)	 18.7	30.2	23.6	25.4	29.4	15.5
Ratio of exports to shipments (percent)	 23.0	32.0	22.3	24.2	27.0	11.7
MM011 Ceramic bricks and similar articles:	007					
Number of establishments	207	207	207	207	200	-3.4
Employees (thousands)	14.0	14.0	14.0	14.0	14.0	0.0
Capacity utilization (percent)	 (")	(")	(°)	_ (°)	(°)	(ª) 3.0
U.S. shipments (million dollars)	1,785	1,900	2,120	2,233	2,300	
U.S. exports (million dollars)	23	26	46	39	43	9.2
U.S. imports (million dollars)	 (b)	38	50	(b)	94	40.3
Apparent U.S. consumption (million dollars)	 1,797	1,912	2,124	2,260	2,351	4.0
Trade balance (million dollars)	 -12	-12	-4	-27	-51	-84.6
Ratio of imports to consumption (percent)	1.9	2.0	2.4	2.9	4.0	34.9
Ratio of exports to shipments (percent)	 1.3	1.4	2.2	1.8	1.9	6.0
MM012 Ceramic floor and wall tiles:						
Number of establishments	 203	203	203	203	200	-1.5
Employees (thousands)	 7.0	7.0	7.0	7.0	7.0	0.0
Capacity utilization (percent)	 (a)	_(a)	(a)	(a)	(a)	(a)
U.S. shipments (million dollars)	 825	757	876	856	870	1.6
U.S. exports (million dollars)	 28	27	27	31	37	18.7
U.S. imports (million dollars)	(b)	1,430	1,631	(")	1,919	6.6
Apparent U.S. consumption (million dollars)	2,087	2,160	2,480	2,624	2,751	4.8
Trade balance (million dollars)	 -1,262	-1,403	-1,604	-1,768	-1,881	-6.4
Ratio of imports to consumption (percent)	 61.8	66.2	65.8	68.6	69.7	1.7
Ratio of exports to shipments (percent)	 3.4	3.6	3.1	3.7	4.3	16.8

TABLE MM-21 Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
MM013	Ceramic household articles:						
	Number of establishments	60	60	60	60	60	0.0
	Employees (thousands)	6.0	6.0	6.0	6.0	6.0	0.0
	Capacity utilization (percent)	(*)	(°)	(")	(*)	(°)	(a) -2.8
	U.S. shipments (million dollars)	328	323	352	360	350	-2.8
	U.S. exports (million dollars)	83	_88	107	104	99	-4.2
	U.S. imports (million dollars)	( <sup>b</sup> )	1,757	1,683	(8)	1,737	3.0
	Apparent U.S. consumption (million dollars)	1,936	1,992	1,929	1,943	1,988	2.3
	Trade balance (million dollars)	-1,608	-1,669	-1,577	-1,583	-1,638	-3.5
	Ratio of imports to consumption (percent)	87.3	88.2	87.3	86.8	87.4	0.7
	Ratio of exports to shipments (percent)	25.3	27.3	30.3	28.8	28.3	-1.5
MM014	Flat glass:						
	Number of establishments	80	80	80	80	80	0.0
	Employees (thousands)	12.0	12.0	12.0	12.0	12.0	0.0
	Capacity utilization (percent)	(a)	(a)	(°)	(°)	(a)	(a)
	U.S. shipments (million dollars)	2,691	2,803	2,800	3,200	3,650	14.1
	U.S. exports (million dollars)	1,694	1,747	1,882	1,987	2,204	10.9
	U.S. imports (million dollars)	_ (°)	1,699	1,959	(8)	2,143	5.0
	Apparent U.S. consumption (million dollars)	2,551	2,754	2,877	3,253	3,589	10.3
	Trade balance (million dollars)	140	49	-77	-53	_ 61	(d)
	Ratio of imports to consumption (percent)	60.9	61.7	68.1	62.7	59.7	-4.8
	Ratio of exports to shipments (percent)	62.9	62.3	67.2	62.1	60.4	-2.8
MM015	Glass containers:						
	Number of establishments	61	61	60	60	60	0.0
	Employees (thousands)	16.0	16.0	16.0	15.0	15.0	0.0
	Capacity utilization (percent)	(a)	(a)	( <sup>a</sup> )	(a)	(a)	_(a)
	U.S. shipments (million dollars)	4,345	4,343	4,400	4,000	4,200	5.0
	U.S. exports (million dollars)	165	161	185	180	180	0.1
	U.S. imports (million dollars)	(0)	607	659	(6)	794	13.4
	Apparent U.S. consumption (million dollars)	4,788	4,789	4,874	4,520	4,814	6.5
	Trade balance (million dollars)	-443	-446	-474	-520	-614	-18.0
	Ratio of imports to consumption (percent)	12.7	12.7	13.5	15.5	16.5	6.5
	Ratio of exports to shipments (percent)	3.8	3.7	4.2	4.5	4.3	-4.7
MM016	Household glassware:						
	Number of establishments	220	200	180	180	180	0.0
	Employees (thousands)	10.0	10.0	10.0	10.0	10.0	0.0
	Capacity utilization (percent)	(a)	(a)	( <sup>a</sup> )	(a)	(a)	(a)
	U.S. shipments (million dollars)	1,6 <u>35</u>	1,488	1,450	2,000	2,200	10.0
	U.S. exports (million dollars)	177	165	183	183	205	11.9
	U.S. imports (million dollars)	( <sup>b</sup> )	919	947	o = (°)	895	-1.5
	Apparent U.S. consumption (million dollars)	2,346	2,241	2,214	2,725	2,889	6.0
	Trade balance (million dollars)	-711	-753	-764	-725	-689	4.9
	Ratio of imports to consumption (percent)	37.9	41.0	42.8	33.3	31.0	-7.1
	Ratio of exports to shipments (percent)	10.8	11.1	12.6	9.2	9.3	1.7

TABLE MM-21 Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
				2004			2000 11 0111 2000
MM018	Fiberglass insulation products:						
	Number of establishments	298	298	(a)	(a)	(a)	(a)
	Employees (thousands)	18.0	18.0	(a)	(a)	(a)	(a)
	Capacity utilization (percent)	( <sup>a</sup> )	( <sup>a</sup> )	(a)	(a)	( <sup>a</sup> )	(a)
	U.S. shipments (million dollars)	4,400	4,400	4,500	4,500	4,525	0.6
	U.S. exports (million dollars)	75	88	92	93	73	-21.2
	U.S. imports (million dollars)	(b)	155	214	( <sup>b</sup> )	272	9.2
	Apparent U.S. consumption (million dollars)	4,456	4,467	4,622	4,656	4,723	1.5
	Trade balance (million dollars)	-56	-67	-122	-156	-198	-27.4
	Ratio of imports to consumption (percent)	2.9	3.5	4.6	5.3	5.7	7.7
	Ratio of exports to shipments (percent)	1.7	2.0	2.1	2.1	1.6	-21.6
MM019	Natural and synthetic gemstones:						
	Number of establishments	225	224	223	225	225	0.0
	Employees (thousands)	2.0	2.0	2.0	2.0	2.0	0.0
	Capacity utilization (percent)	(a)	(a)	(a)	_ (a)	(a)	(a)
	U.S. shipments (million dollars)	430	680	450	530	600	13.2
	U.S. exports (million dollars)	1,331	469	1,129	2,765	4,087	47.8
	U.S. imports (million dollars)	(")	13,854	15,690	(°)	18,452	6.3
	Apparent U.S. consumption (million dollars)	12,161	14,066	15,012	15,117	14,966	-1.0
	Trade balance (million dollars)	-11,731	-13,386	-14,562	-14,587	-14,366	1.5
	Ratio of imports to consumption (percent)	e107.4	98.5	<sup>e</sup> 104.5	<sup>e</sup> 114.8	°123.3	7.4
	Ratio of exports to shipments (percent)	°309.6	68.9	°250.8	°521.7	°681.1	30.5
MM020A	Unrefined and refined gold:	00	0.4	00	00	00	0.0
	Number of establishments	22	21	20	20	20	0.0
	Employees (thousands)	2.0	1.0	1.0	1.0	1.0	0.0
	Capacity utilization (percent)	67	81	65	70	71	1.4
	U.S. shipments (million dollars)	4,142	4,627	4,646	4,749	6,606	39.1
	U.S. exports (million dollars)	2,639	4,130	3,465	4,636	7,171	54.7
	U.S. imports (million dollars)	(b)	2,689	3,680	4 205	5,029	22.3
	Apparent U.S. consumption (million dollars)	3,646	3,186	4,861	4,225	4,464	5.7
	Trade balance (million dollars)	496	1,441	-215	524	2,142	308.9
	Ratio of imports to consumption (percent)	58.8	84.4	75.7	97.3	<sup>5</sup> 112.7	15.8
	Ratio of exports to shipments (percent)	63.7	89.3	74.6	97.6	⁵108.6	11.2
MM021	Primary iron products:	40	40	40	47	47	0.0
	Number of establishments	16	18	18	17	17	0.0
	Employees (thousands)	15.0	15.0	15.0	13.0	12.0	-7.7
	Capacity utilization (percent)	84	81	84	82	85	3.7
	U.S. shipments (million dollars)	5,000	6,400	9,500	10,700	10,600	-0.9
	U.S. exports (million dollars)	7	11	10	12	12	-5.0
	U.S. imports (million dollars)	(b)	815	1,898	40 704	2,227	9.5
	Apparent U.S. consumption (million dollars)	5,722	7,204	11,387	12,721	12,815	0.7
	Trade balance (million dollars)	-722	-804	-1,887	-2,021	-2,215	-9.6
	Ratio of imports to consumption (percent)	12.7	11.3	16.7	16.0	17.4	8.7
	Ratio of exports to shipments (percent)	0.1	0.2	0.1	0.1	0.1	-4.2

TABLE MM-21 Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
N 4N 4000							
MM022	Ferroalloys:						
	Number of establishments	20	20	20	19	19	0.0
	Employees (thousands)	2.0	3.0	3.0	3.0	3.0	0.0
	Capacity utilization (percent)	_(a)	70	90	90	90	0.0
	U.S. shipments (million dollars)	759	735	949	1,202	1,300	8.2
	U.S. exports (million dollars)	50	51	81	162	146	-9.5
	U.S. imports (million dollars)	( <sup>b</sup> )	899	1,885	(b)	1,954	6.5
	Apparent U.S. consumption (million dollars)	1,422	1,583	2,754	2,875	3,107	8.1
	Trade balance (million dollars)	-663	-848	-1,805	-1,673	-1,807	-8.1
	Ratio of imports to consumption (percent)	50.2	56.8	68.5	63.8	62.9	-1.5
1111000	Ratio of exports to shipments (percent)	6.6	7.0	8.5	13.4	11.2	-16.3
MM023	Iron and steel waste and scrap:	= 000	4 000	4 000	4.000	4 000	
	Number of establishments	5,000	4,000	4,000	4,000	4,000	0.0
	Employees (thousands)	28.0	28.0	22.0	22.0	22.0	0.0
	Capacity utilization (percent)	75	77	80	80	80	0.0
	U.S. shipments (million dollars)	5,100	6,800	12,300	11,300	13,100	15.9
	U.S. exports (million dollars)	1,307	1,960	2,923	3,451	4,256	23.3
	U.S. imports (million dollars)	( <sup>b</sup> )	518	1,244	0 774	1,255	36.2
	Apparent U.S. consumption (million dollars)	4,189	5,358	10,620	8,771	10,099	15.1
	Trade balance (million dollars)	911	1,442	1,680	2,529	3,001	18.6
	Ratio of imports to consumption (percent)	9.5	9.7	11.7	10.5	12.4	18.3
	Ratio of exports to shipments (percent)	25.6	28.8	23.8	30.5	32.5	6.4
MM024A	Abrasive products:	<b>50</b>	<b>50</b>	50	(3)	(2)	(3)
	Number of establishments	50	50	50	(a)	(a)	(a)
	Employees (thousands)	(a)	(a)	(°)	(a)	(a)	(a)
	Capacity utilization (percent)	(a)	2 2 (a)	2 4 ( <sup>a</sup> )	2 <b>5</b> (a)	(a)	(")
	U.S. shipments (million dollars)	3,299	3,377	3,477	3,500	3,400	-2.9
	U.S. exports (million dollars)	284	310	345	390	417	7.0
	U.S. imports (million dollars)	2 5 6 7	540	631	0.700	712	8.2
	Apparent U.S. consumption (million dollars)	3,521	3,607	3,763	3,768	3,695	-1.9
	Trade balance (million dollars)	-222	-230	-286	-268	-295	-10.0
	Ratio of imports to consumption (percent)	14.4	15.0	16.8	17.5	19.3	10.4
N 4 N 4 O O E	Ratio of exports to shipments (percent)	8.6	9.2	9.9	11.1	12.3	10.1
MM025	Steel mill products:	4 000	4 000	4 000	4 000	4 000	0.0
	Number of establishments	1,039	1,039	1,039	1,039	1,039	0.0
	Employees (thousands)	171.0	153.0	152.0	143.0	143.0	0.0
	Capacity utilization (percent)	83	83	82	85	85	0.0
	U.Ś. shipments (million dollars)	62,543	63,116	94,629	102,389	110,068	7.5
	U.S. exports (million dollars)	4,533	5,525	7,015	9,331	10,479	12.3
	U.S. imports (million dollars)	70.242	10,499	21,559	116 500	31,500	33.8
	Apparent U.S. consumption (million dollars)	70,213	68,090	109,173	116,592	131,088	12.4
	Trade balance (million dollars)	-7,670	-4,974	-14,544	-14,203	-21,020	-48.0
	Ratio of imports to consumption (percent)	17.4	15.4	19.7	20.2	24.0	19.0
	Ratio of exports to shipments (percent)	7.2	8.8	7.4	9.1	9.5	4.5

TABLE MM-21 Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
MM026	Steel pipe and tube fittings and certain cast						
	products:	62	62	62	62	60	-3.2
	Number of establishments	12.0	12.0	11.0	11.0	11.0	-3.2 0.0
	Capacity utilization (percent)	(a)	12.0 (a)	/a\	/a\	/a\	0.0 (a)
	U.S. shipments (million dollars)	2,100	2,100	2,100	2.100	2.100	0.0
	U.S. exports (million dollars)	669	705	900	1,017	1,277	25.6
	U.S. imports (million dollars)	(b)	609	838	(b)	1,307	24.2
	Apparent U.S. consumption (million dollars)	2,100	2,005	2,038	2,135	2,130	-0.3
	Trade balance (million dollars)	_, ( <sup>b</sup> )	95	62	-35	-30	15.5
	Ratio of imports to consumption (percent)	31.9	30.4	41.1	49.3	61.4	24.6
	Ratio of exports to shipments (percent)	31.8	33.6	42.8	48.4	60.8	25.6
MM027	Fabricated structurals:						
	Number of establishments	3,760	3,730	3,700	3,670	3,650	-0.5
	Employees (thousands)	106.0	100.0	99.0	100.0	100.0	0.0
	Capacity utilization (percent)	58	60	70	73	75	2.7
	U.S. shipments (million dollars)	17,560	17,540	18,280	17,530	18,770	7.1
	U.S. exports (million dollars)	166	160	203	278	376	35.1
	U.S. imports (million dollars)	( <sup>D</sup> )	501	508	(°)	1,176	51.5
	Apparent U.S. consumption (million dollars)	18,020	17,881	18,585	18,028	19,570	8.6
	Trade balance (million dollars)	-460	-341	-305	-498	-800	-60.6
	Ratio of imports to consumption (percent)	3.5	2.8	2.7	4.3	6.0	39.5
MM028	Ratio of exports to shipments (percent)	0.9	0.9	1.1	1.6	2.0	26.2
IVIIVIUZO	Metal construction components:  Number of establishments	2,500	2,430	2,200	2,200	2,200	0.0
	Employees (thousands)	2,500 154.0	150.0	135.0	125.0	129.0	3.2
	Capacity utilization (percent)	70	68	65	70	74	5.Z 5.7
	U.S. shipments (million dollars)	19,400	19,000	17,000	18,000	19,000	5.6
	U.S. exports (million dollars)	497	561	675	773	970	25.4
	U.S. imports (million dollars)	( <sup>b</sup> )	1,212	1,501	(b)	2,074	22.6
	Apparent U.S. consumption (million dollars)	20,038	19,652	17,826	18,918	20.104	6.3
	Trade balance (million dollars)	-638	-652	-826	-918	-1,104	-20.3
	Ratio of imports to consumption (percent)	5.7	6.2	8.4	8.9	10.3	15.4
	Ratio of exports to shipments (percent)	2.6	3.0	4.0	4.3	5.1	18.8
MM029	Metallic containers:						
	Number of establishments	1,288	1,288	1,288	1,288	1,288	0.0
	Employees (thousands)	69.0	66.0	66.0	64.0	62.0	-3.1
	Capacity utilization (percent)	71	71	69	73	73	0.0
	U.S. shipments (million dollars)	19,404	19,447	19,958	21,226	22,712	7.0
	U.S. exports (million dollars)	661	616	716	904	1,088	20.4
	U.S. imports (million dollars)	40 000	660	760	04 4 (°)	898	8.5
	Apparent U.S. consumption (million dollars)	19,388	19,492	20,002	21,150	22,522	6.5
	Trade balance (million dollars)	16	-45	-44	76	190	149.7
	Ratio of imports to consumption (percent)	3.3	3.4	3.8	3.9	4.0	1.9
	Ratio of exports to shipments (percent)	3.4	3.2	3.6	4.3	4.8	12.5

TABLE MM-21 Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
MM030	Wire products of base metal:	4 470	4 400	4 400	4.050	4.050	0.0
	Number of establishments	1,470	1,430	1,400	1,350	1,350	0.0
	Employees (thousands)	94.0	91.0	83.0	80.0	80.0	0.0
	Capacity utilization (percent)	47.000	40.500	(°)	45.000	(*)	( <sup>a</sup> ) 6.7
	U.S. shipments (million dollars)	17,000	16,500	15,000	15,0ÒÓ	16,000	
	U.S. exports (million dollars)	732	760	853	966	1,104	14.3
	U.S. imports (million dollars)	4 <b>-</b> 200	1,591	2,191	10 707	2,538	2.6
	Apparent U.S. consumption (million dollars)	17,684	17,331	16,338	16,507	17,434	5.6
	Trade balance (million dollars)	-684	-831	-1,338	-1,507	-1,434	4.9
	Ratio of imports to consumption (percent)	8.0	9.2	1 <u>3</u> .4	15.0	14.6	-2.8
	Ratio of exports to shipments (percent)	4.3	4.6	5.7	6.4	6.9	7.2
MM032	Industrial fasteners of base metal:						
	Number of establishments	860	840	820	800	800	0.0
	Employees (thousands)	46.0	45.0	43.0	40.0	41.0	2.5
	Capacity utilization (percent)	73	71	68	70	74	5.7
	U.S. shipments (million dollars)	7,000	6,800	6,500	6,000	6,400	6.7
	U.S. exports (million dollars)	1,496	1,520	1,672	1,894	2,218	17.1
	U.S. imports (million dollars)	(b)	2,348	2,977	( <sup>b</sup> )	3,684	7.0
	Apparent U.S. consumption (million dollars)	7,589	7,628	7,805	7,548	7,866	4.2
	Trade balance (million dollars)	-589	-828	-1,305	-1,548	-1,466	5.3
	Ratio of imports to consumption (percent)	27.5	30.8	38.1	45.6	46.8	2.7
	Ratio of exports to shipments (percent)	21.4	22.4	25.7	31.6	34.7	9.8
MM033	Cooking and kitchen ware:						
	Number of establishments	88	88	88	88	87	-1.1
	Employees (thousands)	6.0	6.0	5.0	5.0	5.0	0.0
	Capacity utilization (percent)	( <sup>a</sup> )	(a)				
	U.S. shipments (million dollars)	1,5ÒÓ	1,5ÒÓ	1,5ÒÓ	2,500	2,525	1.0
	U.S. exports (million dollars)	201	199	198	204	225	10.4
	U.S. imports (million dollars)	( <sup>b</sup> )	2,070	2,170	( <sup>b</sup> )	2,581	6.2
	Apparent U.S. consumption (million dollars)	3,232	3,371	3,472	4,727	4,880	3.3
	Trade balance (million dollars)	-1,732	-1,871	-1,972	-2,227	-2,355	-5.8
	Ratio of imports to consumption (percent)	59.8	61.4	62.5	51.4	52.9	2.8
	Ratio of exports to shipments (percent)	13.4	13.3	13.2	8.2	8.9	9.3
MM034	Metal and ceramic sanitary ware:						
	Number of establishments	140	140	140	140	140	0.0
	Employees (thousands)	17.0	17.0	17.0	17.0	17.0	0.0
	Capacity utilization (percent)	(a)	(a)	(a)	(a)	(a)	(a)
	U.S. shipments (million dollars)	2.7ÒÓ	2.7ÒÓ	2.7ÒÓ	2.7ÒÓ	2.7ÒÓ	0.0
	U.S. exports (million dollars)	134	142	159	162	180	11.5
	U.S. imports (million dollars)	(b)	863	1,062	(b)	1.371	11.4
	Apparent U.S. consumption (million dollars)	3,308	3,421	3,603	3,769	3,890	3.2
	Trade balance (million dollars)	-608	-721	-903	-1,069	-1,190	-11.4
	Ratio of imports to consumption (percent)	22.4	25.2	29.5	32.6	35.2	7.9
	Ratio of exports to shipments (percent)	4.9	5.3	5.9	6.0	6.7	11.5
	ratio of exports to shipmonts (percently	7.0	0.0	0.0	0.0	0.7	11.5

TABLE MM-21 Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC	In dear to the course of the course	0000		0004	0005		Percent change,
code	Industry/commodity group	2002	2003	2004	2005	2006	2006 from 2005
MM035	Construction castings and other cast-iron articles:						
	Number of establishments	50	50	50	50	50	0.0
	Employees (thousands)	5.0	5.0	5.0	5.0	5.0	0.0
	Capacity utilization (percent)	85	85	85	85	85	0.0
	U.S. shipments (million dollars)	800	800	900	1,000	1,100	10.0
	U.S. exports (million dollars)	25	23	30	39	48	21.6
	U.S. imports (million dollars)	(b)	124	180	(b)	223	2.8
	Apparent U.S. consumption (million dollars)	887	901	1,051	1,177	1,275	8.3
	Trade balance (million dollars)	-87	-101	-151	-177	-175	1.4
	Ratio of imports to consumption (percent)	12.6	13.8	17.2	18.4	17.5	-5.1
	Ratio of exports to shipments (percent)	3.2	2.9	3.3	3.9	4.3	10.5
MM036A	A Unrefined and refined copper:						
	Number of establishments	22	22	22	23	24	4.3
	Employees (thousands)	3.8	3.3	3.4	3.2	3.4	6.3
	Capacity utilization (percent)	62	54	54	51	53	3.9
	U.S. shipments (million dollars)	2,620	2,553	4,091	5,244	10,308	96.6
	U.S. exports (million dollars)	92	214	339	157	255	62.3
	U.S. imports (million dollars)	(b)	1,854	2,411	( <sup>D</sup> )	7,093	93.9
	Apparent U.S. consumption (million dollars)	4,268	4,193	6,162	8,745	17,146	96.1
	Trade balance (million dollars)	-1,648	-1,640	-2,071	-3,501	-6,838	-95.3
	Ratio of imports to consumption (percent)	40.8	44.2	39.1	41.8	41.4	-1.1
	Ratio of exports to shipments (percent)	3.5	8.4	8.3	3.0	2.5	-17.4
MM036E	Copper alloy plate, sheet, and strip:						
	Number of establishments	53	43	30	30	29	-3.3
	Employees (thousands)	6.5	4.2	4.2	4.3	4.4	2.3
	Capacity utilization (percent)	_63	60	65	72	_74	2.8
	U.S. shipments (million dollars)	791	802	1,211	1,355	1,728	27.5
	U.S. exports (million dollars)	117	144	198	275	284	3.1
	U.S. imports (million dollars)	_(b)	104	176	(0)	252	49.8
	Apparent U.S. consumption (million dollars)	792	762	1,189	1,248	1,696	35.9
	Trade balance (million dollars)	-1	40	22	107	32	-70.3
	Ratio of imports to consumption (percent)	15.0	13.6	14.8	13.5	14.8	10.2
1414007	Ratio of exports to shipments (percent)	14.8	17.9	16.3	20.3	16.4	-19.2
MIMO377	A Primary and secondary aluminum:	400	00	00	00	00	0.0
	Number of establishments	100	98	96	92	92	0.0
	Employees (thousands)	21.0	21.0	20.0	22.0	22.0	0.0
	Capacity utilization (percent)	69	71	72	67	74	10.4
	U.S. shipments (million dollars)	5,589	5,730	5,700	6,984	7,200	3.1
	U.S. exports (million dollars)	431	376	608	716	1,004	40.2
	U.S. imports (million dollars)	( <sup>b</sup> )	4,401	6,001	12 107	9,114	26.6
	Apparent U.S. consumption (million dollars)	9,346	9,755	11,093	13,467	15,310	13.7
	Trade balance (million dollars)	-3,757	-4,025	-5,393	-6,483	-8,110	-25.1
	Ratio of imports to consumption (percent)	44.8	45.1	54.1	53.5	59.5	11.4
	Ratio of exports to shipments (percent)	7.7	6.6	10.7	10.2	13.9	36.0

TABLE MM-21 Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
MM038	Aluminum mill products:						
IVIIVIOOO	Number of establishments	372	381	383	385	380	-1.3
	Employees (thousands)	58.0	58.0	58.0	58.0	58.0	0.0
	Capacity utilization (percent)	80	81	79	82	79	-3.7
	U.S. shipments (million dollars)	17,960	18,320	18,565	21,907	1,900	-91.3
	U.S. exports (million dollars)	2,519	2,564	3,171	3,757	4,592	22.2
	U.S. imports (million dollars)	_, (b)	2,768	3,512	(b)	5.768	22.8
	Apparent U.S. consumption (million dollars)	17,957	18,523	18,907	22,845	3.076	-86.5
	Trade balance (million dollars)	3	-203	-342	-938	-1,176	-25.3
	Ratio of imports to consumption (percent)	14.0	14.9	18.6	20.6	°187.5	812.4
	Ratio of exports to shipments (percent)	14.0	14.0	17.1	17.2	e241.7	1,309.3
MM039A	Refined lead:						1,000.0
	Number of establishments	26	25	24	23	23	0.0
	Employees (thousands)	1.9	1.9	1.8	1.8	1.9	5.6
	Capacity utilization (percent)	84	87	88	_88	91	3.4
	U.S. shipments (million dollars)	1,280	1,318	1,516	1,712	2,133	24.6
	U.S. exports (million dollars)	14	48	.38	35	52	51.1
	U.S. imports (million dollars)	(5)	65	128	( <sup>b</sup> )	322	33.4
	Apparent U.S. consumption (million dollars)	1,348	1,336	1,606	1,919	2,403	25.2
	Trade balance (million dollars)	-68	-18	-90	-207	-270	-30.5
	Ratio of imports to consumption (percent)	6.1	4.9	8.0	12.6	13.4	6.5
	Ratio of exports to shipments (percent)	1.1	3.6	2.5	2.0	2.4	21.2
MIMU40A	Unwrought zinc:	4-	4.4		4.4	4.4	0.0
	Number of establishments	15	14	14	14	14	0.0
	Employees (thousands)	2.4	1.6	1.0	1.0	1.0	0.0
	Capacity utilization (percent)	64	66	67	82	85	3.7
	U.S. shipments (million dollars)	251	271	354	457	863	88.8
	U.S. exports (million dollars)	1	2	5	1 (b)	4	153.6
	U.S. imports (million dollars)	(b)	676	947	4 075	2,181	137.1
	Apparent U.S. consumption (million dollars)	981	945	1,295	1,375	3,040	121.0
	Trade balance (million dollars)	-730 74.5	-674 -74	-941	-918	-2,177	-137.0
	Ratio of imports to consumption (percent)	74.5	71.5	73.1	66.9	71.7	7.3
NANAO 44 A	Ratio of exports to shipments (percent)	0.5	0.6	1.5	0.3	0.4	34.3
IVIIVIU41 <i>P</i>	Titanium ingot:	E	E	E	E	_	^ ^
	Number of establishments	5	5	5	5	5	0.0
	Employees (thousands)	0.3	0.3	0.3	0.3	0.3	0.0
	Capacity utilization (percent)	45	41	48 550	50 1 700	50	0.0
	U.S. shipments (million dollars)	420	470	550	1,700	2,000	17.6
	U.S. exports (million dollars)	12	11 7	14 15	33 ( <sup>b</sup> )	41 59	26.7 52.1
	U.S. imports (million dollars)	( <sup>b</sup> )	-		\ /		
	Apparent U.S. consumption (million dollars)	421	466	550	1,706	2,018	18.3
	Trade balance (million dollars)	-1	4	( <sup>b</sup> )	-6	-18	-188.6
	Ratio of imports to consumption (percent)	3.1	1.4	2.7	2.3	2.9	28.6
	Ratio of exports to shipments (percent)	3.0	2.3	2.6	1.9	2.1	7.7

TABLE MM-21 Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC							Percent change,
code	Industry/commodity group	2002	2003	2004	2005	2006	2006 from 2005
MM042	Nonpowered handtools:						
WIWIU42	Number of establishments	900	850	700	600	600	0.0
	Employees (thousands)	106.0	93.0	89.0	87.0	85.0	-2.3
	Capacity utilization (percent)	53	65	69	68	68	0.0
	U.S. shipments (million dollars)	12,433	11,765	11,821	12,682	12,057	-4.9
	U.S. exports (million dollars)	2,038	2,109	2,361	2,508	2,880	14.8
	U.S. imports (million dollars)	2,000 (b)	3,652	4,136	2,000 (b)	4,770	12.9
	Apparent U.S. consumption (million dollars)	13,679	13,308	13,597	14,399	13,946	-3.1
	Trade balance (million dollars)	-1,246	-1,543	-1,776	-1,717	-1,889	-10.0
	Ratio of imports to consumption (percent)	24.0	27.4	30.4	29.3	34.2	16.5
	Ratio of exports to shipments (percent)	16.4	17.9	20.0	19.8	23.9	20.8
MM043	Certain cutlery, sewing implements, and related	10.1		20.0	10.0	20.0	20.0
	products:						
	Number of establishments	178	178	177	177	176	-0.6
	Employees (thousands)	9.0	9.0	9.0	9.0	9.0	0.0
	Capacity utilization (percent)	(a)	(a)	(a)	(a)	(a)	(a)
	U.S. shipments (million dollars)	1,8ÒÓ	1,8ÒÓ	1,9ÒÓ	1,9ÒÓ	1,9ÒÓ	0.0
	U.S. exports (million dollars)	551	550	553	592	592	(°)
	U.S. imports (million dollars)	(b)	1,053	1,133	(b)	1,358	(°) 9.2
	Apparent U.S. consumption (million dollars)	2,161	2,303	2,480	2,5ŠÍ	2,665	4.5
	Trade balance (million dollars)	-361	-503	-580	-651	-765	-17.6
	Ratio of imports to consumption (percent)	42.2	45.7	45.7	48.7	50.9	4.5
	Ratio of exports to shipments (percent)	30.6	30.6	29.1	31.2	31.2	(°)
MM044	Table flatware and related products:						( )
	Number of establishment's	5	4	4	4	4	0.0
	Employees (thousands)	1.0	1.0	1.0	1.0	1.0	0.0
	Capacity utilization (percent)	90	90	91	90	85	-5.6
	U.S. shipments (million dollars)	200	200	212	225	230	2.2
	U.S. exports (million dollars)	29	22	24	37	35	-4.2
	U.S. imports (million dollars)	(b)	484	518	(b)	572	1.6
	Apparent U.S. consumption (million dollars)	6 <b>5</b> Ó	662	706	751	766	2.1
	Trade balance (million dollars)	-450	-462	-494	-526	-536	-2.0
	Ratio of imports to consumption (percent)	73.6	73.1	73.4	74.9	74.6	-0.5

TABLE MM-21 Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC							Percent change,
code	Industry/commodity group	2002	2003	2004	2005	2006	2006 from 2005
MM045	Ratio of exports to shipments (percent)	14.3	10.8	11.4	16.3	15.3	-6.3
	Number of establishments	230	226	221	217	215	-0.9
	Employees (thousands)	33.0	31.0	31.0	31.0	31.0	0.0
	Capacity utilization (percent)	69	64	70	71	73	2.8
	U.S. shipments (million dollars)	5,447	5,762	6,010	5,543	6,109	10.2
	U.S. exports (million dollars)	907	911	982	1,035	1,052	1.6
	U.S. imports (million dollars)	(b)	2,405	3,063	(b)	4,155	15.6
	Apparent U.S. consumption (million dollars)	6,736	7,256	8,090	8,1ÒÍ	9,212	13.7
	Trade balance (million dollars)	-1,289	-1,494	-2,080	-2,558	-3,103	-21.3
	Ratio of imports to consumption (percent)	32.6	33.1	37.9	44.4	45.1	1.7
	Ratio of exports to shipments (percent)	16.7	15.8	16.3	18.7	17.2	-7.8

Source: These data have been estimated by the Commission's international trade analysts on the basis of primary and secondary data sources including discussions with various Government and industry contacts. These estimated data are subject to change either from secondary sources or from detailed surveys the Commission often conducts in the course of statutory investigations or other work. Further, these data may undergo adjustments based on revisions in tariff nomenclature, classification practices, or redefinitions of industry classes.

<sup>&</sup>lt;sup>a</sup>Not available.

<sup>&</sup>lt;sup>b</sup>Less than 500,000.

<sup>&</sup>lt;sup>c</sup>Less than 0.05 percent.

dNot meaningful.

elnventory changes, for which data are not available, likely account for ratios that exceed 100 percent.

# Machinery

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Change in 2006 from 2005:

U.S. trade deficit: Increased by \$2.8 billion (7 percent) to \$44.0 billion U.S. exports: Increased by \$12.5 billion (15 percent) to \$94.6 billion U.S. imports: Increased by \$15.3 billion (12 percent) to \$138.6 billion

The U.S. merchandise trade deficit in machinery continued to increase for the fifth consecutive year, rising by \$2.8 billion (7 percent) to \$44 billion. U.S. exports of machinery increased by \$12.5 billion (15 percent), whereas U.S. imports rose by \$15.3 billion (12 percent) in 2006. The primary growth driver in the machinery trade deficit continued to be annual U.S. growth in GDP of 3.3 percent, which resulted in increases in both durable goods orders and manufacturers' inventories. The increase in U.S. machinery imports was broad-based, with the fastest growth categories consisting of household appliances, including commercial applications (\$2.1 billion); electric motors, generators and related equipment (\$1.8 billion); non-automotive electrical wire (\$1.4 billion); major household appliances and parts (\$1.3 billion); and semiconductor manufacturing equipment (\$1 billion).

#### U.S. Exports

The three markets that registered the largest percentage increases in U.S. exports in 2006 were China (24 percent), Korea (24 percent), and Italy (17 percent), together accounting for 12 percent of total machinery exports (table MT-1). The primary drivers of U.S. exports to these countries in 2006 were their rapidly expanding domestic economies and strong business machinery replacement demand. The leading export growth sectors included semiconductor manufacturing equipment (up by 30 percent to \$3.3 billion); nonautomotive insulated wire and cable (up by 28 percent to \$908 million); welding and soldering equipment (up by 34 percent, to \$293 million); and mineral-processing equipment (up by 31 percent to \$253 million).

<sup>&</sup>lt;sup>1</sup> USDOC, BEA, "Gross Domestic Product and Corporate Profits."

**TABLE MT-1** Machinery: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dolla	ars ———			
U.S. exports of domestic merchandise:  Mexico Canada China Japan Germany Korea Taiwan United Kingdom Italy France All other	9,183 15,207 2,730 3,328 2,625 2,521 3,217 2,731 786 1,622 19,312	9,086 15,310 3,091 3,493 2,581 2,713 2,384 2,475 942 1,539 19,848	10,078 16,214 4,729 4,629 2,906 3,293 4,865 2,614 899 1,819 24,698	11,418 18,008 4,275 4,563 3,372 3,808 4,264 2,734 917 1,871 26,857	12,454 20,054 5,296 5,186 3,816 4,711 4,706 3,004 1,076 2,071 32,231	1,037 2,046 1,021 623 445 903 441 270 158 201 5,375	9.1 11.4 23.9 13.6 13.2 23.7 10.3 9.9 17.3 10.7 20.0
Total	63,262 11,669 12,025	63,462 11,671 12,091	76,744 12,929 13,403	82,087 14,163 14,789	94,606 15,857 16,627	12,519 1,694 1,837	15.3 12.0 12.4
OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	2,476 13,627 1,357 16,799 672 395	2,307 13,408 1,366 16,692 714 432	3,204 15,180 1,519 24,591 882 510	3,576 17,720 1,942 23,355 895 653	4,535 19,884 2,195 28,117 1,131 763	959 2,164 253 4,762 236 109	26.8 12.2 13.0 20.4 26.4 16.8
U.S. imports of merchandise for consumption: Mexico Canada China Japan Germany Korea Taiwan United Kingdom Italy France All other	16,321 9,810 10,467 12,689 8,902 2,554 2,743 3,002 3,519 1,919 13,254	16,596 10,071 13,922 14,013 9,985 2,505 2,800 2,955 3,952 1,980 14,359	18,029 11,233 17,585 17,042 12,039 2,771 3,195 3,322 4,559 2,308 16,480	20,173 12,129 21,314 18,589 13,711 3,725 3,236 3,564 5,005 2,667 19,144	23,036 13,371 25,916 19,707 14,665 4,021 3,422 3,835 5,293 2,651 22,676	2,863 1,242 4,602 1,117 954 296 186 271 288 -17 3,532	14.2 10.2 21.6 6.0 7.0 8.0 5.7 7.6 5.7 -0.6 18.4
Total	85,181	93,138	108,564	123,258	138,592	15,335	12.4
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	23,076 23,839 219 17,469 235 31,163 231 836	25,086 25,921 221 18,018 324 36,166 182 914	28,717 29,755 311 19,812 442 44,313 196 1,112	32,694 33,892 331 22,465 580 50,927 274 1,320	35,698 37,042 450 25,544 735 58,277 316 1,465	3,004 3,149 119 3,078 155 7,350 42 145	9.2 9.3 35.9 13.7 26.6 14.4 15.4

**TABLE MT-1** Machinery: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>1</sup>—Continued

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dolla	ars ———			
U.S. merchandise trade balance:    Mexico    Canada    China    Japan    Germany    Korea    Taiwan    United Kingdom    Italy    France    All other    Total	-7,138 5,396 -7,737 -9,361 -6,278 -33 474 -271 -2,732 -297 6,058 -21,919	-7,510 5,240 -10,831 -10,520 -7,404 208 -416 -480 -3,011 -441 5,489	-7,951 4,981 -12,856 -12,413 -9,132 521 1,669 -708 -3,660 -489 8,218	-8,755 5,879 -17,039 -14,026 -10,339 83 1,028 -830 -4,088 -796 7,713	-10,582 6,684 -20,620 -14,520 -10,848 690 1,284 -831 -4,217 -579 9,556	-1,826 805 -3,581 -494 -510 607 256 -2 -129 217 1,843	-20.9 13.7 -21.0 -3.5 -4.9 732.0 24.9 -0.2 -3.2 27.3 23.9
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-11,408 -11,814 2,257 -3,842 1,122 -14,364 441 -441	-13,415 -13,830 2,086 -4,610 1,043 -19,474 532 -481	-15,787 -16,352 2,893 -4,632 1,077 -19,721 686 -602	-18,532 -19,103 3,245 -4,745 1,362 -27,572 621 -667	-19,841 -20,415 4,085 -5,659 1,460 -30,160 815 -702	-1,309 -1,312 840 -914 98 -2,588 194 -35	-7.1 -6.9 25.9 -19.3 7.2 -9.4 31.2 -5.3

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

In 2006, total U.S. exports of welding and soldering equipment increased by \$293 million (34 percent) to \$1.2 billion (table MT-2). U.S. exports of welding and soldering equipment to China rose significantly as a result of rising demand in several domestic advanced technology industry sectors, including automotive, aerospace, and commercial building construction. The growth in demand for advanced technology products in China resulted in various U.S. welding corporations such as Lincoln Electric Holdings acquiring several large welding businesses from 2004 through 2006.<sup>2</sup> Principal types of welding and soldering equipment exported to China included electric laser, ultrasonic and resistance welding equipment, brazing (MIG) welding machines, and parts used in high-volume industry applications, such as production of heat-exchangers.<sup>3</sup>

U.S. exports of mineral-processing equipment increased by \$253 million (31 percent) to \$1.1 billion. A sharp increase in demand for U.S. exports of mineral-processing machinery in 2006 can be largely attributed to rising prices for commodities such as copper, aluminum, nickel, and zinc, and the weakening U.S. dollar against a broad spectrum of international currencies. China was the principal U.S. export market for mineral-processing machinery in 2006. Major types of mineral-processing equipment exported to China in 2006 were rock to road crushing machinery, gas and process compressors, pneumatic tools, soil purification and environmental remediation machinery, and surface and tunneling equipment.

