

Shifts in U.S. Merchandise Trade 2007

**December 2008
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**Investigation No. 332-345
United States International Trade Commission**



U.S. International Trade Commission

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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 2006–07. Overall U.S. merchandise trade performance is summarized for 2007, compared with such trade for 2006, on the basis of 10 merchandise sectors.¹ 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 17, presents and examines the shifts in U.S. trade with each of the top five U.S. trade partners—Canada, China, the European Union, Japan, and Mexico. Also presented and examined are shifts in trade with Brazil and India, U.S. trading partners that are 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 80, 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 2006 and 2007.

In addition to the sectoral analyses, shifts in 17 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.

¹ 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 2006–07. Overall U.S. merchandise trade performance is summarized for 2007, compared with such trade for 2006, on the basis of 10 merchandise sectors.² 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.

² Ibid.

U.S. Merchandise Trade and Overall Economic Performance

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U.S. exports and imports of goods and services³ were at record highs and the trade deficit was down in 2007. U.S. total trade in goods and services (exports plus imports) was almost \$4.0 trillion, with exports of \$1.6 trillion and imports of \$2.3 trillion.⁴ This resulted in a \$700.3 billion goods and services trade deficit in 2007.⁵ However, exports increased more than imports in 2007, reducing the trade deficit by \$53.0 billion (7 percent) from \$753.3 billion in 2006.⁶ The goods and services trade deficit decreased to 5.1 percent of U.S. gross domestic product in 2007, compared with 5.7 percent in 2006.⁷

Merchandise exports continued to be less than imports, although this difference narrowed to \$896.5 billion in 2007 (table US.1). U.S. merchandise exports and imports were \$1.0 trillion and \$1.9 trillion, respectively, an increase of 13 percent and 5 percent, respectively, over comparable figures in 2006.

In 2007, U.S. services exports and imports were \$497.2 billion and \$378.1 billion, respectively, resulting in a surplus of \$119.1 billion.⁸ The surplus in services trade consisted largely of U.S. companies collecting royalties and license fees from foreign entities,⁹ and the export (usually through affiliates located abroad) of other private services (e.g, business, professional, and technical services; insurance services; and financial services).

The United States is a significant exporter of capital goods and industrial supplies and materials. In 2007, exports of capital goods accounted for 39 percent of all merchandise exports, followed by industrial supplies and materials (27 percent), and automotive vehicles, parts, and engines (10 percent). The remainder of U.S. merchandise exports consisted of consumer goods (13 percent) and foods, feeds, and beverages (7 percent), and other (4 percent).¹⁰

³ Aggregate merchandise goods and services trade data are reported on a balance of payments (BOP) basis. Trade data reported on a BOP basis are adjusted by the Bureau of Economic Analysis (BEA) to bring the data in line with BEA national and international accounts. Data on individual components of U.S. merchandise exports and country trade are reported on a Census basis. These data are not adjusted for consistency with the balance of payments.

⁴ USDOC, Census, *FT900: U.S. International Trade in Goods and Services*, exhibit 1, April 2008. Data may not add due to rounding.

⁵ Ibid.

⁶ Ibid.

⁷ USDOC, BEA, *U.S. International Trade in Goods and Services*, March 11, 2008.

⁸ USDOC, Census, *FT900: U.S. International Trade in Goods and Services*, April 2008.

⁹ According to the International Monetary Fund (IMF), trade in royalties and license fees includes international payments and receipts for the use of intangible, nonproduced, nonfinancial assets and proprietary rights. IMF, *Balance of Payments Manual*, 1995.

¹⁰ USDOC, Census, *FT900: U.S. International Trade in Goods and Services*, exhibit 13, April 2008.