High demand from Asian markets spurred U.S. production levels and contributed to increased U.S. exports of semiconductor manufacturing equipment (SME) in 2006, which increased by \$3.3 billion (30 percent) to \$14.2 billion. The major markets for U.S. SME including robotic exports in 2006 were Taiwan, Korea, Japan, Singapore, and China, collectively accounting for \$10.2 billion (71 percent) of total U.S. exports. The increase in demand for SME from these East Asian nations was largely attributed to expansion and modernization of production processes.<sup>5</sup>

U.S. exports of nonautomotive insulated electrical wire and cable also increased in 2006, rising by \$908 million (28 percent) to \$4.1 billion. This increase is reflective of economic growth in China, Korea, Canada, and Mexico in 2006.<sup>6</sup> Insulated electrical wire and cable is employed in numerous applications, including oil exploration, telecommunications systems, computers, satellite communications, microwave cable, and aerospace electronics industries.<sup>7</sup>

<sup>&</sup>lt;sup>2</sup> Datamonitor, "Lincoln Electric Holdings, Inc., Profile," 17.

<sup>&</sup>lt;sup>3</sup> Goldsberry, "Resistance Welding Technology Advances," 17.

<sup>&</sup>lt;sup>4</sup> EIU, "Country Profile, Australia," 30.

<sup>&</sup>lt;sup>5</sup> As a region, Asia accounted for \$11.1 billion (78 percent) of total U.S. exports, which reflects the region's status as a major semiconductor producer and consumer of these products. See "Semiconductor Manufacturing Equipment" in Electronic Products chapter.

<sup>&</sup>lt;sup>6</sup> Insulated Wire (IW) Company, "Company Profile."

<sup>&</sup>lt;sup>7</sup> Datamonitor, "Leviton Manufacturing Company Profile."

TABLE MT-2 Leading changes in U.S. exports and imports of machinery, 2002-06a

						Change, 200	6 from 2005
Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
			—— Million o	dollars ———			
U.S. EXPORTS:							
Increases:							
Semiconductor manufacturing machinery (MM087A)	6,972	7,242	12,790	10,971	14,232	3,261	29.7
Miscellaneous machinery (MM098)	6,793	6,409	7,434	8,299	9,509	1,211	14.6
Nonautomotive insulated electrical wire and related							
products (MM097)	2,856	2,660	2,936	3,202	4,110	908	28.4
Welding and soldering equipment (MM096)	635	618	818	872	1,165	293	33.5
Mineral processing machinery (MM077)	485	545	669	811	1.064	253	31.1
All other	45,521	45,988	52,098	57,932	64,526	6,594	11.4
TOTAL	63,262	63,462	76,744	82,087	94,606	12,519	15.3
U.S. IMPORTS:							
Increases:							
Electric motors, generators, and related equipment							
(MM091)	7,177	6,811	7,020	8,533	10,305	1,772	20.8
Nonautomotive insulated electrical wire and related	.,	0,0	.,020	0,000	.0,000	.,	_0.0
products (MM097)	3,076	3,208	3,903	4,693	6,071	1,378	29.4
Major household appliances and parts (MM073A)	2,444	2,868	3,440	4.360	5,684	1,324	30.4
Semiconductor manufacturing machinery (MM087A)	3,304	2,750	3,586	3,857	4,902	1,045	27.1
All other	69,179	77,501	90,616	101,814	111,630	9,816	9.6
All valid	00,170	77,501	30,010	101,017	111,000	5,010	
TOTAL	85,181	93,138	108,564	123,258	138,592	15,335	12.4

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

#### U.S. Imports

The major source markets for U.S. imports for machinery were China, Mexico, and Japan. Collectively, these three major trading partners accounted for 50 percent of total sector imports in 2006.

In 2006, U.S. imports of household appliances, which include commercial applications rose by \$2.1 billion (15 percent) to \$16.6 billion. U.S. imports of commercial appliances from China are primarily for the residential or institutional markets. Leading appliance products imported from China included vacuum cleaners, microwave ovens, refrigerated display cases, and small-sized refrigerators used in college dormitories or studio apartments where space may be at a premium.<sup>8</sup>

Electric motors, generators, and related equipment registered the second-largest increase in the value of U.S. exports in 2006, rising by \$1.8 million (21 percent) to \$10.3 billion. U.S. imports of these products increased largely as a result of rapid U.S. growth in demand for AC motors and electrical generating sets, which included wind-powered electrical generating sets. The largest import sources of electric motors, generators, and related equipment were Mexico, China, and Japan, accounting for 51 percent of total exports. In 2006, China surpassed Japan as the second-leading source of sector imports with U.S. imports of \$1.5 billion and \$1.3 billion, respectively.

U.S. imports of nonautomotive insulated electrical wire and cable products also rose in 2006, by \$1.4 billion (29 percent) to \$6.1 billion. The U.S. rise in demand for insulated electrical wire was due largely to the continued strong growth in residential construction and building renovation. U.S. demand also increased in 2006 for ceramic insulated wire, nylon insulated wire, fiber optic cable, insulated wire cable, and rubber insulated wire. These various types of cable are used in numerous industrial applications, including electric power transmission, underwater cables, television and computer applications, and home renovations and fabrication industries. 10

U.S. imports of welding and soldering equipment rose by approximately \$299 million (28 percent) to \$1.4 billion in 2006. China, the leading U.S. foreign supplier in 2006, has emerged as a major supplier of welding and soldering equipment. U.S. imports of welding and soldering equipment included arc welding power sources, robotic packages used in resistance welding, brazing and soldering equipment, and welding torches used in oxy-fuel welding and cutting.<sup>11</sup>

The 2006 increase in SME imports was due largely to U.S. replacement demand and recent industry requirements for an alternate semiconductor wafer processing technology known as photolithography. <sup>12</sup> U.S. imports of SME from primary supplier Japan rose by \$1.0 billion (27 percent) to \$4.9 billion in 2006.

<sup>&</sup>lt;sup>8</sup> Datamonitor, "Haier Company Profile."

<sup>&</sup>lt;sup>9</sup> Driscoll, "U.S. Major Appliance and Home Furniture Industries," 1.

<sup>&</sup>lt;sup>10</sup> Shepard, "Plumbing's Next Generation. 53–55.

<sup>&</sup>lt;sup>11</sup> Goldsberry, "Resistance Welding Technology Advances." 17–19.

<sup>&</sup>lt;sup>12</sup> In 2006, photolithography equipment was the leading type of semiconductor equipment based on sales, accounting for 16 percent of total SME sales. See "Semiconductor Manufacturing Equipment" in Electronics chapter.

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# **Semiconductor Manufacturing Equipment**

Change in 2006 from 2005:

U.S. trade surplus: Increased by \$2.2 billion (31 percent) to \$9.3 billion U.S. exports: Increased by \$3.3 billion (30 percent) to \$14.2 billion U.S. imports: Increased by \$1.0 billion (27 percent) to \$4.9 billion

U.S. trade in semiconductor manufacturing equipment (SME) increased substantially in 2006 due to an increase in U.S. and global demand for semiconductors and the trend by semiconductor producers to invest in more advanced manufacturing equipment (table MT-3). Global SME sales increased by 23 percent to \$40.47 billion in 2006, with increases in all major markets. The highest sales growth occurred in China, North America, and Taiwan. Sales in all major industry segments increased as well, with the global wafer-processing equipment market growing by 26 percent, the assembly and packaging segment increasing by 16 percent, and total test equipment sales growing by 21 percent. Overall, the U.S. trade surplus in semiconductor manufacturing equipment increased \$2.2 billion (31 percent) in 2006. For over 10 years, the United States has maintained a trade surplus in SME due to increased semiconductor production outside of the United States and the strength of the domestic SME industry.

#### U.S. Exports

High demand from Asian markets plus strong U.S. production fueled the \$3.3 billion (30 percent) increase in U.S. exports of SME in 2006. The major markets for U.S. SME exports in 2006 were Taiwan, Korea, Japan, Singapore, and China, which together accounted for \$10.2 billion (71 percent) of total U.S. exports. Aggressive capital spending by Asian DRAM (dynamic random access memory) manufacturers fueled increased U.S. equipment exports to the region, particularly to Taiwan and Korea. Several Taiwanese DRAM producers made significant investments in the latest 300 mm semiconductor fabrication equipment in an attempt to gain DRAM market share, and Korean companies

<sup>&</sup>lt;sup>13</sup> SIA, "Global Chip Sales Hit Record \$247.7 Billion in 2006." Many semiconductor firms are upgrading to equipment that is designed to process 300 millimeter silicon wafers instead of the standard 200 millimeter wafers, and most newly constructed semiconductor fabrication plants incorporate 300 millimeter wafer processing equipment.

<sup>&</sup>lt;sup>14</sup> SEMI, "SEMI Reports 2006 Global Semiconductor Equipment Sales of \$40.47 Billion." Sales in 2006 represent the second-highest all time total in SME sales behind 2000.

<sup>15</sup> Ibid.

<sup>&</sup>lt;sup>16</sup> U.S. industry representative, e-mail message to Commission staff, March 29, 2007.

<sup>&</sup>lt;sup>17</sup> Of the \$40.47 billion in global equipment sales in 2006, U.S. producers accounted for \$18.6 billion (46 percent), and 78 percent of U.S. headquartered firms' sales were due to exports. U.S. industry representative, e-mail message to Commission staff, March 29, 2007.

<sup>&</sup>lt;sup>18</sup> As a region, Asia accounted for \$11.1 billion (78 percent) of total U.S. exports, which reflects the region's status as a major semiconductor producer and SME consumer.

**TABLE MT-3** Semiconductor manufacturing machinery (MM087A): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			<ul><li>Million dolla</li></ul>	rs ———			
U.S. exports of domestic merchandise: Japan Taiwan Korea Singapore Netherlands China Germany Malaysia Canada	1,166 1,660 602 583 64 551 440 252 354	1,293 1,177 928 560 77 529 420 228 350	2,020 2,979 1,618 1,476 185 1,261 544 362 325	1,922 2,206 1,999 764 154 662 658 298 338	2,248 2,763 2,638 1,376 248 1,143 703 523 466	326 557 639 612 94 481 45 225	17.0 25.2 32.0 80.1 61.1 72.6 6.9 75.6
Israel	82	93	136	89	148	59	66.5
All other	1,220 6,972	1,586 7,242	1,881 12,790	1,880 10,971	1,975 14,232	95 3,261	5.1 29.7
EU-15 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	1,078 26 347 16 4,991 7 21	1,351 33 287 25 5,012 14 19	1,617 32 408 21 10,159 14 19	1,680 48 451 59 8,222 14 29	1,813 61 435 31 11,114 21 37	133 13 -16 -28 2,892 7	7.9 27.1 -3.6 -47.4 35.2 46.8 26.5
U.S. imports of merchandise for consumption: Japan Taiwan Korea Singapore Netherlands China Germany Malaysia Canada Israel All other	1,750 23 20 16 665 8 258 15 32 140 377	1,292 17 38 28 665 25 193 34 32 100 324	1,811 37 48 84 636 31 284 77 50 178 351	1,972 39 61 85 761 34 291 49 46 147 372	2,375 50 89 135 1,108 85 321 59 57 204 419	403 12 27 50 347 51 30 10 11 57	20.4 29.6 44.0 58.5 45.6 147.8 10.4 21.0 23.7 39.1
Total	3,304	2,750	3,586	3,857	4,902	1,045	27.1
EU-15 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	1,218 (b) 16 11 1,849 (b)	1,096 (°) 28 18 1,443 (°)	1,199 1 8 1 2,100 (b) 2	1,345 1 10 1 2,259 (°) 2	1,748 2 23 10 2,817 (b) 9	403 1 13 9 558 (°) 7	30.0 89.0 121.5 924.1 24.7 32.3 274.1

**TABLE MT-3** Semiconductor manufacturing machinery (MM087A): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—continued

						Change, 2000	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			<ul> <li>Million dollar</li> </ul>	rs ———			
U.S. merchandise trade balance: Japan Taiwan Korea Singapore Netherlands China Germany Malaysia Canada Israel All other	-584 1,636 581 567 -601 543 182 236 322 -58 842	(b) 1,159 890 531 -587 504 227 194 318 -7	209 2,943 1,571 1,392 -451 1,231 260 286 276 -41 1,529	-50 2,167 1,938 679 -607 628 367 249 292 -58 1,507	-126 2,713 2,549 1,241 -859 1,058 383 464 408 -56 1,555	-77 545 612 562 -253 430 15 215 116 2	-153.6 25.2 31.6 82.8 -41.7 68.5 4.2 86.2 39.9 2.9
Total	3,668	4,492	9,204	7,113	9,330	2,216	31.2
EU-15 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-140 26 330 5 3,142 7 20	255 33 259 7 3,570 14 18	418 31 400 20 8,059 14 17	335 47 441 58 5,964 14 27	65 59 412 20 8,297 21 28	-270 12 -29 -37 2,333 7 1	-80.6 25.9 -6.5 -64.5 39.1 46.9 4.0

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Less than \$500,000.

continued their strong capital spending practices, in which they have engaged since 2003.<sup>19</sup> Semiconductor pure-play foundries and flash memory producers, which are both heavily concentrated in Asia as well, also increased their equipment spending in 2006, thereby further contributing to the increase in U.S. SME exports to the region.<sup>20</sup>

#### U.S. Imports

U.S. SME imports increased \$1.0 billion (27 percent) in 2006. Japan continued to be the largest foreign SME supplier to the U.S. market in 2006, accounting for \$2.4 billion (48 percent) of total U.S. imports. The Netherlands was the second-largest supplier of U.S. imports, accounting for \$1.1 billion (23 percent) of the total. Producers in these two countries accounted for the majority of all U.S. SME imports because they are reportedly the only suppliers in the world of an essential and very expensive semiconductor wafer processing tool known as photolithography equipment. U.S. based semiconductor producers are therefore dependent on imports of this equipment from Japan and the Netherlands.

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<sup>&</sup>lt;sup>19</sup> McClean, Matas, and Yancey, *The McClean Report*, 4-11–4-15.

<sup>&</sup>lt;sup>20</sup> A pure-play foundry is a semiconductor company which provides only semiconductor manufacturing services; it does not provide semiconductor design services. The majority of foundries are located in Taiwan, Singapore, and China. Overall, Asia dominates the foundry industry with companies in the region accounting for over 90 percent of total foundry sales in 2006. This means U.S. equipment sales to pure-play foundries are almost exclusively to companies located in Asia, contributing to the increase in U.S. exports. See McClean, Matas, and Yancey, *The McClean Report*, 3-23.

<sup>&</sup>lt;sup>21</sup> Three companies are responsible for virtually all global production of photolithography equipment: Japanese companies Nikon Corp. and Canon Inc. and Dutch company ASML Holding. In 2006, photolithography equipment was the leading type of semiconductor equipment based on sales, accounting for 16 percent of total SME sales. U.S. industry representative, e-mail message to Commission staff, March 29, 2007.

### **Electric Motors, Generators, and Related Equipment**

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$889 million (26 percent) to \$4.3 billion U.S. exports: Increased by \$883 million (17 percent) to \$6.0 billion U.S. imports: Increased by \$1.8 billion (21 percent) to \$10.3 billion

The U.S. trade deficit in electric motors, generators and related equipment expanded by \$889 million (26 percent) to \$4.3 billion in 2006 as import growth (\$1.8 billion) outpaced exports (\$883 million). Import growth was largely driven by increased U.S. demand for alternating current (AC) motors and electrical generating sets, including wind-powered electrical generating sets. U.S. exports were driven largely by increased sales of electric generating sets and wind-powered electric generating sets. Production of these products is highly integrated within North America leading to large U.S. trade volumes with Canada and Mexico. China and Japan are also important sources of electric motors and generating sets.

#### U.S. Exports

U.S. exports of electric motors, generators, and related equipment expanded for the fifth consecutive year by \$883 million (17 percent) to \$6.0 billion in 2006 (table MT-4). The leading U.S. exports were electric generating sets, which increased by \$309 million (21 percent) in 2006. Though a relatively small sector component, exports of wind-powered generating sets increased substantially in 2006, from \$3.6 million to \$83.3 million (nearly 2,200 percent). This growth was fueled by robust global demand for alternative energy sources, including wind energy.<sup>22</sup>

The principal export destinations for electric motors, generators, and related equipment were Canada and Mexico, which collectively accounted for \$2.8 billion (46 percent) of exports in 2006, and 58 percent of the growth in exports in 2006. Exports to Canada increased by \$441 million (42 percent), surpassing Mexico as the largest market for these products. Other important export destinations in 2006 were China (\$298 million, up 24 percent) and the United Kingdom (\$223 million, up 28 percent).

<sup>&</sup>lt;sup>22</sup> Global Wind Energy Council, "Global Wind Energy Markets Continue To Boom - 2006 Another Record Year."

**TABLE MT-4** Electric motors, generators, and related equipment (MM091): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
_			<ul><li>Million dollar</li></ul>	rs			
U.S. exports of domestic merchandise:  Mexico Canada China Japan Germany Denmark United Kingdom Spain Brazil India All other	999 949 107 110 103 7 179 44 148 10 1,266	1,056 822 108 126 103 7 128 33 43 23 1,582	1,061 951 204 105 99 4 150 55 21 16 2,008	1,234 1,048 239 116 137 6 174 61 45 1,993	1,303 1,488 298 124 152 9 223 87 41 38 2,233	69 441 58 8 16 2 49 26 -20 -7 241	5.6 42.1 24.4 6.9 11.4 36.7 28.0 42.9 -32.1 -16.2
Total	3,923	4,031	4,673	5,114	5,997	883	17.3
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	643 652 179 1,362 88 650 43 14	603 615 353 1,358 91 666 27 13	717 724 412 1,404 140 909 73 21	765 775 346 1,628 111 1,023 64 17	925 949 359 1,735 141 1,208 85 25	160 174 13 107 30 185 21	20.9 22.5 3.6 6.6 26.9 18.1 33.5 46.9
U.S. imports of merchandise for consumption: Mexico Canada China Japan Germany Denmark United Kingdom Spain Brazil India All other	2,117 503 552 1,362 675 157 306 17 114 36 1,339	2,161 464 687 959 499 285 241 58 186 80 1,192	2,175 500 850 1,113 480 95 288 21 141 80 1,277	2,282 576 1,140 1,279 612 397 300 90 302 115 1,440	2,424 698 1,535 1,341 640 718 407 343 370 351 1,479	142 122 395 61 28 320 107 252 68 236 39	6.2 21.2 34.7 4.8 4.6 80.7 35.5 279.2 22.4 205.8 2.7
Total	7,177	6,811	7,020	8,533	10,305	1,772	20.8
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	1,666 1,834 14 2,247 13 2,420 4 183	1,536 1,636 14 2,368 18 2,208 4 116	1,343 1,420 28 2,348 24 2,612 8	1,992 2,091 34 2,612 25 3,105 8 106	2,670 2,778 32 2,814 18 3,837 13	678 687 -1 202 -7 732 5 9	34.0 32.9 -4.0 7.7 -28.0 23.6 57.8 8.4

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**TABLE MT-4** Electric motors, generators, and related equipment (MM091): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>—continued

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
_			— Milli	ion dollars			
U.S. merchandise trade balance:    Mexico .    Canada .    China .    Japan .    Germany .    Denmark .    United Kingdom .    Spain .    Brazil . India . All other .	-1,118 446 -445 -1,252 -572 -149 -126 26 34 -26 -73	-1,105 358 -579 -833 -396 -278 -113 -25 -143 -57 390	-1,114 451 -646 -1,008 -381 -91 -138 34 -120 -64 731	-1,048 472 -901 -1,164 -475 -391 -126 -29 -241 -70 553	-1,120 790 -1,238 -1,217 -488 -709 -184 -256 -329 -313 -754	-73 318 -337 -53 -13 -318 -58 -226 -87 -243 201	-6.9 67.5 -37.4 -4.6 -2.7 -81.4 -45.8 -769.3 -36.3 -348.9
Total  EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan África Central and Eastern Europe	-3,255 -1,023 -1,182 164 -885 75 -1,770 39 -169	-2,780 -932 -1,021 339 -1,010 73 -1,542 23 -102	-2,346 -626 -695 384 -943 116 -1,703 65 -60	-3,420 -1,228 -1,316 313 -985 86 -2,082 55 -90	-4,309 -1,746 -1,829 327 -1,080 123 -2,629 72 -91	-889 -518 -513 14 -95 37 -547 17	-26.0 -42.2 -39.0 4.4 -9.6 42.6 -26.3 29.9 -1.2

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

#### U.S. Imports

U.S. imports of electric motors, generators, and related equipment increased by \$1.8 billion (21 percent) in 2006, to \$10.3 billion. The largest import sources were Mexico, China, and Japan which collectively accounted for 51 percent of sector imports. U.S. imports from Mexico and China increased by \$142 million (6.2 percent) and \$395 million (35 percent), respectively, while imports from Japan increased modestly, by \$61 million (5 percent). In 2006, China surpassed Japan as the second-leading source of imports, with \$1.5 billion and \$1.3 billion, respectively.

The leading U.S. imports in 2006 were AC motors, electrical generating sets, and wind-powered generating sets. In 2006, U.S. imports of AC motors increased by 23 percent to \$2.6 million; electrical generating sets increased by 16 percent to \$1.0 billion; and wind-powered electrical generating sets increased by 150 percent to \$1.2 billion. According to the American Wind Energy Association, wind power is one of the fastest growing sources of new power generation, with over 2,400 megawatts of new capacity installed in 2006. <sup>23</sup> Denmark and Germany were leading suppliers of these wind-powered generating sets in 2006.

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<sup>&</sup>lt;sup>23</sup> AWEA, "Annual U.S. Wind Power Rankings Track Industry's Rapid Growth."

TABLE MT-5 Machinery: U.S. trade for industry/commodity groups and subgroups, 2002–06<sup>a</sup>

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars ——			
MM068	Wiring harnesses for motor vehicles:							
	Exports	961	868	878	939	930	-10	-1.0
	Imports	5,302	5,272	5,434	5,782	6,029	247	4.3
	Trade balance	-4,341	-4,404	-4,555	-4,843	-5,099	-257	-5.3
MM069	Pumps for motor vehicles:							
	Exports	681	690	771	743	790	48	6.4
	Imports	913	992	1,173	1,288	1,472	184	14.3
	Trade balance	-232	-302	-402	-546	-682	-136	-24.9
MM070	Pumps for liquids:							
	Exports	2,393	2,412	2,725	2,963	3,565	602	20.3
	Imports	1,883	2,180	2,673	3,302	3,952	649	19.7
	Trade balance	510	232	51	-339	-386	-47	-13.8
MM071	Air-conditioning equipment and parts:							
	Exports	5,318	5,334	5,794	6,340	6,861	522	8.2
	Imports	6,674	7,403	8,533	9,531	10,748	1,216	12.8
	Trade balance	-1,356	-2,070	-2,739	-3,192	-3,886	-695	-21.8
MM072	Industrial thermal-processing equipment and							
	furnaces:							
	Exports	2,064	2,099	2,789	3,220	3,540	320	9.9
	Imports	1,671	1,660	1,880	2,350	2,853	504	21.4
	Trade balance	393	439	910	870	687	-183	-21.1
MM073	Household appliances, including commercial							
	applications:							
	Exports	4,892	4,810	5,193	5,733	6,515	782	13.6
	Imports	9,587	10,782	12,489	14,464	16,574	2,110	14.6
	Trade balance	-4,695	-5,971	-7,296	-8,731	-10,059	-1,328	-15.2
MM073A	Major household appliances and parts:							
	Exports	1,610	1,655	1,773	1,991	2,309	318	16.0
	Imports	2,444	2,868	3,440	4,360	5,684	1,324	30.4
	Trade balance	-834	-1,212	-1,667	-2,369	-3,375	-1,006	-42.5
MM074	Centrifuges and filtering and purifying equipment:							
	Exports	3,045	3,022	3,277	3,505	4,060	556	15.9
	Imports	2,403	2,663	3,088	3,192	3,871	679	21.3
	Trade balance	642	358	189	313	189	-124	-39.5
MM075	Wrapping, packaging, and can-sealing machinery:							
	Exports	639	637	707	727	777	50	6.9
	Imports	1,333	1,505	1,725	1,811	1,966	154	8.5
	Trade balance	-694	-868	-1,018	-1,084	-1,188	-104	-9.6

**TABLE MT-5** Machinery: U.S. trade for industry/commodity groups and subgroups, 2002–06a—Continued

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars ———			
MM076	Scales and weighing machinery:							
	Exports	164	155	155	148	155	6	4.3
	Imports	293	375	525	577	604	27	4.7
	Trade balance	-129	-220	-370	-429	-450	-21	-4.8
MM077	Mineral processing machinery:							
-	Exports	485	545	669	811	1,064	253	31.1
	Imports	565	627	797	1,034	1,164	129	12.5
	Trade balance	-81	-82	-128	-223	-100	123	55.2
MM078	Farm and garden machinery and equipment:							
	Exports	4,747	5,109	6,098	6,885	7,533	648	9.4
	Imports	3.898	4,645	6,216	6,900	6,638	-262	-3.8
	Trade balance	848	464	-117	-15	895	910	( <sup>3</sup> )
MM079	Industrial food-processing and related machinery:							( )
	Exports	606	558	601	710	644	-66	-9.3
	Imports	570	684	758	839	853	14	1.7
	Trade balance	36	-126	-157	-129	-209	-80	-62.3
MM080	Pulp, paper, and paperboard machinery:							
	Exports	560	648	662	660	712	52	7.9
	Imports	719	867	938	948	1,086	138	14.5
	Trade balance	-159	-219	-276	-289	-374	-85	-29.6
MM081	Printing and related machinery:							
	Exports	1,136	1,215	1,300	1,443	1,526	83	5.7
	Imports	2,001	4,844	5,802	6,340	6,554	214	3.4
	Trade balance	-865	-3,628	-4,502	-4,897	-5,029	-132	-2.7
MM082	Textile machinery:							
	Exports	871	810	897	991	1,009	18	1.8
	Imports	1,314	1,316	1,410	1,561	1,264	-297	-19.0
	Trade balance	-442	-506	-513	-569	-255	315	55.3
MM083	Metal rolling mills:							
	Exports	169	182	243	314	351	37	11.9
	Imports	163	210	150	207	352	145	69.9
	Trade balance	7	-27	93	107	-1	-108	(°)

**TABLE MT-5** Machinery: U.S. trade for industry/commodity groups and subgroups, 2002–06a—Continued

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars ———			
				wiiiion	aonaro			
MM084	Metal cutting machine tools and machine tool accessories:							
	Exports	1,634	1,585	1,749	2,037	2,510	472	23.2
	Imports	2,558	2,704	3,424	4,134	4,607	473	11.4
	Trade balance	-924	-1,118	-1,674	-2,097	-2,097	-1	(d)
MM085	Metal forming machine tools:							
	Exports	652	691	733	851	957	106	12.5
	Imports	846	933	1,019	1,196	1,335	139	11.6
	Trade balance	-194	-242	-286	-345	-378	-33	-9.6
MM086	Non-metalworking machine tools:							
	Exports	768	711	1,083	1,110	1,159	49	4.4
	Imports	1.242	1.330	1.626	1,694	1.776	82	4.8
	Trade balance	-474	-619	-543	-584	-617	-33	-5.7
MM087	Semiconductor manufacturing equipment and robotics:							
	Exports	7,341	7,599	13,257	11,435	14,733	3,299	28.8
	Imports	3,679	3,152	4,151	4,515	5,612	1,097	24.3
	Trade balance	3,662	4,446	9,107	6,919	9,121	2,202	31.8
MM087A	A Semiconductor manufacturing machinery:	0,002	.,	0,.0.	0,0.0	0,	_,	00
	Exports	6.972	7,242	12,790	10,971	14,232	3,261	29.7
	Imports	3,304	2,750	3,586	3,857	4,902	1,045	27.1
	Trade balance	3,668	4,492	9,204	7,113	9,330	2,216	31.2
MM088	Taps, cocks, valves, and similar devices:	0,000	1, 102	0,20 :	7,1.0	0,000	2,210	02
	Exports	3.202	3,329	3.685	4,235	5.010	775	18.3
	Imports	5,156	5,500	6,738	7,589	8,942	1,353	17.8
	Trade balance	-1,954	-2,171	-3,054	-3,354	-3,932	-578	-17.2
MM089	Mechanical power transmission equipment:	.,00 .	_,	0,001	0,001	0,002	0.0	
	Exports	936	1,054	1,197	1,398	1,639	241	17.2
	Imports	1.994	2,222	2,638	3,252	3,439	187	5.8
	Trade balance	-1,057	-1,168	-1,441	-1,854	-1,800	54	2.9
MM090	Boilers, turbines, and related machinery:	1,007	1,100	.,	1,00 +	1,000	O r	2.0
141141000	Exports	892	875	909	1,124	1,130	7	0.6
	Imports	1,514	881	839	1,098	1,001	-97	-8.8
	Trade balance	-622	-6	70	26	1,001	103	401.5
	Trade balance	-022	-0	70	20	123	103	401.5

**TABLE MT-5** Machinery: U.S. trade for industry/commodity groups and subgroups, 2002–06a—Continued

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				A A:II: a ra	ala lla va			
				Million	dollars ———			
MM091	Electric motors, generators, and related							
	equipment:							
	Exports	3,923	4,031	4,673	5,114	5,997	883	17.3
	Imports	7,177	6,811	7,020	8,533	10,305	1,772	20.8
	Trade balance	-3,255	-2,780	-2,346	-3,420	-4,309	-889	-26.0
MM092	Electrical transformers, static converters, and							
	inductors:							
	Exports	1,784	1,767	1,805	1,895	2,380	485	25.6
	Imports	4,707	4,680	5,496	5,973	6,989	1,016	17.0
	Trade balance	-2,923	-2,912	-3,692	-4,078	-4,608	-531	-13.0
MM093	Portable electric handtools:	·	,	·	,	·		
	Exports	212	191	180	185	165	-19	-10.5
	Imports	1,434	1,777	2,122	2,424	2,478	54	2.2
	Trade balance	-1,222	-1,586	-1,942	-2,239	-2,313	-74	-3.3
MM094	Nonelectrically powered handtools and parts	,	•	•	,	,		
	thereof:							
	Exports	549	578	907	1,264	1,148	-116	-9.2
	Imports	961	992	1,235	1,396	1,513	117	8.4
	Trade balance	-412	-414	-328	-132	-365	-233	-176.9
MM095	Electric lamps (bulbs) and portable electric lights:							
	Exports	750	721	786	859	823	-36	-4.2
	Imports	1,687	1,748	2,094	2,202	2,375	173	7.9
	Trade balance	-937	-1,028	-1,309	-1,342	-1,552	-209	-15.6
MM096	Welding and soldering equipment:							
	Exports	635	618	818	872	1,165	293	33.5
	Imports	761	996	1,088	1,054	1,353	299	28.4
	Trade balance	-126	-378	-270	-182	-189	-7	-3.7
MM097	Nonautomotive insulated electrical wire and							
	related products:							
	Exports	2,856	2,660	2,936	3,202	4,110	908	28.4
	Imports	3,076	3,208	3,903	4,693	6,071	1,378	29.4
	Trade balance	-220	-548	-966	-1,491	-1,961	-470	-31.5

TABLE MT-5 Machinery: U.S. trade for industry/commodity groups and subgroups, 2002–06a—Continued

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				—— Million o	dollars ———			
MM098	Miscellaneous machinery:							
WIWIOOO	Exports	6,793	6,409	7,434	8,299	9,509	1,211	14.6
	Imports	6,133	6,917	8,058	9,343	10,527	1,184	12.7
	Trade balance	660	-508	-624	-1,044	-1,017	27	2.6
MM099	Molds and molding machinery:							
	Exports	1,605	1,550	1,833	2,074	2,136	62	3.0
	Imports	2,969	3,262	3,525	4,035	4,290	255	6.3
	Trade balance	-1,363	-1,712	-1,691	-1,960	-2,153	-193	-9.9

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes

<sup>°</sup>Not meaningful for purposes of comparison.

dLess than 0.05 percent.

TABLE MT-6 Machinery sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
MM068	Wiring harnesses for motor vehicles:						
	Number of establishments	(a)	(a)	(a)	(a)	(a)	(a)
	Employees (thousands)	(a)	(a)	(a)	(a)	(a)	(a)
	Capacity utilization (percent)	(a)	(a)	(a)	(a)	_ ( <sup>a</sup> )	(a)
	U.S. shipments (million dollárs)	6,450	6,100	6,270	6,300	6,500	3.2
	U.S. exports (million dollars)	961	868 5 272	878 5 424	939	930	-1.0
	U.S. imports (million dollars)	(°) 10.791	5,272 10.504	5,434 10,825	11,143	6,029 11,599	4.3 4.1
	Trade balance (million dollars)	-4,341	-4,404	-4,555	-4,843	-5,099	-5.3
	Ratio of imports to consumption (percent)	49.1	50.2	50.2	51.9	52.0	0.2
	Ratio of exports to shipments (percent)	14.9	14.2	14.0	14.9	14.3	-4.1
MM069	Pumps for motor vehicles:						
	Number of establishments	225	202	196	(a)	(a)	(a)
	Employees (thousands)	30.0	27.0	23.0	(a)	(a)	(a)
	Capacity utilization (percent)	78	72	74	(a)	(a)	(a)
	U.S. shipments (million dollars)	3,384	3,046	3,000	3,100	3,200	3.2
	U.S. exports (million dollars)	681	690	771	743	790	6.4
	U.S. imports (million dollars)	3,616	992 3,348	1,173 3,402	3,646	1,472 3,882	14.3 6.5
	Trade balance (million dollars)	-232	-302	-402	-546	-682	-24.9
	Ratio of imports to consumption (percent)	25.3	29.6	34.5	35.3	37.9	7.3
	Ratio of exports to shipments (percent)	20.1	22.7	25.7	24.0	24.7	3.1
MM070	Pumps for liquids:						
	Number of establishments	475	453	446	512	497	-2.9
	Employees (thousands)	35.0	31.0	26.0	32.0	30.0	-6.3
	Capacity utilization (percent)	69	66	64	71	70	-1.4
	U.S. shipments (million dollars)	6,867	6,660	6,594	7,253	8,473	16.8
	U.S. exports (million dollars)	2,393	2,412	2,725	2,963	3,565	20.3
	U.S. imports (million dollars)	(b)	2,180	2,673	(b)	3,952	19.7
	Apparent U.S. consumption (million dollars)  Trade balance (million dollars)	6,357 510	6,428 232	6,543 51	7,592 -339	8,859 -386	16.7 -13.8
	Ratio of imports to consumption (percent)	29.6	33.9	40.9	43.5	44.6	2.5
	Ratio of exports to shipments (percent)	34.8	36.2	41.3	40.9	42.1	3.0
MM071	Air-conditioning equipment and parts:	01.0	00.2	11.0	10.0	12.1	0.0
	Number of establishments	1,240	1,265	1,252	1,310	1,340	2.3
	Employees (thousands)	142.0	134.0	132.0	142.0	146.0	2.8
	Capacity utilization (percent)	71	71	68	70	66	-5.7
	U.S. shipments (million dollars)	23,894	24,372	24,859	28,837	28,293	-1.9
	U.S. exports (million dollars)	5,318	5,334	5,794	6,340	6,861	8.2
	U.S. imports (million dollars)	25 250	7,403	8,533	33 030	10,748	12.8
	Apparent U.S. consumption (million dollars)	25,250 1,356	26,442 -2,070	27,598 -2,739	32,029 -3,192	32,179 -3,886	0.5 -21.8
	Trade balance (million dollars)	-1,356 26.4	-2,070 28.0	-2,739 30.9	-3, 192 29.8	-3,666 33.4	-21.6 12.2
	Ratio of imports to consumption (percent)	20.4	20.0 21.9	23.3	29.0 22.0	24.3	10.3

TABLE MT-6 Machinery sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

MM072 Industrial thermal-processing equipment and furnaces:  Number of establishments	69 60	328 30.0	0.0
Number of establishments	0.0 28.0 69 60		0.0
	0.0 28.0 69 60		
	69 60		2.8 7.1
		58	-3.3
U.S. shipments (million dollars)		4,055	5.0
U.S. exports (million dollars)		3,540	9.9
U.S. imports (million dollars)		2,853	21.4
Apparent U.S. consumption (million dollars) 3,206 3,236 2,83	39 2,991	3,368	12.6
Trade balance (million dollars)	10 870	687	-21.1
Ratio of imports to consumption (percent)		84.7	7.8
Ratio of exports to shipments (percent)	4.4 83.4	87.3	4.7
MM073 Household appliances, including commercial			
applications:	00 05	00	2.0
	93 95	98	3.2
Employees (thousands)         53.0         53.0         50           Capacity utilization (percent)         69         70         7	0.0 53.0 72 74	51.0 72	-3.8 -2.7
U.S. shipments (million dollars)		17,776	3.0
U.S. exports (million dollars)		6,515	13.6
U.S. imports (million dollars)		16,574	14.6
Apparent U.S. consumption (million dollars) 20,122 21,707 23,42	25,989	27,835	7.1
Trade balance (million dollars)	96 -8,731	-10,059	-15.2
Ratio of imports to consumption (percent)		59.5	7.0
Ratio of exports to shipments (percent)	2.2 33.2	36.7	10.3
MM073A Major household appliances and parts:			
	70 265	267	0.8
Employees (thousands)		76.0	4.1
	73 76	74	-2.6
U.S. shipments (million dollars)		17,418	5.0
U.S. exports (million dollars)		2,309 5,684	16.0 30.4
U.S. imports (million dollars)		20,793	9.7
Trade balance (million dollars)		-3,375	-42.5
Ratio of imports to consumption (percent)		27.3	18.9
Ratio of exports to shipments (percent)		13.3	10.5
MM075 Wrapping, packaging, and can-sealing machinery:			
Number of establishments	08 780	780	0.0
Employees (thousands)	2.0 20.0	21.0	5.0
	66 70	73	4.3
U.S. shipments (million dollars)		3,771	5.0
U.S. exports (million dollars)		777	6.9
U.S. imports (million dollars)		1,966	8.5
Apparent U.S. consumption (million dollars) 4,458 4,772 4,63		4,959	6.1
Trade balance (million dollars)		-1,188	-9.6
Ratio of imports to consumption (percent)		39.6 20.6	2.3 1.8
read of exports to shipments (percent)	20.2	20.0	1.0

TABLE MT-6 Machinery sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
MM076	Scales and weighing machinery:						
	Number of establishments	113	111	110	97	88	-9.3
	Employees (thousands)	4.3	4.2	4.1	3.9	3.6	-7.7
	Capacity utilization (percent)	54	55	57	67	65	-3.0
	U.S. shipments (million dollars)	692	694	696	689	660	-4.2
	U.S. exports (million dollars)	164	155	155	148	155	4.3
	U.S. imports (million dollars)	_ (b)	375	525	(b)	604	4.7
	Apparent U.S. consumption (million dollars)	821	914	1,066	1,118	1,110	-0.7
	Trade balance (million dollars)	-129	-220	-370	-429	-450	-4.8
	Ratio of imports to consumption (percent)	35.7	41.0	49.2	51.6	54.5	5.5
1111077	Ratio of exports to shipments (percent)	23.7	22.4	22.3	21.5	23.4	8.9
MM077	Mineral processing machinery: Number of establishments	236	232	228	224	235	4.9
	Employees (thousands)	9.7	9.1	8.8	8.3	8.6	3.6
	Capacity utilization (percent)	53	57	74	80	83	3.8
	U.S. shipments (million dollars)	2,127	2,145	2,244	2,342	2,872	22.6
	U.S. exports (million dollars)	485	545	669	811	1,064	31.1
	U.S. imports (million dollars)	(b)	627	797	(b)	1,164	12.5
	Apparent U.S. consumption (million dollars)	2,208	2,227	2,372	2,565	2,972	15.9
	Trade balance (million dollars)	, -81	<sup>′</sup> -82	-128	-223	-100	55.2
	Ratio of imports to consumption (percent)	25.6	28.1	33.6	40.3	39.2	-2.9
	Ratio of exports to shipments (percent)	22.8	25.4	29.8	34.6	37.0	6.9
MM078	Farm and garden machinery and equipment:						
	Number of establishments	1,400	1,400	1,400	1,400	1,400	0.0
	Employees (thousands)	76.0	76.0	74.0	74.0	74.0	0.0
	Capacity utilization (percent)	67	70	70	70	70	0.0
	U.S. shipments (million dollars)	19,464	20,864	22,270	22,048	22,600	2.5
	U.S. exports (million dollars)	4,747	5,109	6,098	6,885	7,533	9.4
	U.S. imports (million dollars)	(b)	4,645	6,216	(b)	6,638	-3.8
	Apparent U.S. consumption (million dollars) Trade balance (million dollars)	18,616 848	20,400 464	22,387 -117	22,063 -15	21,705 895	-1.6
	Ratio of imports to consumption (percent)	20.9	22.8	27.8	31.3	30.6	(°) -2.2
	Ratio of imports to consumption (percent)	24.4	24.5	27.6 27.4	31.2	33.3	6.7
MM079	Industrial food-processing and related machinery:	27.7	24.0	21.4	31.2	55.5	0.7
IVIIVIO7 5	Number of establishments	549	553	550	500	500	0.0
	Employees (thousands)	19.0	19.0	19.0	20.0	21.0	5.0
	Capacity utilization (percent)	68	55	73	71	76	7.0
	U.S. shipments (million dollars)	2,572	2,620	2,774	2,869	2,912	1.5
	U.S. exports (million dollars)	606	558	601	710	644	-9.3
	U.S. imports (million dollars)	(b)	684	758	(b)	853	1.7
	Apparent U.S. consumption (million dollars)	2,536	2,746	2,931	2,998	3,121	4.1
	Trade balance (million dollars)	36	-126	-157	-129	-209	-62.3
	Ratio of imports to consumption (percent)	22.5	24.9	25.9	28.0	27.3	-2.3
	Ratio of exports to shipments (percent)	23.6	21.3	21.7	24.7	22.1	-10.7

TABLE MT-6 Machinery sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
MM080	Pulp, paper, and paperboard machinery:						
IVIIVIOOO	Number of establishments	290	275	261	245	232	-5.3
	Employees (thousands)	10.8	10.8	9.4	8.0	6.5	-18.8
	Capacity utilization (percent)	( <sup>d</sup> )	( <sup>d</sup> )	( <sup>d</sup> )	(d)	( <sup>d</sup> )	( <sup>d</sup> )
	U.S. shipments (million dollars)	1,588	1,764	1,667	1,786	1,206	-32.5
	U.S. exports (million dollars)	560	648	662	660	712	7.9
	U.S. imports (million dollars)	(b)	867	938	(b)	1,086	14.5
	Apparent U.S. consumption (million dollars)	1,747	1,983	1,943	2,075	1,580	-23.8
	Trade balance (million dollars)	-159	-219	-276	-289	-374	-29.6
	Ratio of imports to consumption (percent)	41.1	43.7	48.3	45.7	68.7	50.4
N 4 N 4 O O 4	Ratio of exports to shipments (percent)	35.2	36.7	39.7	36.9	59.0	59.8
MM081	Printing and related machinery: Number of establishments	456	485	478	478	478	0.0
	Employees (thousands)	14.0	15.0	476 15.0	476 15.0	15.0	0.0
	Capacity utilization (percent)	58	65	67	67	67	0.0
	U.S. shipments (million dollars)	2,879	2,863	2,834	2,619	2,517	-3.9
	U.S. exports (million dollars)	1,136	1,215	1,300	1,443	1,526	5.7
	U.S. imports (million dollars)	(b)	4,844	5,802	(b)	6,554	3.4
	Apparent U.S. consumption (million dollars)	3,744	6,491	7,336	7,516	7,546	0.4
	Trade balance (million dollars)	-865	-3,628	-4,502	-4,897	-5,029	-2.7
	Ratio of imports to consumption (percent)	53.4	74.6	79.1	84.4	86.9	3.0
	Ratio of exports to shipments (percent)	39.5	42.5	45.9	55.1	60.6	10.0
MM082	Textile machinery:						
	Number of establishments	420	400	388	388	392	1.0
	Employees (thousands)	10.0	8.0	7.0	16.0	17.0	6.3
	Capacity utilization (percent)	(a)	31	32	35	38	8.6
	U.S. shipments (million dollars)	1,3 <del>7</del> 7	1,308	1,295	1,131	1,142	1.0
	U.S. exports (million dollars)	871	810	897	991	1,009	1.8
	U.S. imports (million dollars)	( <sup>b</sup> ) 1,819	1,316	1,410	(b)	1,264	-19.0 -17.9
	Apparent U.S. consumption (million dollars) Trade balance (million dollars)	1,619 -442	1,814 -506	1,808 -513	1,700 -569	1,397 -255	55.3
	Ratio of imports to consumption (percent)	72.2	72.5	78.0	91.8	90.5	-1.4
MM083	Metal rolling mills:	12.2	12.5	70.0	31.0	30.5	-1
IVIIVIOOO	Number of establishments	79	79	79	79	79	0.0
	Employees (thousands)	3.0	2.0	2.0	2.0	2.0	0.0
	Capacity utilization (percent)	58	56	51	53	55	3.8
	U.S. shipments (million dollars)	500	480	440	580	650	12.1
	U.S. exports (million dollars)	169	182	243	314	351	11.9
	U.S. imports (million dollars)	(b)	210	150	(b)	352	69.9
	Apparent U.S. consumption (million dollars)	493	507	347	473	651	37.6
	Trade balance (million dollars)	7	-27	93	107	1	(°) 23.5
	Ratio of imports to consumption (percent)	33.0	41.3	43.2	43.8	54.1	23.5
	Ratio of exports to shipments (percent)	33.9	38.0	55.2	54.1	54.0	-0.2
	Ratio of exports to shipments (percent)	63.3	61.9	69.2	87.7	88.4	0.8

TABLE MT-6 Machinery sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
MM084	Metal cutting machine tools and machine tool						
	accessories:	400	070	000	200		
	Number of establishments	400	370	330	300	300	0.0
	Employees (thousands)	70.0	66.0	64.0	65.0	66.0	1.5
	Capacity utilization (percent)	60 5,259	60 5 115	65 5 35 6	70 6.472	72	2.9
	U.Ś. shípments (million dollárs) U.S. exports (million dollars)	5,259 1,634	5,115 1,585	5,256 1,749	6,172 2,037	6,839 2,510	10.8 23.2
	U.S. imports (million dollars)	1,034 (b)	2,704	3,424	2,037 ( <sup>b</sup> )	4,607	23.2 11.4
	Apparent U.S. consumption (million dollars)	6,183	6,233	6,930	8,269	8,936	8.1
	Trade balance (million dollars)	-924	-1,118	-1,674	-2,097	-2,097	(e)
	Ratio of imports to consumption (percent)	41.4	43.4	49.4	50.0	51.6	3.1
	Ratio of exports to shipments (percent)	31.1	31.0	33.3	33.0	36.7	11.2
MM085	Metal forming machine tools:	01.1	01.0	00.0	00.0	00.7	11.64
	Number of establishments	200	175	175	150	140	-6.7
	Employees (thousands)	15.0	12.0	11.0	11.0	12.0	9.1
	Capacity utilization (percent)	48	49	61	62	62	0.0
	U.S. shipments (million dollars)	1,647	1,880	1,864	2,040	2,313	13.4
	U.S. exports (million dollars)	652	691	733	851	957	12.5
	U.S. imports (million dollars)	( <sup>b</sup> )	933	1,019	(b)	1,335	11.6
	Apparent U.S. consumption (million dollars)	1,841	2,122	2,150	2,385	2,691	12.8
	Trade balance (million dollars)	-194	-242	-286	-345	-378	-9.6
	Ratio of imports to consumption (percent)	46.0	44.0	47.4	50.1	49.6	-1.1
	Ratio of exports to shipments (percent)	39.6	36.7	39.3	41.7	41.4	-0.8
MM086	Non-metalworking machine tools:	200	400	400	400	400	0.0
	Number of establishments	200	190	190	180	180	0.0
	Employees (thousands)	35.0	35.0 68	38.0	39.0	39.0 66	0.0
	Capacity utilization (percent) U.S. shipments (million dollars)	70 1,492	1,416	68 1,526	70 1,558	1,589	-5.7 2.0
	U.S. exports (million dollars)	768	711	1,083	1,110	1,159	4.4
	U.S. imports (million dollars)	/ 00 /b)	1,330	1,626	1,110 (b)	1,776	4.8
	Apparent U.S. consumption (million dollars)	1,966	2,035	2,069	2,142	2,206	3.0
	Trade balance (million dollars)	-474	-619	-543	-584	-617	-5.7
	Ratio of imports to consumption (percent)	63.2	65.3	78.6	79.1	80.5	1.8
	Ratio of exports to shipments (percent)	51.5	50.2	71.0	71.2	72.9	2.4
MM087A	Semiconductor manufacturing machinery:						
	Number of establishments	400	400	419	405	400	-1.2
	Employees (thousands)	35.0	31.0	26.0	24.0	24.0	0.0
	Capacity utilization (percent)	44	43	58	49	60	22.4
	U.S. shipments (million dollars)	12,200	11,100	13,800	12,100	18,600	53.7
	U.S. exports (million dollars)	6,972	7,242	12,790	10,971	14,232	29.7
	U.S. imports (million dollars)	(b)	2,750	3,586	(°)	4,902	27.1
	Apparent U.S. consumption (million dollars)	8,532	6,608	4,596	4,987	9,270	85.9
	Trade balance (million dollars)	3,668	4,492	9,204	7,113	9,330	31.2
	Ratio of imports to consumption (percent)	38.7	41.6	78.0	77.4	52.9	-31.6
	Ratio of exports to shipments (percent)	57.2	65.2	92.7	90.7	76.5	-15.6

TABLE MT-6 Machinery sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
MM088	Taps, cocks, valves, and similar devices:						
VIIVIOOO	Number of establishments	695	666	659	705	718	1.8
	Employees (thousands)	64.0	62.0	60.0	65.0	72.0	10.8
	Capacity utilization (percent)	68	64	64	62	65	4.8
	U.S. shipments (million dollars)	11,221	10,772	10,825	11,583	11,758	1.5
	U.S. exports (million dollars)	3,202	3,329	3,685	4,235	5,010	18.3
	U.S. imports (million dollars)	(b)	5,500	6,738	(b)	8,942	17.8
	Apparent U.S. consumption (million dollars)	13,175	12,943	13,879	14,937	15,690	5.0
	Trade balance (million dollars)	-1,954	-2,171	-3,054	-3,354	-3,932	-17.2
	Ratio of imports to consumption (percent)	39.1	42.5	48.6	50.8	57.0	12.2
MMA000	Ratio of exports to shipments (percent)	28.5	30.9	34.0	36.6	42.6	16.5
MM089	Mechanical power transmission equipment: Number of establishments	241	241	240	240	240	0.0
	Employees (thousands)	13.0	12.0	11.0	11.0	10.0	-9.1
	Capacity utilization (percent)	53	53	64	64	72	12.5
	U.S. shipments (million dollars)	2,036	1,986	1,951	2,097	2,107	0.5
	U.S. exports (million dollars)	936	1,054	1,197	1,398	1,639	17.2
	U.S. imports (million dollars)	(b)	2,222	2,638	( <sup>b</sup> )	3,439	5.8
	Apparent U.S. consumption (million dollars)	3,093	3,154	3,392	3,951	3,907	-1.1
	Trade balance (million dollars)	-1,057	-1,168	-1,441	-1,854	-1,800	2.9
	Ratio of imports to consumption (percent)	64.5	70.5	77.8	82.3	88.0	6.9
	Ratio of exports to shipments (percent)	46.0	53.1	61.3	66.7	77.8	16.7
MM090	Boilers, turbines, and related machinery:						
	Number of establishments	330	330	329	329	329	0.0
	Employees (thousands)	20.0	19.0	17.0	17.0	17.0	0.0
	Capacity utilization (percent)	54 3.570	62	70	70 2.714	66	-5.7 -1.6
	U.Ś. shipments (million dollars) U.S. exports (million dollars)	3,579 892	3,276 875	3,221 909	3,714 1,124	3,656 1,130	-1.6 0.6
	U.S. imports (million dollars)	(b)	881	839	1,124 (b)	1,130	-8.8
	Apparent U.S. consumption (million dollars)	4,201	3,282	3,151	3,688	3,527	-0.0 -4.4
	Trade balance (million dollars)	-622	-6	70	26	129	401.5
	Ratio of imports to consumption (percent)	36.0	26.8	26.6	29.8	28.4	-4.6
	Ratio of exports to shipments (percent)	24.9	26.7	28.2	30.3	30.9	2.2
MM091	Electric motors, generators, and related equipment:						
	Number of establishments	597	597	597	598	598	0.0
	Employees (thousands)	55.0	49.0	48.0	47.0	47.0	0.0
	Capacity utilization (percent)	60	62	75	75	59	-21.3
	U.S. shipments (million dollars)	9,151	9,281	10,311	11,539	11,671	1.1
	U.S. exports (million dollars)	3,923	4,031	4,673	5,114	5,997	17.3
	U.S. imports (million dollars)	12.406	6,811	7,020	14.050	10,305	20.8
	Apparent U.S. consumption (million dollars)	12,406 -3,255	12,061 -2,780	12,657 -2,346	14,959 -3,420	15,980 -4,309	6.8 -26.0
	Trade balance (million dollars) Ratio of imports to consumption (percent)	-3,255 57.9	-2,760 56.5	-2,3 <del>4</del> 6 55.5	-3,420 57.0	-4,309 64.5	-26.0 13.0
	Ratio of imports to consumption (percent)  Ratio of exports to shipments (percent)	42.9	43.4	45.3	44.3	51.4	15.9

TABLE MT-6 Machinery sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
MM092	Electrical transformers, static converters, and inductors:						
	Number of establishments	1,623	1,620	1,620	1,620	1,620	0.0
	Employees (thousands)	70.0	62.0	59.0	58.0	58.0	0.0
	Capacity utilization (percent)	48	49	61	61	63	3.3
	U.S. shipments (million dollars)	8,882	9,104	8,659	9,261	9,338	0.8
	U.S. exports (million dollars)	1.784	1,767	1,805	1,895	2,380	25.6
	U.S. imports (million dollars)	(b)	4,680	5,496	(b)	6,989	17.0
	Apparent U.S. consumption (million dollars)	11,8ÒŚ	12,016	12,351	13,339	13,946	4.6
	Trade balance (million dollars)	-2,923	-2,912	-3,692	-4,078	-4,608	-13.0
	Ratio of imports to consumption (percent)	39.9	38.9	44.5	44.8	50.1	11.9
	Ratio of exports to shipments (percent)	20.1	19.4	20.8	20.5	25.5	24.6
MM093	Portable electric handtools:						
	Number of establishments	128	128	127	127	127	0.0
	Employees (thousands)	12.0	11.0	10.0	9.0	9.0	0.0
	Capacity utilization (percent)	75	70	_65	_64	60	-6.3
	U.S. shipments (million dollars)	3,576	3,271	2,788	2,581	2,467	-4.4
	U.S. exports (million dollars)	212	. 191	180	185	165	-10.5
	U.S. imports (million dollars)	(b)	1,777	2,122	(b)	2,478	2.2
	Apparent U.S. consumption (million dollars)	4,798	4,857	4,730	4,820	4,780	-0.8
	Trade balance (million dollars)	-1,222	-1,586	-1,942	-2,239	-2,313	-3.3
	Ratio of imports to consumption (percent)	29.9	36.6	44.9	50.3	51.8	3.1
N 4 N 4 O O 4	Ratio of exports to shipments (percent)	5.9	5.8	6.5	7.2	6.7	-6.4
MM094	Nonelectrically powered handtools and parts thereof:	25	25	26	24	24	0.0
	Number of establishments	25	25	26	24	24	0.0
	Employees (thousands)	12.0 75	11.0 75	11.0 61	10.0 60	9.0 60	-10.0
	Capacity utilization (percent) U.S. shipments (million dollars)	1,840	2,120	1,911	1,976	2,075	0.0 5.0
	U.S. exports (million dollars)	549	2,120 578	907	1,976	1,148	-9.2
	U.S. imports (million dollars)	(b)	992	1,235	1,20 <del>4</del> /b\	1,513	8.4
	Apparent U.S. consumption (million dollars)	2,252	2,534	2,239	2,108	2,440	15.7
	Trade balance (million dollars)	-412	-414	-328	-132	-365	-176.9
	Ratio of imports to consumption (percent)	42.7	39.1	55.2	66.2	62.0	-6.4
	Ratio of exports to shipments (percent)	29.8	27.2	47.5	64.0	55.3	-13.5

TABLE MT-6 Machinery sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

			0004	0005		Percent change,
group	2002	2003	2004	2005	2006 	2006 from 2005
g equipment:						
shments	225	200	190	180	180	0.0
ands)	16.0	16.0	17.0	19.0	19.0	0.0
n (percent)	50	41	76	75	76	1.3
illion dollárs)	2,749	2,815	3,070	3,545	3,722	5.0
on dollars)	635	618	818	872	1,165	33.5
on dollars)	(b)	996	1,088	(b)	1,353	28.4
sumption (million dollars)	2,875	3,193	3,340	3,727	3,911	4.9
llion dollars)	-126	-378	-270	-182	-189	-3.7
consumption (percent)	26.5	31.2	32.6	28.3	34.6	22.4
shipments (percent)	23.1	22.0	26.7	24.6	31.3	27.2
ted electrical wire and related						
shments	323	323	324	324	324	0.0
ands)	26.0	25.0	23.0	23.0	23.0	0.0
n (percent)	61	64	68	68		13.2
nillion dollárs)	6,889	6,978	7,405	9,278	10,113	9.0
on dollars)	2,856	2,660	2,936	3,202	4,110	28.4
on dollars)	- (°)	3,208	3,903	(b)	6,071	29.4
sumption (million dollars)	7,109	7,526	8,371	10,769	12,074	12.1
llion dollars)	-220	-548	-966	-1,491	-1,961	-31.5
consumption (percent)	43.3	42.6	46.6	43.6	50.3	15.4
shipments (percent)	41.5	38.1	39.7	34.5	40.6	17.8
achinery:	0.070	0.070	0.070	0.000	0.050	4.7
shments	3,079	3,079	3,079	3,000	2,950	-1.7
ands)	65.0	60.0	60.0	58.0	57.0	-1.7
n (percent)						1.4
illion dollars)		8,236		8,388	8,598	2.5 3.0
on dollars)	CUO, I	1,550		2,074	2,136	3.0
on dollars)	10.000	3,202		10 249	4,290	6.3 3.9
Sumption (million dollars)		უ,უ <del>4</del> 0 1 712				-9.9
	-1,303 20.4					-9.9 2.3
	∠9. <del>4</del> 18. <i>1</i>			39.0 24.7	39.9 24.9	2.3 0.5
n (pe nillior on do sum llion con	rcent) n dollars) ollars)	recent) 61 n dollars) 8,736 pllars) 1,605 pllars) (b) ption (million dollars) 10,099 dollars) -1,363 sumption (percent) 29.4	reent) 61 58 d dollars) 8,736 8,236 bllars) 1,605 1,550 bllars) (b) 3,262 ption (million dollars) 10,099 9,948 dollars) -1,363 -1,712 sumption (percent) 29.4 32.8	reent) 61 58 66 dollars) 8,736 8,236 8,648 dollars) 1,605 1,550 1,833 dollars) (b) 3,262 3,525 ption (million dollars) 10,099 9,948 10,339 dollars) -1,363 -1,712 -1,691 sumption (percent) 29.4 32.8 34.1 doments (percent) 18.4 18.8 21.2	reent) 61 58 66 69 dollars) 8,736 8,236 8,648 8,388 billars) 1,605 1,550 1,833 2,074 billars) (b) 3,262 3,525 (b) ption (million dollars) 10,099 9,948 10,339 10,348 dollars) -1,363 -1,712 -1,691 -1,960 sumption (percent) 29.4 32.8 34.1 39.0 biments (percent) 18.4 18.8 21.2 24.7	reent) 61 58 66 69 70 dollars) 8,736 8,236 8,648 8,388 8,598 bllars) 1,605 1,550 1,833 2,074 2,136 bllars) (b) 3,262 3,525 (b) 4,290 ption (million dollars) 10,099 9,948 10,339 10,348 10,751 dollars) -1,363 -1,712 -1,691 -1,960 -2,153 sumption (percent) 29.4 32.8 34.1 39.0 39.9 bments (percent) 18.4 18.8 21.2 24.7 24.8

Source: These data have been estimated by the Commission's international trade analysts on the basis of primary and secondary data sources including discussions with various Government and industry contacts. These estimated data are subject to change either from secondary sources or from detailed surveys the Commission often conducts in the course of statutory investigations or other work. Further, these data may undergo adjustments based on revisions in tariff nomenclature, classification practices, or redefinitions of industry classes.

<sup>&</sup>lt;sup>a</sup>Not available.

<sup>&</sup>lt;sup>b</sup>Less than 500,000.

<sup>°</sup>Not meaningful.

<sup>&</sup>lt;sup>d</sup>Capacity utilization could not be meaningfully calculated for this industry.

<sup>&</sup>lt;sup>e</sup>Less than 0.05 percent.

# Transportation Equipment

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Change in 2006 from 2005:

U.S. trade deficit: Decreased by \$14.7 billion (16 percent) to \$76.3 billion U.S. exports: Increased by \$35.3 billion (20 percent) to \$215.8 billion U.S. imports: Increased by \$20.6 billion (8 percent) to \$292.1 billion

The trade deficit for transportation equipment narrowed by \$14.7 billion (16 percent) in 2006 to \$76.3 billion. The improvement in this sector deficit was led by strong growth in U.S. exports of goods such as aircraft, spacecraft, and related equipment; motor vehicles; and construction and mining equipment.

Canada continued to be the largest U.S. trading partner in transportation equipment, accounting for 26 percent of U.S. imports and 29 percent of U.S. exports in 2006 (table TE-1). The motor vehicle industries in the United States and Canada are highly integrated, leading to large volumes of two-way trade in motor vehicles and motor vehicle parts. Japan and Mexico are also leading U.S. trading partners in transportation equipment, retaining their second and third spots for overall trade. Japan is a leading motor vehicle and motor-vehicle parts producer, and U.S. demand for vehicles from Japan, as well as demand for Japanese motor-vehicle parts for use in U.S. vehicle assembly by Japanese transplants, accounts for a significant portion of transportation equipment trade with Japan. Over the last decade, Mexico has grown both as a global automotive producer and as a U.S. trading partner in the automotive sector.

In 2006, the largest value increases in U.S. imports of transportation equipment products (table TE-2) included motor vehicles; construction and mining equipment; and certain motor vehicle parts. U.S. imports of motor vehicles rose by \$13.2 billion (9 percent) to \$159.3 billion. U.S. imports of motor vehicles were largely driven by the popularity of Japanese-built passenger vehicles. U.S. imports of construction and mining equipment amounted to \$13.5 billion, an increase of \$1.9 billion (16 percent). Parts for construction and mining equipment and self-propelled excavation equipment contributed to this rise. The trade surplus in construction and mining equipment rose by \$1.1 billion (29 percent) to \$4.9 billion, as U.S. exports outpaced U.S. imports in 2006.

Imports of aircraft engines, other gas turbines, and parts grew by \$1.6 billion (14 percent) to \$12.8 billion. Parts for aircraft and other gas turbine engines were the most significant import in this sector, accounting for \$8.9 billion (70 percent) of 2006 imports. Principal sources of such parts imports were France, the United Kingdom, and Canada, together accounting for \$4.4 billion (49 percent) of total U.S. imports of parts for such engines. U.S. imports of aircraft turbojet engines of a thrust exceeding 25 kiloNewtons (kN) grew by \$477 million (22 percent) to \$2.7 billion. Principal suppliers of these engines included France, the United Kingdom, and Germany. Together, these countries accounted for \$2.1 billion (77 percent) of such engine imports.

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**TABLE TE-1** Transportation equipment: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002 2003	3 2004	2005	2006 Ab	solute		Percent
-			— Million dolla	ars ———			
U.S. exports of domestic merchandise: Canada	46,733 8,099	48,568 8,402	52,268 7,947	58,366 8,442	63,007 9,422	4,641 980	8.0 11.6
Mexico Germany United Kingdom Korea	14,524 6,961 6,970 3,364	13,725 7,932 7,526 2,809	15,882 6,534 6,744 3,126	16,871 6,869 7,361 3,594	19,266 11,111 8,430 5,057	2,395 4,242 1,069 1,463	14.2 61.7 14.5 40.7
China	4,293 6,042 3,116 1,608	3,757 4,288 2,458 1,425	3,835 6,631 3,763 1,228 47,943	6,440 6,789 3,955 4,916	8,973 7,527 5,602 7,506	2,533 738 1,647 2,590 12,996	39.3 10.9 41.6 52.7 22.8
All other	42,946 144,655	42,056 142,948	155,902	56,912 180,517	69,908 215,810	35,293	19.6
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	31,778 32,269 5,641 22,226 1,756 25,073 1,877 389	32,237 33,155 4,769 20,303 1,700 24,576 2,284 751	34,481 35,475 5,778 24,595 1,537 25,421 2,893 997	36,013 36,916 11,647 27,606 1,889 30,897 4,035 858	42,773 44,628 16,536 33,916 2,406 39,195 4,579 1,558	6,760 7,712 4,889 6,310 517 8,298 543 700	18.8 20.9 42.0 22.9 27.4 26.9 13.5 81.5
U.S. imports of merchandise for consumption: Canada Japan Mexico Germany United Kingdom Korea China France Brazil United Arab Em All other	65,462 55,583 31,117 24,978 10,147 8,282 2,302 9,161 3,739 17 16,358	66,727 53,274 30,664 27,346 10,485 9,836 3,072 7,941 3,877 104 18,888	73,154 56,745 33,025 29,008 10,483 12,241 4,548 8,012 4,779 3 21,777	77,209 62,308 34,451 31,874 12,351 12,450 6,072 7,338 4,651 10 22,751	75,682 71,047 41,291 30,917 12,226 13,137 8,133 9,332 4,365 6 25,928	-1,526 8,739 6,840 -957 -125 687 2,062 1,994 -286 -4 3,177	-2.0 14.0 19.9 -3.0 -1.0 5.5 34.0 27.2 -6.2 -41.2
Total	227,147	232,212	253,775	271,464	292,065	20,601	7.6
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	53,599 54,381 344 35,223 70 69,115 621 842	56,103 57,837 501 34,929 69 69,476 823 1,769	59,846 61,629 356 38,238 84 77,346 651 1,853	64,609 66,049 393 39,580 84 85,229 389 1,589	66,946 69,014 450 46,150 103 97,198 586 2,161	2,337 2,965 57 6,570 19 11,968 197 572	3.6 4.5 14.6 16.6 22.7 14.0 50.6

**TABLE TE-1** Transportation equipment: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—continued

						Change, 200	6 from 2005
Item	2002 200	3 2004	2005	2006 Ab	solute		Percent
-			— Million dolla	ars ———			
U.S. merchandise trade balance:	40.720	40.450	20.000	40.040	40.075	0.407	22.7
Canada Japan Mexico Germany United Kingdom Korea China France Brazil United Arab Em All other	-18,730 -47,484 -16,593 -18,017 -3,177 -4,918 1,990 -3,119 -623 1,591 26,588	-18,159 -44,872 -16,939 -19,414 -2,958 -7,027 686 -3,652 -1,419 1,321 23,168	-20,886 -48,797 -17,143 -22,473 -3,739 -9,115 -713 -1,381 -1,016 1,225 26,166	-18,842 -53,866 -17,579 -25,005 -4,990 -8,856 369 -549 -696 4,905 34,161	-12,675 -61,624 -22,025 -19,806 -3,796 -8,080 840 -1,805 1,238 7,499 43,980	6,167 -7,759 -4,446 5,199 1,194 776 471 -1,256 1,933 2,594 9,818	32.7 -14.4 -25.3 20.8 23.9 8.8 127 (2) 52.9 28.7
Total	-82,492	-89,264	-97,873	-90,947	-76,254	14,692	16.2
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-21,820 -22,112 5,297 -12,997 1,686 -44,042 1,256 -453	-23,866 -24,682 4,269 -14,625 1,631 -44,900 1,461 -1,017	-25,365 -26,155 5,422 -13,643 1,453 -51,925 2,241 -857	-28,596 -29,133 11,254 -11,974 -1,805 -54,332 3,646 -731	-24,173 -24,386 16,086 -12,234 -2,303 -58,003 3,992 -603	4,423 4,748 4,832 -260 498 -3,671 346 128	15.5 16.3 42.9 -2.6 -6.8 9.5 17.5

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Not meaningful for purposes of comparison.

TABLE TE-2 Leading changes in U.S. exports and imports of transportation equipment, 2002–06<sup>a</sup>

Industry/commodity group		2003	2004	2005	2006	Change, 2006 from 2005	
	2002					Absolute	Percent
	Million dollars						
U.S. EXPORTS:							
Increases:							
Aircraft, spacecraft, and related equipment (ET013)	41,447	37,835	40,076	47,981	64,374	16,393	34.2
Motor vehicles (ET009)	26,209	29,379	29,979	34,681	43,707	9,026	26.0
Construction and mining equipment (ET004)	9,504	9,461	11,689	15,418	18,377	2,959	19.2
Certain motor-vehicle parts (ET010)	26,651	25,625	27,741	28,292	29,938	1,646	5.8
All other	40,844	40,648	46,416	54,145	59,414	5,269	9.7
TOTAL	144,655	142,948	155,902	180,517	215,810	35,293	19.6
U.S. IMPORTS:							
Increases:							
Motor vehicles (ET009)	133,264	134,286	142,750	146,169	159,331	13,163	9.0
Construction and mining equipment (ET004)	5,302	5,904	8,844	11,607	13,462	1,855	16.0
Certain motor-vehicle parts (ET010)	27,761	30,897	35,045	38,908	40,556	1,648	4.2
Aircraft engines and gas turbines (ÉT001)	10,993	8,834	9,642	11,243	12,816	1,573	14.0
Aircraft, spacecraft, and related equipment (ET013)	17,636	16,910	16,485	16,475	17,557	1,083	6.6
All other	32,191	35,381	41,010	47,062	48,342	1,280	2.7
TOTAL	227,147	232,212	253,775	271,464	292,065	20,601	7.6

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

The largest increases in U.S. transportation equipment exports were registered in aircraft, spacecraft, and related equipment; motor vehicles; construction and mining equipment; and aircraft engines, other gas turbines, and parts. U.S. exports of aircraft, spacecraft and related equipment rose because of increasing global demand for large civil aircraft (LCA) and parts for the existing fleet of LCA. Total U.S. exports in this group rose by \$16.4 billion (34 percent) to \$64.4 billion, with LCA representing \$34.4 billion (53 percent). Exports of other parts for civil airplanes or helicopters, excluding propellers, rotors, undercarriages and parts thereof, rose by \$1.9 billion (20 percent) to \$12.7 billion. Principal export markets in 2006 included Asia (\$25.1 billion) and Latin America (\$5.8 billion). Strong exports led to a \$15.3 billion rise (49 percent) in the trade surplus for aircraft, spacecraft, and related equipment, reaching \$46.8 billion in 2006.

U.S. exports of motor vehicles rose by \$9.0 billion (26 percent) to \$43.7 billion in 2006. However, the deficit in motor vehicles trade increased by \$4.1 billion (4 percent) to \$115.6 billion. U.S. exports of construction and mining equipment rose by \$3.0 billion (19 percent) to \$18.4 billion, the bulk of which was accounted for by construction and mining equipment parts, exports of which were valued at \$10 billion. Other construction and mining equipment products contributing to increased exports were off-highway dump trucks and self-propelled front-end shovel loaders.

In 2006, U.S. exports of aircraft engines, other gas turbines, and parts increased by \$860 million (4 percent) to \$21.6 billion. Principal markets for these goods were France, the United Kingdom, and Germany. U.S. exports of parts for aircraft and other gas turbine engines increased by \$1.5 billion (13 percent) to \$13.4 billion, while exports of turbofan engines whose thrust exceeded 25 kN declined by \$617 million (14 percent) to \$3.8 billion.

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### Aircraft Engines, Other Gas Turbines, and Parts Thereof

Change in 2006 from 2005:

U.S. trade surplus: Decreased by \$713 million (8 percent) to \$8.8 billion U.S. exports: Increased by \$860 million (4 percent) to \$21.6 billion U.S. imports: Increased by \$1.6 billion (14 percent) to \$12.8 billion

In 2006, the U.S. trade surplus in aircraft engines, other gas turbines, and parts declined in the face of modest export gains, countered by a much larger increase in imports (table TE-3). The United States had a record year for aircraft production, leading to an increase in demand for both imported parts of aircraft engines and turbofan engines of a thrust exceeding 25 kiloNewtons (kN).

### U.S. Exports

U.S. exports of parts rose because of increased foreign production of civil aircraft turbine engines to meet the need of increased production of foreign aircraft. European LCA manufacturer Airbus delivered 434 aircraft in 2006, an increase of 15 percent over 2005 deliveries. Each aircraft required multiple engines, and the contracts typically included spare engines as well. Decreased exports of completed engines likely are the result of surging U.S. production of civil aircraft. Increased exports of parts for civil aircraft gas turbine engines, which rose by \$1.2 billion (17 percent) to \$8.3 billion, and parts of other nonaircraft gas turbines, which rose by \$153 million (6 percent) to \$2.6 billion, were muted by decreased exports of turbofan engines over 25kN, which declined by \$617 million (14 percent) to \$3.7 billion, and other gas turbines of a power exceeding 5,000 kiloWatts, which declined by \$183 million (12 percent) to \$1.4 billion.

The top three U.S. export markets were France, with a decrease of \$108 million (3 percent) to \$3.4 billion; the United Kingdom, increasing by \$252 million (11 percent) to \$2.6 billion; and Germany, with an increase of \$286 million (16 percent) to \$2.1 billion. More than one-half of the total 2006 U.S. exports of aircraft engines, other gas turbines, and parts to France were accounted for by engine parts, which rose by \$162 million (9 percent) to \$2.1 billion, while such exports to the United Kingdom, principally consisting of similar parts for aircraft and other gas turbine engines, rose by \$220 million (15 percent) to \$1.7 billion. U.S. exports of aircraft and other gas turbine parts to Germany amounted to \$979 million in 2006, an increase of \$99 million (11 percent).

<sup>&</sup>lt;sup>1</sup> Airbus S.A.S., "Airbus 2006 Results."

<sup>&</sup>lt;sup>2</sup> Boeing delivered 398 LCA in 2006, a 37 percent increase over 2005 deliveries. The Boeing Co., "Orders and Deliveries."