TABLE US.1 U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major industry/commodity sectors, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|------------------|------------------|------------------|------------------|------------------------|----------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| Agricultural products | 64,706 | 66,908 | 68,698 | 76,924 | 96,041 | 19,117 | 24.9 | |
| Forest products | 23,566 | 25,637 | 27,809 | 30,156 | 33,088 | 2,933 | 9.7 | |
| Chemicals and related products | 102,330 | 121,383 | 132,734 | 149,848 | 169,409 | 19,561 | 13.1 | |
| Energy-related products | 16,639 | 21,783 | 29,892 | 38,999 | 46,674 | 7,675 | 19.7 | |
| Textiles and apparel | 17,033 | 17,663 | 17,864 | 18,088 | 17,535 | -553 | -3.1 | |
| Footwear | 495 | 450 | 507 | 573 | 578 | 6 | 1.0 | |
| Minerals and metals | 42,980 | 50,588 | 62,911 | 82,944 | 100,260 | 17,316 | 20.9 | |
| Machinery | 61,905 | 75,096 | 80,405 | 92,886 | 101,289 | 8,403 | 9.0 | |
| Transportation equipment | 145,045 | 158,135 | 182,731 | 218,326 | 249,421 | 31,095 | 14.2 | |
| Electronic products | 140,947 | 149,564 | 155,552 | 169,381 | 172,502 | 3,122 | 1.8 | |
| Miscellaneous manufactures | 14,210 | 16,223 | 18,435 | 22,438 | 25,954 | 3,516 | 15.7 | |
| Special provisions | 21,570 | 23,753 | 26,454 | 28,925 | 33,607 | 4,682 | 16.2 | |
| Total | 651,424 | 727,183 | 803,992 | 929,486 | 1,046,358 | 116,872 | 12.6 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| Agricultural products | 60,899 | 67,012 | 73,050 | 81,456 | 88,136 | 6,679 | 8.2 | |
| Forest products | 38,769 | 47,591 | 50,003 | 50,416 | 46,561 | -3,855 | -7.6 | |
| Chemicals and related products | 123,922 | 141,683 | 163,050 | 179,410 | 194,331 | 14,922 | 8.3 | |
| Energy-related products | 147,183 | 195,553 | 273,197 | 319,168 | 344,829 | 25,661 | 8.0 | |
| Textiles and apparel | 87,241 | 94,045 | 100,485 | 104,563 | 107,678 | 3,114 | 3.0 | |
| Footwear | 15,560 | 16,498 | 17,834 | 19,038 | 19,270 | 232 | 1.2 | |
| Minerals and metals | 89,204 | 120,897 | 137,367 | 169,510 | 174,207 | 4,696 | 2.8 | |
| Machinery | 86,875 | 101,958 | 116,187 | 131,091 | 139,131 | 8,040 | 6.1 | |
| Transportation equipment | 242,287 | 264,620 | 282,881 | 303,979 | 309,924 | 5,944 | 2.0 | |
| Electronic products | 239,265 | 280,463 | 305,667 | 332,485 | 353,009 | 20,524 | 6.2 | |
| Miscellaneous manufactures | 70,521 | 78,669 | 86,559 | 94,099 | 103,905 | 9,807 | 10.4 | |
| Special provisions | 48,372 | 51,171 | 56,098 | 59,837 | 61,882 | 2,045 | 3.4 | |
| Total | 1,250,097 | 1,460,160 | 1,662,380 | 1,845,053 | 1,942,863 | 97,810 | 5.3 | |
| U.S. merchandise trade balance | | | | | | | | |
| Agricultural products | 3,807 | -104 | -4,352 | -4,532 | 7,906 | 12,438 | ^(b) | |
| Forest products | -15,204 | -21,953 | -22,194 | -20,260 | -13,473 | 6,787 | 33.5 | |
| Chemicals and related products | -21,592 | -20,299 | -30,317 | -29,562 | -24,923 | 4,639 | 15.7 | |
| Energy-related products | -130,544 | -173,770 | -243,304 | -280,170 | -298,155 | -17,986 | -6.4 | |
| Textiles and apparel | -70,208 | -76,382 | -82,621 | -86,476 | -90,143 | -3,668 | -4.2 | |
| Footwear | -15,065 | -16,048 | -17,327 | -18,465 | -18,692 | -227 | -1.2 | |
| Minerals and metals | -46,224 | -70,309 | -74,456 | -86,567 | -73,947 | 12,620 | 14.6 | |
| Machinery | -24,970 | -26,863 | -35,783 | -38,205 | -37,842 | 364 | 1.0 | |
| Transportation equipment | -97,242 | -106,485 | -100,150 | -85,654 | -60,503 | 25,151 | 29.4 | |
| Electronic products | -98,318 | -130,899 | -150,115 | -163,105 | -180,507 | -17,403 | -10.7 | |
| Miscellaneous manufactures | -56,311 | -62,445 | -68,124 | -71,661 | -77,951 | -6,291 | -8.8 | |
| Special provisions | -26,802 | -27,418 | -29,644 | -30,912 | -28,275 | 2,637 | 8.5 | |
| Total | -598,673 | -732,977 | -858,388 | -915,567 | -896,505 | 19,062 | 2.1 | |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bNot meaningful for purposes of comparison.