**TABLE TE-3** Aircraft engines and gas turbines (ET001): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
_			<ul> <li>Million dolla</li> </ul>	irs ———			
U.S. exports of domestic merchandise: France United Kingdom Canada Germany Japan Singapore Mexico Brazil Italy Korea All other	2,750 1,568 1,789 1,424 1,230 723 523 1,023 556 364 3,548	2,230 1,711 1,646 1,427 1,043 757 419 739 604 318 3,848	2,938 1,606 1,671 1,506 1,237 1,094 486 1,012 508 524 5,124	3,515 2,314 1,854 1,811 1,224 1,243 627 1,140 638 635 5,769	3,407 2,566 1,792 2,097 1,439 1,567 784 1,131 623 574 5,652	-108 252 -63 286 216 324 156 -9 -15 -61 -118	-3.1 10.9 -3.4 15.8 17.6 26.0 24.9 -0.8 -2.4 -9.6 -2.0
Total  EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan África Central and Eastern Europe	7,447 7,501 390 1,899 70 3,061 63 48	7,096 7,152 520 1,522 157 2,959 53 43	8,053 8,153 872 1,831 123 3,987 76 102	9,992 10,175 1,045 2,170 4,388 119 181	10,389 10,644 1,041 2,465 148 4,852 291 265	397 469 -4 295 8 465 172 84	4.0 4.6 -0.4 13.6 10.6 145.5 46.2
U.S. imports of merchandise for consumption: France United Kingdom Canada Germany Japan Singapore Mexico Brazil Italy Korea All other	2,630 2,803 2,300 1,028 517 66 177 20 265 185 1,003	2,096 2,100 1,594 800 567 59 217 9 234 140 1,018	2,281 2,050 1,677 1,006 667 77 275 14 257 150 1,189	2,842 2,247 1,801 1,216 745 105 337 6 326 210 1,408	3,150 2,638 1,847 1,284 955 116 394 12 392 257 1,771	309 390 47 67 211 11 57 6 67 47 363	10.9 17.4 2.6 5.5 28.3 10.0 16.8 98.2 20.4 22.3 25.8
Total  EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	7,065 7,138 2 200 1 897 2 88	5,553 5,659 4 228 ( <sup>2</sup> ) 890 2 113	5,971 6,098 4 295 (b) 1,109 2 153	7,139 7,274 6 349 1 1,279 2 165	7,999 8,357 3 415 1 1,602 2 393	859 1,084 -4 66 -1 324 (²) 229	12.0 14.9 -60.2 19.0 -48.7 25.3 -1.8 139.0

**TABLE TE-3** Aircraft engines and gas turbines (ET001): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>—*Continued* 

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
_			— Million dollai	rs			
U.S. merchandise trade balance:							
France	120 -1.235	133 -388	658 -444	673 67	257 -72	-416 -138	-61.8
Canada	-511	52	-6	54	-56	-110	\c\
Germany	396	627	501	595	813	218	36.7
Japan	713 657	476 698	570 1.016	479 1,138	484 1,451	313	1.1 27.5
Mexico	346	201	212	290	390	100	34.4
Brazil	1,004	730	999	1,134	1,119	-15	-1.3
Italy	291 179	370 178	250 374	313 425	231 317	-82 -108	-26.2 -25.4
Korea	2,545	2,830	3,935	4,362	3,881	-481	-11.0
Total	4,505	5,907	8,064	9,528	8,815	-713	-7.5
EU-15	382	1,543	2,082	2,853	2,391	-463	-16.2
EU-25	363	1,493	2,055	2,901	2,287	-614	-21 <u>.2</u>
OPECLatin America	388 1.699	517 1,294	868 1,536	1,038 1.821	1,039 2,050	229	12.6
CBERA	69	1,256	123	139	148	8	6.0
Asia	2,164	2,069	2,878	3,109	3,250	141	4.5
Sub-Saharan Africa	61 -40	51 -70	74 -51	116 17	289 -128	172 -145	148.2
		70		17	120	140	( )

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Less than \$500,000.

<sup>&</sup>lt;sup>c</sup>Not meaningful for purposes of comparison.

dLess than 0.05 percent.

#### U.S. Imports

U.S. imports of aircraft engines, other gas turbines, and parts rose because of increased demand from U.S. aircraft manufacturers and increased domestic airline fleet utilization. Parts of aircraft engines and other gas turbine engines were the largest import category in this sector in 2006, rising by \$1.1 billion (14 percent) to \$8.9 billion. These parts were followed by imports of turbojet engines over 25kN, imports of which rose by \$477 million (22 percent) to \$2.7 billion.

In 2006, principal sources of U.S. imports of aircraft engines, other gas turbines, and parts thereof included France, the United Kingdom, and Canada. Together, these countries accounted for \$7.6 billion (60 percent) of such imports. The principal U.S. imports from each of these nations were parts of aircraft engines and other gas turbine engines. Imports from France rose by \$309 million (11 percent) to \$3.2 billion, those from the United Kingdom rose by \$390 million (17 percent) to \$2.6 billion, while those from Canada rose by \$47 million (3 percent) to \$1.8 billion.

In 2006, principal sources of U.S. imports of aircraft turbojets exceeding 25kN in thrust were France (\$819 million, a decline of 2 percent), the United Kingdom (\$818 million, an increase of 34 percent), and Canada (\$342 million, an increase of 1 percent). SNECMA, a French aerospace company, is a partner with GE Aircraft Engines in a joint venture known as CFM International. CFM is the sole engine supplier for Boeing 737 series aircraft. In 2005, Boeing delivered 212 of this aircraft type; such deliveries rose to 302 in 2006, thus increasing the demand for this engine.<sup>3</sup>

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<sup>&</sup>lt;sup>3</sup> The Boeing Company, Deliveries 2006.

## Aircraft, Spacecraft, and Related Equipment

Change in 2006 from 2005:

U.S. trade surplus: Increased by \$15.3 billion (49 percent) to \$46.8 billion U.S. exports: Increased by \$16.4 billion (34 percent) to \$64.4 billion U.S. imports: Increased by \$1.1 billion (7 percent) to \$17.6 billion

The U.S. trade surplus for aircraft, spacecraft, and related equipment grew primarily because of a sizeable increase in exports coupled with a modest increase in U.S. imports. Increased U.S. exports of large civil aircraft (LCA) and parts for civil aircraft accounted for \$34.4 billion (74 percent) of the U.S. trade surplus. The surplus reflects the continued prosperity of foreign airlines, that have taken delivery of the majority of U.S.-built LCA. The U.S. trade balance has risen in each of the last three years as the market for LCA and parts has grown with the increased world demand for air transportation services (table TE-6).

### U.S. Exports

The largest absolute dollar increase in U.S. exports was accounted for by increased exports to Asia and Latin America. However, the EU-25 was the top market for U.S. aerospace exports in 2006, accounting for \$15.8 billion of U.S. exports, a 17 percent increase over 2005. U.S. exports of aircraft, spacecraft, and related equipment to Asia increased by \$6.7 billion (37 percent) to \$25.1 billion, while such exports to Latin America increased by \$2.8 billion (90 percent) to \$5.8 billion in 2006 (table TE-4). Together, U.S. exports to Asia and Latin America accounted for 48 percent of total U.S. exports of aircraft, spacecraft, and related equipment.

The principal exports to Asia were passenger and cargo LCA and parts for civil aircraft. Shipments to Asia of these three goods increased by \$5.6 billion (36 percent) to \$21.2 billion in 2006. U.S. exports to Latin America principally consisted of civil aircraft, both LCA and smaller aircraft. In 2006, Latin America imported \$2.8 billion worth of LCA from the United States and \$637 million of other civil aircraft. Airline route and frequency expansion and fleet renewal were the prime motivator of these purchases in both areas.

In 2006, the top three products exported included new civil passenger transports of an unladen weight exceeding 15,000 kg (i.e., LCA), and two parts categories. U.S. exports of LCA rose by \$10 billion (41 percent) to \$34.4 billion, while exports of civil aircraft parts grew by \$1.8 billion (17 percent) to \$12.7 billion and exports of noncivil aircraft parts rose by \$1.1 billion (28 percent) to \$5 billion.

**TABLE TE-4** Aircraft, spacecraft, and related equipment (ET013): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>—continued

						Change, 200	6 from 2005
Item	22000022	2003	<b>2000</b> 4	<b>220005</b> 2006	<b>2086</b> lu	te Absolute	Percent
<del>-</del>			<ul><li>Million dollars</li></ul>				
U.S. exports of domestic merchandise: Canada France Japan China United Arab Em United Kingdom Korea Germany Singapore Brazil All other	1,727 2,629 3,768 3,367 971 2,569 2,300 1,483 2,812 1,145 18,675	1,520 1,359 4,757 2,447 728 2,925 1,803 1,336 2,606 649 17,705	1,762 2,943 4,750 1,948 173 2,486 1,744 1,200 2,292 1,243 19,536	2,381 2,438 5,182 4,338 3,283 2,641 1,890 1,619 2,603 1,031 20,576	2,488 3,111 5,721 6,047 5,060 2,627 3,463 2,313 3,504 2,323 27,719	106 674 539 1,709 1,776 -14 1,573 692 902 1,292 7,144	4.5 27.6 10.4 39.4 54.1 -0.5 83.2 42.8 34.7 34.7
Total	41,447	37,835	40,076	47,981	64,374	16,393	34.2
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	12,335 12,604 2,018 2,336 418 15,164 587 194	11,855 12,495 1,310 1,909 345 15,053 814 510	14,425 15,019 674 2,862 327 14,613 975 645	13,260 13,552 4,496 3,067 357 18,401 1,262 344	14,865 15,847 6,319 5,813 448 25,131 1,329 868	1,605 2,296 1,823 2,746 91 6,730 67 524	12.1 16.9 40.6 89.5 25.5 36.6 5.3 152.1
U.S. imports of merchandise for consumption: Canada France Japan China United Arab Em United Kingdom Korea Germany Singapore Brazil All other	5,268 4,948 1,027 54 (b) 932 89 1,663 62 1,847 1,746	6,345 4,128 848 62 (°) 936 87 1,091 64 1,845 1,504	5,347 3,688 872 80 (b) 874 113 1,217 74 2,508 1,711	6,006 2,441 1,058 84 (°) 988 186 1,837 81 1,806 1,989	5,082 4,322 1,443 134 1,215 226 1,352 82 1,202 2,499	-924 1,881 384 49 1 228 40 -485 1 -604 510	-15.4 77.1 36.3 58.4 182.6 23.1 21.4 -26.4 1.5 -33.4
Total	17,636	16,910	16,485	16,475	17,557	1,083	6.6
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe U.S. merchandise trade balance:	8,286 8,332 3 2,078 1 1,286 3 47	6,685 6,755 3 1,915 2 1,133 3 70	6,481 6,577 3 2,543 3 1,236 5	6,123 6,214 5 1,852 5 1,511 4 91	7,843 7,990 7 1,260 4 1,991 3	1,719 1,777 2 -592 -1 480 -1 58	28.1 28.6 35.7 -32.0 -21.8 31.8 -29.2 64.0
Canada	-3,541 -2,319 2,741	-4,826 -2,770 3,910	-3,585 -745 3,878	-3,625 -3 4,123	-2,595 -1,211 4,279	1,030 -1,208 155	28.4 -44,411.1 3.8

See footnote(s) at end of table.

**TABLE TE-4** Aircraft, spacecraft, and related equipment (ET013): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>—continued

						Change, 200	6 from 2005
Item	2002	2003	2004	2005 2006	Absolute	е	Percent
			<ul><li>Million dolla</li></ul>	nrs ———			
China United Arab Em United Kingdom Korea Germany Singapore Brazil All other Total	3,313 971 1,637 2,211 -180 2,751 -702 16,928 23,811	2,384 728 1,989 1,716 245 2,542 -1,195 16,201	1,868 173 1,612 1,630 -17 2,218 -1,265 17,825	4,254 3,283 1,653 1,704 -218 2,522 -775 18,587	5,913 5,059 1,412 3,237 959 3,422 1,121 25,220	1,659 1,776 -241 1,533 1,177 900 1,895 6,633	39.0 54.1 -14.6 90.0 (°) 35.7 (°) 35.7 48.6
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	4,048 4,271 2,015 259 417 13,878 584 146	5,170 5,740 1,307 -6 343 13,921 811 440	7,944 8,442 671 319 324 13,377 970 545	7,137 7,338 4,491 1,215 352 16,890 1,259 254	7,022 7,857 6,312 4,553 444 23,140 1,326 719	-115 519 1,822 3,338 92 6,249 68 466	-1.6 7.1 40.6 274.6 26.2 37.0 5.4 183.6

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Less than \$500,000.

<sup>&</sup>lt;sup>c</sup>Not meaningful for purposes of comparison.

### U.S. Imports

In 2006, the leading product imported in this sector was new LCA, which were valued at \$4.9 billion, a 17 percent decrease over 2005. The decline in imports reflects U.S. airlines' continued fleet contraction, a move that increases load factors on existing aircraft, which can lead to improved per-flight profitability. Imports of these aircraft from France continued to rise, accounting for \$1.7 billion (23 percent increase), while imports from Canada and Germany combined accounted for \$2.5 billion (51 percent decline). These three nations have supplied the bulk of imported LCA to the United States for the last 5 years. Brazil, the other major producer of these aircraft, saw its exports to the United States decline by \$79 million (10 percent) to \$708 million.

U.S. imports of parts for civil aircraft, the second-largest import group, grew by \$1 billion (28 percent) to \$4.7 billion. The top three suppliers of these imports included Japan, the United Kingdom, and Canada. Together, these three countries supplied \$2.8 billion (59 percent) of total imports in this category. All U.S. manufacturers of civil aircraft increased their production of aircraft in 2006, which in turn required more imported parts for these aircraft.

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### **Construction and Mining Equipment**

Change in 2006 from 2005:

U.S. trade surplus: Increased by \$1.1 billion (29 percent) to \$4.9 billion U.S. exports: Increased by \$3.0 billion (19 percent) to \$18.4 billion U.S. imports: Increased by \$1.9 billion (16 percent) to \$13.5 billion

The U.S. trade surplus in construction and mining equipment expanded for the third consecutive year, as the growth in U.S. exports continued to outpace that of U.S. imports (table TE-5). The construction and mining equipment industry is highly globalized, consisting of large multinational companies that source product and related components from their worldwide production locations to serve global markets. The increased value of U.S. trade in these products in 2006 resulted from a combination of factors, including growth in mining activity worldwide, agenerally higher prices for construction and mining equipment, and growth in nonresidential construction. In terms of quantity, U.S. exports of construction and mining equipment reportedly rose for the fourth consecutive year, growing by nearly percent to an estimated 54,570 units in 2006, while U.S. imports reportedly declined for the first time in 4 years, dropping by nearly 2 percent to an estimated 85,115 units.

### U.S. Exports

The 2006 increase in U.S. exports continued to be dominated by parts for construction and mining equipment (increased by 12 percent to \$10 billion), followed by off-highway dump trucks (increased by 33 percent to \$2.1 billion), and self-propelled front-end shovel loaders (increased by 20 percent to \$1.5 billion). Canada continued to be the leading market for U.S. exports of construction and mining equipment, accounting for \$3.4 billion (19 percent) of total exports in 2006. Parts, off-highway dump-trucks, and self-propelled front-end shovel loaders accounted for much of this growth. Total exports of construction and mining equipment to Canada grew by \$791 million (30 percent), reflecting Canada's reported position as the world's second-largest investor in future mining projects in 2006.

Other major mining markets also contributed to increased exports. Australia, reported to be the world leader in future mining investments in 2006,<sup>8</sup> continued to be the second-largest U.S. export market, accounting for \$1.4 billion (8 percent) of total sector exports. U.S. exports of construction and mining equipment to Australia grew by \$341 million (32 percent). Off-highway dump trucks accounted for the vast majority of this increase (73 percent). Brazil, reportedly the world's fifth-largest investor in future mining projects

<sup>&</sup>lt;sup>4</sup> Ericsson and Olsson, Raw Materials Group, "Project Survey 2007," 28.

<sup>&</sup>lt;sup>5</sup> Compiled from official trade data of the U.S. Department of Commerce.

<sup>&</sup>lt;sup>6</sup> Machinery Outlook, "2007 Forecast," 28.

<sup>&</sup>lt;sup>7</sup> Ericsson and Olsson, "Project Survey 2007," 29.

<sup>8</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> Although parts dominated increased U.S. exports to Australia in 2005, accounting for 79 percent of \$318 million, parts shipments to Australia decreased by 9 percent to almost \$450 million in 2006.

**TABLE TE-5** Construction and mining equipment (ET004): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>—*continued* 

						Change, 200	6 from 2005
Item	<b>20002</b> 2003	200034	2002005	200@005	<b>2066</b> lu	te Absolute	Percent
-			<ul><li>Million dollar</li></ul>	rs ———			
U.S. exports of domestic merchandise: Canada Japan Brazil Mexico United Kingdom Australia China Germany Italy Singapore All other	1,249 124 337 554 396 428 268 152 99 454 5,444	1,524 102 437 561 366 446 295 228 115 446 4,941	1,926 109 487 572 385 754 423 261 149 521 6,101	2,650 182 823 649 466 1,073 413 275 161 834 7,892	3,441 115 1,243 1,015 502 1,413 542 282 151 740 8,932	791 -67 420 366 36 341 129 7 -10 -94 1,040	29.9 -36.6 51.0 56.4 7.8 31.8 2.7 -6.3 -11.3
Total	9,504	9,461	11,689	15,418	18,377	2,959	19.2
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan África Central and Eastern Europe	1,504 1,521 1,371 2,378 422 1,455 788 14	1,480 1,514 982 2,243 296 1,429 848 31	1,638 1,665 1,635 2,734 291 1,723 1,166 28	2,057 2,102 1,889 3,436 342 2,165 1,518 43	1,865 1,924 2,322 4,783 467 2,165 1,732 66	-192 -178 433 1,347 125 (°) 214 24	-9.3 -8.5 22.9 39.2 36.6 ( 14.1 55.0
U.S. imports of merchandise for consumption: Canada Japan Brazil Mexico United Kingdom Australia China Germany Italy Singapore All other	519 1,259 142 349 584 20 212 569 334 7 1,308	575 1,526 187 353 611 31 132 591 391 7 1,501	750 2,511 442 501 810 28 182 753 544 6 2,315	979 3,161 570 766 1,070 40 358 1,135 725 13 2,792	1,074 3,612 664 795 1,267 49 903 1,127 888 18 3,065	95 452 94 29 197 9 545 -7 163 6 273	9.7 14.3 16.4 3.8 18.4 21.8 152.2 -0.6 22.5 44.5
Total	5,302	5,904	8,844	11,607	13,462	1,855	16.0
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe U.S. merchandise trade balance: Canada	2,410 2,441 20 504 3 1,708 26 32 730 -1,136	2,624 2,680 51 555 1 1,942 42 60 948 -1,425	3,647 3,708 17 959 1 3,281 55 70 1,176 -2,402	4,785 4,866 26 1,365 2 4,231 43 86 1,671 -2,978	5,242 5,334 26 1,495 3 5,340 16 98 2,367 -3,497	456 468 (°) 130 1,109 -27 12 696 -519	9.5 9.6 0.4 9.6 28.8 26.2 -62.8 14.0 41.6

See footnote(s) at end of table.

**TABLE TE-5** Construction and mining equipment (ET004): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—continued

						Change, 200	6 from 2005
Item	2002 2003	2004	2005	2006	Absolute	<del></del>	Percent
			— Million dollai	rs ———			
Mexico United Kingdom Australia China Germany Italy Singapore All other Total	206 -188 408 -56 -417 -235 448 4,136	208 -245 416 163 -363 -276 439 3,440	71 -425 726 241 -492 -395 515 3,786	-116 -604 1,033 -55 -859 -563 821 5,099	220 -765 1,365 -361 -845 -737 722 5,867	337 -161 332 -416 15 -173 -100 767	(d) -26.6 32.1 1.7 -30.8 -12.1 15.0 29.0
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-906 -920 1,351 1,874 420 -253 762 -17	-1,144 -1,166 931 1,689 294 -513 806 -29	-2,009 -2,043 1,618 1,775 290 -1,558 1,111 -42	-2,729 -2,764 1,863 2,071 340 -2,066 1,475 -43	-3,377 -3,410 2,296 3,288 464 -3,175 1,716 -32	-648 -646 433 1,217 124 -1,109 241	-23.8 -23.4 23.3 58.8 36.6 -53.7 16.3 26.7

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Less than \$500,000.

<sup>&</sup>lt;sup>c</sup>Less than 0.05 percent.

<sup>&</sup>lt;sup>d</sup>Not meaningful for purposes of comparison.

in 2006, was the third-largest U.S. export market, growing by \$420 million (51 percent), of which parts accounted for the dominant share (93 percent).

### U.S. Imports

The increase in U.S. imports was principally led by parts for construction and mining equipment (increased by 19 percent to \$4.5 billion) and self-propelled excavation equipment with a 360-degree revolving superstructure (increased by 18 percent to \$3.1 billion). Japan continued to be the leading supplier of U.S. imports of construction and mining equipment, accounting for \$3.6 billion (27 percent) of total imports in 2006. Total imports of construction and mining equipment from Japan grew by \$452 million (14 percent), with much of this growth accounted for by excavators with a 360 degree revolving superstructure, which posted an increase of 12 percent to \$2.0 billion. Numerous smaller suppliers also contributed to the import increase. Imports from the United Kingdom, Germany, and Canada, the next largest suppliers, together rose by \$285 million (9 percent) to almost \$3.5 billion in 2006.

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<sup>&</sup>lt;sup>10</sup> In this context, excavation equipment covers backhoes, mechanical shovels, clamshells, and draglines.

### **Motor Vehicles**<sup>11</sup>

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$4.1 billion (4 percent) to \$115.6 billion U.S. exports: Increased by \$9.0 billion (26 percent) to \$43.7 billion U.S. imports: Increased by \$13.2 billion (9 percent) to \$159.3 billion

Despite a healthy increase in U.S. exports in 2006, the motor vehicle trade deficit increased due to a larger increase in U.S. imports (table TE-6). The growth in imports primarily reflects strong U.S. demand for vehicles made in Japan and U.S.-branded vehicles made in Mexico. Hence, the most notable increases in the motor vehicle trade deficit were with Japan and Mexico—the U.S. deficit with these countries increased by \$8.6 billion and \$5.4 billion, respectively, in 2006.

### U.S. Exports

U.S. exports of motor vehicles also continued to increase in 2006. Canada is by far the leading destination for U.S. motor vehicle exports, accounting for 52 percent (\$22.6 billion) of total U.S. exports in 2006. Such exports increased by 11 percent in 2006; this increase may be partly attributable to small growth in the motor vehicle market in Canada. Additionally, in terms of the number of vehicles exported, U.S. exports to Canada increased by less than 4 percent, indicating that the vehicles exported to Canada increased in value in 2006. In 2006, the motor vehicle categories that registered the largest increases—both in terms of value and quantity—were larger gasoline-powered passenger vehicles, including minivans and SUVs (increase of 36,050 units, or \$850 million) and gasoline-powered pickup trucks (increase of 14,572 units, or \$687 million).

The second-leading export market for U.S. motor vehicles is Germany, accounting for 11 percent of U.S. exports in 2006. <sup>12</sup> Overall, sales of passenger vehicles in Germany were strong in 2006 because customers brought forward purchases that may have otherwise been

<sup>&</sup>lt;sup>11</sup> This industry group includes passenger vehicles, commercial trucks, and buses. Passenger vehicles account for the overwhelming majority of trade in this industry group.

<sup>&</sup>lt;sup>12</sup> U.S. domestic export data show a substantial increase to Germany in 2006—176 percent. However, while U.S. data show that the largest category, both in terms of total U.S. exports to Germany and the value increase over 2005, is passenger cars with gasoline-powered engines between 1.5 and 3.0 liters, German import data from Eurostat show that the largest category, both in terms of total U.S. exports to Germany and the value increase over 2005, is passenger cars with diesel-powered engines over 2.5 liters. The Eurostat data for Germany also show a more modest increase in motor vehicle imports from the United States—approximately 60 percent. GTIS, *World Trade Atlas*. German trade association data report that new registrations of German brand imported passenger cars increased by 10 percent, or 55,046 vehicles in 2006. Verband der Automobilindustrie Web site. Data reported by Ward's and *Automotive News* show that Mercedes-Benz's U.S. production in excess of U.S. sales nearly doubled in 2006, increasing by almost 50,000 vehicles. *Ward's Automotive Reports*, "Ward's North American Production by Plant," 8; and *Automotive News*, "U.S. Light-vehicle Sales by Nameplate," 40.

**TABLE TE-6** Motor vehicles (ET009): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percen
-			— Million dolla	ars ———			
U.S. exports of domestic merchandise: Canada Japan Mexico Germany Korea United Kingdom Sweden Saudi Arabia Austria Belgium All other	15,486 423 3,711 2,737 87 622 20 575 19 151 2,380	17,193 438 3,186 3,888 77 907 27 476 12 124 3,050	17,918 320 3,983 2,451 49 574 76 629 14 61 3,904	20,404 339 4,323 1,769 98 325 164 1,009 12 80 6,159	22,625 430 3,964 4,875 148 987 68 1,857 15 198 8,539	2,221 91 -358 3,106 50 661 -96 848 4 118 2,381	10.9 26.8 -8.5 175.5 50.9 203.2 -58.7 84.0 32.9 146.8
Total	26,209	29,379	29,979	34,681	43,707	9,026	26.0
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	3,865 3,887 1,049 4,280 346 718 228 18	5,431 5,484 1,158 3,745 363 786 335 33	3,779 3,904 1,505 4,593 371 716 406 62	3,072 3,287 2,677 5,447 496 1,008 769 101	7,224 7,544 4,712 5,520 5,73 1,398 695 113	4,152 4,258 2,036 73 76 390 -74	135.2 129.6 76.0 1.3 15.4 38.7 -9.6
U.S. imports of merchandise for consumption: Canada Japan Mexico Germany Korea United Kingdom Sweden Saudi Arabia Austria Belgium All other	41,589 35,847 20,793 17,851 6,847 4,218 2,114 0 307 1,022 2,677	41,022 33,061 19,327 20,312 7,913 5,148 2,875 (°) 521 1,033 3,073	46,651 33,170 19,116 21,147 10,033 4,840 2,441 (°) 1,245 1,343 2,764	48,458 35,946 18,520 21,824 8,970 5,893 2,356 0 618 1,332 2,252	48,465 44,608 23,539 20,940 9,103 5,024 1,969 0 1,506 1,122 3,055	7 8,662 5,019 -883 133 -869 -386 0 888 -211	24.1 27.1 -4.0 1.5 -14.7 -16.4 0.0 143.7 -15.8 35.7
Total	133,264	134,286	142,750	146,169	159,331	13,163	9.0
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe U.S. merchandise trade balance:	26,481 26,769 21,417 (°) 42,696 479 288	30,657 31,636 (°) 19,874 (°) 40,977 634 979	31,665 32,723 19,343 (°) 43,209 418 1,057	32,996 33,624 (°) 18,743 (°) 44,923 139 628	31,955 32,850 (°) 23,707 (°) 53,722 341 895	-1,041 -774 (°) 4,964 (°) 8,799 202 266	-3.2 -2.3 -24.4 26.5 -55.6 19.6 145.5 42.4
Canada Japan Mexico Germany	-26,103 -35,424 -17,083 -15,114	-23,829 -32,623 -16,140 -16,424	-28,732 -32,850 -15,133 -18,696	-28,054 -35,607 -14,197 -20,055	-25,840 -44,178 -19,574 -16,065	2,214 -8,571 -5,377 3,990	7.9 -24.1 -37.9 19.9

TABLE TE-6 Motor vehicles (ET009): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002-06a-Continued

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			— Million dol	lars ———			
Korea United Kingdom Sweden Saudi Arabia Austria Belgium All other Total	-6,760 -3,596 -2,095 575 -288 -871 -297	-7,836 -4,241 -2,849 476 -509 -909 -23	-9,984 -4,266 -2,365 629 -1,231 -1,282 1,140	-8,872 -5,568 -2,192 1,009 -606 -1,252 3,907	-8,955 -4,038 -1,902 1,857 -1,490 -923 5,485	-84 1,530 290 848 -884 328 1,578	-0.9 27.5 13.2 84.0 -145.8 26.2 40.4
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-22,616 -22,882 1,049 -17,137 345 -41,978 -252 -270	-25,226 -26,152 1,158 -16,128 -363 -40,191 -299 -946	-27,886 -28,818 1,505 -14,750 371 -42,494 -13 -995	-29,925 -30,338 2,677 -13,296 496 -43,915 630 -527	-24,732 -25,306 4,712 -18,187 573 -52,324 354 -782	5,193 5,032 2,036 -4,891 76 -8,409 -276 -255	17.4 16.6 76.1 -36.8 15.4 -19.1 -43.8 -48.3

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

bLess than 0.05 percent. cLess than \$500,000.

made in 2007 to avoid a 3 percentage point increase in the VAT rate beginning in January 2007.<sup>13</sup>

The third-leading export market for U.S. motor vehicles is Mexico, accounting for 9 percent of U.S. exports in 2006. U.S. exports to Mexico decreased by 8 percent in 2006. In volume terms, the largest declines were in gasoline-powered pickup trucks (20,666 fewer vehicles exported in 2006, a 38 percent decline) and larger passenger vehicles, including minivans and SUVs (10,068 fewer vehicles in 2006, a 9 percent decline). The Mexican light vehicle market declined slightly—by 0.7 percent—in 2006, while as noted above, domestic production rose by 22 percent. Declining sales likely resulted from a lack of consumer confidence in the wake of political protests and interest rates that made mortgage lending attractive enough to take lenders away from vehicle purchases.<sup>14</sup>

### U.S. Imports

U.S. imports of motor vehicles continued to increase in 2006. Canada, Japan, and Mexico—the leading three sources of U.S. motor vehicle imports—accounted for 73 percent of U.S. motor vehicle imports in 2006. Imports from Canada, the leading source, increased by just \$7.3 million, or less than 1 percent.

U.S. imports from Japan rose by 24 percent to \$44.6 billion. With a continually weakening domestic motor vehicle market in Japan as a backdrop, Japanese automakers have been adding capacity and increasing exports. In 2006, Japanese automakers as a group exported more than one-half of their Japanese vehicle production. According to a U.S. industry official, the current value of the yen provides Japanese automakers a per vehicle cost advantage ranging from \$4,000 on smaller passenger cars to as much as \$10,000 on upper end luxury cars. U.S. sales of passenger vehicles imported from Japan increased by 24 percent in 2006. Toyota is the leading Japanese import brand by a large margin, with imports increasing by 37 percent to nearly 1.2 million units in 2006. Honda is a relatively distant second, with imports increasing by 17 percent to 346,652 units in 2006.

U.S. imports from Mexico grew by 27 percent to \$23.5 billion, reflecting healthy increases in Mexican motor vehicle production and exports in 2006. Total motor vehicle production in Mexico increased by nearly 22 percent to 2.0 million units, and export production increased by 28 percent to 1.6 million units. Ford reported that, despite selling fewer vehicles in Mexico in 2006, its local production grew by 137 percent to 349,910 units. Combined U.S. sales of the Ford Fusion, Mercury Milan, and Lincoln Zephyr, built in Mexico starting in mid-2005, led to a near trebling of Ford's exports from Mexico in 2006.

<sup>&</sup>lt;sup>13</sup> Just-auto.com editorial team, "Germany: 2006 Market Ended with Fireworks."

<sup>&</sup>lt;sup>14</sup> Mexico Watch, "2006 in Review." 9.

<sup>&</sup>lt;sup>15</sup> Treece, "Japan Exports to U.S. Soar," 1.

<sup>&</sup>lt;sup>16</sup> Just-auto.com editorial team, "Weak Yen Seen Damaging Competitiveness."

<sup>&</sup>lt;sup>17</sup> Calculated by Commission staff from *Automotive News*, "U.S. Light-Vehicle Sales by Nameplate," 40–41

<sup>&</sup>lt;sup>18</sup> Ward's Automotive Reports, "Ward's Mexico Production by Vehicle Line," 4.

Other popular models sold in the United States and assembled in Mexico include the Chevrolet HHR, Chrysler's PT Cruiser, and the Volkswagen Jetta.<sup>19</sup>

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<sup>&</sup>lt;sup>19</sup> Mexico Watch, "2006 in Review," 9.

TABLE TE-7 Transportation equipment : U.S. trade for industry/commodity groups and subgroups, 2002–06a

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars			
ET001	Aircraft engines and gas turbines:							
	Exports	15,498	14,742	17,706	20,771	21,631	860	4.1
	Imports	10,993	8,834	9,642	11,243	12,816	1,573	14.0
	Trade balance		5,907	8,064	9,528	8,815	-713	-7.5
ET002	Internal combustion piston engines, other than for aircraft:							
	Exports	13,069	12,741	13,444	14,969	15,930	961	6.4
	Imports	14,841	16,250	18,682	21,035	20,617	-417	-2.0
	Trade balance	-1,771	-3,509	-5,238	-6,065	-4,688	1,378	22.7
ET003	Forklift trucks and similar industrial vehicles:							
	Exports	1,090	1,028	1,324	1,760	2,172	412	23.4
	Imports	1,266	1,408	1,853	2,435	2,717	282	11.6
	Trade balance	-176	-381	-528	-675	-545	131	19.4
ET004	Construction and mining equipment:							
	Exports	9,504	9,461	11,689	15,418	18,377	2,959	19.2
	Imports	5,302	5,904	8,844	11,607	13,462	1,855	16.0
	Trade balance	4,202	3,557	2,845	3,811	4,915	1,105	29.0
ET005	Ball and rollers bearings:							
	Exports	1,249	1,320	1,494	1,638	1,841	202	12.3
	Imports	1,598	1,680	2,052	2,351	2,429	79	3.4
	Trade balance	-349	-360	-558	-712	-589	123	17.3
ET006	Primary cells and batteries and electric storage batteries:							
	Exports	1,807	1,786	1,977	2,272	2,801	530	23.3
	Imports	2,196	2,175	2,620	2,841	3,075	234	8.2
	Trade balance	-389	-389	-642	-570	-274	296	51.9
ET007	Ignition, starting, lighting, and other electrical equipment:							
	Exports	1,894	1,822	1,773	1,844	1,880	36	2.0
	Imports	3,467	3,858	4,371	4,813	5,122	309	6.4
	Trade balance	-1,574	-2,036	-2,598	-2,969	-3,242	-273	-9.2

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**TABLE TE-7** Transportation equipment: U.S. trade for industry/commodity groups and subgroups, 2002–06a—Continued

USITC						Change, 200	6 from 2005
code	Industry/commodity group 2002	2003	2004	2005	2006	Absolute	Percent
			Million	dollars ——			
ET008	Rail locomotive and rolling stock:						
	Exports	1,386	1,649	2,124	2,600	477	22.4
	Imports	1,105	1,282	1,516	1,742	226	14.9
	Trade balance33	282	368	607	858	251	41.3
ET009	Motor vehicles:						
	Exports	29,379	29,979	34,681	43,707	9,026	26.0
	Imports	134,286	142,750	146,169	159,331	13,163	9.0
	Trade balance	-104,907	-112,770	-111,488	-115,625	-4,137	-3.7
ET010	Certain motor-vehicle parts:						
	Exports	25,625	27,741	28,292	29,938	1,646	5.8
	Imports	30,897	35,045	38,908	40,556	1,648	4.2
	Trade balance	-5,272	-7,304	-10,616	-10,618	-2	(°)
ET011	Motorcycles, mopeds, and parts:						
	Exports	864	917	983	1,252	268	27.3
	Imports	3,213	3,809	4,277	4,449	172	4.0
	Trade balance2,134	-2,349	-2,891	-3,293	-3,197	96	2.9
ET012	Miscellaneous vehicles and transportation-related equipment:						
	Exports	3,187	3,803	4,997	5,583	586	11.7
	Imports	2,926	3,386	4,084	4,450	366	9.0
	Trade balance19	261	417	913	1,133	220	24.1
ET013	Aircraft, spacecraft, and related equipment:						
	Exports	37,835	40,076	47,981	64,374	16,393	34.2
	Imports	16,910	16,485	16,475	17,557	1,083	6.6
	Trade balance	20,924	23,592	31,506	46,817	15,311	48.6
ET014	Ships, tugs, pleasure boats, and similar vessels:	•	•	,	•	•	
	Exports	1,195	1,659	1,950	2,601	650	33.3
	Imports	1,932	1,888	2,350	2,146	-204	-8.7
	Trade balance	-736	-229	-400	454	854	( <sup>d</sup> )
							` '

TABLE TE-7 Transportation equipment: U.S. trade for industry/commodity groups and subgroups, 2002–06ª—Continued

USITC							Change, 2000	6 from 2005
USITC code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				— Million o	lollars ———			
ET015	Motors and engines, except internal combustion, aircraft, or electric:							
	Exports	479	578	668	837	1,124	287	34.3
	Imports	700	834	1,066	1,360	1,594	234	17.2
	Trade balance	-221	-256	-399	-523	-470	53	10.1

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes

<sup>&</sup>lt;sup>c</sup>Less than 0.05 percent.

<sup>&</sup>lt;sup>d</sup>Not meaningful for purposes of comparison.

TABLE TE-8 Transportation equipment sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06

code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
ET001	Aircraft engines and gas turbines:	0=	0.5	0=		(3)	(2)
	Number of establishments	27	25	25	22	(a)	(a)
	Employees (thousands)	95 <u>.3</u>	95.2	88.0	89.8	91.0	1.3
	Capacity utilization (percent)	75	75	70	80	80	0.0
	U.S. shipments (million dollars)	44,307	37,120	37,682	39,566	38,326	-3.1
	U.S. exports (million dollars)	15,498	14,742	17,706	20,771	21,631	4.1
	U.S. imports (million dollars)	(b)	8,834	9,642	(b)	12,816	14.0
	Apparent U.S. consumption (million dollars)	39,802	31,213	29,618	30,038	29,511	-1.8
	Trade balance (million dollars)	4,505	5,907	8,064	9,528	8,815	-7.5
	Ratio of imports to consumption (percent)	27.6	28.3	32.6	37.4 52.5	43.4	16.0
ET002	Ratio of exports to shipments (percent)	35.0	39.7	47.0	52.5	56.4	7.5
E1002	Internal combustion piston engines, other than for aircraft:						
	Number of establishments	1.450	1.450	1,450	(a)	/a\	/a\
	Employees (thousands)	1,450	150.0	150.0	145.0	151.0	4.1
	Capacity utilization (percent)	78	71	74	(a)	131.0 (a)	
	U.S. shipments (million dollars)	54.800	55.000	58.900	62.800	64,800	(ª) 3.2
	U.S. exports (million dollars)	13,069	12,741	13,444	14,969	15,930	6.4
	U.S. imports (million dollars)	(a)	16,250	18.682	(a)	20.617	-2.0
	Apparent U.S. consumption (million dollars)	56,571	58,509	64,138	68,865	69,488	0.9
	Trade balance (million dollars)	-1,771	-3,509	-5,238	-6,065	-4,688	22.7
	Ratio of imports to consumption (percent)	26.2	27.8	29.1	30.5	29.7	-2.9
	Ratio of exports to shipments (percent)	23.8	23.2	22.8	23.8	24.6	3.1
ET003	Forklift trucks and similar industrial vehicles:	_0.0	_0		_0.0		<b>5.</b>
	Number of establishments	419	419	419	419	419	0.0
	Employees (thousands)	22.0	22.0	22.0	22.0	22.0	0.0
	Capacity utilization (percent)	70	72	75	78	78	0.0
	U.S. shipments (million dollars)	5,113	5,708	6,854	8,767	9,200	4.9
	U.S. exports (million dollars)	1,090	1,028	1,324	1,760	2,172	23.4
	U.S. imports (million dollars)	(b)	1,408	1,853	(b)	2,717	11.6
	Apparent U.S. consumption (million dollars)	5,289	6,089	7,382	9,442	9,745	3.2
	Trade balance (million dollars)	-176	-381	-528	-675	-545	19.4
	Ratio of imports to consumption (percent)	23.9	23.1	25.1	25.8	27.9	8.1
	Ratio of exports to shipments (percent)	21.3	18.0	19.3	20.1	23.6	17.6
ET004	Construction and mining equipment:						
	Number of establishments	1,611	1,611	1,611	1,611	( <sup>a</sup> )	(a)
	Employees (thousands)	95.0	95.0	95.0	100.0	92.0	-8.0
	Capacity utilization (percent)	56	61	_64	70	( <sup>a</sup> )	_ ( <sup>a</sup> )
	U.S. shipments (million dollars)	23,479	25,087	31,789	37,408	18,600	-50.3
	U.S. exports (million dollars)	9,504	9,461	11,689	15,418	18,377	19.2
	U.S. imports (million dollars)	$a = \frac{\binom{0}{1}}{\binom{1}{1}}$	5,904	8,844	20 - (°)	13,462	16.0
	Apparent U.S. consumption (million dollars)	19,277	21,530	28,944	33,597	13,685	-59.3
	Trade balance (million dollars)	4,202	3,557	2,845	3,811	4,915	29.0
	Ratio of imports to consumption (percent)	27.5	27.4	30.6	34.5	98.4	184.7
	Ratio of exports to shipments (percent)	40.5	37.7	36.8	41.2	98.8	139.7

TABLE TE-8 Transportation equipment sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
ET005	Ball and rollers bearings:						
	Number of establishments	181	181	181	(a)	(a)	(a)
	Employees (thousands)	35.0	35.0	35.0	35.0	35.0	0.0
	Capacity utilization (percent)	62	71	78	(a)	(a)	
	U.S. shipments (million dollars)	5.700	5.600	6.000	6.6ÒÓ	6.8ÒÓ	(a) 3.0
	U.S. exports (million dollars)	1,249	1,320	1,494	1,638	1,841	12.3
	U.S. imports (million dollars)	(b)	1.680	2,052	(b)	2,429	3.4
	Apparent U.S. consumption (million dollars)	6,049	5,960	6,558	7,312	7,389	1.1
	Trade balance (million dollars)	-349	-360	-558	-712	-589	17.3
	Ratio of imports to consumption (percent)	26.4	28.2	31.3	32.1	32.9	2.3
	Ratio of exports to shipments (percent)	21.9	23.6	24.9	24.8	27.1	9.0
ET006	Primary cells and batteries and electric storage						
	batteries:						
	Number of establishments	165	165	165	(a)	(a)	(a)
	Employees (thousands)	28.0	28.0	27.0	28 <u>`</u> .ó	28 <u>`</u> .Ó	0.0
	Capacity utilization (percent)	75	65	67	(a)	(a)	(a)
	U.S. shipments (million dollars)	6,200	6,100	5,800	6,500	6,700	3.1
	U.S. exports (million dollars)	1,807	1,786	1,977	2,272	2,801	23.3
	U.S. imports (million dollars)	(b)	2,175	2,620	(b)	3,075	8.2
	Apparent U.S. consumption (million dollars)	6,589	6,489	6,442	7,070	6,974	-1.4
	Trade balance (million dollars)	-389	-389	-642	-570	-274	51.9
	Ratio of imports to consumption (percent)	33.3	33.5	40.7	40.2	44.1	9.7
	Ratio of exports to shipments (percent)	29.1	29.3	34.1	35.0	41.8	19.6
ET007	Ignition, starting, lighting, and other electrical						
	equipment:				(2)	(2)	(3)
	Number of establishments	670	670	670	(°)	(")	(°) -5.2
	Employees (thousands)	108.0	103.0	99.0	97.0	92.0	-5.2
	Capacity utilization (percent)	75	64	74	(°)	(*)	(ª) 3.3
	U.S. shipments (million dollars)	19,200	19,000	17,400	18,000	18,600	3.3
	U.S. exports (million dollars)	1,894	1,822	1,773	1,844	1,880	2.0
	U.S. imports (million dollars)	00 774	3,858	4,371	(5)	5,122	6.4
	Apparent U.S. consumption (million dollars)	20,774	21,036	19,998	20,969	21,842	4.2
	Trade balance (million dollars)	-1,574	-2,036	-2,598	-2,969	-3,242	-9.2
	Ratio of imports to consumption (percent)	16.7	18.3	21.9	23.0	23.5	2.2
ГТООО	Ratio of exports to shipments (percent)	9.9	9.6	10.2	10.2	10.1	-1.3
ET008	Rail locomotive and rolling stock:	100	200	200	200	/a\	/a\
	Number of establishments	199	200	200	200	26.0	4.0
	Employees (thousands)	25.0	24.0	23.0	25.0		4.0 7.6
	Capacity utilization (percent)	60 7,793	60 5,000	69 7,906	79 9,205	85 9,796	7.6 6.4
	U.S. exports (million dollars)	7,793 1,006	1,386	7,906 1,649	9,205 2,124	2,600	22.4
	U.S. imports (million dollars)	1,006 (b)	1,386	1,649	2,124 (b)	2,600 1,742	22.4 14.9
	Apparent U.S. consumption (million dollars)	7,826	4,718	7,538	8,598	8,938	4.0
	Trade balance (million dollars)	-33	4,716 282	7,536 368	607	0,930 858	41.3
	Ratio of imports to consumption (percent)	-33 13.3	202 23.4	17.0	17.6	19.5	10.5
	Ratio of imports to consumption (percent)	12.9	23. <del>4</del> 27.7	20.9	23.1	26.5	15.1
	region of exholis in stilbilieties (hercetti)	12.9	21.1	20.9	23.1	20.3	15.1

TABLE TE-8 Transportation equipment sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
ET009	Motor vehicles:						
	Number of establishments	1,312	1,307	1,305	1,303	1,305	0.2
	Employees (thousands)	281.0	273.0	281.0	272.0	264.0	-2.9
	Capacity utilization (percent)	89	84	89	92	88	-4.3
	U.S. shipments (million dollars)	254,347	278,200	277,681	276,505	260,191	-5.9
	U.S. exports (million dollars)	26,209	29,379	29,979	34,681	43,707	26.0
	U.S. imports (million dollars)	361.401	134,286	142,750 390.451	387,993	159,331	9.0 -3.1
	Apparent U.S. consumption (million dollars)  Trade balance (million dollars)	-107,054	383,107 -104,907	-112,770	-111,488	375,816 -115,625	-3.7
	Ratio of imports to consumption (percent)	36.9	35.1	36.6	37.7	42.4	12.5
	Ratio of exports to shipments (percent)	10.3	10.6	10.8	12.5	16.8	33.9
ET010	Certain motor-vehicle parts:	10.0	10.0	10.0	12.0	10.0	00.0
	Number of establishments	3,125	3,125	3,125	(a)	(a)	(a)
	Employees (thousands)	525.0	525.0	520.0	500Ì.Ó	491 <u>`</u> .ó	-1`.8
	Capacity utilization (percent)	80	73	74	(a)	(a)	( <sup>a</sup> ) 3.1
	U.S. shipments (million dollars)	122,200	121,800	124,400	129,000	133,000	3.1
	U.S. exports (million dollars)	26,651	25,625	27,741	28,292	29,938	5.8
	U.S. imports (million dollars)	(b)	30,897	35,045	(°)	40,556	4.2
	Apparent U.S. consumption (million dollars)	123,310	127,072	131,704	139,616	143,618	2.9
	Trade balance (million dollars)	-1,110 22.5	-5,272 24.3	-7,304 26.6	-10,616 27.9	-10,618 28.2	(³) 1.3
	Ratio of imports to consumption (percent)	21.8	21.0	22.3	21.9	22.5	2.6
ET011	Motorcycles, mopeds, and parts:	21.0	21.0	22.5	21.9	22.5	2.0
LIOII	Number of establishments	60	65	70	75	80	6.7
	Employees (thousands)	12.0	12.0	12.0	13.0	13.0	0.0
	Capacity utilization (percent)	85	85	85	85	85	0.0
	U.S. shipments (million dollars)	5,500	6,100	6,800	7,500	8,200	9.3
	U.S. exports (million dollars)	793	864	917	983	1,252	27.3
	U.S. imports (million dollars)	_ (2)	3,213	3,809	(b)	4,449	4.0
	Apparent U.S. consumption (million dollars)	7,634	8,449	9,691	10,793	11,397	5.6
	Trade balance (million dollars)	-2,134	-2,349	-2,891	-3,293	-3,197	2.9
	Ratio of imports to consumption (percent)	38.3	38.0	39.3	39.6	39.0	-1.5 16.4
ET012	Ratio of exports to shipments (percent)	14.4	14.2	13.5	13.1	15.3	10.4
E1012	equipment:						
	Number of establishments	1,676	1,665	1,670	1,670	1,672	0.1
	Employees (thousands)	90.0	90.0	99.0	106.0	110.0	3.8
	Capacity utilization (percent)	64	65	68	68	68	0.0
	U.S. shipments (million dollars)	19,120	20,010	23,969	27,557	28,000	1.6
	U.S. exports (million dollars)	2,725	3,187	3,803	4,997	5,583	11.7
	U.S. imports (million dollars)	(b)	2,926	3,386	(b)	4,450	9.0
	Apparent U.S. consumption (million dollars)	19,139	19,749	23,552	26,644	26,867	0.8
	Trade balance (million dollars)	-19	261	417	913	1,133	24.1
	Ratio of imports to consumption (percent)	14.3	14.8	14.4	15.3	16.6	8.1
	Ratio of exports to shipments (percent)	14.3	15.9	15.9	18.1	19.9	10.0

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TABLE TE-8 Transportation equipment sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
ET013	Aircraft, spacecraft, and related equipment:						
	Number of establishments	210	200	190	210	(a)	(a)
	Employees (thousands)	324.9	325.5	323.9	328.1	342.1	4.3
	Capacity utilization (percent)	55	52	65	68	70	2.9
	U.S. shipments (million dollars)	53,338	43,365	50,503	80,475	103,600	28.7
	U.S. exports (million dollars)	41,447	37,835	40,076	47,981	64,374	34.2
	U.S. imports (million dollars) Apparent U.S. consumption (million dollars)	(b)	16,910	16,485	(b)	17,557	6.6
	Apparent U.S. consumption (million dollars)	29,527	22,441	26,911	48,969	56,783	16.0
	Trade balance (million dollars)	23,811	20,924	23,592	31,506	46,817	48.6
	Ratio of imports to consumption (percent)	59.7	75.4	61.3	33.6	30.9	-8.1
	Ratio of exports to shipments (percent)	77.7	87.2	79.4	59.6	62.1	4.2
ET014	Ships, tugs, pleasure boats, and similar vessels:		_			_	
_	Number of establishments	1,600	1,600	1,640	1,685	(a)	(a)
	Employees (thousands)	113.0	115.0	144.2	140.6	138 <u>`</u> .ó	-1`.8
	Capacity utilization (percent)	57	60	71	72	70	-2.8
	U.S. shipments (million dollars)	14,100	14,300	24,004	25,516	24,000	-5.9
	U.S. exports (million dollars)	1,234	1,195	1,659	1,950	2,601	33.3
	U.S. imports (million dollars)	(b)	1,932	1,888	(b)	2,146	-8.7
	Apparent U.S. consumption (million dollars)	14,279	15,036	24,233	25,916	23,546	-9.1
	Trade balance (million dollars)	-179	-736	-229	-400	454	( <sup>4</sup> )
	Ratio of imports to consumption (percent)	9.9	12.8	7.8	9.1	9.1	0.5
	Ratio of exports to shipments (percent)	8.8	8.4	6.9	7.6	10.8	41.8
ET015	Motors and engines, except internal combustion,						
	aircraft, or electric:						
	Number of establishments	335	335	335	( <sup>a</sup> )	(a)	(a)
	Employees (thousands)	40.0	40.0	40.0	( <sup>a</sup> )	(a)	(a)
	Capacity utilization (percent)	70	(a)	(a)	(a)	(a)	(a)
	U.S. shipments (million dollars)	6,600	6,4ÒÓ	6,5ÒÓ	6,5ÒÓ	6,7ÒÓ	3.1
	U.S. exports (million dollars)	479	578	668	837	1.124	34.3
	U.S. imports (million dollars)	( <sup>b</sup> )	834	1,066	(b)	1,594	17.2
	Apparent U.S. consumption (million dollars)	6,821	6,656	6,899	7,023	7,170	2.1
	Trade balance (million dollars)	-221	-256	-399	-523	-470	10.1
	Ratio of imports to consumption (percent)	10.3	12.5	15.5	19.4	22.2	14.8
	Ratio of exports to shipments (percent)	7.3	9.0	10.3	12.9	16.8	30.3

Source: These data have been estimated by the Commission's international trade analysts on the basis of primary and secondary data sources including discussions with various Government and industry contacts. These estimated data are subject to change either from secondary sources or from detailed surveys the Commission often conducts in the course of statutory investigations or other work. Further, these data may undergo adjustments based on revisions in tariff nomenclature, classification practices, or redefinitions of industry classes.

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Not available.

<sup>&</sup>lt;sup>b</sup>Less than 500,000.

<sup>&</sup>lt;sup>c</sup>Less than 0.05 percent.

<sup>&</sup>lt;sup>d</sup>Not meaningful.

# **Electronic Products**

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Change in 2006 from 2005:

U.S. trade deficit: Increased by \$13.0 billion (9 percent) to \$162.8 billion U.S. exports: Increased by \$13.8 billion (9 percent) to \$169.2 billion U.S. imports: Increased by \$26.8 billion (9 percent) to \$332.1 billion

For the fifth consecutive year, the U.S. merchandise trade deficit in electronic products increased in 2006 (table ET-1). The trade deficit increased by \$13.0 billion (9 percent), primarily because of a surge in U.S. imports of computers, peripherals, and parts (\$8.5 billion); television receivers and video monitors (\$5.9 billion); and telephone and telegraph apparatus (\$4.1 billion). Declining prices and continued strong domestic demand for computer products, especially portable products such as laptop PCs, drove the rise in U.S. imports of computers, peripherals, and parts. Increased consumer demand for flat-panel display color television receivers and video monitors fueled the increase in U.S. imports of television receivers and video monitors. Finally, the increase in U.S. imports of telephone and telegraph apparatus was prompted mainly by significant growth in the U.S. telecommunications services market.

U.S. exports of electronic products increased in 2006 by \$13.8 billion (9 percent) to \$169.2 billion (table ET-1). Leading U.S. export sectors were semiconductors and integrated circuits (\$3.0 billion); medical goods (\$2.3 billion); and measuring, testing, and controlling instruments (\$2.3 billion) (table ET-1). Healthy global economic conditions, which created strong demand from foreign electronic systems producers, contributed to increased U.S. semiconductor exports.<sup>4</sup> Increases in U.S. medical goods exports were driven mainly by demand for the latest U.S. innovations in cardiovascular and orthopedic products from the EU.<sup>5</sup> The expansion of U.S. exports of measuring, testing, and controlling instruments benefitted from strong growth in leading country destinations, namely Canada, China, Germany, Japan, and Mexico (table ET-10).<sup>6</sup>

<sup>&</sup>lt;sup>1</sup> IDC, "Portable PC Adoption and Emerging Markets."

<sup>&</sup>lt;sup>2</sup> Wolk, "For TV Retailers."

<sup>&</sup>lt;sup>3</sup> TIA, "TIA Report: Broadband Demand."

<sup>&</sup>lt;sup>4</sup> SIA, "Global Chip Sales."

<sup>&</sup>lt;sup>5</sup> Diller and Gold, 16–19.

<sup>&</sup>lt;sup>6</sup> OECD, "Country Summaries."

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**TABLE ET-1** Electronic products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	4,855 5,934 6,902 7,951 11,111 3,160 18,965 16,414 17,383 16,609 18,333 1,724 11,810 11,348 11,231 10,963 11,534 571 5,997 7,290 6,546 6,314 6,960 645 17,025 16,637 17,559 18,894 18,336 548 5,961 5,555 5,624 5,463 5,911 448 6,380 7,085 7,388 7,896 8,421 524 7,639 7,633 7,526 7,944 9,111 1,167 4,600 4,992 6,004 6,039 6,035 -4 7,432 7,065 8,112 7,509 7,492 -17 4,9764 50,887 55,175 59,825 66,005 6,181 140,428 140,838 149,450 155,408 169,248 13,840 34,805 34,703 36,641 37,681 40,178 2,497 35,672 35,604 37,600 38,807 41,546 2,739 1,981 1,888 2,957 3,752 4,652 900 27,705 24,648 26,798 27,548 31,745 4,197 2,883 3,098 3,101 3,433 4,347 914 51,835 55,638 57,832 59,412 65,098 5,686 36 637 47,150 69,153 86,716 103,117 16,401 35,029 34,560 38,945 40,160 47,044 6,884 30,745 29,177 8,78 878 1,008 1,232 223 m Europe 823 942 996 1,192 1,424 232 shandise for consumption: 36,270 47,150 69,153 86,716 103,117 16,401 35,029 34,560 38,945 40,160 47,044 6,884 30,745 29,177 32,020 31,510 30,835 -675 19,501 10,605 9,788 10,960 12,457 11,930 -526 10,606 9,768 10,960 12,457 11,930 -526 10,669 10,669 10,066 10,477 9,853 10,296 443 4,597 4,795 5,117 5,411 5,530 119 42,530 43,030 45,846 50,043 50,329 287	Percent					
			— Million dolla	ars ———			
U.S. exports of domestic merchandise: China Mexico Japan Malaysia Canada Taiwan Korea	18,965 11,810 5,997 17,025 5,961 6,380	16,414 11,348 7,290 16,637 5,555 7,085	17,383 11,231 6,546 17,559 5,624 7,388	16,609 10,963 6,314 18,894 5,463 7,896	18,333 11,534 6,960 18,336 5,911 8,421	1,724 571 645 -558 448 524	39.7 10.4 5.2 10.2 -3.0 8.2 6.6
Singapore United Kingdom All other	4,600 7,432 49,764	4,992 7,065 50,887	6,004 8,112 55,175	6,039 7,509 59,825	6,035 7,492 66,005	-4 -17 6,181	14.7 -0.1 -0.2 10.3
Total	-, -	140,838	149,450	155,408	169,248	13,840	8.9
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	35,672 1,981 27,705 2,883 51,835 637	35,604 1,888 24,648 3,098 55,638 778	37,600 2,957 26,798 3,101 57,832 878	38,807 3,752 27,548 3,433 59,412 1,008	41,546 4,652 31,745 4,347 65,098 1,232	2,739 900 4,197 914 5,686 223	6.6 7.1 24.0 15.2 26.6 22.2 19.5
U.S. imports of merchandise for consumption: China Mexico Japan Malaysia Canada Taiwan Korea Germany Singapore United Kingdom All other	35,029 30,745 19,501 10,605 16,594 15,411 7,295 10,669 4,597	34,560 29,177 20,695 9,768 15,654 15,955 7,983 10,066 4,795	38,945 32,020 22,273 10,960 16,418 19,699 9,039 10,477 5,317	40,160 31,510 27,554 12,457 16,221 15,381 9,963 9,853 5,411	47,044 30,835 29,401 11,930 18,332 14,331 10,296 5,530	6,884 -675 1,846 -526 2,112 -1,050 956 443 119	18.9 17.1 -2.1 6.7 -4.2 13.0 -6.8 9.6 4.5 2
Total	229,245	238,833	280,146	305,268	332,065	26,797	8.8
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	27,220 28,655 2,093 38,299 1,732 145,645 50 1,207	28,986 30,656 1,761 38,105 2,164 153,491 66 1,425	31,986 34,063 2,067 41,742 2,068 185,897 71 1,783	33,750 36,087 2,233 43,528 2,306 205,118 76 2,136	34,036 36,279 1,758 50,217 2,319 224,669 85 2,056	286 192 -474 6,689 13 19,551 9 -80	0.8 0.5 -21.2 15.4 0.6 9.5 12.0 -3.7

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**TABLE ET-1** Electronic products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—continued

						Change, 200	6 from 2005
Item	2002	2003	2004	2005 2006	Absolu	te	Percent
-			— Million dol	llars ———			
U.S. merchandise trade balance:     China     Mexico     Japan     Malaysia     Canada     Taiwan     Korea     Germany     Singapore     United Kingdom     All other     Total	-31,414 -16,064 -18,935 -13,504 6,420 -10,633 -9,031 345 -6,069 2,835 7,235 -88,817	-41,216 -18,146 -17,829 -13,409 -10,099 -8,869 -350 -5,075 -2,270 -7,856	-62,251 -21,562 -20,789 -15,728 6,600 -10,794 -12,311 -1,513 -4,473 -2,795 9,330	-78,764 -23,550 -20,547 -21,240 6,437 -10,758 -7,484 -2,019 -3,814 2,098 9,782	-92,006 -28,711 -19,301 -22,441 -6,405 -12,422 -5,910 -1,808 -4,261 1,962 15,676	-13,242 -5,161 1,246 -1,201 -31 -1,664 1,575 211 -447 -136 5,894	-16.8 -21.9 6.1 -5.7 -0.5 -15.5 21.0 10.4 -11.7 -6.5 60.3
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	7,585 7,016 -111 -10,594 1,151 -93,811 -587 -383	5,718 4,948 127 -13,457 -97,852 -97,852 -483	4,655 3,538 891 -14,945 1,033 -128,065 807 -788	3,931 2,720 1,519 -15,980 1,127 -145,707 932 -944	6,142 5,267 2,893 -18,472 2,028 -159,571 1,146 -632	2,211 2,547 1,374 -2,492 900 -13,865 214 312	56.3 93.6 90.4 -15.6 79.9 -9.5 23.0 33.0

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

China, Mexico, and Japan were the leading sources of electronics imports in 2006, accounting for 55 percent of total U.S. imports. China accounted for the largest single country import increase in both absolute (\$16.4 billion) and percentage terms (19 percent), attributable to China's role as a leading producer and exporter of electronic products. Electronic sectors which experienced the largest increases in U.S. imports from China were computers, peripherals, and parts (\$6.3 billion); telephone and telegraph apparatus (\$3.7 billion); and television receivers and video monitors (\$2.7 billion). Over the past five years, U.S. imports from China have grown faster than imports from any other source, increasing China's proportion of total U.S. imports from 16 percent in 2002 to 31 percent in 2006. Electronic sectors that registered the largest increases in U.S. imports from Mexico were television receivers and video monitors (\$4.4 billion), telephone and telegraph apparatus (\$1.5 billion), and medical goods (\$437 million). The largest increases in U.S. imports from Japan were semiconductors and integrated circuits (\$475 million); computers, peripherals, and parts (\$145 million); and measuring, testing, and controlling instruments (\$91 million).

Canada, Mexico, Japan, and China were the electronics sector's leading export markets in 2006, accounting for 35 percent of total U.S. exports. China accounted for the largest single country export increase in both absolute (\$3.2 billion) and percentage terms (40 percent). This was due mainly to an increase in U.S. semiconductor exports. Global semiconductor sales in 2006 increased by 8.9 percent, and China is the world's largest semiconductor market.<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> SIA, "Global Chip Sales."

TABLE ET-2 Leading changes in U.S. exports and imports of electronic products, 2002–06a

						Change, 200	6 from 2005
Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
			Million o	dollars			
U.S. EXPORTS:							
Increases:							
Semiconductors and integrated circuits (ET033)	31,738	35,712	35,130	34,195	37,227	3,031	8.9
Medical goods (ET040)	15,059	16,827	18,433	20,970	23,311	2,341	11.2
Measuring, testing, and controlling							
instruments (ET043)	14,346	14,683	16,603	17,399	19,669	2,270	13.0
Computers, peripherals, and parts (ET035)	29,534	28,038	27,350	28,862	29,969	1,106	3.8
Telephone and telegraph apparatus (ET017)	12,952	10,946	13,958	14,183	14,779	597	4.2
Decreases:	,	,	•	·	ŕ		
Cathode-ray tubes (ET031)	1,762	1,202	998	600	292	-308	-51.3
Prerecorded media (ET020)	3,069	3,010	3,124	3,422	3,399	-23	-0.7
All other	31,969	30,421	33,852	35,777	40,603	4,826	13.5
TOTAL	140,428	140,838	149,450	155,408	169,248	13,840	8.9
U.S. IMPORTS:							
Increases:							
Computers, peripherals, and parts (ET035)	75.817	76.940	89.264	93,950	102.468	8,518	9.1
Television receivers and video monitors (ET022)	10.586	12.654	17.509	22,712	28.628	5,917	26.1
Telephone and telegraph apparatus (ET017)	27,948	30,982	39,341	49,220	53,318	4,098	8.3
Medical goods (ET040)	13,232	16,143	19,006	20,548	22,152	1,604	7.8
Decreases:	13,232	10,143	19,000	20,340	22,132	1,004	7.0
Radio and television broadcasting							
equipment (ET023)	4,977	4,120	4,309	3.830	3,527	-304	-7.9
Photographic cameras and equipment (ET039)	3,029	2,715	2,382	1.880	3,527 1,612	-30 <del>4</del> -268	-14.2
				,		-206 -236	-14.2 -15.7
Prerecorded media (ET020)	1,308	1,436	1,503	1,499	1,263		-
All other	92,348	93,843	106,831	111,630	119,098	7,468	6.7
TOTAL	229,245	238,833	280,146	305,268	332,065	26,797	8.8

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

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# **Telephone and Telegraph Apparatus**<sup>8</sup>

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$3.5 billion (10 percent) to \$38.5 billion U.S. exports: Increased by \$597 million (4 percent) to \$14.8 billion U.S. imports: Increased by \$4.1 billion (8 percent) to \$53.3 billion

The U.S. trade deficit in telephone and telegraph apparatus increased for the fifth consecutive year (table ET-3). U.S. imports continued to outpace exports, increasing by 8 percent in 2006, approximately double the rate of growth for U.S. exports. Import growth was largely driven by increased U.S. demand for a range of sector products and the growth of telecommunications manufacturing in China, Malaysia, and other Asian economies.

Increased demand was reflected in U.S. sales of products such as cellular telephones and other wireless devices, telecommunications network equipment, and Wi-Fi and Wi-Max equipment, which grew by 11 percent in 2006. U.S. telecommunications service providers, the principal customers for sector equipment, continued to invest in sector apparatus to increase their data carrying capacity in order to accommodate new subscribers and applications. Wireless service providers (e.g., AT&T/Cingular and Verizon Wireless) continued to add capacity to allow new applications for cellular telephones such as high-speed Internet access, while the network expansion of wireline providers (e.g., Bell South and Qwest) allowed them to offer bundled services consisting of telephone service, cable TV, and high-speed Internet. Of the contract of the providers (e.g., Cable TV, and high-speed Internet.

Manufacturers of sector products continue to expand their Asian operations, especially in countries with relatively low labor costs such as China and Malaysia. This expansion has been enhanced by the increasing reliance by U.S. firms on contract manufacturers such as Flextronics and Solectron, which manufacture a large share of their products in Asia.<sup>11</sup>

### U.S. Exports

U.S. exports of telephone and telegraph apparatus increased by \$597 million (4 percent) to \$14.8 billion (table ET-3). Leading U.S. exports consisted largely of parts, transmission and reception apparatus for telecommunications networks, and cellular telephones. The largest markets for U.S. exports were Mexico, the Netherlands, and Canada, which collectively accounted for 32 percent of the total in 2006. U.S. sector exports to Mexico increased by 34 percent in 2006 as Telmex spent \$1.4 billion to upgrade its telecommunications infrastructure. U.S. sector exports to the Netherlands, on the other hand, decreased by 18 percent, reflecting the slow and diminished growth of many segments of the European

<sup>&</sup>lt;sup>8</sup> This industry/commodity group includes both wireless and wired telecommunications equipment such as cellular telephones, facsimile machines, switches, and modems.

<sup>&</sup>lt;sup>9</sup> TIA, 2007 Telecommunications Market Review and Forecast, 10.

<sup>&</sup>lt;sup>10</sup> Standard and Poor's, *Industry Surveys: Telecommunications: Wireless*, 15; and Standard and Poor's, *Industry Surveys: Telecommunications: Wireline*, 4.

<sup>&</sup>lt;sup>11</sup> See, for example, 2006 Form 10-K filings for Motorola, Inc, Nortel Networks Corporation, Flextronics. International, Ltd., and Solectron Corporation.

<sup>&</sup>lt;sup>12</sup> TIA, 2007 Telecommunications Market Review and Forecast, 273.

market, which has the highest cellular telephone penetration rate in the world. <sup>13</sup> U.S. sector exports to Canada declined by 9 percent.

### U.S. Imports

U.S. imports of telephone and telegraph apparatus increased by approximately \$4.1 billion (8 percent) in 2006, to \$53.3 billion. The largest import sources were China, Malaysia, Mexico, and Korea. U.S. sector imports from China and Mexico each increased by approximately 26 percent in 2006, reaching \$18.1 billion and \$7.1 billion, respectively, while imports from Malaysia increased by a more modest 5 percent to reach \$7.9 billion, and U.S. imports from Korea decreased by 11 percent to \$5.7 billion.

The leading U.S. imports in 2006 included cellular telephones and other wireless devices, printed circuit assemblies and other parts used in the sector (parts), cordless telephone sets, and modems. In 2006, U.S. imports of cellular telephones and other wireless devices increased by 10 percent to \$21.7 million; parts increased by 9 percent to \$12.0 billion; cordless telephone sets decreased by 3 percent to \$1.4 billion; and modems decreased by 19 percent to \$655 million.

China, the principal U.S. supplier of cellular telephones, now accounts for more than one-half of U.S. imports of these products, whereas its import share was only 15 percent in 2002. U.S. imports of cellular telephones from China increased by 30 percent in 2006, while imports from Korea, the second largest U.S. supplier, and Mexico, the fourth largest, declined by 13 percent and 21 percent, respectively. The leading U.S. import sources of sector parts in 2006 (in descending order) were Malaysia, Mexico, China, and Canada, collectively accounting for nearly three-quarters of the total. U.S. parts imports from the three leading sources increased by 11 to 25 percent, while imports from Canada remained flat.

U.S. imports of cordless telephone sets decreased slightly (3 percent) in 2006, reflecting the relatively flat demand for the mature technology associated with the product. The Philippines increased its share of U.S. imports at the expense of China, as Japanese electronics manufacturer Uniden Electronics relocated its cordless manufacturing facility from China to the Philippines. <sup>14</sup> U.S. imports from China decreased by 7 percent, while imports from the Philippines increased by 406 percent, albeit from a much smaller base, and imports from Malaysia increased 18 percent. U.S. modem imports decreased by 19 percent in 2006. China was by far the largest source, accounting for 72 percent of the total. U.S. modem imports from China increased by 11 percent in 2006, while imports from the next largest suppliers—Mexico, Malaysia, and Taiwan—decreased significantly.

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<sup>&</sup>lt;sup>13</sup> TIA, 2007 Telecommunications Market Review and Forecast, 231.

<sup>&</sup>lt;sup>14</sup> Manila Standard Today, Japan's Uniden Leaving China, Sets RP Comeback.

**TABLE ET-3** Telephone and telegraph apparatus (ET017): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
_			— Million dolla	ars ———			
U.S. exports of domestic merchandise: China Mexico Malaysia Korea Canada Japan Taiwan Thailand Netherlands United Kingdom	756 1,328 233 404 1,571 971 247 89 911 707	545 1,229 138 373 1,416 858 211 78 710 665	616 1,573 151 460 1,506 1,135 338 102 1,256	645 1,459 119 397 1,440 895 205 248 1,734	747 1,949 230 324 1,309 770 153 120 1,430 851	102 489 111 -73 -131 -125 -52 -128 -304 100	15.8 33.5 93.3 -18.4 -9.1 -13.9 -25.4 -17.5 13.3
All other	5,735 12,952	4,721 10,946	5,948 13,958	6,290 14,183	6,898 14,779	607 597	9.7 4.2
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	3,165 3,302 496 3,038 541 3,682 119 165	2,622 2,736 380 2,770 568 3,027 169 128	3,388 3,519 734 3,652 562 3,966 213 162	3,849 4,018 864 3,477 606 3,788 245 206	3,726 3,885 1,155 4,305 715 3,583 328 184	-123 -134 291 828 109 -205 83 -22	-3.2 -3.3 33.7 23.8 18.0 -5.4 33.9 -10.7
U.S. imports of merchandise for consumption: China Mexico Malaysia Korea Canada Japan Taiwan Thailand Netherlands United Kingdom All other	4,659 4,210 2,326 4,556 2,975 1,815 761 340 13 281 6,012	5,932 4,664 3,495 5,936 2,470 1,477 810 711 30 325 5,132	9,556 5,913 3,778 8,668 2,713 1,588 833 1,450 32 304 4,506	14,410 5,645 7,512 6,435 3,275 1,851 1,282 2,657 14 352 5,787	18,083 7,123 7,871 5,742 3,335 1,719 2,322 2,042 16 394 4,669	3,673 1,477 359 -693 60 -132 1,040 -615 3 43	25.5 26.2 4.8 -10.8 -7.1 81.1 -23.1 18.5 12.1 -19.3
Total	27,948	30,982	39,341	49,220	53,318	4,098	8.3
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	3,642 3,667 40 5,304 27 15,313 6 30	2,894 2,950 31 5,704 59 19,195 10 52	2,366 2,549 44 6,392 107 26,978 6 180	2,968 3,327 93 6,505 103 35,290 5 363	2,127 2,354 80 7,739 76 39,013 8 230	-841 -972 -14 1,234 -27 3,723 3 -133	-28.3 -29.2 -14.7 19.0 -26.2 10.6 73.5 -36.7

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**TABLE ET-3** Telephone and telegraph apparatus (ET017): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—continued

						Change, 2006	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			— Million dolla	ars ———			
U.S. merchandise trade balance:							
China Mexico Malaysia Korea Canada Japan Taiwan Thailand Netherlands United Kingdom All other	-3,903 -2,882 -2,092 -4,152 -1,404 -844 -250 897 426 -277	-5,387 -3,436 -3,357 -5,563 -1,054 -619 -633 680 341 -411	-8,940 -4,339 -3,628 -8,208 -1,208 -453 -495 -1,348 1,224 568 1,443	-13,765 -4,186 -7,393 -6,039 -1,835 -956 -1,077 -2,409 1,720 399 504	-17,336 -5,174 -7,641 -5,419 -2,026 -949 -2,169 -1,922 1,414 456 2,228	-3,571 -988 -248 620 -192 7 -1,092 487 -306 58 1,725	-25.9 -23.6 -3.4 10.3 -10.4 0.7 -101.3 20.2 -17.8 14.5
Total	-14,996	-20,037	-25,382	-35,038	-38,539	-3,501	-10.0
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-477 -365 455 -2,265 -514 -11,632 112 135	-272 -214 349 -2,934 510 -16,168 160 76	1,021 969 690 -2,740 454 -23,011 208 -17	881 692 770 -3,028 503 -31,502 241 -157	1,599 1,531 1,075 -3,434 639 -35,431 320 -46	718 839 305 -406 136 -3,928 80 111	81.4 121.2 39.6 -13.4 27.0 -12.5 33.1 70.7

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

### Television Receivers and Video Monitors<sup>15</sup>

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$5.7 billion (26 percent) to \$27.5 billion U.S. exports: Increased by \$244 million (29 percent) to \$1.1 billion U.S. imports: Increased by \$5.9 billion (26 percent) to \$28.6 billion

Imports of television receivers and video monitors grew in 2006 as a result of increased consumer demand for flat-panel display color television receivers (CTVs) and video monitors. Demand for new television receivers is increasing as the United States moves toward the cessation of analog broadcasting on February 17, 2009, after which any television receiver must have a digital tuner in order to receive terrestrial broadcasts. Also, as the cost of flat-panel displays has decreased significantly in the last several years, consumer demand has switched from picture tube-based CTVs to CTVs with flat-panel displays.

Mexico and China continued as the largest suppliers to the United States of sector imports, accounting for \$22.2 billion (78 percent) of imports in 2006, compared to \$15.2 billion (67 percent) in 2005 (see table ET-4).

The largest export markets for the United States are Mexico and Canada, which combined account for 53 percent of U.S. exports. Almost 90 percent of U.S. exports to Mexico were of printed circuit boards and other parts for assembly into CTVs and video monitors intended for subsequent export to the United States. Virtually all exports to Canada were transshipments of finished goods produced elsewhere that have been incorrectly reported as domestic exports.

<sup>&</sup>lt;sup>15</sup> This industry/commodity group includes television receivers and video monitors (not computer monitors), set top boxes with a communications function and integral tuners, and parts of the foregoing. Set top boxes with a communications function but without an integral tuner are not included in this digest.

<sup>&</sup>lt;sup>16</sup> The Federal Communications Commission has mandated that all color television receivers sold in the United States on or after March 1, 2007, must contain a digital tuner. A separate digital-to-analog converter can be used to allow the continued use of CTVs with analog tuners.

**TABLE ET-4** Television receivers and video monitors (ET022): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			<ul><li>Million dolla</li></ul>	nrs ———			
U.S. exports of domestic merchandise:  Mexico China Japan Taiwan Thailand Malaysia Korea Canada India Belgium All other	406 22 19 16 2 9 12 452 3 27 290	171 31 17 11 3 8 15 296 5 5	191 40 21 10 3 6 39 291 4 3 265	211 44 20 10 1 3 25 260 5 3 274	296 66 25 11 3 4 34 283 6 3 369	85 22 5 1 1 9 23 1 ( <sup>2</sup> ) 95	40.5 50.7 24.2 13.5 100.2 28.3 37.1 9.0 14.2 -12.3 34.8
Total	1,257	809	874	857	1,101	244	28.5
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	129 133 15 526 43 108 2 5	111 113 11 253 39 122 2 3	105 107 24 292 36 156 4	100 105 32 330 42 133 3 6	156 158 39 435 42 194 8	56 54 7 105 61 5 -3	56.2 51.3 21.4 31.8 1.8 45.5 180.4 -47.3
U.S. imports of merchandise for consumption:  Mexico China Japan Taiwan Thailand Malaysia Korea Canada India Belgium All other	5,165 849 1,678 226 732 1,295 353 13 1 65 208	5,532 1,490 2,229 526 682 1,019 816 14 1 74 270	7,743 2,438 2,987 1,140 928 863 1,054 8 27 70 250	10,029 5,130 2,605 1,699 1,015 955 809 35 84 90 260	14,386 7,836 1,781 1,780 1,153 655 468 96 162 93 219	4,357 2,706 -824 81 138 -300 -341 61 78 2	43.4 52.8 -31.6 4.7 13.6 -31.4 -42.2 172.4 93.3 2.4 -15.8
Total	10,586	12,654	17,509	22,712	28,628	5,917	26.1
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	117 119 106 5,172 3 5,270 (b)	148 149 89 5,546 2 6,912 2	154 154 59 7,769 7 9,554 3	148 149 123 10,044 4 12,462 (°)	161 163 44 14,393 7 13,953 1 2	13 13 -80 4,349 3 1,491	8.6 8.9 -64.5 43.3 90.0 12.0 784.8 47.3

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**TABLE ET-4** Television receivers and video monitors (ET022): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>—continued

						Change, 2006	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
U.S. merchandise trade balance: Mexico China Japan Taiwan Thailand Malaysia Korea Canada India Belgium All other	-4,760 -828 -1,660 -210 -730 -1,286 -341 439 2 -38 82	-5,362 -1,459 -2,212 -515 -679 -1,011 -801 282 4 -69 -25	-7,552 -2,398 -2,966 -1,130 -925 -856 -1,015 284 -24 -67	-9,818 -5,086 -2,585 -1,689 -1,013 -952 -784 225 -79 -87	-14,090 -7,770 -1,756 -1,756 -1,150 -651 -434 187 -156 -90 150	-4,271 -2,684 829 -79 -137 301 350 -38 -78 -3 136	-43.5 -52.8 32.1 -4.7 -13.5 31.6 44.7 -16.7 -98.6 -3.0 1,005.4
Total	-9,329	-11,845	-16,636	-21,854	-27,527	-5,673	-26.0
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	12 14 -91 -4,646 40 -5,162 2 3	-37 -35 -78 -5,293 37 -6,790 1 -18	-49 -47 -35 -7,477 29 -9,398 1 -4	-48 -45 -91 -9,714 38 -12,329 3 5	-5 -4 -5 -13,958 -13,759 -13,759 6	43 40 86 -4,244 -3 -1,430 4 -3	89.6 90.3 95.0 -43.7 -6.6 -11.6 144.1 -70.7

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Less than \$500,000.