As in previous years, industrial supplies and materials (including petroleum) were the largest component of U.S. imports in 2007, accounting for 32.4 percent of all merchandise imports, followed by imports of consumer goods (24.3 percent), and capital goods (22.7 percent).

In 2007, the value of imports of energy-related petroleum products¹¹ reached a record high of \$330.0 billion, increasing 8 percent over 2006.¹² The average import price per barrel of crude petroleum increased by 24 percent, from \$58.76 per barrel in 2006 to \$72.86 in 2007.¹³

The \$53.0 billion decline in the U.S. goods and services trade deficit was a result of slower U.S. import growth in 2007. U.S. export growth of 13 percent in 2007 was less than the 14 percent growth rate in 2006, although substantial nonetheless. However, the 6 percent growth in the value of U.S. imports from 2006 to 2007 was significantly less than the growth rate of 11 percent between 2005 and 2006. Depreciation of the dollar, real income growth in foreign trading partners, and slower U.S. real income growth increased the U.S. export rate and decreased the import growth rate, resulting in a decline in the U.S. merchandise trade deficit in 2007.

The depreciation of the dollar in 2007 made U.S. exports cheaper and more competitive abroad while imports became more costly. The trade-weighted value of the dollar measured against a broad basket of foreign currencies fell by 4.7 percent in 2007. However, the dollar fell by 9.1 percent against the euro and by 5.3 percent against the Canadian dollar.¹⁴ This depreciation contributed to growth in U.S. exports to both Canada and the EU and to declines in the U.S. merchandise trade deficits with these trading partners. The dollar also fell by 4.6 percent against the Chinese yuan and by 1.2 percent against the Japanese yen.

In 2007, global real gross domestic product (GDP) growth was 5.2 percent, slightly down from 5.4 percent in 2006, but substantial enough to contribute to increased demand for U.S. exports.¹⁵ Real income growth for the United States' leading export partners was much lower than the world average, with the exception of China, whose real GDP grew by 11.5 percent in 2007. For the other major export partners, real GDP growth ranged from 2.0 percent in Japan to 2.9 percent in Mexico.

In 2007, U.S. merchandise imports were affected by slower growth in real U.S. GDP, which fell to 2.2 percent, compared with 2.9 percent in 2006.¹⁶ The growth rate of real personal consumption expenditure in the United States also fell in 2007 to 2.9 percent, compared with 3.1 percent in 2006. Similarly, the rate of growth in the value of U.S. imports of consumer goods fell to 7.3 percent in 2007, compared with 8.7 percent in 2006, while growth in the value of capital goods imports fell to 6.3 percent in 2007, compared with 10.4 percent in 2006. Growth in U.S. imports of petroleum products rose by 8 percent in 2007, although this rate of growth was lower than in 2006 when petroleum products imports rose by 17 percent.

¹¹ Includes crude petroleum, petroleum preparations, and liquefied propane and butane gas.

¹² See Energy Products section for more details.

¹³ USDOE, EIA, *Monthly Energy Review*, February 2008.

¹⁴ CEA, *2008 Economic Report of the President*, table B110, 2008.

¹⁵ *Ibid.*, table B112, 2008.

¹⁶ USDOC, BEA, *Gross Domestic Product Fourth Quarter Final*, table 1, March 27, 2008.

U.S. Trade by Industry/Commodity Groups and Sectors¹⁷

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U.S. Trade Balance

All industry/commodity sectors except agricultural products registered trade deficits in 2007, as the total merchandise deficit improved by 2 percent to \$896.5 billion (table US.1). The largest deficit (\$298.2 billion), as well as the largest absolute deficit increase (\$18.0 billion, or 6 percent), was in energy-related products—crude petroleum, petroleum products, and natural gas and components—as a result of higher prices and increased demand. The electronic products sector recorded the second-largest trade deficit in 2007 (\$180.5 billion), as well as the second-largest absolute deficit increase (\$17.4 billion, or 11 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 2007, U.S. exports increased by \$116.9 billion (13 percent) to \$1.0 trillion, setting a new record (table US.1). Exports increased in every sector except textiles and apparel. Transportation equipment, notably motor vehicles and aircraft, spacecraft, and related equipment; showed the greatest absolute increase, growing by \$31.1 billion (14 percent), followed by chemicals and related products (\$20.0 billion, or 13 percent), agricultural products (\$19.1 billion, or 25 percent), and minerals and metals (\$17.3 billion, or 21 percent). Exports of textiles and apparel declined by \$553 million (3 percent).

In 2007, exports of agricultural products increased by \$19.1 billion, or 25 percent. Grains (cereals) and oilseeds recorded the largest increases in 2007, accounting for a combined \$10.7 billion (56 percent) of agricultural products export growth (table US.2). These industries' increased exports (primarily corn, wheat, and soybeans) grew largely due to record high commodity prices, increased domestic supplies in the United States, and a reduction in exports from other global suppliers.

Exports of aircraft, spacecraft, and related equipment, principally large civil aircraft, increased by \$9.0 billion (14 percent) to \$73.4 billion in 2007 (table US.2). Much of the increase was due to the expansion of airline routes and frequencies, as well as fleet renewal.

Motor vehicle exports grew by \$8.3 billion (19 percent) to \$52.7 billion in 2007, largely the result of increased exports to Canada, the largest market by far for U.S. vehicles, resulting from the depreciation of the U.S. dollar. Also, exports to the EU increased because of demand for U.S.-made German-brand vehicles and the appreciation of the euro.

¹⁷ Each of the 10 industry sectors is analyzed in a separate chapter later in this report. These are: 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.