#### U.S. Imports

In 2006, U.S. consumer demand for CTVs continued shifting away from tube-based CTVs to flat-panel display CTVs and monitors. <sup>17</sup> At the same time, direct-view tube-based CTV sales declined to \$2.7 billion in 2006, a 34 percent reduction from \$4.0 billion in 2005. U.S. production of flat-panel CTVs and monitors is small, and most demand is supplied by imports (table ET-5).

Imports from Mexico and China continued to increase in 2006, and they accounted for 78 percent of the value of group imports. Mexico supplied 70 percent of U.S. imports of flat-panel CTVs and China 19 percent. Imports from Japan, the third-largest supplier of flat-panel CTVs, declined from 9 percent to only 2 percent of total imports. An antidumping finding in April 2005 led to the imposition of antidumping duties ranging from 9.69 percent to 78.45 percent on imports from China of tube-based, direct-view CTVs with screen size greater than 35.56cm (14 inches); imports of such CTVs from China fell by 45 percent between 2005 and 2006.

TABLE ET-5 Changes in U.S. imports of television receivers and video monitors, 2002-06

						Change, 2006	from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			ті	illion dollars		_	
Flat-panel TV receivers	461	1,296	3,651	7,467	14,106	6,639	88.9
Flat-panel video monitors CRT-based direct-view color TV	730	1,500	2,296	3,389	4,172	783	23.1
receivers	5,631	4,988	4,378	4,031	2,669	-1,363	-33.8
Other	3,763	4,870	7,184	7,825	7,681	-143	-1.8
Total	10,586	12,654	17,509	22,712	28,628	5,917	26.0

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.—Calculations based on unbounded data.

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<sup>&</sup>lt;sup>17</sup> CEA, "CEA Forecasts Consumer Electronics Revenue Will Surpass \$155 Billion in 2007".

<sup>&</sup>lt;sup>18</sup> Federal Register, May 19, 2005 (Volume 69, Number 97), 28879–28880.

# **Computers, Peripherals, and Parts**

Change in 2006 from 2005:

U.S. trade deficit: Increased by \$7.4 billion (11 percent) to \$72.5 billion U.S. exports: Increased by \$1.1 billion (4 percent) to \$30.0 billion U.S. imports: Increased by \$8.5 billion (9 percent) to \$102.5 billion

The U.S. merchandise trade deficit in computers, peripherals, and parts (computer hardware) increased by \$7.4 billion in 2006 (table ET-6). While U.S. sector exports rose by \$1.1 billion, U.S. imports grew by a much larger \$8.5 billion. Continued U.S. and worldwide consumer demand for computer products led to growth in both U.S. imports and U.S. exports of sector products. Increasing worldwide demand for products such as personal computers (PCs) provided business opportunities for many U.S. computer hardware companies that have significant shares in the international market. Despite some corporate buyers and individual consumers holding off purchases with the pending introduction of Microsoft's new operating system, Vista, U.S. shipments of PCs continued to grow in 2006, though not as rapidly as in previous years.

### U.S. Exports

U.S. exports of computer hardware continued to rise for the second straight year, increasing by \$1.1 billion to \$30.0 billion. The largest U.S. export markets of sector products were Canada (\$3.9 billion), Mexico (\$2.8 billion), and the United Kingdom (\$2.2 billion). Computer parts, many destined for foreign affiliates or contract manufacturers, accounted for a large portion of exports, \$30.9 billion in 2006, an increase of 14 percent (\$3.7 billion) over the previous year.

U.S. exports declined to many markets, including Canada (decrease of \$339 million or 8 percent), Singapore (\$258 million or 18 percent), and Malaysia (\$209 million or 28 percent). However, these declines were offset by increases in U.S. exports to other key markets such as China (increase of \$309 million or 25 percent), Mexico (\$397 million or 16 percent), and Thailand (\$92 million or 14 percent). Furthermore, U.S. exports of computer parts increased to countries such as China and Mexico, accounting for 68 percent (\$209 million) and 62 percent (\$244 million) of the total U.S. sector export increases, respectively.

<sup>&</sup>lt;sup>19</sup> IDC, "Portable PC Adoption and Emerging Markets Claim Larger Share of PC Future."

<sup>&</sup>lt;sup>20</sup> ZDNet News, "PCs Aren't Coming to America." Various industry sources provide different PC shipment estimates; however, most of them indicate that there was growth in PC shipments for 2006.

**TABLE ET-6** Computers, peripherals, and parts (ET035): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dolla	ars ———			
U.S. exports of domestic merchandise:	222	4 000	4 000	4.040	4.550	222	0.4.0
China Malaysia Mexico Japan Singapore Canada Taiwan Thailand Korea United Kingdom All other	892 643 3,612 2,498 1,125 3,948 611 367 832 2,371 12,635 29,534	1,022 459 2,660 2,246 1,461 3,655 509 492 655 2,260 12,617 28,038	1,038 459 2,646 2,040 1,313 3,834 502 551 580 2,427 11,958 27,350	1,246 759 2,442 1,871 1,463 4,201 474 675 570 2,278 12,882 28,862	1,556 550 2,839 1,890 1,205 3,863 445 768 617 2,155 14,081	309 -209 397 20 -258 -339 -28 92 47 -124 1,199	24.8 -27.5 16.3 1.1 -17.6 -8.1 -6.0 13.7 8.2 -5.4 9.3
<b>-</b>	,	-,	•	-,	-,	-92	
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	9,298 9,467 388 5,894 509 8,547 153 198	9,357 9,537 362 4,835 466 8,292 191 219	8,368 8,540 580 5,152 497 7,943 186 206	8,226 8,435 740 5,522 607 8,746 195 267	8,134 8,441 886 6,625 766 8,845 211 371	146 146 1,103 160 99 15 104	-1.1 0.1 19.7 20.0 26.3 1.1 7.7 38.8
U.S. imports of merchandise for consumption: China Malaysia Mexico Japan Singapore Canada Taiwan Thailand Korea United Kingdom All other	14,928 9,085 8,913 8,734 7,630 1,745 8,725 2,382 4,600 1,021 8,054	22,141 9,978 7,640 6,977 7,151 1,533 7,046 2,065 3,686 1,069 7,654	33,985 11,171 7,794 6,799 6,977 1,739 6,213 2,498 3,781 1,179 7,129	40,298 12,658 7,161 6,536 6,217 1,831 4,948 2,833 2,995 899 7,574	46,583 14,590 7,050 6,681 6,235 1,677 4,623 3,529 3,120 766 7,615	6,284 1,932 -111 145 18 -154 -326 696 125 -133	15.6 15.3 -1.6 2.2 0.3 -8.4 -6.6 24.6 4.2 -14.8
Total	75,817	76,940	89,264	93,950	102,468	8,518	9.1
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	4,226 4,944 476 9,110 121 59,625 8 719	4,455 5,173 441 7,818 123 62,040 18 721	4,376 5,243 519 8,000 167 73,882 7 866	4,113 5,121 462 7,651 457 78,865 6 1,004	4,131 5,021 373 7,519 425 87,676 7 896	17 -99 -89 -133 -33 8,811 2 -108	0.4 -1.9 -19.2 -1.7 -7.1 11.2 25.7 -10.8

**TABLE ET-6** Computers, peripherals, and parts (ET035): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—Continued

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dolla	ars ———			
U.S. merchandise trade balance: China Malaysia Mexico Japan Singapore Canada Taiwan Thailand Korea United Kingdom All other	-14,036 -8,441 -5,301 -6,236 -6,505 2,203 -8,114 -2,015 -3,768 1,350 4,580 -46,283	-21,119 -9,518 -4,979 -4,731 -5,689 2,122 -6,538 -1,573 -3,031 1,192 4,963 -48,902	-32,947 -10,712 -5,147 -4,758 -5,663 2,095 -5,711 -1,947 -3,201 1,248 4,829	-39,052 -11,899 -4,719 -4,665 -4,753 2,370 -4,475 -2,157 -2,424 1,379 5,308	-45,027 -14,040 -4,211 -4,791 -5,030 2,186 -4,177 -2,761 -2,503 1,389 6,466	-5,975 -2,141 509 -126 -276 -185 297 -604 -78 10 1,158	-15.3 -18.0 10.8 -2.7 -5.8 -6.6 -28.0 -3.2 0.7 21.8
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	5,072 4,524 -89 -3,216 388 -51,078 145 -521	4,902 4,363 -79 -2,983 343 -53,747 172 -502	3,992 3,297 62 -2,848 330 -65,939 179 -661	4,112 3,314 278 -2,129 149 -70,120 190 -737	4,003 3,420 512 -893 341 -78,831 203 -525	-109 106 235 1,235 192 -8,712 14 212	-2.7 3.2 84.4 58.0 129.0 -12.4 7.2 28.7

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

#### U.S. Imports

U.S. imports of computer hardware increased by 9 percent in 2006, to \$102.5 billion. Sector products that registered the largest increases, in terms of absolute value, were notebook computers, various desktop computers, certain computer magnetic disk drive storage units, and computer parts. Growth in U.S. imports of PCs continued in 2006. For example, U.S. imports of notebook computers increased by 17 percent to \$22.7 billion, as continued demand for portability and declining prices drove sales.<sup>21</sup>

The two main U.S. import sources of computer hardware were China, which supplied 45 percent of sector imports (\$46.6 billion), and Malaysia, which supplied 14 percent (\$14.6 billion). In 2006, China accounted for approximately \$12.8 billion (66 percent) of U.S. imports of notebook computers, while Malaysia accounted for \$7.6 billion (39 percent). Many major manufacturers of computer hardware equipment, including Taiwanese notebook manufacturers, have facilities in China that account for the majority of world production, while Dell continues to manufacture a majority of its notebooks in their Malaysian production facility.<sup>22</sup>

The Asia-Pacific region continues to be a large manufacturing base for computer hardware original equipment manufacturers (OEMs) for not only PCs, but also for key components such as magnetic disk drive storage units, which include hard disk drives. U.S. imports of these products increased by nearly 10 percent in 2006 from the previous year, to approximately \$7.6 billion, as computer hard disk drive sales increased.

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<sup>&</sup>lt;sup>21</sup> Kawamoto, "Report: Notebooks to Take Lead Over Desktops by 2011."

<sup>&</sup>lt;sup>22</sup> ZDNet News, "Dell Bucks the Notebook-Outsourcing Trend."

### **Medical Goods**

Change in 2006 from 2005:

U.S. trade surplus: Increased by \$737 million (175 percent) to \$1.2 billion

U.S. exports: Increased by \$2.3 billion (11 percent) to \$23.3 billion U.S. imports: Increased by \$1.6 billion (8 percent) to \$22.2 billion

The U.S. trade surplus in medical goods surged for the second consecutive year, expanding by 175 percent to \$1.2 billion in 2006 (table ET-7). While U.S. imports continued to rise, U.S. exports increased even faster. Demand in the European Union (EU) for the latest U.S. innovations in cardiovascular and orthopedic products fueled much of the growth in U.S. exports, despite growing pressures by governments in the EU to contain escalating healthcare costs. U.S. manufacturers were more successful than their EU rivals in developing less invasive technologies that minimize the overall costs of treating patients. 24

### U.S. Exports

U.S. exports of medical goods increased by 11 percent in 2006, to \$23 billion. Double-digit growth in exports to Germany, the Netherlands, and Mexico compensated for a slowdown in exports to Ireland and Japan. U.S. exports to Germany and the Netherlands increased by 20 percent and 18 percent to \$2.1 billion and \$2.7 billion, respectively, across a broad range of products. Germany continued as the largest EU market for medical devices, accounting for one-third of total sales in that region.<sup>25</sup> The largest portion of U.S. exports to the Netherlands, a much smaller market, was destined for other EU markets through the Dutch port of Rotterdam.<sup>26</sup> In addition to benefitting from increased demand for advanced technology products, such as drug-eluting stents, implantable defibrillators, and orthopedic implants, U.S. exporters to those and other EU countries were also buoyed by intracompany trade in diagnostic imaging and patient monitoring parts and equipment by large German and Dutch multinationals with operations in both the EU and the United States.<sup>27</sup>

In recent years, U.S.-owned operations in Ireland have made that country a leading U.S. export market for parts of high-technology products manufactured there, such as pacemakers.<sup>28</sup> However, U.S. exports dropped by 27 percent in 2006, as Irish affiliates produced more parts and components themselves, relying less on their parent companies.<sup>29</sup>

<sup>&</sup>lt;sup>23</sup> Diller and Gold, "Healthcare: Products and Supplies: Europe," March 2007, 16–19.

<sup>&</sup>lt;sup>24</sup> U.S. industry officials, interviews by Commission staff, United States, June 2006; and German and U.K. industry officials, interviews by Commission staff, Germany and the United Kingdom, September 20–27, 2006.

<sup>&</sup>lt;sup>25</sup> Diller and Gold, "Healthcare: Products and Supplies: Europe," March 2007, 16–19.

<sup>&</sup>lt;sup>26</sup> U.S. industry officials, telephone interview by Commission staff, March 19, 2007.

<sup>&</sup>lt;sup>27</sup> U.S. industry officials, interviews by Commission staff, June 7 and 14, 2006.

<sup>&</sup>lt;sup>28</sup> U.S. industry official, telephone interview by Commission staff, August 16, 2006; and Irish industry and government officials, interviews by Commission staff, September 28-29, 2007.

<sup>&</sup>lt;sup>29</sup> U.S. industry officials, telephone interviews by Commission staff, August 21–23, 2006.

**TABLE ET-7** Medical goods (ET040): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			<ul> <li>Million dolla</li> </ul>	ars ———			
U.S. exports of domestic merchandise:							
Germany	1,530	1,679	1,602	1,714	2,057	343	20.0
Mexico	848	983	1,030	1,163	1,354	191	16.5
Ireland	875	1,293	1,360	1,342 2.624	980	-362 103	-27.0
Japan	2,203 1,284	2,307 1.618	2,408 1.940	2,024	2,727 2.691	408	3.9 17.9
Canada	1,204	1,337	1,540	1.701	1.864	163	9.6
United Kingdom	822	839	979	1,157	1,163	6	0.5
China	313	453	493	593	631	37	6.3
France	901	859	880	985	1.075	89	9.1
Switzerland	434	477	461	533	650	117	21.9
All other	4,646	4,983	5,771	6,874	8,120	1,246	18.1
Total	15,059	16,827	18,433	20,970	23,311	2,341	11.2
<u>EU-15</u>	7,074	8,059	8,854	9,832	10,908	1,076	10.9
EU-25	7,160	8,164	8,972	9,989	11,065	1,075	10.8
OPEC Latin America	193 1,582	197 1.724	250 1.906	336 2.251	428 2.639	92 387	27.3 17.2
CBERA	212	249	248	297	343	46	15.6
Asia	3,608	3,974	4,241	4,854	5,165	311	6.4
Sub-Saharan Africa	92	93	113	154	165	10	6.7
Central and Eastern Europe	96	103	119	161	151	-10	-6.2
U.S. imports of merchandise for consumption:	1,931	2,342	2.883	3.308	3.634	326	9.9
Germany	1,957	2,342	2,663 2.575	3,306	3,452	437	14.5
Ireland	1.807	2.853	4.056	3,707	3.471	-236	-6.4
Japan	1,329	1,327	1,501	1,694	1,692	-2 2	-0.1
Netherlands	501	470	530	608	610	2	0.4
Canada	400 415	466 439	520 527	551 646	619 859	68 213	12.4 32.9
China	531	594	710	864	1.184	319	37.0 37.0
France	469	510	604	638	695	57	8.9
Switzerland	708	1,204	1,142	1,069	1,072	4	0.3
All other	3,184	3,621	3,957	4,447	4,863	416	9.4
Total	13,232	16,143	19,006	20,548	22,152	1,604	7.8
EU-15	5,916	7,526	9,633	10,136	10,526	390	3.8 4.0
EU-25	5,970	7,591 8	9,720	10,200 10	10,612	413 -3	4.0 -32.8
Latin America	2,701	3,260	3.493	3.996	4.494	498	12.4
ÇBERA	<sup>2</sup> 719	<sup>2</sup> 917	893	946	1,000	53	5.7
Asia	2,829	2,937	3,321	3,793	4,16 <u>1</u>	368	9.7
Sub-Saharan Africa	4 52	6	8	15	17	2	11.8
Central and Eastern Europe	52	62	83	59	80	21	35.7

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**TABLE ET-7** Medical goods (ET040): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06ª—*continued* 

						Change, 200	6 from 2005
Item	2002 2003	2004	2005	2006	Absolute	;	Percent
_			<ul><li>Million dollar</li></ul>	'S			
U.S. merchandise trade balance: Germany Mexico Ireland Japan Netherlands Canada United Kingdom China France Switzerland All other Total	-401 -1,109 -933 875 782 804 407 -218 432 -274 1,462	-664 -1,332 -1,560 980 1,148 870 399 -141 350 -728 1,361	-1,282 -1,546 -2,696 907 1,409 990 452 -217 276 -681 1,814	-1,594 -1,853 -2,365 930 1,675 1,150 511 -271 348 -535 2,427	-1,577 -2,098 -2,491 1,035 2,080 1,245 304 -553 380 -422 3,257	16 -246 -125 105 406 95 -207 -282 32 113 830	1.0 -13.3 -5.3 11.3 24.2 8.2 -40.5 -104.2 9.3 21.1 34.2
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	1,158 1,190 186 -1,120 -506 779 88 44	533 573 189 -1,536 -668 1,037 87 41	-780 -749 241 -1,587 -645 921 105 36	-303 -210 326 -1,745 -649 1,061 139 102	382 452 421 -1,855 -656 1,004 148 71	686 663 95 -110 -7 -57 9	(b) 29.2 -6.3 -1.1 -5.4 6.2 -30.2

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Not meaningful for purposes of comparison.

U.S. exports to Mexico, which increased by 17 percent to \$1.4 billion, included parts and components of medical devices to be assembled into finished devices in that country, many of which are exported to the United States.<sup>30</sup> U.S. exports to Japan, the largest overseas market for U.S.-made medical goods, continued to slow, rising by only 4 percent, as government regulatory and health insurance reimbursement policies restricted sales of U.S.-made high-technology products in that country.<sup>31</sup>

### U.S. Imports

U.S. imports of medical goods increased by 8 percent (\$1.6 billion) from 2005 through 2006. mainly based on continued growth in U.S. demand and transfers from U.S. affiliate companies abroad. The most significant increases in imports were from Mexico, China, and the United Kingdom. U.S. imports from Mexico rose by 15 percent to \$3.5 billion. Although U.S. firms originally established operations there to take advantage of U.S. and Mexican tax and tariff incentives and relatively low wages, Mexico has moved up the supply chain to manufacture more advanced products, including drug-eluting stents.<sup>32</sup> U.S. imports from China grew by 37 percent, as the number of Chinese manufacturers has been rapidly expanding, with sales estimated at over \$5 billion in 2006, 75 percent of which represented exports to all markets.<sup>33</sup> U.S. imports from China exhibiting the most growth were orthopedic and fracture appliances, syringes, oxygen therapy devices, and massage apparatus. Finally, U.S. imports from the United Kingdom<sup>34</sup> rose by 33 percent, as several major U.S. pharmaceutical companies increased their procurement of recently approved hand-held devices for the administration of respiratory therapy drugs.<sup>35</sup> Other imported products from that country showing significant growth included orthopedic implants and rehabilitation equipment.

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<sup>&</sup>lt;sup>30</sup> Mexico Watch, "Cordis de Mexico VPO Victor Chance," 1.

 $<sup>^{31}</sup>$  For further information on the Japanese market for medical goods, see USITC, *Medical Devices and Equipment*, 3-32-3-44.

<sup>32</sup> Mexico Watch, "Cordis de Mexico VPO Victor Chance," 1.

<sup>&</sup>lt;sup>33</sup> Zamiska, "Beijing Policy Shift May Boost Local Medical Device Companies," and Hassell and Bella, "Diagnosing China's Medical Device Market."

<sup>&</sup>lt;sup>34</sup> Arthur D. Little Limited, UK Sector Competitiveness, 1-20.

<sup>&</sup>lt;sup>35</sup> Pfizer Inc. and Schering-Plough Healthcare, 2007 Form 10-K Filing; and U.S. industry officials, telephone interviews by Commission staff, March 21–22, 2007.

## Measuring, Testing, and Controlling Instruments

Change in 2006 from 2005:

U.S. trade surplus: Increased by \$1.1 billion (52 percent) to \$3.1 billion U.S. exports: Increased by \$2.3 billion (13 percent) to \$19.7 billion U.S. imports: Increased by \$1.2 billion (8 percent) to \$16.6 billion

The U.S. trade surplus for measuring, testing, and controlling instruments expanded as the growth in U.S. exports (\$2.3 billion, or 13 percent) nearly doubled that of U.S. imports (\$1.2 billion, or 8 percent) (table ET-8). The measuring, testing, and controlling instruments industry is highly globalized, consisting of large multinational companies that source product and related components from their worldwide production locations to serve global markets. A combination of economic factors contributed to the increased value in U.S. trade in these products in 2006, including relatively strong economic growth, particularly in the United States and its major trading partners—Canada, China, Germany, Japan, and Mexico.

### U.S. Exports

The leading market for U.S. exports of measuring, testing, and controlling instruments in 2006 continued to be Canada, which accounted for \$3.0 billion (15 percent) of total sector exports in 2006. Other major growth markets for U.S. exports in 2006 were Japan, Germany, and China, <sup>36</sup> which together accounted for \$4.6 billion (23 percent) of total U.S. exports. The 2006 growth in U.S. exports to these and other countries was dominated by parts for measuring, testing, and controlling instruments (an increase of 38 percent to \$6 billion), followed by instruments for measuring electrical quantities and ionization radiation (increased by 11 percent to \$3.8 billion), <sup>37</sup> instruments for physical or chemical analysis (increased by 10 percent to \$2.6 billion), <sup>38</sup> and instruments for measuring flow, level, and pressure of liquids and gases (increased by 19 percent to \$1.4 billion). <sup>39</sup>

### U.S. Imports

Mexico continued to be the leading supplier of measuring, testing, and controlling instruments to the U.S. market in 2006, accounting for \$2.8 billion (17 percent) of total sector imports. However, the value of imports from Mexico decreased for the third consecutive year, by \$50 million (2 percent). At the same time, the value of sector imports from other major suppliers increased (table ET-10). The second- and third-largest suppliers ontinued to be Japan and Germany, together accounting for \$4.7 billion (29 percent) of

<sup>&</sup>lt;sup>36</sup> In 2006, Japan and Germany displaced Mexico as the second- and third-largest U.S. export market for this sector due to the \$53 million decrease (4 percent) in U.S. exports to Mexico. Automatic regulating or controlling instruments (such as thermostats, manostats, and liquid level control instruments) continued to be the leading U.S. export to Mexico, but such exports decreased by 7 percent to \$485 million in 2006.

<sup>&</sup>lt;sup>37</sup> Along with instruments for measuring ionization radiation, other products include oscilloscopes and spectrum analyzers.

<sup>&</sup>lt;sup>38</sup> Product examples include gas and smoke analysis instruments and spectrometers, which are instruments that detect and record energy that would otherwise be invisible to the human eye.

<sup>&</sup>lt;sup>39</sup> Product examples include flow meters, level gauges, manometers, and heat meters.

**TABLE ET-8** Measuring, testing, and controlling instruments (ET043): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			<ul><li>Million dolla</li></ul>	rs			
U.S. exports of domestic merchandise: Canada Mexico Japan Germany China United Kingdom France Singapore Malaysia Korea All other	2,707 1,481 1,445 963 592 873 434 522 314 495 4,522	2,759 1,346 1,391 1,013 782 845 498 511 242 548 4,749	2,897 1,597 1,508 1,218 996 825 596 582 265 637 5,480	2,877 1,490 1,405 1,345 1,109 830 685 577 261 782 6,037	3,035 1,438 1,685 1,535 1,349 909 833 692 353 754 7,087	157 -53 280 190 240 79 148 114 92 -28 1,050	5.5 -3.5 19.9 14.1 21.6 9.5 21.6 19.8 35.4 -3.6
Total	14,346	14,683	16,603	17,399	19,669	2,270	13.0
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	3,739 3,821 317 2,121 180 4,552 91 98	3,930 4,027 351 1,930 194 4,716 105 103	4,352 4,471 370 2,264 198 5,576 136 120	4,703 4,843 516 2,325 218 5,755 148 148	5,250 5,438 713 2,468 287 6,672 195	547 595 197 143 69 916 47 47	11.6 12.3 38.2 6.1 31.8 15.9 31.8 31.7
U.S. imports of merchandise for consumption: Canada Mexico Japan Germany China United Kingdom France Singapore Malaysia Korea All other	1,118 2,820 1,875 1,367 641 1,101 289 223 208 60 1,893	1,037 3,106 2,017 1,528 835 1,099 340 241 252 62 2,121	1,152 2,872 2,359 1,889 1,162 1,201 406 277 385 67 2,597	1,320 2,850 2,356 2,093 1,333 1,244 515 277 464 81 2,825	1,496 2,800 2,447 2,299 1,471 1,279 624 302 565 134 3,155	177 -50 91 206 138 35 109 25 101 53	13.4 -1.8 3.9 9.9 10.4 2.8 21.2 8.9 21.7 64.8 11.7
Total	11,595	12,638	14,367	15,359	16,573	1,214	7.9
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	3,584 3,644 7 2,904 10 3,330 8 73	3,925 4,048 6 3,167 19 3,776 7 125	4,703 4,883 13 2,930 12 4,651 9 181	5,094 5,274 17 2,910 10 4,994 10 200	5,472 5,663 29 2,898 16 5,517 10 215	377 389 12 -12 7 523 (b) 14	7.4 7.4 69.8 -0.4 71.2 10.5 -4.6 7.1

**TABLE ET-8** Measuring, testing, and controlling instruments (ET043): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06°—*Continued* 

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
			<ul> <li>Million dolla</li> </ul>	rs ———			
U.S. merchandise trade balance:     Canada     Mexico     Japan     Germany     China     United Kingdom     France     Singapore     Malaysia     Korea     All other	1,590 -1,340 -430 -404 -49 -228 145 299 105 434 2,629	1,722 -1,760 -626 -515 -53 -254 158 270 -9 486 2,628	1,746 -1,276 -851 -671 -166 -376 191 305 -120 571 2,883	1,557 -1,359 -951 -748 -224 -414 171 300 -204 701 3,212	1,538 -1,362 -762 -764 -123 -370 -210 390 -212 620 3,932	-19 -3 189 -16 102 44 39 89 -8 -81	-1.2 -0.2 19.9 -2.2 45.3 10.6 22.9 29.8 -4.1 -11.6 22.4
Total	2,751	2,046	2,237	2,040	3,096	1,056	51.8
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	155 177 311 -784 171 1,222 84 25	4 -21 345 -1,236 175 939 98 -22	-350 -413 356 -666 186 924 126 -61	-391 -432 499 -585 208 761 138 -52	-222 -226 684 -430 270 1,155 186 -19	169 206 185 155 62 394 48 33	43.3 47.7 37.1 26.5 29.9 51.7 34.4 62.6

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export. <sup>b</sup>Less than \$500,000.

total imports in 2006. The 2006 growth in U.S. imports from Japan, Germany, and other major suppliers was dominated by parts for sector products (increased by 9 percent to \$4.0 billion), followed by instruments for measuring electrical quantities and ionization radiation (up by 12 percent to \$1.4 billion), and instruments for measuring flow, level, and pressure of liquids and gases (up by 13 percent to \$1.3 billion).

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**TABLE ET-9** Electronic products: U.S. trade for industry/commodity groups and subgroups, 2002–06<sup>a</sup>

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars ——			
ET016	Office machines:							
	Exports	816	725	682	751	911	159	21.2
	Imports	1,491	1,544	1,732	1,793	1,877	84	4.7
	Trade balance	-675	-819	-1,050	-1,041	-966	75	7.2
ET017	Telephone and telegraph apparatus:							
	Exports	12,952	10,946	13,958	14,183	14,779	597	4.2
	Imports	27,948	30,982	39,341	49,220	53,318	4,098	8.3
	Trade balance	-14,996	-20,037	-25,382	-35,038	-38,539	-3,501	-10.0
ET018	Consumer electronics (except televisions):							
	Exports	2,631	2,392	2,518	2,679	3,130	451	16.8
	Imports	21,455	21,471	24,428	25,866	26,203	337	1.3
	Trade balance	-18,825	-19,079	-21,911	-23,187	-23,073	114	0.5
ET019	Blank media:							
	Exports	970	1,082	1,159	1,195	1,049	-146	-12.2
	Imports	2,746	3,127	3,831	4,248	4,486	237	5.6
	Trade balance	-1,776	-2,045	-2,672	-3,053	-3,436	-383	-12.5
ET020	Prerecorded media:							
	Exports	3,069	3,010	3,124	3,422	3,399	-23	-0.7
	Imports	1,308	1,436	1,503	1,499	1,263	-236	-15.7
	Trade balance	1,761	1,574	1,621	1,924	2,136	213	11.1
ET021	Navigational instruments and remote control							
	apparatus:							
	Exports	2,921	2,866	3,082	3,217	3,786	568	17.7
	Imports	1,858	2,286	2,761	3,241	3,996	755	23.3
	Trade balance	1,063	580	321	-23	-210	-187	-799.1
ET022	Television receivers and video monitors:							
	Exports	1,257	809	874	857	1,101	244	28.5
	Imports	10,586	12,654	17,509	22,712	28,628	5,917	26.1
	Trade balance	-9,329	-11,845	-16,636	-21,854	-27,527	-5,673	-26.0
ET023	Radio and television broadcasting equipment:							
	Exports	1,364	1,241	1,335	1,544	1,535	-9	-0.6
	Imports	4,977	4,120	4,309	3,830	3,527	-304	-7.9
	Trade balance		-2,879	-2,974	-2,286	-1,991	295	12.9
ET024	Electric sound and visual signaling apparatus:	•	,	,	•	•		
	Exports	1,042	937	1,098	1,092	1,205	112	10.3
	Imports	1,797	1,845	2,145	2,409	2,647	238	9.9
	Trade balance	,	-908	-1,047	-1,317	-1,443	-126	-9.6
				•	•	,		

TABLE ET-9 Electronic products: U.S. trade for industry/commodity groups and subgroups, 2002–06a—Continued

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars ———			
ET025	Electrical capacitors and resistors:							
	Exports	1,706	1,623	1,664	1,286	1,825	538	41.9
	Imports	2,093	1,964	2,035	2,177	2,721	544	25.0
	Trade balance	-386	-341	-371	-891	-896	-5	-0.6
ET026	Printed circuits:							
	Exports	1,853	1,742	1,836	1,781	1,864	84	4.7
	Imports	1,896	1,785	2,113	2,123	2,215	92	4.3
	Trade balance	-44	-44	-277	-342	-351	-8	-2.5
ET027	Circuit apparatus exceeding 1000V:							
	Exports	549	487	507	509	539	29	5.8
	Imports	338	272	309	401	442	42	10.4
	Trade balance	211	215	197	109	97	-12	-11.3
ET028	Circuit apparatus not exceeding 1000V:							
	Exports	4,478	4,431	5,138	5,327	6,124	796	14.9
	Imports	4,933	5,127	6,259	6,818	7,369	551	8.1
	Trade balance	-455	-696	-1,120	-1,491	-1,245	246	16.5
ET029	Circuit apparatus assemblies:			•	,	,		
	Exports	1,108	1,150	1,193	1,447	2,250	803	55.5
	Imports	2,577	2,920	3,341	3,941	4,496	555	14.1
	Trade balance	,	-1,771	-2,148	-2,493	-2,246	248	9.9
ET030	Parts of circuit apparatus:	.,	.,	_,	_,	_,_ :		
	Exports	1.592	1.807	2,201	2,348	2,530	182	7.7
	Imports	1,087	1,206	1,526	1,730	1,992	262	15.2
	Trade balance	506	601	675	619	538	-81	-13.0
ET031	Cathode-ray tubes:							
	Exports	1.762	1,202	998	600	292	-308	-51.3
	Imports	607	577	673	545	329	-216	-39.7
	Trade balance	1,155	625	325	54	-37	-91	(°)
ET032	Electron tubes other than CRTs:	,,,,,			-			( )
	Exports	180	165	175	192	173	-19	-10.0
	Imports		203	195	214	232	18	8.4
	Trade balance	-66	-38	-21	-22	-59	-37	-166.8
ET033	Semiconductors and integrated circuits:							
	Exports	31.738	35,712	35,130	34,195	37,227	3,031	8.9
	Imports		24,190	26,256	25,425	27,022	1,597	6.3
	Trade balance		11,522	8,874	8,770	10,205	1,435	16.4
		0,007	, 522	3,37 1	5,770	. 5,200	., 100	10.7

**TABLE ET-9** Electronic products: U.S. trade for industry/commodity groups and subgroups, 2002–06a—Continued

USITC							Change, 200	6 from 2005
code	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars ——			
ET034	Miscellaneous electrical equipment:							
	Exports	1,564	1,426	1,968	2,419	2,537	118	4.9
	Imports	2,428	2,649	3,313	3,333	3,738	405	12.2
	Trade balance	-865	-1,223	-1,345	-914	-1,201	-287	-31.4
ET035	Computers, peripherals, and parts:							
	Exports	29,534	28,038	27,350	28,862	29,969	1,106	3.8
	Imports	75,817	76,940	89,264	93,950	102,468	8,518	9.1
	Trade balance	-46,283	-48,902	-61,914	-65,087	-72,499	-7,411	-11.4
ET036	Photographic film and paper:							
	Exports	2,127	2,233	2,182	2,091	2,336	245	11.7
	Imports	1,865	1,820	1,951	1,845	1,657	-188	-10.2
	Trade balance	262	413	231	246	679	433	175.9
ET037	Optical fibers, optical fiber bundles and cables:							
	Exports	474	437	383	459	568	109	23.7
	Imports	252	210	310	408	554	147	35.9
	Trade balance	222	227	74	51	14	-38	-73.3
ET038	Optical goods, including ophthalmic goods:							
	Exports	3,548	3,309	3,992	4,664	5,041	377	8.1
	Imports	4,142	4,495	5,386	5,626	6,294	668	11.9
	Trade balance	-594	-1,186	-1,395	-962	-1,253	-291	-30.3
ET039	Photographic cameras and equipment:							
	Exports	1,187	954	1,197	1,175	1,177	2	0.2
	Imports	3,029	2,715	2,382	1,880	1,612	-268	-14.2
	Trade balance	-1,842	-1,761	-1,185	-704	-435	270	38.3
ET040	Medical goods:							
	Exports	15,059	16,827	18,433	20,970	23,311	2,341	11.2
	Imports	13,232	16,143	19,006	20,548	22,152	1,604	7.8
	Trade balance	1,826	683	-573	422	1,159	737	174.7
ET041	Watches and clocks:							
	Exports	235	242	271	255	304	48	18.9
	Imports	3,098	3,291	3,634	3,795	3,964	170	4.5
	Trade balance	-2,864	-3,049	-3,363	-3,539	-3,660	-121	-3.4
ET042	Drawing, drafting, and calculating instruments:							
	Exports	368	364	397	485	619	134	27.6
	Imports	192	223	264	335	293	-41	-12.4
	Trade balance	176	141	133	151	326	175	116.3

TABLE ET-9 Electronic products: U.S. trade for industry/commodity groups and subgroups, 2002-06a—Continued

USITC							Change, 200	6 from 2005
code	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars ———			
cET043	Measuring, testing, and controlling instruments:							
	Exports	14,346	14,683	16,603	17,399	19,669	2,270	13.0
	Imports	11,595	12,638	14,367	15,359	16,573	1,214	7.9
	Trade balance	2,751	2,046	2,237	2,040	3,096	1,056	51.8

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes

<sup>°</sup>Not meaningful for purposes of comparison.