TABLE US.2 All sectors: Leading changes in U.S. exports and imports, 2003–07

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|--|--------|--------|--------|--------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| <i>Million dollars</i> | | | | | | | | |
| U.S. EXPORTS | | | | | | | | |
| Increases | | | | | | | | |
| TE013 | Aircraft, spacecraft, and related equipment | 37,835 | 40,076 | 47,981 | 64,374 | 73,406 | 9,032 | 14.0 |
| TE009 | Motor vehicles | 29,883 | 30,473 | 35,312 | 44,437 | 52,739 | 8,303 | 18.7 |
| AG030 | Cereals | 10,429 | 12,683 | 11,096 | 13,341 | 20,860 | 7,519 | 56.4 |
| MM020 | Precious metals and non-numismatic coins | 6,299 | 6,204 | 7,522 | 13,360 | 19,289 | 5,929 | 44.4 |
| EP005 | Petroleum products | 9,783 | 12,651 | 18,302 | 26,407 | 31,484 | 5,077 | 19.2 |
| TE004 | Construction and mining equipment | 9,546 | 11,794 | 15,584 | 18,590 | 23,371 | 4,781 | 25.7 |
| CH019 | Medicinal chemicals | 22,527 | 27,098 | 29,296 | 32,460 | 37,036 | 4,576 | 14.1 |
| MM020A | Unrefined and refined gold | 4,130 | 3,465 | 4,636 | 7,171 | 11,509 | 4,337 | 60.5 |
| TE001 | Aircraft engines and gas turbines | 14,742 | 17,706 | 20,771 | 21,631 | 25,780 | 4,149 | 19.2 |
| AG032 | Oilseeds | 8,153 | 6,911 | 6,527 | 7,172 | 10,346 | 3,173 | 44.2 |
| MM023 | Iron and steel waste and scrap | 1,960 | 2,923 | 3,451 | 4,256 | 6,910 | 2,654 | 62.4 |
| EL002 | Telecommunications equipment | 10,946 | 13,958 | 14,183 | 14,779 | 16,882 | 2,103 | 14.2 |
| MM025 | Steel mill products | 5,525 | 7,015 | 9,331 | 10,479 | 12,535 | 2,056 | 19.6 |
| EL022 | Medical goods | 16,936 | 18,548 | 21,114 | 23,443 | 25,446 | 2,003 | 8.5 |
| MT009 | Farm and garden machinery and equipment | 5,109 | 6,098 | 6,885 | 7,533 | 9,245 | 1,712 | 22.7 |
| CH033 | Miscellaneous plastic products | 13,041 | 14,307 | 15,826 | 17,570 | 19,218 | 1,649 | 9.4 |
| CH006 | Certain organic chemicals | 8,857 | 11,283 | 11,991 | 14,263 | 15,796 | 1,533 | 10.8 |
| MM019 | Natural and synthetic gemstones | 469 | 1,129 | 2,765 | 4,087 | 5,572 | 1,486 | 36.4 |
| CH007 | Miscellaneous inorganic chemicals | 4,903 | 5,608 | 7,003 | 8,737 | 10,169 | 1,432 | 16.4 |
| CH004 | Organic commodity chemicals | 2,692 | 4,631 | 4,295 | 4,360 | 5,787 | 1,427 | 32.7 |
| EL025 | Measuring, testing, and controlling instruments | 14,683 | 16,603 | 17,399 | 19,669 | 20,963 | 1,294 | 6.6 |
| EP006 | Natural gas and components | 2,074 | 2,906 | 4,045 | 3,688 | 4,905 | 1,217 | 33.0 |
| CH025 | Polyethylene resins in primary forms | 2,817 | 3,698 | 4,448 | 5,103 | 6,312 | 1,209 | 23.7 |
| MS017 | Works of art and miscellaneous manufactured goods | 1,561 | 1,806 | 2,423 | 3,837 | 5,011 | 1,174 | 30.6 |
| FP009 | Wood pulp and wastepaper | 4,112 | 4,521 | 5,081 | 5,749 | 6,916 | 1,167 | 20.3 |
| CH030 | Other plastics in primary forms | 7,694 | 9,106 | 10,531 | 11,746 | 12,860 | 1,114 | 9.5 |
| TE002 | Internal combustion piston engines, other than for aircraft | 12,741 | 13,444 | 14,969 | 15,930 | 17,039 | 1,109 | 7.0 |
| AG013 | Animal feeds | 4,207 | 4,160 | 4,535 | 5,065 | 6,144 | 1,079 | 21.3 |
| Decreases | | | | | | | | |
| EL017 | Computers, peripherals, and parts | 28,038 | 27,350 | 28,862 | 29,969 | 28,051 | -1,917 | -6.4 |
| EL015 | Semiconductors and integrated circuits | 35,712 | 35,130 | 34,195 | 37,227 | 35,487 | -1,740 | -4.7 |
| MT019A | Semiconductor manufacturing equipment | 7,242 | 12,790 | 10,971 | 14,232 | 12,982 | -1,340 | -9.4 |
| MT019 | Semiconductor manufacturing equipment and robotics | 7,599 | 13,257 | 11,435 | 14,733 | 13,394 | -1,339 | -9.1 |
| TX005 | Apparel | 4,965 | 4,414 | 4,129 | 3,854 | 3,206 | -648 | -16.8 |
| MT030 | Miscellaneous machinery | 6,409 | 7,434 | 8,299 | 9,509 | 8,982 | -528 | -5.6 |
| TX002A | Broadwoven fabrics | 2,575 | 2,754 | 2,478 | 2,210 | 1,822 | -388 | -17.6 |
| TX002 | Fabrics | 6,641 | 7,228 | 7,285 | 7,015 | 6,666 | -349 | -5.0 |