TABLE ET-10 Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06

ET016   Office machines:   119	SITC ode	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
Number of establishments	 T016	Office machines:						
Employees (thousands)	1010		110	110	110	110	110	0.0
Capacity utilization (percent)		Employees (thousands)						0.0
U.S. shipments (million dollars)		Canacity utilization (percent)						0.0
U.S. exports (million dollars)		U.S. shipments (million dollars)						-6.3
U.S. imports (million dollars)		U.S. exports (million dollars)						21.2
Apparent U.S. consumption (million dollars)   3,262   2,751   3,250   3,253   3,038     Trade balance (million dollars)   -675   -819   -1,050   -1,041   -966     Ratio of imports to consumption (percent)   31.6   37.5   31.0   34.0   44.0     ET017   Telephone and telegraph apparatus:     Telephone and telegraph apparatus:     Telephone and telegraph apparatus:     Telephone site (fine to the total site of extending		U.S. imports (million dollars)						4.7
Trade balance (million dollars)								-6.6
Ratio of imports to consumption (percent)   45.7   56.1   53.3   55.1   61.8   Ratio of exports to shipments (percent)   31.6   37.5   31.0   34.0   44.0								7.2
Ratio of exports to shipments (percent)   31.6   37.5   31.0   34.0   44.0								12.1
Telephone and telegraph apparatus:   Number of establishments		Ratio of exports to shipments (percent)						29.4
Number of establishments	Γ017	Telephone and telegraph apparatus:	00	00	0.10	00		
Employees (thousands)			1.434	1.200	1.200	1.123	1.100	-2.0
Capacity utilization (percent)   35   32   56   58   60     U.S. shipments (million dollars)   50,914   46,022   50,175   46,961   54,007     U.S. exports (million dollars)   12,952   10,946   13,958   14,183   14,779     U.S. imports (million dollars)   (a) 30,982   39,341   (b) 53,318     Apparent U.S. consumption (million dollars)   65,910   66,059   75,557   81,999   92,546     Trade balance (million dollars)   -14,996   -20,037   -25,382   -35,038   -38,539     Ratio of imports to consumption (percent)   42.4   46.9   52.1   60.0   57.6     Ratio of exports to shipments (percent)   25.4   23.8   27.8   30.2   27.4     ET018   Consumer electronics (except televisions):   Number of establishments   215   205   205   210   210     Employees (thousands)   25.0   25.0   23.0   22.0   21.0     Capacity utilization (percent)   54   57   64   71   71     U.S. shipments (million dollars)   5,270   5,520   6,306   4,625   4,000     U.S. exports (million dollars)   26,31   2,392   2,518   2,679   3,130     U.S. imports (million dollars)   26,31   2,392   2,518   2,679   3,130     U.S. imports (million dollars)   24,095   24,599   28,217   27,812   27,073     Trade balance (million dollars)   -18,825   -19,079   -21,911   -23,187   -23,073     Ratio of imports to consumption (percent)   89.0   87.3   86.6   93.0   96.8     Ratio of imports to consumption (percent)   89.0   87.3   86.6   93.0   96.8     Ratio of imports to shipments (percent)   49.9   43.3   39.9   57.9   78.2     ET019   Blank media:   Number of establishments   212   210   210   205   205     Employees (thousands)   7.0   7.0   7.0   7.0     Capacity utilization (percent)   77   81   75   72   72		Employees (thousands)	, -		,			-0.9
U.S. shipments (million dollars) U.S. exports (million dollars) U.S. exports (million dollars) U.S. imports to consumption (percent) U.S. exports to shipments (percent) U.S. imports to shipments (percent) U.S. imports to shipments (percent) U.S. imports to shipments U.S. imports to shipments U.S. exports (million dollars) U.S. exports (million dollars) U.S. imports (mil		Capacity utilization (percent)						3.4
U.S. exports (million dollars)   12,952   10,946   13,958   14,183   14,779		U.S. shipments (million dollars)						15.0
U.S. imports (million dollars)		U.S. exports (million dollars)						4.2
Apparent U.S. consumption (million dollars)		U.S. imports (million dollars)	(a)			(a)	53,318	8.3
Trade balance (million dollars)			65.910			81.9 <u>9</u> 9		12.9
Ratio of imports to consumption (percent)		Trade balance (million dollars)					-38,539	-10.0
Ratio of exports to shipments (percent)   25.4   23.8   27.8   30.2   27.4								-4.0
ET018   Consumer electronics (except televisions):   Number of establishments   215   205   205   210   210     Employees (thousands)   25.0   25.0   23.0   22.0   21.0     Capacity utilization (percent)   54   57   64   71   71     U.S. shipments (million dollars)   5,270   5,520   6,306   4,625   4,000     U.S. exports (million dollars)   2,631   2,392   2,518   2,679   3,130     U.S. imports (million dollars)   2,631   2,392   2,518   2,679   3,130     U.S. imports (million dollars)   24,095   24,599   28,217   27,812   27,073     Trade balance (million dollars)   -18,825   -19,079   -21,911   -23,187   -23,073     Ratio of imports to consumption (percent)   89.0   87.3   86.6   93.0   96.8     Ratio of exports to shipments (percent)   49.9   43.3   39.9   57.9   78.2     ET019   Blank media:   Number of establishments   212   210   210   205   205     Employees (thousands)   7.0   7.0   7.0   7.0     Capacity utilization (percent)   77   81   75   72   72		Ratio of exports to shipments (percent)	25.4	23.8		30.2		-9.4
Number of establishments   215   205   205   210   210     Employees (thousands)   25.0   25.0   23.0   22.0   21.0     Capacity utilization (percent)   54   57   64   71   71     U.S. shipments (million dollars)   5,270   5,520   6,306   4,625   4,000     U.S. exports (million dollars)   2,631   2,392   2,518   2,679   3,130     U.S. imports (million dollars)   (a) 21,471   24,428   (a) 26,203     Apparent U.S. consumption (million dollars)   24,095   24,599   28,217   27,812   27,073     Trade balance (million dollars)   -18,825   -19,079   -21,911   -23,187   -23,073     Ratio of imports to consumption (percent)   89.0   87.3   86.6   93.0   96.8     Ratio of exports to shipments (percent)   49.9   43.3   39.9   57.9   78.2     ET019 Blank media:   Number of establishments   212   210   210   205   205     Employees (thousands)   7.0   7.0   8.0   7.0   7.0     Capacity utilization (percent)   77   81   75   72   72	Γ018	Consumer electronics (except televisions):						
Employees (thousands)		Number of establishments	215	205	205	210	210	0.0
Capacity utilization (percent) 54 57 64 71 71 U.S. shipments (million dollars) 5,270 5,520 6,306 4,625 4,000 U.S. exports (million dollars) 2,631 2,392 2,518 2,679 3,130 U.S. imports (million dollars) 21,471 24,428 (a) 26,203 Apparent U.S. consumption (million dollars) 24,095 24,599 28,217 27,812 27,073 Trade balance (million dollars) -18,825 -19,079 -21,911 -23,187 -23,073 Ratio of imports to consumption (percent) 89.0 87.3 86.6 93.0 96.8 Ratio of exports to shipments (percent) 49.9 43.3 39.9 57.9 78.2  ET019 Blank media: Number of establishments 212 210 210 205 205 Employees (thousands) 7.0 7.0 8.0 7.0 7.0 Capacity utilization (percent) 77 81 75 72 72		Employees (thousands)	25.0	25.0	23.0	22.0	21.0	-4.5
U.S. shipments (million dollars) U.S. exports (million dollars) U.S. exports (million dollars) U.S. imports (million dollars) U.S. imports (million dollars) U.S. imports (million dollars) U.S. imports (million dollars) U.S. consumption (million dollars) U.S. co		Capacity utilization (percent)					71	0.0
U.S. imports (million dollars) (a) 21,471 24,428 (b) 26,203 Apparent U.S. consumption (million dollars) 24,095 24,599 28,217 27,812 27,073 Trade balance (million dollars) -18,825 -19,079 -21,911 -23,187 -23,073 Ratio of imports to consumption (percent) 89.0 87.3 86.6 93.0 96.8 Ratio of exports to shipments (percent) 49.9 43.3 39.9 57.9 78.2  ET019 Blank media: Number of establishments 212 210 210 205 205 Employees (thousands) 7.0 7.0 8.0 7.0 7.0 Capacity utilization (percent) 77 81 75 72 72		U.S. shipments (million dollars)	5,270				4,000	-13.5
U.S. imports (million dollars)		U.S. exports (million dollars)	2,631	2,392	2,518	2,679	3,130	16.8
Trade balance (million dollars)		U.S. imports (million dollars)	(a)	21,471	24,428		26,203	1.3
Ratio of imports to consumption (percent)   89.0   87.3   86.6   93.0   96.8		Apparent U.S. consumption (million dollars)	24,095		28,217	27,812		-2.7
Ratio of imports to consumption (percent)   89.0   87.3   86.6   93.0   96.8		Trade balance (million dollars)	-18,825		-21,911			0.5
ET019       Blank media:         Number of establishments       212       210       210       205       205         Employees (thousands)       7.0       7.0       8.0       7.0       7.0         Capacity utilization (percent)       77       81       75       72       72								4.1
Number of establishments       212       210       210       205       205         Employees (thousands)       7.0       7.0       8.0       7.0       7.0         Capacity utilization (percent)       77       81       75       72       72			49.9	43.3	39.9	57.9	78.2	35.1
Employees (thousands)       7.0       7.0       8.0       7.0       7.0         Capacity utilization (percent)       77       81       75       72       72	Г019							
Capacity utilization (percent)								0.0
Capacity utilization (percent)		Employees (thousands)					7.0	0.0
		Capacity utilization (percent)						0.0
U.Ś. shipments (million dollars)		U.S. shipments (million dollars)						0.0
U.S. exports (million dollars)		U.S. exports (million dollars)						-12.2
U.S. imports (million dollars) (a) 3,127 3,831 (a) 4,486		U.S. imports (million dollars)						5.6
Apparent U.S. consumption (million dollars) 4,576 4,645 5,122 5,403 5,786		Apparent U.S. consumption (million dollars)						7.1
Trade balance (million dollars)		Trade balance (million dollars)						-12.5
Ratio of imports to consumption (percent)								-1.4
Ratio of exports to shipments (percent)		Ratio of exports to shipments (percent)	34.6	41.6	47.3	50.9	44.7	-12.2

TABLE ET-10 Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
	inductry, commodity group			200-			2000 11 0111 2000
ET020	Prerecorded media:						
	Number of establishments	700	708	710	710	705	-0.7
	Employees (thousands)	31.0	29.0	26.0	25.0	25.0	0.0
	Capacity utilization (percent)	73	67	70	70	70	0.0
	U.S. shipments (million dollars)	6,200	6,700	6,700	6,750	6,700	-0.7
	U.S. exports (million dollars)	3,069 (a)	3,010 1,436	3,124 1,503	3,422	3,399 1,263	-0.7 -15.7
	Apparent U.S. consumption (million dollars)	4,439	5,126	5,079	4,826	4,564	-13.7 -5.4
	Trade balance (million dollars)	1,761	1,574	1,621	1,924	2,136	11.1
	Ratio of imports to consumption (percent)	29.5	28.0	29.6	31.1	27.7	-10.9
	Ratio of exports to shipments (percent)	49.5	44.9	46.6	50.7	50.7	0.1
ET021	Navigational instruments and remote control						• • • • • • • • • • • • • • • • • • • •
	apparatus:						
	Number of establishments	653	650	645	640	635	-0.8
	Employees (thousands)	148.0	145.0	151.0	157.0	158.0	0.6
	Capacity utilization (percent)	59	67	56	62	63	1.6
	U.S. shipments (million dollars)	32,258	33,656	36,907	36,739	37,000	0.7
	U.S. exports (million dollars)	2,921	2,866	3,082	3,217	3,786	17.7
	U.S. imports (million dollars)	(a)	2,286	2,761	(°)	3,996	23.3
	Apparent U.S. consumption (million dollars)	31,195	33,076	36,586	36,762	37,210	1.2
	Trade balance (million dollars)	1,063	580	321	-23	-210	-799.1
	Ratio of imports to consumption (percent)	6.0	6.9	7.5	8.8	10.7	21.8 16.8
ET022	Ratio of exports to shipments (percent) Television receivers and video monitors:	9.1	8.5	8.4	8.8	10.2	10.0
L1022	Number of establishments	9	8	8	7	8	14.3
	Employees (thousands)	7.0	7.0	7.0	7.0	8.0	14.3
	Capacity utilization (percent)	7.0 54	7.0 57	64	7.0 71	71	0.0
	U.S. shipments (million dollars)	3,285	3,499	3,705	3,826	3,700	-3.3
	U.S. exports (million dollars)	1,257	809	874	857	1,101	28.5
	U.S. imports (million dollars)	(a)	12,654	17,509	(a)	28,628	26.1
	Apparent U.S. consumption (million dollars)	12,614	15,344	20,341	25,68Ó	31,227	21.6
	Trade balance (million dollars)	-9,329	-11,845	-16,636	-21,854	-27,527	-26.0
	Ratio of imports to consumption (percent)	83.9	82.5	86.1	88.4	91.7	3.7
	Ratio of exports to shipments (percent)	38.3	23.1	23.6	22.4	29.8	32.8
ET023	Radio and television broadcasting equipment:						
	Number of establishments	170	175	170	170	170	0.0
	Employees (thousands)	12.0	11.0	10.0	10.0	10.0	0.0
	Capacity utilization (percent)	56	52	52	52	52	0.0
	U.S. shipments (million dollars)	3,304 1,364	2,932 1,241	2,763 1,335	3,289 1,544	3,900 1,535	18.6 -0.6
	U.S. exports (million dollars) U.S. imports (million dollars)	1,304 (a)	4.120	4,309	1,5 <del>44</del> /a\	3.527	-0.6 -7.9
	Apparent U.S. consumption (million dollars)	6,917	4,120 5,811	4,309 5,737	5,575	5,891	-7.9 5.7
	Trade balance (million dollars)	-3,613	-2,879	-2,974	-2,286	-1,991	12.9
	Ratio of imports to consumption (percent)	72.0	70.9	75.1	68.7	59.9	-12.9
	Ratio of exports to shipments (percent)	41.3	42.3	48.3	46.9	39.4	-16.2
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TABLE ET-10 Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
ET024	Electric sound and visual signaling apparatus:						
L1024	Number of establishments	454	486	494	494	494	0.0
	Employees (thousands)	25.0	22.0	18.0	17.0	17.0	0.0
	Capacity utilization (percent)	66	63	63	60	60	0.0
	U.S. shipments (million dollars)	5,508	4,837	4,086	4,347	4,243	-2.4
	U.S. exports (million dollars)	1,042	937	1,098	1,092	1,205	10.3
	U.S. imports (million dollars)	(a)	1,845	2,145	(a)	2,647	9.9
	Apparent U.S. consumption (million dollars)	6,263	5,745	5,133	5,664	5,686	0.4
	Trade balance (million dollars)	-755	-908	-1,047	-1,317	-1,443	-9.6
	Ratio of imports to consumption (percent)	28.7	32.1	41.8	42.5	46.6	9.5
	Ratio of exports to shipments (percent)	18.9	19.4	26.9	25.1	28.4	13.0
ET025	Electrical capacitors and resistors:	10.0		20.0	20.1	20. 1	10.0
	Number of establishments	185	174	166	132	115	-12.9
	Employees (thousands)	16.0	15.0	14.0	13.0	12.0	-7.7
	Capacity utilization (percent)	50	54	53	57	65	14.0
	U.S. shipments (million dollars)	1,991	1,828	1,928	1,681	2,000	19.0
	U.S. exports (million dollars)	1,706	1,623	1,664	1,286	1,825	41.9
	U.S. imports (million dollars)	(a)	1,964	2,035	(a)	2,721	25.0
	Apparent U.S. consumption (million dollars)	2,377	2,169	2,299	2,572	2,896	12.6
	Trade balance (million dollars)	-386	-341	-371	-891	-896	-0.6
	Ratio of imports to consumption (percent)	88.0	90.5	88.5	84.7	94.0	11.0
	Ratio of exports to shipments (percent)	85.7	88.8	86.3	76.5	91.2	19.2
ET026	Printed circuits:						
	Number of establishments	435	515	418	374	370	-1.1
	Employees (thousands)	82.0	66.0	63.0	60.0	58.0	-3.3
	Capacity utilization (percent)	51	60	56	59	62	5.1
	U.Ś. shipments (million dollárs)	5,764	4,871	4,709	4,794	4,900	2.2
	U.S. exports (million dollars)	1,853	1,742	1,836	1,781	1,864	4.7
	U.S. imports (million dollars)	(a)	1,785	2,113	(a)	2,215	4.3
	Apparent U.S. consumption (million dollars)	5,808	4,915	4,986	5,136	5,251	2.2
	Trade balance (million dollars)	-44	-44	-277	-342	-351	-2.5
	Ratio of imports to consumption (percent)	32.7	36.3	42.4	41.3	42.2	2.1
	Ratio of exports to shipments (percent)	32.1	35.8	39.0	37.1	38.0	2.4
ET027	Circuit apparatus exceeding 1000V:					de .	de .
	Number of establishments	200	200	200	200	(°)	( <sub>D</sub> )
	Employees (thousands)	15.0	14.0	15.0	15.0	(p)	(p)
	Capacity utilization (percent)	60	60	60	60	(p)	(p)
	U.S. production (million dollars)	3,800	3,600	3,800	3,800	_(°)	(°)
	U.S. exports (million dollars)	549	487	507	509	539	5.8
	U.S. imports (million dollars)	(a)	272	309	(a)	442	10.4
	Apparent U.S. consumption (million dollars)	3,589	3,385	3,603	3,691	( <u>°)</u>	(°)
	Trade balance (million dollars)	211	215	197	109	97	-11.3
	Ratio of imports to consumption (percent)	9.4	8.0	8.6	10.9	( <sup>b</sup> ) ( <sup>2</sup> )	(5)
	Ratio of exports to production (percent)	14.4	13.5	13.3	13.4	141	(4)

TABLE ET-10 Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
ET028	Circuit apparatus not exceeding 1000V:						
	Number of establishments	600	600	600	600	600	0.0
	Employees (thousands)	46.0	43.0	46.0	48.0	50.0	4.2
	Capacity utilization (percent)	60	60	60	60	70	16.7
	U.S. shipments (million dollars)	11,800	11,200	11,800	12,240	14,050	14.8
	U.S. exports (million dollars)	4,478	4,431	5,138	5,327	6,124	14.9
	U.S. imports (million dollars)	(a)	5,127	6,259	(a)	7,369	8.1
	Apparent U.S. consumption (million dollars)	12,255	11,896	12,920	13,731	15,295	11.4
	Trade balance (million dollars)	-455	-696	-1,120	-1,491	-1,245	16.5
	Ratio of imports to consumption (percent)	40.2	43.1	48.4	49.7	48.2	-3.0
ET004	Ratio of exports to shipments (percent)	37.9	39.6	43.5	43.5	43.6	0.1
ET031	Cathode-ray tubes:	4.4	40	40	_		40.0
	Number of establishments	14	13	12	/	4	-42.9
	Employees (thousands)	11.0	7.0	6.0	4.0	2.0	-50.0
	Capacity utilization (percent)	73	74	47	43	43	0.0
	U.S. shipments (million dollars)	2,486	1,508	1,049	620	300	-51.6
	U.S. exports (million dollars)	1,762	1,202	998	600	292	-51.3
	U.S. imports (million dollars)	(a)	577	673	(a)	329	-39.7
	Apparent U.S. consumption (million dollars)	1,331	883	724	566 54	337 -37	-40.5
	Trade balance (million dollars)	1,155	625 65.3	325			(°) 1.3
	Ratio of imports to consumption (percent)	45.6 70.9	65.3 79.7	93.0	96.4 96.7	97.6 97.4	0.7
ГТОЗЗ	Ratio of exports to shipments (percent)	70.9	79.7	95.1	96.7	97.4	0.7
ET032	Electron tubes other than CRTs: Number of establishments	35	33	28	24	22	-8.3
		4.0	4.0	3.0	2.0	2.0	-0.3 0.0
	Employees (thousands)	73	4.0 74	3.0 47	2.0 43	2.0 42	-2.3
	Capacity utilization (percent)	584	629	641	652	600	-2.3 -8.0
	U.S. Shiphients (million dollars)	180	165	175	192	173	-0.0 -10.0
	U.S. exports (million dollars)	(a)	203	175		232	-10.0 8.4
	U.S. imports (million dollars)	650	203 667	662	(a) 674	232 659	-2.2
	Trade balance (million dollars)	-66	-38	-21	-22	-59	-2.2 -166.8
	Ratio of imports to consumption (percent)	37.9	30.4	29.5	31.7	35.2	10.8
	Ratio of imports to consumption (percent)	30.9	26.2	29.3 27.3	29.4	28.8	-2.2
ET033	Semiconductors and integrated circuits:	30.9	20.2	21.5	23.4	20.0	-2.2
L1033	Number of establishments	1,190	1,291	1,274	1,285	1,285	0.0
	Employees (thousands)	251.0	226.0	222.0	223.0	233.0	4.5
	Capacity utilization (percent)	65	79	83	88	89	1.1
	U.S. shipments (million dollars)	61,435	66,608	72,356	75,491	80,257	6.3
	U.S. exports (million dollars)	31,738	35,712	35,130	34,195	37,227	8.9
	U.S. imports (million dollars)	(a)	24,190	26,256	(a)	27,022	6.3
	Apparent U.S. consumption (million dollars)	55,348	55,086	63,482	66,721	70,052	5.0
	Trade balance (million dollars)	6,087	11,522	8,874	8,770	10,205	16.4
	Ratio of imports to consumption (percent)	46.3	43.9	41.4	38.1	38.6	1.2
	Ratio of imports to consumption (percent)	51.7	53.6	48.6	45.3	46.4	2.4
	ratio of exports to shipments (percent)	51.7	55.0	+0.0	₹5.5	70.4	2.4

TABLE ET-10 Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
ET035	Computers, peripherals, and parts:						
	Number of establishments	715	715	720	720	715	-0.7
	Employees (thousands)	151.0	143.0	101.0	101.0	100.0	-1.0
	Capacity utilization (percent)	62	65	71	66	65	-1.5
	U.S. shipments (million dollars)	82,100	84,000	84,500	85,000	85,000	0.0
	U.S. exports (million dollars)	29,534	28,038	27,350	28,862	29,969	3.8
	U.S. imports (million dollars)	(a)	76,940	89,264	(a)	102,468	9.1
	Apparent U.S. consumption (million dollars)	128,383	132,902	146,414	150,087	157,499	4.9
	Trade balance (million dollars)	-46,283	-48,902	-61,914	-65,087	-72,499	-11.4
	Ratio of imports to consumption (percent)	59.1	57.9	61.0	62.6	65.1	3.9
	Ratio of exports to shipments (percent)	36.0	33.4	32.4	34.0	35.3	3.8
ET036	Photographic film and paper:						
	Number of establishments	379	410	403	403	403	0.0
	Employees (thousands)	30.0	34.0	35.0	35.0	35.0	0.0
	Capacity utilization (percent)	69	72	82	89	89	0.0
	U.S. shipments (million dollars)	11,856	12,410	11,726	12,862	12,969	0.8
	U.S. exports (million dollars)	2,127	2,233	2,182	2,091	2,336	11.7
	U.S. imports (million dollars)	( <sup>a</sup> )	1,820	1,951	( <sup>a</sup> )	1,657	-10.2
	Apparent U.S. consumption (million dollars)	11,594	11,997	11,495	12,616	12,290	-2.6
	Trade balance (million dollars)	262	413	231	246	679	175.9
	Ratio of imports to consumption (percent)	16.1	15.2	17.0	14.6	13.5	-7.8
	Ratio of exports to shipments (percent)	17.9	18.0	18.6	16.3	18.0	10.8
ET037	Optical fibers, optical fiber bundles and cables:						440
	Number of establishments	96	90	80	70	_60	-14.3
	Employees (thousands)	7.0	7.0	7.0	7.0	7.0	0.0
	Capacity utilization (percent)	45	52	61	67	67	0.0
	U.S. shipments (million dollars)	3,000	2,400	2,600	2,800	2,900	3.6
	U.S. exports (million dollars)	474	437	383	459	568	23.7
	U.S. imports (million dollars)	0 770	210	310	0.7(0)	554	35.9
	Apparent U.S. consumption (million dollars)	2,778	2,173	2,526	2,749	2,886	5.0
	Trade balance (million dollars)	222	227	74	51	14	-73.3
	Ratio of imports to consumption (percent)	9.1	9.6	12.3	14.8	19.2	29.4
ГТООО	Ratio of exports to shipments (percent)	15.8	18.2	14.7	16.4	19.6	19.4
ET038	Optical goods, including ophthalmic goods:	050	055	0.50	050	0.55	0.0
	Number of establishments	850 50.0	855 50.0	850 50.0	850 50.0	855 55.0	0.6
	Employees (thousands)	50.0	50.0	50.0	50.0	55.0	10.0
	Capacity utilization (percent)	54 7 700	52 7 800	53	59 7 000	58	-1.7
	U.S. shipments (million dollars)	7,700 3,548	7,800	7,800	7,900 4,664	8,100 5,041	2.5
	U.S. exports (million dollars)	3,548 ( <sup>a</sup> )	3,309	3,992	4,664	5,041	8.1 11.9
	U.S. imports (million dollars)		4,495	5,386	9 963	6,294 9.353	11.9 5.5
	Apparent U.S. consumption (million dollars)	8,294 -594	8,986 -1,186	9,195 -1,395	8,862 -962	9,353 -1,253	-30.3
	Trade balance (million dollars)						
	Ratio of imports to consumption (percent)	49.9 46.1	50.0 42.4	58.6 51.2	63.5 59.0	67.3 62.2	6.0 5.4
	ratio of exports to shipments (percent)	46.1	42.4	31.2	59.0	02.2	5.4

TABLE ET-10 Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
ET039	Photographic cameras and equipment:						
L1039	Number of establishments	316	303	293	293	293	0.0
	Employees (thousands)	9.0	8.0	7.0	7.0	7.0	0.0
	Capacity utilization (percent)	59	70	7.0 41	7.0 85	7.0 85	0.0
	U.S. shipments (million dollars)	1,960	2,017	2,211	2,302	2,109	-8.4
	U.S. exports (million dollars)	1,187	954	1,197	1,175	1,177	0.4
	U.S. imports (million dollars)	(a)	2,715	2,382	(a)	1.612	-14.2
	Apparent U.S. consumption (million dollars)	3.802	3,778	3,396	3,006	2,544	-15.4
	Trade balance (million dollars)	-1,842	-1,761	-1,185	-704	-435	38.3
	Ratio of imports to consumption (percent)	79.7	71.9	70.1	62.5	63.4	1.4
	Ratio of exports to shipments (percent)	60.5	47.3	54.1	51.1	55.8	9.3
ET040	Medical goods:	00.0	47.0	J-1.1	01.1	00.0	0.0
L10+0	Number of establishments	4,330	4,320	4,300	4,300	4,300	0.0
	Employees (thousands)	265.0	255.0	247.0	252.0	250.0	-0.8
	Capacity utilization (percent)	63	68	63	67	68	1.5
	U.S. shipments (million dollars)	60,197	63,267	66,999	75,039	81,000	7.9
	U.S. exports (million dollars)	15,059	16,827	18,433	20,970	23,311	11.2
	U.S. imports (million dollars)	(a)	16,143	19,006	(a)	22,152	7.8
	Apparent U.S. consumption (million dollars)	58,371	62,584	67,572	74,617	79,841	7.0
	Trade balance (million dollars)	1,826	683	-573	422	1,159	174.7
	Ratio of imports to consumption (percent)	22.7	25.8	28.1	27.5	27.7	0.8
	Ratio of exports to shipments (percent)	25.0	26.6	27.5	27.9	28.8	3.0
ET041	Watches and clocks:	20.0	20.0	27.0	27.0	20.0	0.0
	Number of establishments	124	124	124	124	124	0.0
	Employees (thousands)	6.0	3.0	3.0	2.0	2.0	0.0
	Capacity utilization (percent)	51	46	82	56	56	0.0
	U.S. shipments (million dollars)	668	570	619	641	663	3.4
	U.S. exports (million dollars)	235	242	271	255	304	18.9
	U.S. imports (million dollars)	(a)	3,291	3,634	(a)	3,964	4.5
	Apparent U.S. consumption (million dollars)	3,532	3,619	3,982	4,18Ó	4,323	3.4
	Trade balance (million dollars)	-2,864	-3,049	-3,363	-3,539	-3,660	-3.4
	Ratio of imports to consumption (percent)	87.7	90.9	91.3	90.8	91.7	1.0
	Ratio of exports to shipments (percent)	35.1	42.5	43.8	39.9	45.8	15.0
ET042	Drawing, drafting, and calculating instruments:						
	Number of establishments	130	130	130	130	130	0.0
	Employees (thousands)	6.0	5.0	5.0	4.0	4.0	0.0
	Capacity utilization (percent)	70	65	70	75	75	0.0
	U.S. shipments (million dollars)	887	814	896	1,100	1.200	9.1
	U.S. exports (million dollars)	368	364	397	485	619	27.6
	U.S. imports (million dollars)	(a)	223	264	(a)	293	-12.4
	Apparent U.S. consumption (million dollars)	711	673	763	949	874	-7.9
	Trade balance (million dollars)	176	141	133	151	326	116.3
	Ratio of imports to consumption (percent)	26.9	33.2	34.6	35.2	33.6	-4.8
	Ratio of exports to shipments (percent)	41.5	44.7	44.3	44.1	51.6	17.0
	(Paradia )					00	

TABLE ET-10 Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06—Continued

USITC code	Industry/commodity group	2003	2004	2005	2006		Percent change, 2006 from 2005
ET043	Measuring, testing, and controlling instruments: Number of establishments Employees (thousands) Capacity utilization (percent) U.S. shipments (million dollars) U.S. exports (million dollars) U.S. imports (million dollars) Apparent U.S. consumption (million dollars) Trade balance (million dollars) Ratio of imports to consumption (percent) Ratio of exports to shipments (percent)	4,060 210.0 65 38,724 14,346 (a) 35,973 2,751 32.2 37.0	4,060 192.0 65 38,960 14,683 12,638 36,914 2,046 34.2 37.7	4,060 184.0 70 42,735 16,603 14,367 40,498 2,237 35.5 38.9	4,060 181.0 75 43,900 17,399 (a) 41,860 2,040 36.7 39.6	4,060 181.0 75 44,000 19,669 16,573 40,904 3,096 40.5 44.7	0.0 0.0 0.0 0.2 13.0 7.9 -2.3 51.8 10.4 12.8

Source: These data have been estimated by the Commission's international trade analysts on the basis of primary and secondary data sources including discussions with various Government and industry contacts. These estimated data are subject to change either from secondary sources or from detailed surveys the Commission often conducts in the course of statutory investigations or other work. Further, these data may undergo adjustments based on revisions in tariff nomenclature, classification practices, or redefinitions of industry classes.

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Less than 500,000.

<sup>&</sup>lt;sup>b</sup>Not available.

<sup>&</sup>lt;sup>c</sup>Not meaningful.

# Miscellaneous Manufactures<sup>1</sup>

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Change in 2006 from 2005:

U.S. trade deficit: Increased by \$3.4 billion (5 percent) to \$75.6 billion U.S. exports: Increased by \$4.3 billion (22 percent) to \$23.4 billion U.S. imports: Increased by \$7.6 billion (8 percent) to \$98.9 billion

The U.S. trade deficit in miscellaneous manufactures expanded by \$3.4 billion (5 percent) to \$75.6 billion in 2006, largely reflecting rising imports of furniture (\$1.8 billion), video games (\$1.3 billion), gold jewelry (\$919 million), sporting goods (\$622 million), and luggage (\$498 million). China continued to be the dominant supplier (52 percent of total imports in 2006) of virtually all of the products covered in this broad industry sector (table MS-1). China also accounted for 66 percent (\$5.0 billion) of the expansion in sector imports in 2006. The increase in imports of miscellaneous manufactures was partially offset by rising exports of works of art (\$1.4 billion), jewelry (\$973 million), military arms and munitions (\$670 million), furniture (\$334 million), and games (\$300 million).

### U.S. Exports

The principal export destinations for miscellaneous manufactures were Canada, the United Kingdom, Japan, and Mexico, which collectively accounted for 51 percent of sector exports and 46 percent of the growth in sector exports in 2006. Leading the growth in exports to these markets in 2006 were upholstered furniture to Canada (\$85 million), works of art and gold jewelry to the United Kingdom (\$307 million and \$232 million, respectively) and Japan (\$77 million and \$179 million, respectively), and home video game cartridges and parts to Mexico (131 million).

In 2006, U.S. exports of works of art and miscellaneous manufactured goods increased by \$1.4 billion (58 percent) to \$3.8 billion (table MS-2). Works of art and antiques accounted for all of the expansion, with exports rising by \$1.4 million (72 percent) to \$3.3 billion. The entry and departure of touring works of art and antique pieces, and, to a lesser extent, auctions and other sales to private collectors, account for the bulk of international trade in these articles. In 2006, U.S. exports of works of art and antiques to Switzerland rose by \$350 million (75 percent) to \$817 million, and exports to the United Kingdom increased by \$307 million (59 percent) to \$824 million. Together, exports to Korea, Hong Kong, and Japan increased by \$319 million (296 percent) to \$427 million.

<sup>&</sup>lt;sup>1</sup> The miscellaneous manufactures sector encompasses a variety of industry groups, including luggage, handbags, umbrellas, silverware, jewelry, furniture, lamps, prefabricated buildings, writing instruments, musical instruments, bicycles, toys, games, sporting goods, arms and ammunition, brooms and brushes, hair grooming articles, and apparel fasteners. For the most part, the manufacturing processes used to make these articles are mature, and imports supply a significant share of the U.S. market.

**TABLE MS-1** Miscellaneous manufactures: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06<sup>a</sup>

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
_			— Million dolla	ars ———			
U.S. exports of domestic merchandise: China Canada Mexico United Kingdom Japan France Italy India Taiwan Germany All other	137 3,561 1,687 1,327 1,686 334 236 45 230 455 5,306	143 3,697 1,511 1,315 1,604 299 247 69 299 450 5,225	185 4,257 1,525 1,535 1,625 361 266 90 355 524 6,200	222 4,745 1,611 1,710 1,882 490 308 167 289 604 7,085	230 5,230 2,027 2,467 2,192 728 253 182 370 700 8,986	9 485 416 757 310 238 -54 15 82 95 1,902	4.0 10.2 25.8 44.3 16.5 48.5 -17.6 9.2 28.3 15.8 26.8
Total	15,004	14,859	16,923	19,111	23,366	4,255	22.3
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	3,434 3,494 394 2,869 789 3,303 69 38	3,344 3,409 456 2,755 827 3,151 89 45	3,845 3,920 451 2,814 818 3,679 133 61	4,412 4,489 520 3,217 1,011 4,055 146 67	5,611 5,737 683 4,018 1,224 5,018 160 133	1,199 1,248 163 801 213 963 14 66	27.2 27.8 31.4 24.9 21.1 23.7 9.6 98.6
U.S. imports of merchandise for consumption: China Canada Mexico United Kingdom Japan France Italy India Taiwan Germany All other	31,490 5,967 6,356 1,602 3,399 2,546 4,020 1,283 2,325 1,189 11,949	35,812 6,137 6,252 1,496 1,992 2,220 3,852 1,618 2,282 1,409 11,695	40,712 6,700 6,555 1,944 2,058 2,643 3,593 1,958 2,342 1,587 13,134	46,411 6,828 6,814 2,040 2,656 2,693 3,539 2,311 2,358 1,625 14,031	51,416 6,880 7,022 2,361 2,224 3,112 3,486 3,024 2,279 1,813 15,317	5,005 52 208 321 -433 419 -53 713 -79 188 1,285	10.8 0.8 3.1 15.7 -16.3 15.6 -1.5 30.9 11.6 9.2
Total	72,129	74,765	83,226	91,306	98,933	7,627	8.4
EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	11,338 11,741 1,125 7,779 465 44,775 118 485	10,815 11,249 1,053 7,582 418 47,838 123 542	11,867 12,402 1,072 8,114 464 53,668 127 716	12,013 12,605 1,204 8,455 481 60,793 133 844	13,195 13,758 1,264 8,615 515 66,558 186 807	1,182 1,153 60 160 34 5,766 53 -37	9.8 9.2 5.0 1.9 7.1 9.5 39.8 -4.4

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**TABLE MS-1** Miscellaneous manufactures: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2002–06a—continued

						Change, 200	6 from 2005
Item	2002	2003	2004	2005	2006	Absolute	Percent
-			— Million dolla	ars ———			
U.S. merchandise trade balance: China Canada Mexico United Kingdom Japan France Italy India Taiwan Germany All other	-31,353 -2,406 -4,668 -275 -1,713 -2,213 -3,785 -1,238 -2,095 -734 -6,644	-35,669 -2,440 -4,741 -181 -388 -1,921 -3,605 -1,549 -1,984 -959 -6,469	-40,527 -2,443 -5,030 -410 -432 -2,282 -3,327 -1,868 -1,987 -1,064 -6,934	-46,189 -2,083 -5,204 -330 -775 -2,203 -3,231 -2,144 -2,069 -1,021 -6,947	-51,186 -1,650 -4,996 106 -32 -2,384 -3,232 -2,842 -1,909 -1,113 -6,331	-4,996 433 208 436 743 -181 -1 -698 160 -93 616	-10.8 20.8 4.0 95.9 -8.2 -32.5 7.8 -9.1 8.9
Total  EU-15 EU-25 OPEC Latin America CBERA Asia Sub-Saharan Africa Central and Eastern Europe	-57,124 -7,905 -8,248 -732 -4,910 324 -41,472 -48 -447	-59,906 -7,471 -7,840 -597 -4,827 -4,827 -4,687 -35 -496	-66,304 -8,022 -8,482 -621 -5,300 -354 -49,989 6 -655	-72,195 -7,601 -8,116 -684 -5,238 -530 -56,737 13 -777	-75,567 -7,584 -8,021 -581 -4,597 709 -61,540 -26 -674	-3,372 17 95 103 641 179 -4,803 -39 103	-4.7 0.2 1.2 15.0 12.2 33.8 -8.5 (b)

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2006.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>Not meaningful for purposes of comparison.

<sup>&</sup>lt;sup>c</sup>Less than 0.05 percent.

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TABLE MS-2 Leading changes in U.S. exports and imports of miscellaneous manufactures, 2002–06a

						Change, 200	6 from 2005
Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
			—— Million d	lollars			
U.S. EXPORTS:							
Increases:							
Works of art and miscellaneous manufactured							
goods (MM064)	1,379	1,561	1,806	2,423	3,837	1,413	58.3
Precious jewelry and related articles (MM051)	1,826	1,770	2,270	2,721	3,694	973	35.8
Arms and ammunition (MM066)	2,019	1,736	2,240	2,186	2,855	670	30.6
Furniture (MM054)	2,409	2,595	2,787	3,020	3,354	334	11.1
Games (MM060)	858	1,084	1,089	1,410	1,710	300	21.3
All other	6,514	6,112	6,731	7,350	7,915	564	7.7
TOTAL	15,004	14,859	16,923	19,111	23,366	4,255	22.3
U.S. IMPORTS:							
Increases:							
Furniture (MM054)	17,028	19,035	21,819	24,296	26,078	1.782	7.3
Works of art and miscellaneous manufactured	,	,	,	,		.,	
goods (MM064)	9,274	8,556	9,662	9,943	11,228	1,286	12.9
Precious jewelry and related articles (MM051)	6,261	6,559	7,492	8,359	9,553	1,194	14.3
Games (MM060)	5,887	4,985	5,199	6,745	7,450	705	10.5
Luggage, handbags, and flat goods (MM046)	4,412	4,734	5,585	6.151	6,834	683	11.1
Sporting goods (MM061)	3,859	4,149	4,581	4,978	5,600	622	12.5
All other	25,408	26,747	28,888	30,834	32,189	1,355	4.4
TOTAL	72,129	74,765	83,226	91,306	98,933	7,627	8.4

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

U.S. exports of precious jewelry and related articles increased by \$973 million (36 percent) to \$3.7 billion in 2006, driven largely by the rising value of gold. Gold jewelry accounted for most of this increase, rising by \$721 million (36 percent) to \$2.7 billion.<sup>2</sup> U.S. exports of gold jewelry to the United Kingdom increased by \$232 million (214 percent) to \$341 million in 2006, and exports to Japan rose by \$179 million (55 percent) to \$504 million. U.S. exports of gold jewelry to the Dominican Republic rose by \$82 million (253 percent) to \$114 million in 2006. Most U.S. exports of gold jewelry to the Dominican Republic consist of parts for assembly and return to the United States. Prior to the U.S. free trade agreement with the Dominican Republic and Central America (CAFTA-DR), many jewelry pieces assembled in the Dominican Republic did not qualify for duty-free entry under the Caribbean Basin Economic Recovery Act (CBEMA) because the value added in the Dominican Republic to the U.S.-made gold components was less than the minimum threshold of 35 percent. The CAFTA-DR FTA rules of origin allow for the combination of the U.S. and Dominican (or Central American) content in determining eligibility for dutyfree entry, providing an incentive to expand assembly operations in the Dominican Republic and Central America.<sup>3</sup>

U.S. private sector exports of arms and ammunition in 2006 increased by \$670 million (31 percent) to \$2.9 billion. Private sector exports of guided missiles more than doubled in 2006, rising by \$376 million to \$715 million. Markets with the largest increases in purchases of guided missiles were Taiwan (\$120 million), Pakistan (\$61 million), Korea (\$49 million), Greece (\$48 million), and Turkey (\$42 million) reflecting strategic partnerships between those countries and the United States. Private sector exports of munitions (e.g., bombs, grenades, torpedoes, and mines) and parts also more than doubled in 2006, expanding by \$221 million to \$397 million. The export markets with the largest increases in 2006 were Israel and the United Arab Emirates, with growth of \$116 million and \$67 million, respectively.

In 2006, U.S. exports of furniture grew by \$334 million (11 percent) to \$3.6 billion. Shipments to Canada accounted for over one-half of this increase, as exports to Canada rose by \$192 million (13 percent) to \$1.6 billion, spurred in part by historically low interest rates, gains in disposable income, and strong consumer confidence in Canada in 2006.<sup>5</sup> Upholstered furniture accounted for the bulk of the increase in U.S. exports to Canada.

U.S. exports of games grew by \$300 million (21 percent) to \$1.7 billion in 2006. Exports of parts and accessories for home video games, including software in the form of video game cartridges, rose by \$181 million (42 percent) to \$612 million, accounting for 60 percent in the growth of total exports in the games category. Software exports were boosted in 2006 with the introduction of a new generation of home video game consoles in late 2005 by the three industry leaders: Sony, Nintendo, and Microsoft. Mexico is the leading market for U.S. exports of home video game cartridges and accessories, with exports in 2006 increasing by \$131 million (525 percent) to \$156 million.

<sup>&</sup>lt;sup>2</sup> The average daily price of gold rose by 35.8 percent in 2005-06, based on the London Final Price. London Bullion Market Association website.

<sup>&</sup>lt;sup>3</sup> U.S.-CAFTAN-DR FTA, art. 4.5.

<sup>&</sup>lt;sup>4</sup> Transfers by the U.S. Department of Defense dwarfed private sector sales but are not reported in official trade statistics.

<sup>&</sup>lt;sup>5</sup> St-Jacques, Report on Canada's Industrial Performance: First Half of 2006, 3.

#### U.S. Imports

China, Mexico, and Canada were the leading suppliers of miscellaneous manufactures to the U.S. market in 2006, accounting for 66 percent of total imports (table MS-1). The EU-25 supplied an additional 14 percent. U.S. imports from China of miscellaneous manufactures consisted largely of high labor content products such as furniture (\$13.5 billion); toys and dolls (\$8.5 billion); and luggage, handbags, and flat goods (\$5.1 billion).

U.S. imports of furniture increased by \$1.8 billion (7 percent) to \$26.1 billion in 2006. The import growth rate slowed in 2006 from the rate of 11 percent in 2005, as the pace of housing turnover in the U.S. market decelerated in 2006. Trends in home sales and interest rates are the most important factors determining the demand for furniture. China remained the leading U.S. supplier of wood furniture in 2006, and accounted for all of the expansion in U.S. imports of furniture. Imports from China rose by \$1.8 billion (15 percent) to \$13.5 billion, with wood furniture accounting for over one-half of all furniture imported from China. Vietnam has emerged as an alternative supplier, particularly for wood furniture, with imports of furniture from Vietnam rising by \$208 million (31 percent) to \$891 million in 2006. The growth of imports from Asia has coincided with a decline in furniture imports from Italy and Brazil, especially in upholstered furniture from Italy and wood furniture from Brazil.

Despite the imposition of an antidumping duty order in 2005, U.S. imports of wooden bedroom furniture from China continued to expand during the period, rising by \$270 million (22 percent) to \$1.5 billion. Imports from all other suppliers increased by \$222 million (15 percent) to \$1.7 billion, and China's share of the U.S. import market edged upward from 46 percent to 47 percent.

In 2006, U.S. imports of works of art and miscellaneous manufactured goods increased by \$1.3 billion (13 percent) to \$11.2 billion. Within this category, imports of works of art and antiques climbed by \$1.2 billion (21 percent) to \$6.6 billion. Touring exhibits from European collections may have accounted for much of this increase.

While U.S. imports of home video games and parts (including game cartridges) rose by \$1.3 billion (53 percent) in 2006 to \$3.8 billion, imports of all other types of games fell by \$620 million, for a net increase of \$705 million in the games category (table MS-2). This development reflects the role of video games in the home entertainment market. Other types of games lost market share following the introduction of the new generation of video game consoles in late 2005 by the three industry leaders, Sony, Nintendo, and Microsoft. Production of game consoles by the leading companies is limited to China and Japan, but components and software are made at high-tech centers throughout the world. China dominates the assembly of both consoles and cartridges, supplying 95 percent of U.S. imports of all home video games and parts in 2006. Accordingly, in 2006, U.S. imports of such articles from China rose by \$1.3 billion (55 percent) to \$3.6 billion.

U.S. imports of jewelry of precious metal increased by \$1.2 billion (14 percent) to \$9.6 billion in 2006, albeit less than the rise in the prices of precious metals such as gold and

<sup>&</sup>lt;sup>6</sup> Shell, "Overheated Housing Market is Cooling."

<sup>&</sup>lt;sup>7</sup> Furniture Today, "Magnussen to Ship from Vietnam: Part of its Quick-Ship Supply Chain Efforts."

<sup>&</sup>lt;sup>8</sup> Carroll, "U.S. Furniture Imports Up 7% in 2006."

silver. <sup>9</sup> Imports of gold jewelry from India grew by \$633 million (38 percent) to \$2.3 billion, bringing India's share of U.S. imports of gold jewelry to 29 percent. India has a significant diamond cutting and polishing industry and has developed a niche in the global jewelry market for gold jewelry set with small diamonds. The competitive advantages of India for gold jewelry have led jewelry producers in China and Thailand to seek alternative niches, focusing on high fashion silver jewelry. <sup>10</sup> In 2006, imports of silver jewelry from China increased by \$78 million (28 percent) to \$359 million and imports from Thailand increased by \$56 million (24 percent) to \$293 million.

In 2006, U.S. imports of luggage, handbags, and flatgoods rose by \$683 million (11 percent) to \$6.8 million. China accounted for 74 percent of total imports in this category. Imports from China increased by \$508 million (11 percent) to \$4.6 million in 2006. During the same period, imports from Italy, the second leading supplier with an 8 percent U.S. import market share, rose by \$96 million (21 percent).

China also was the leading supplier of sporting goods to the U.S. market in 2006, accounting for 68 percent of total U.S. imports and 86 percent of the growth in U.S. sector imports. While total U.S imports of sporting goods increased by \$622 million (13 percent) to \$5.6 billion, imports from China rose by \$533 million (16 percent) to \$3.8 billion. China is a competitive supplier in almost every category of sporting goods. Most of the leading brands in the sporting goods industry contract out production to manufacturers in China or license the use of their brand names to Chinese producers.

<sup>&</sup>lt;sup>9</sup> The price of gold rose by 36 percent and the price of silver by 58 percent in 2006, based on the London Final Price. London Bullion Market Association Web site.

<sup>&</sup>lt;sup>10</sup> Esserman, Steptoe & Johnson, "Comments on 2006 GSP Eligibility and CNL Waiver Review."

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TABLE MS-3 Miscellaneous manufactures: U.S. trade for industry/commodity groups and subgroups, 2002–06a

USITC							Change, 200	6 from 2005
code <sup>b</sup>	Industry/commodity group	2002	2003	2004	2005	2006	Absolute	Percent
				Million	dollars ———			
MM046	Luggage, handbags, and flat goods:							
	Exports	278	298	315	384	466	83	21.6
	Imports	4,412	4,734	5,585	6,151	6,834	683	11.1
	Trade balance	-4,134	-4,437	-5,270	-5,767	-6,368	-600	-10.4
MM046A	Luggage:							
	Exports	194	187	195	204	268	64	31.5
	Imports	2,656	2,622	3,044	3,259	3,758	498	15.3
	Trade balance	-2,462	-2,435	-2,849	-3,056	-3,490	-434	-14.2
MM046B	Handbags:							
	Exports	55	76	87	149	161	12	8.2
	Imports	1,301	1,503	1,926	2,220	2,366	146	6.6
	Trade balance	-1,247	-1,426	-1,839	-2,071	-2,204	-134	-6.5
MM046C	Flat goods:							
	Exports	25	23	26	23	29	6	26.6
	Imports	433	473	532	580	616	36	6.3
	Trade balance	-408	-451	-506	-557	-588	-30	-5.5
MM047	Certain other leather goods:							
	Exports	94	87	124	221	235	14	6.2
	Imports	291	348	384	408	464	56	13.8
	Trade balance	-197	-262	-260	-186	-229	-43	-22.9
MM048	Musical instruments and accessories:							
	Exports	373	381	456	516	561	45	8.7
	Imports	1,306	1,363	1,503	1,531	1,413	-118	-7.7
	Trade balance	-933	-982	-1,047	-1,014	-852	163	16.0
MM049	Umbrellas, whips, riding crops, and canes:							
	Exports	9	7	8	10	12	2	20.0
	Imports	275	310	341	371	386	15	4.1
	Trade balance	-266	-303	-333	-361	-374	-13	-3.6
MM050	Silverware and related articles of precious metal:							
	Exports	155	161	180	184	167	-17	-9.2
	Imports	54	68	81	85	302	217	253.8
	Trade balance	101	92	99	98	-136	-234	(°)
MM051	Precious jewelry and related articles:					_		( )
	Exports	1,826	1,770	2,270	2,721	3,694	973	35.8
	Imports	6,261	6,559	7,492	8,359	9,553	1,194	14.3
	Trade balance	-4.435	-4,789	-5,222	-5,638	-5,858	-220	-3.9

TABLE MS-3 Miscellaneous manufactures: U.S. trade for industry/commodity groups and subgroups, 2002–06a—continued

USITC							Change, 2006	from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Absolute	)	Percent
MM052	Costume jewelry and related articles:							
	Exports	104	100	109	126	166	39	31.2
	Imports	750	816	947	1,214	1,317	102	8.4
	Trade balance	-646	-716	-838	-1,088	-1,151	-63	-5.8
MM053	Bicycles and certain parts:							
	Exports	216	240	266	288	300	12	4.3
	Imports	1,125	1,106	1,260	1,434	1,342	-92	-6.4
	Trade balance	-909	-867	-994	-1,146	-1,041	104	9.1
MM054	Furniture:							
	Exports	2,409	2,595	2,787	3,020	3,354	334	11.1
	Imports	17,028	19,035	21,819	24,296	26,078	1,782	7.3
	Trade balance	-14,620	-16,440	-19,031	-21,276	-22,724	-1,448	-6.8
MM055	Writing instruments and related articles:							
	Exports	269	241	228	210	209	-1	-0.3
	Imports	1,044	1,100	1,215	1,225	1,335	110	9.0
	Trade balance	-775	-859	-986	-1,015	-1,125	-111	-10.9
MM056	Lamps and lighting fittings:							
	Exports	671	628	677	742	825	83	11.1
	Imports	4,605	4,781	5,319	5,831	6,180	349	6.0
	Trade balance	-3,934	-4,153	-4,641	-5,089	-5,356	-267	-5.2
MM057	Prefabricated buildings:							
	Exports	275	309	353	447	476	29	6.4
	Imports	341	347	403	427	417	-10	-2.2
	Trade balance	-66	-39	-50	21	59	38	186.0
MM058	Dolls:							
	Exports	24	20	22	17	19	2	11.3
	Imports	1,257	1,226	1,005	1,038	1,053	15	1.4
	Trade balance	-1,233	-1,206	-983	-1,020	-1,033	-13	-1.3
MM059	Toys:							
	Exports	424	378	412	406	442	36	8.8
	Imports	8,292	8,452	8,848	9,287	9,338	51	0.6
	Trade balance	-7,868	-8,074	-8,435	-8,880	-8,895	-15	-0.2
MM060	Games:							
	Exports	858	1,084	1,089	1,410	1,710	300	21.3
	Imports	5,887	4,985	5,199	6,745	7,450	705	10.5
	Trade balance	-5,029	-3,901	-4,111	-5,335	-5,739	-405	-7.6

TABLE MS-3 Miscellaneous manufactures: U.S. trade for industry/commodity groups and subgroups, 2002–06a—continued

USITC							Change, 2006	from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Absolute		Percent
				——— Million o	dollars ———			
MM061	Sporting goods:							
	Exports	1,537	1,534	1,670	1,735	1,813	79	4.5
	Imports	3,859	4,149	4,581	4,978	5,600	622	12.5
	Trade balance	-2,322	-2,615	-2,911	-3,243	-3,787	-543	-16.8
MM062	Smokers' articles:							
	Exports	82	93	99	96	96	( <sup>d</sup> )	(e)
	Imports	139	170	191	204	211	8	3.8
	Trade balance	-57	-77	-93	-107	-115	-8	-7.1
MM063	Brooms, brushes, and hair grooming articles:							
	Exports	205	228	258	272	283	12	4.3
	Imports	999	1,011	1,112	1,236	1,275	39	3.2
	Trade balance	-795	-783	-854	-964	-992	-27	-2.8
MM063/	A Brooms and brushes:							
	Exports	185	211	239	253	265	12	4.9
	Imports	815	847	945	1,049	1,070	21	2.0
	Trade balance	-630	-635	-707	-796	-804	-8	-1.1
MM063E	B Hair grooming articles, non-electric (except brushes):							
	Exports	20	17	19	18	18	-1	-4.0
	Imports	184	164	166	187	205	18	9.7
	Trade balance	-164	-147	-147	-168	-187	-19	-11.2
MM064	Works of art and miscellaneous manufactured goods:							
	Exports	1,379	1,561	1,806	2,423	3,837	1,413	58.3
	Imports	9.274	8,556	9,662	9,943	11,228	1,286	12.9
	Trade balance	-7.895	-6,995	-7.857	-7,520	-7,392	128	1.7
MM065	Apparel fasteners:	,	-,	,	,	,		
	Exports	157	148	158	145	154	9	6.0
	Imports	65	69	81	80	83	3	3.6
	Trade balance	92	79	77	65	71	6	9.1
MM066	Arms and ammunition:							
	Exports	2,019	1,736	2,240	2,186	2,855	670	30.6
	Imports	978	1,090	1,357	1,444	1,824	379	26.3
	Trade balance	1,040	646	883	742	1,032	290	39.1
		•				•		

TABLE MS-3 Miscellaneous manufactures: U.S. trade for industry/commodity groups and subgroups, 2002–06a—continued

USITC							hange, 2006	from 2005
code <sup>b</sup>	Industry/commodity group	2002 2003	2004	2005	2006	Absolute		Percent
				——— Million o	lollars ———			
MM066/	A Small arms and ammunition:							
	Exports	480	551	777	823	905	82	10.0
	Imports	800	873	1,059	1,071	1,389	317	29.6
	Trade balance	-320	-321	-281	-249	-484	-235	-94.6
MM067	Seats for motor vehicles and aircraft:							
	Exports	1,641	1,260	1,395	1,550	1,688	138	8.9
	Imports	3,886	4,489	4,841	5,020	5,250	230	4.6
	Trade balance	-2,245	-3,229	-3,446	-3,470	-3,562	-92	-2.6

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>&</sup>lt;sup>b</sup>This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes

<sup>°</sup>Not meaningful for purposes of comparison.

dLess than \$500,000.

<sup>&</sup>lt;sup>e</sup>Less than 0.05 percent.

TABLE MS-4 Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2002–06

USITC code	Industry/commodity group	2002	2003	2004	2005	2006	Percent change, 2006 from 2005
MMOAGA	A Luggege						
IVIIVIU40A	A Luggage:	100	101	179	20	15	25.0
	Number of establishments	183	181		20	15	-25.0
	Employees (thousands)	6.0	6.0	6.0	4.0	3.0	-25.0
	Capacity utilization (percent)	68	72 975	73	70	70 74	0.0
	U.S. shipments (million dollars)	825	875	881	98	74	-24.5
	U.S. exports (million dollars)	194	187	195	204	268	31.5
	U.S. imports (million dollars)	(a)	2,622	3,044	(a)	3,758	15.3
	Apparent U.S. consumption (million dollars)	3,287	3,310	3,730	3,154	3,564	13.0
	Trade balance (million dollars)	-2,462	-2,435	-2,849	-3,056	-3,490	-14.2
	Ratio of imports to consumption (percent)	80.8	79.2	81.6	<sup>b</sup> 103.3	<sup>b</sup> 105.4	2.0
1111010	Ratio of exports to shipments (percent)	23.5	21.4	22.1	<sup>b</sup> 207.7	⁵361.7	74.1
MM0461	B Handbags:						
	Number of establishments	90	88	86	40	35	-12.5
	Employees (thousands)	3.0	3.0	3.0	2.0	2.0	0.0
	Capacity utilization (percent)	60	64	65	61	61	0.0
	U.S. shipments (million dollars)	220	233	235	109	.96	-11.9
	U.S. exports (million dollars)	55	_76	87	149	161	8.2
	U.S. imports (million dollars)	(a)	1,503	1,926	(a)	2,366	6.6
	Apparent U.S. consumption (million dollars)	1,467	1,659	2,074	2,180	2,300	5.5
	Trade balance (million dollars)	-1,247	-1,426	-1,839	-2,071	-2,204	-6.5
	Ratio of imports to consumption (percent)	88.7	90.6	92.9	<sup>b</sup> 101.8	<sup>b</sup> 102.8	1.0
	Ratio of exports to shipments (percent)	24.9	32.7	37.1	<sup>b</sup> 136.7	⁵167.9	22.9
MM0460	C Flat goods:						
	Number of establishments	112	110	108	50	40	-20.0
	Employees (thousands)	3.0	3.0	3.0	2.0	2.0	0.0
	Capacity utilization (percent)	64	68	68	66	66	0.0
	U.S. shipments (million dollars)	375	398	396	183	147	-19.7
	U.S. exports (million dollars)	25	23	26	23	29	26.6
	U.S. imports (million dollars)	(a)	473	532	(a)	616	6.3
	Apparent U.S. consumption (million dollars)	783	849	902	740	735	-0.7
	Trade balance (million dollars)	-408	-451	-506	-557	-588	-5.5
	Ratio of imports to consumption (percent)	55.3	55.8	59.0	78.3	83.9	7.1
	Ratio of exports to shipments (percent)	6.7	5.7	6.5	12.3	19.4	57.6
MM047	Certain other leather goods:						
	Number of establishments	434	430	426	(°)	(°)	(°)
	Employees (thousands)	9.0	9.0	9.0	(°)	(°)	(°)
	Capacity utilization (percent)	58	62	64	(c)	(c)	(°)
	U.S. shipments (million dollars)	545	578	585	(°)	(°)	(°)
	U.S. exports (million dollars)	94	87	124	2 <b>Ì</b> 1	235	6.2
	U.S. imports (million dollars)	(1)	348	384	(a)	464	13.8
	Apparent U.S. consumption (million dollars)	7 <u>4</u> 2	840	845	(c)	(°)	(°)
	Trade balance (million dollars)	-197	-262	-260	-186	-229	-22.9
	Ratio of imports to consumption (percent)	39.2	41.5	45.5	(°)	(°)	101
	Ratio of exports to shipments (percent)	17.3	15.0	21.2	(°)	(c)	(°)
	the state of the s		. 0.0		( )	( )	( )

**TABLE MS-4** Miscellaneous manufactures sector: Profile of U.S. trade for industry and marker, by industry/commodity groups and subgroups, 2002–06—continued

USITC	Industry/commodity group					Change, 2006 from 2005		
		2002	2003	2004	2005	2006	Absolute Percent	
MM048	Musical instruments and accessories:							
	Number of establishments	559	560	560	560	560	0.0	
	Employees (thousands)	15.0 59	14.0 67	13.0 84	13.0 80	13.0 80	0.0 0.0	
	U.S. shipments (million dollars)	1.814	1.749	1,629	1.678	1.720	2.5	
	U.S. exports (million dollars)	373	381	456	516	561	2.3 8.7	
	U.S. imports (million dollars)	( <sup>a</sup> )	1,363	1,503	( <sup>a</sup> )	1.413	-7.7	
	Apparent U.S. consumption (million dollars)	2,747	2,731	2,676	2,692	2,572	-4.5	
	Trade balance (million dollars)	-933	-982	-1,047	-1,014	-852	16.0	
	Ratio of imports to consumption (percent)	47.6	49.9	56.2	56.9	54.9	-3.4	
N 4 N 4 O 4 O	Ratio of exports to shipments (percent)	20.6	21.8	28.0	30.8	32.6	6.1	
MM049	Umbrellas, whips, riding crops, and canes: Number of establishments	16	16	16	16	16	0.0	
	Employees (thousands)	0.5	0.5	0.5	0.5	0.5	0.0	
	Capacity utilization (percent)	65	50 50	51	62	62	0.0	
	U.S. shipments (million dollars)	74	74	74	74	74	0.0	
	U.S. exports (million dollars)	9	7	8	10	12	20.0	
	U.S. imports (million dollars)	(a)	310	341	(a)	386	4.1	
	Apparent U.S. consumption (million dollars)	340	377	407	435	448	3.0	
	Trade balance (million dollars)	-266	-303	-333	-361	-374	-3.6	
	Ratio of imports to consumption (percent)	80.8 11.7	82.3 9.9	83.8 11.1	85.4 13.9	86.2 16.7	1.0 20.0	
MM050	Ratio of exports to shipments (percent)	11.7	9.9	11.1	13.9	10.7	20.0	
IVIIVIOSO	Number of establishments	30	30	29	27	27	0.0	
	Employees (thousands)	4.0	4.0	4.0	4.0	4.0	0.0	
	Capacity utilization (percent)	75	77	78	78	75	-3.8	
	U.S. shipments (million dollars)	400	400	423	425	430	1.2	
	U.S. exports (million dollars)	155	161	180	184	167	-9.2	
	U.S. imports (million dollars)	(a)	68	81	(a)	302	253.8	
	Apparent U.S. consumption (million dollars)	299	308	324 99	327 98	566 -136	73.0	
	Trade balance (million dollars)	101 18.0	92 22.2	25.1	26.1	53.4	( <sup>d</sup> ) 104.5	
	Ratio of imports to consumption (percent)	38.8	40.1	42.6	43.2	38.8	-10.3	
MM051	Precious jewelry and related articles:	30.0	40.1	42.0	<del>-10.2</del>	50.0	10.0	
	Number of establishments	2,270	2,270	2,240	2,240	2,235	-0.2	
	Employees (thousands)	39.0	39.0	39.0	39.0	39.0	0.0	
	Capacity utilization (percent)	70	73	74	74	75	1.4	
	U.S. shipments (million dollars)	5,800	5,800	6,136	7,000	7,200	2.9	
	U.S. exports (million dollars)	1,826	1,770	2,270	2,721	3,694	35.8	
	U.S. imports (million dollars)	10,235	6,559 10,589	7,492 11,358	(ª) 12.638	9,553 13,058	14.3 3.3	
	Trade balance (million dollars)	-4,435	-4,789	-5,222	-5,638	-5,858	-3.9	
	Ratio of imports to consumption (percent)	61.2	61.9	66.0	66.1	73.2	10.6	
	Ratio of exports to shipments (percent)	31.5	30.5	37.0	38.9	51.3	32.0	

**TABLE MS-4** Miscellaneous manufactures sector: Profile of U.S. trade for industry and marker, by industry/commodity groups and subgroups, 2002–06—continued

USITC	Industry/commodity group			2004	2005	Change, 2006 from 2005		
code <sup>b</sup>		2002	2003			2006	Absolute Percent	
MM052	Costume jewelry and related articles:							
	Number of establishments	700	700	675	675	675	0.0	
	Employees (thousands)	14.0	14.0	14.0	14.0	14.0	0.0	
	Capacity utilization (percent)	64	70	71	75	75	0.0	
	U.S. shipments (million dollars)	930	900	952	1,000	1,100	10.0	
	U.S. exports (million dollars)	104	100	109	126	166	31.2	
	U.S. imports (million dollars)	( <sup>a</sup> )	816	947	( <sup>a</sup> )	1,317 2,251	8.4 7.8	
	Apparent U.S. consumption (million dollars) Trade balance (million dollars)	1,576 -646	1,616 -716	1,790 -838	2,088 -1,088	-1,151	7.0 -5.8	
	Ratio of imports to consumption (percent)	47.6	50.5	52.9	58.2	58.5	-5.6 0.6	
	Ratio of exports to shipments (percent)	11.2	11.2	11.4	12.6	15.1	19.3	
MM053	Bicycles and certain parts:	11.2	11.2		12.0	10.1	10.0	
	Number of establishments	36	36	36	36	36	0.0	
	Employees (thousands)	3.0	3.0	3.0	3.0	3.0	0.0	
	Capacity utilization (percent)	58	58	60	60	60	0.0	
	U.S. shipments (million dollars)	843	840	840	840	840	0.0	
	U.S. exports (million dollars)	216	240	266	288	300	4.3	
	U.S. imports (million dollars)	(a)	1,106	1,260	(a)	1,342	-6.4	
	Apparent U.S. consumption (million dollars)	1,752	1,707	1,834	1,986	1,881	-5.3	
	Trade balance (million dollars)	-909	-867	-994	-1,146	-1,041	9.1	
	Ratio of imports to consumption (percent)	64.2 25.6	64.8 28.5	68.7 31.7	72.2 34.3	71.3 35.7	-1.2 4.3	
MM054	Ratio of exports to shipments (percent) Furniture:	23.0	20.3	31.7	34.3	33.7	4.3	
WIWIO34	Number of establishments	10.140	10.000	9.800	9.500	9.500	0.0	
	Employees (thousands)	458.0	400.0	380.0	364.0	360.0	-1.1	
	Capacity utilization (percent)	66	64	73	73	73	0.0	
	U.S. shipments (million dollars)	56.000	54.800	54.700	58,500	61.000	4.3	
	U.S. exports (million dollars)	2,409	2,595	2,787	3,020	3,354	11.1	
	U.S. imports (million dollars)	(a)	19,035	21,819	(a)	26,078	7.3	
	Apparent U.S. consumption (million dollars)	70,620	71,240	73,731	79,776	83,724	4.9	
	Trade balance (million dollars)	-14,620	-16,440	-19,031	-21,276	-22,724	-6.8	
	Ratio of imports to consumption (percent)	24.1	26.7	29.6	30.5	31.1	2.3	
N 4 N 4 O E E	Ratio of exports to shipments (percent)	4.3	4.7	5.1	5.2	5.5	6.5	
MM055	Writing instruments and related articles:	400	400	0.5	0.5	0.5	0.0	
	Number of establishments	102 9.0	100 8.0	95 7.0	95 7.0	95	0.0 0.0	
	Employees (thousands)	9.0 66	6.0 67	7.0 63	7.0 72	7.0 72	0.0	
	U.S. shipments (million dollars)	1,857	1,760	1,700	1,695	1,700	0.3	
	U.S. exports (million dollars)	269	241	228	210	209	-0.3	
	U.S. imports (million dollars)	(a)	1,100	1,215	(a)	1,335	9.0	
	Apparent U.S. consumption (million dollars)	2,632	2,619	2,686	2,710	2,825	4.3	
	Trade balance (million dollars)	-775	-859	-986	-1,015	-1,125	-10.9	
	Ratio of imports to consumption (percent)	39.7	42.0	45.2	45.2	47.2	4.5	
	Ratio of exports to shipments (percent)	14.5	13.7	13.4	12.4	12.3	-0.6	

**TABLE MS-4** Miscellaneous manufactures sector: Profile of U.S. trade for industry and marker, by industry/commodity groups and subgroups, 2002–06—continued

USITC	Industry/commodity group					Change, 2006 from 2005		
code <sup>b</sup>		2002	2003	2004	2005	2006	Absolute Percent	
MM056	Lamps and lighting fittings:							
	Number of establishments	1,155	1,150	1,150	1,150	1,150	0.0	
	Employees (thousands)	55.0 56	48.0	49.0 61	48.0 63	48.0 63	0.0 0.0	
	U.S. shipments (million dollars)	9.775	60 9.103	9.762	10,595	11.120	5.0	
	U.S. exports (million dollars)	671	628	677	742	825	11.1	
	U.S. imports (million dollars)	(a)	4,781	5,319	( <sup>a</sup> )	6,180	6.0	
	Apparent U.S. consumption (million dollars)	13,7Ò9́	13,256	14,403	15,684	16,476	5.0	
	Trade balance (million dollars)	-3,934	-4,153	-4,641	-5,089	-5,356	-5.2	
	Ratio of imports to consumption (percent)	33.6	36.1	36.9	37.2	37.5	0.9	
NANAOEZ	Ratio of exports to shipments (percent)	6.9	6.9	6.9	7.0	7.4	5.9	
MM057	Prefabricated buildings: Number of establishments	1.900	1.900	1,900	1.900	1.900	0.0	
	Employees (thousands)	103.0	93.0	97.0	97.0	97.0	0.0	
	Capacity utilization (percent)	60	61	64	63	65	3.2	
	U.S. shipments (million dollars)	15,700	14,700	16,100	18,300	19,300	5.5	
	U.S. exports (million dollars)	275	309	353	447	476	6.4	
	U.S. imports (million dollars)	(a)	347	403	(a)	417	-2.2	
	Apparent U.S. consumption (million dollars)	15,766	14,739	16,150	18,279	19,241	5.3	
	Trade balance (million dollars)	-66 2.2	-39 2.4	-50 2.5	21 2.3	59 2.2	186.0 -7.1	
	Ratio of imports to consumption (percent)	1.8	2.4	2.2	2.3 2.4	2.5	0.9	
MM058	Dolls:	1.0	2.1	2.2	2.1	2.0	0.0	
	Number of establishments	28	28	28	28	28	0.0	
	Employees (thousands)	0.5	0.5	0.5	0.5	0.5	0.0	
	Capacity utilization (percent)	69	66	54	67	67	0.0	
	U.S. shipments (million dollars)	67	65	65	65	65	0.0	
	U.S. exports (million dollars) U.S. imports (million dollars)	24 ( <sup>a</sup> )	20 1,226	22 1,005	17 ( <sup>a</sup> )	19 1,053	11.3 1.4	
	Apparent U.S. consumption (million dollars)	1,300	1,271	1,048	1,085	1,033	1.2	
	Trade balance (million dollars)	-1,233	-1,206	-983	-1,020	-1,033	-1.3	
	Ratio of imports to consumption (percent)	96.7	96.5	95.9	95.6	95.8	0.2	
	Ratio of exports to shipments (percent)	35.6	30.8	33.6	26.8	29.8	11.3	
MM059	Toys:							
	Number of establishments	562	550	550	550	550	0.0	
	Employees (thousands)	14.0 59	12.0 66	10.0 54	10.0 67	10.0 67	0.0 0.0	
	Capacity utilization (percent)	2,500	2,500	2,370	2,480	2,480	0.0	
	U.S. exports (million dollars)	2,300 424	378	412	406	442	8.8	
	U.S. imports (million dollars)	(a)	8,452	8.848	( <sup>a</sup> )	9,338	0.6	
	Apparent U.S. consumption (million dollars)	10,368	10,574	10,805	11,3 <del>6</del> 0	11,375	0.1	
	Trade balance (million dollars)	-7,868	-8,074	-8,435	-8,880	-8,895	-0.2	
	Ratio of imports to consumption (percent)	80.0	79.9	81.9	81.7	82.1	0.4	
	Ratio of exports to shipments (percent)	17.0	15.1	17.4	16.4	17.8	8.8	

**TABLE MS-4** Miscellaneous manufactures sector: Profile of U.S. trade for industry and marker, by industry/commodity groups and subgroups, 2002–06—continued

USITC	Industry/commodity group					Change, 2006 from 2005		
code <sup>b</sup>		2002	2003	2004	2005	2006	Absolute Percent	
MM060	Games:							
	Number of establishments	372	370	365	360	360	0.0	
	Employees (thousands)	10.0	9.0	8.0	8.0	8.0	0.0	
	Capacity utilization (percent)	69	66	54	67	67	0.0	
	U.S. shipments (million dollars)	2,015	1,920	1,830 1,089	1,935	1,950	0.8 21.3	
	U.S. exports (million dollars)	858 (ª)	1,084 4,985	5,199	1,410	1,710 7,450	10.5	
	Apparent U.S. consumption (million dollars)	7.044	5,821	5,199	7,270	7,430	5.8	
	Trade balance (million dollars)	-5,029	-3,901	-4,111	-5,335	-5,739	-7.6	
	Ratio of imports to consumption (percent)	83.6	85.6	87.5	92.8	96.9	4.4	
	Ratio of exports to shipments (percent)	42.6	56.5	59.5	72.9	87.7	20.4	
MM061	Sporting goods:							
	Number of establishments	2,120	2,100	2,100	2,100	2,100	0.0	
	Employees (thousands)	59.0	57.0	54.0	52.0	54.0	3.8	
	Capacity utilization (percent)	65	70	61	61	61	0.0	
	U.S. shipments (million dollars)	11,300	11,620	11,060	11,810	12,220	3.5	
	U.S. exports (million dollars)	1,537	1,534	1,670	1,735	1,813	4.5	
	U.S. imports (million dollars)	(a)	4,149	4,581	(a)	5,600	12.5	
	Apparent U.S. consumption (million dollars)	13,622	14,235	13,971	15,053	16,007	6.3	
	Trade balance (million dollars)	-2,322 28.3	-2,615 29.1	-2,911 32.8	-3,243 33.1	-3,787 35.0	-16.8 5.8	
	Ratio of imports to consumption (percent)	13.6	13.2	32.6 15.1	14.7	14.8	1.0	
MM063	A Brooms and brushes:	13.0	13.2	13.1	14.7	14.0	1.0	
IVIIVIOO0/	Number of establishments	268	265	265	260	260	0.0	
	Employees (thousands)	15.0	15.0	15.0	15.0	15.0	0.0	
	Capacity utilization (percent)	75	75	75	70	70	0.0	
	U.S. shipments (million dollars)	2,065	2,065	2,065	2,060	2,060	0.0	
	U.S. exports (million dollars)	<sup>1</sup> 185	211	239	253	265	4.9	
	U.S. imports (million dollars)	(a)	847	945	(a)	1,070	2.0	
	Apparent U.S. consumption (million dollars)	2,695	2,700	2,772	2,856	2,864	0.3	
	Trade balance (million dollars)	-630	-635	-707	-796	-804	-1.1	
	Ratio of imports to consumption (percent)	30.2	31.4	34.1	36.7	37.3	1.7	
N 4 N 4 O O O I	Ratio of exports to shipments (percent)	8.9	10.2	11.6	12.3	12.9	4.9	
MINIOPSI	Hair grooming articles, non-electric (except brushes):							
	Number of establishments	88	85	85	85	85	0.0	
	Employees (thousands)	3.0	3.0	3.0	3.0	3.0	0.0	
	Capacity utilization (percent)	_85	85	85	85	85	0.0	
	U.S. shipments (million dollars)	575	600	600	600	600	0.0	
	U.S. exports (million dollars)	20	17	19	18	18	-4.0	
	U.S. imports (million dollars)	(ª) 739	164 747	166 747	(a) 769	205 787	9.7	
	Apparent U.S. consumption (million dollars)	739 -164	747 -147	747 -147	768 -168	787 -187	2.5 -11.2	
	Ratio of imports to consumption (percent)	-164 24.9	-147 22.0	22.3	24.3	26.0	-11.2 7.1	
	Ratio of imports to consumption (percent)	3.5	22.0 2.9	3.2	24.3 3.1	20.0	-4.0	
	Mailo of exports to shipments (hercent)	5.5	۷.5	J.Z	5.1	2.9	-4.0	

**TABLE MS-4** Miscellaneous manufactures sector: Profile of U.S. trade for industry and marker, by industry/commodity groups and subgroups, 2002–06—continued

USITC						Change	e, 2006 from 2005
code	Industry/commodity group	2002	2003	2004	2005	2006	Absolute Percent
MM065	Apparel fasteners:						
	Number of establishments	130	130	130	130	130	0.0
	Employees (thousands)	3.8	3.4	3.0	3.0	3.0	0.0
	Capacity utilization (percent)	60	54	62	63	63	0.0
	U.Ś. shipments (million dollárs)	470	450	550	590	590	0.0
	U.S. exports (million dollars)	157	148	158	145	154	6.0
	U.S. imports (million dollars)	(a)	69	81	(a)	83	3.6
	Apparent U.S. consumption (million dollars)	378	371	473	5 <b>2</b> 5	519	-1.1
	Trade balance (million dollars)	92	79	77	65	71	9.1
	Ratio of imports to consumption (percent)	17.2	18.5	17.2	15.3	16.0	4.7
	Ratio of exports to shipments (percent)	33.4	32.9	28.8	24.6	26.1	6.0
MM066/	Small arms and ammunition:						
	Number of establishments	296	296	296	296	296	0.0
	Employees (thousands)	17.0	18.0	19.0	21.0	21.0	0.0
	Capacity utilization (percent)	70	67	68	70	70	0.0
	U.S. shipments (million dollars)	2.711	3,405	3,510	3,661	3.840	4.9
	U.S. exports (million dollars)	480	551	777	823	905	10.0
	U.S. imports (million dollars)	(a)	873	1,059	(a)	1,389	29.6
	Apparent U.S. consumption (million dollars)	3,031	3,726	3,791	3,9ÌÓ	4,324	10.6
	Trade balance (million dollars)	-320	-321	-281	-249	-484	-94.6
	Ratio of imports to consumption (percent)	26.4	23.4	27.9	27.4	32.1	17.2
	Ratio of exports to shipments (percent)	17.7	16.2	22.1	22.5	23.6	4.8
MM067	Seats for motor vehicles and aircraft:						
	Number of establishments	190	190	190	(°)	(°)	(°)
	Employees (thousands)	24.0	23.0	23.0	22 <u>`</u> .ó	(°)	(°í)
	Capacity utilization (percent)	77	84	72	(°)	(°)	(°)
	U.S. shipments (million dollars)	6,900	6,900	7,300	7,9ÒÓ	8,200	3.8
	U.S. exports (million dollars)	1,641	1,260	1,395	1,550	1,688	8.9
	U.S. imports (million dollars)	(a)	4,489	4,841	(a)	5,250	4.6
	Apparent U.S. consumption (million dollars)	9,145	10,129	10,746	11,3 <del>7</del> 0	11,762	3.4
	Trade balance (million dollars)	-2,245	-3,229	-3,446	-3,470	-3,562	-2.6
	Ratio of imports to consumption (percent)	42.5	44.3	45.1	44.2	44.6	1.1
	Ratio of exports to shipments (percent)	23.8	18.3	19.1	19.6	20.6	4.9

Source: These data have been estimated by the Commission's international trade analysts on the basis of primary and secondary data sources including discussions with various Government and industry contacts. These estimated data are subject to change either from secondary sources or from detailed surveys the Commission often conducts in the course of statutory investigations or other work. Further, these data may undergo adjustments based on revisions in tariff nomenclature, classification practices, or redefinitions of industry classes.

Note.—Calculations based on unrounded data.

<sup>&</sup>lt;sup>a</sup>Less than 500,000.

<sup>&</sup>lt;sup>b</sup>Inventory changes, for which data are not available, likely account for ratios that exceed 100 percent.

<sup>&</sup>lt;sup>c</sup>Not available.

<sup>&</sup>lt;sup>d</sup>Not meaningful.