See footnote(s) at end of table.

TABLE US.2 All sectors: Leading changes in U.S. exports and imports, 2003–07—*Continued*

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|---------|---------|---------|---------|------------------------|---------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| EL009 Printed circuits | 1,742 | 1,836 | 1,781 | 1,864 | 1,531 | -333 | -17.9 | |
| EL006 Radio and television broadcasting equipment | 1,241 | 1,335 | 1,544 | 1,535 | 1,204 | -331 | -21.5 | |
| EL004 Blank and prerecorded media | 4,092 | 4,282 | 4,618 | 4,449 | 4,139 | -310 | -7.0 | |
| EL008 Electrical capacitors and resistors | 1,623 | 1,664 | 1,286 | 1,825 | 1,548 | -277 | -15.2 | |
| MT028 Welding and soldering equipment | 618 | 818 | 872 | 1,165 | 932 | -233 | -20.0 | |
| TX005E Shirts and blouses | 1,097 | 800 | 841 | 802 | 582 | -220 | -27.4 | |
| AG045 Cigarettes | 1,403 | 1,294 | 1,200 | 1,214 | 1,012 | -201 | -16.6 | |
| EL016 Miscellaneous electrical equipment | 1,426 | 1,968 | 2,419 | 2,537 | 2,341 | -195 | -7.7 | |
| TX005I Robes, nightwear, and underwear | 715 | 700 | 479 | 394 | 203 | -192 | -48.6 | |
| MT015 Metal cutting machine tools | 1,305 | 1,475 | 1,732 | 2,205 | 2,026 | -179 | -8.1 | |
| MT031 Molds and molding machinery | 1,550 | 1,833 | 2,074 | 2,136 | 1,965 | -171 | -8.0 | |
| EL014 Electron tubes | 1,366 | 1,173 | 791 | 465 | 297 | -167 | -36.0 | |
| FP002 Lumber | 1,725 | 1,930 | 2,026 | 2,275 | 2,124 | -151 | -6.6 | |
| MT018 Non-metalworking machine tools | 711 | 1,083 | 1,110 | 1,159 | 1,011 | -148 | -12.7 | |
| CH034 Miscellaneous rubber products | 2,400 | 2,623 | 2,743 | 3,055 | 2,917 | -138 | -4.5 | |
| TX005K Body-supporting garments | 289 | 310 | 275 | 166 | 57 | -109 | -65.8 | |
| CH002 Other olefins | 343 | 430 | 420 | 556 | 463 | -93 | -16.7 | |
| TX002F Other fabrics | 914 | 1,027 | 1,240 | 1,392 | 1,303 | -89 | -6.4 | |
| TX005S Other wearing apparel | 845 | 668 | 599 | 564 | 481 | -83 | -14.7 | |
| MS002 Certain other leather goods | 87 | 124 | 221 | 235 | 156 | -79 | -33.6 | |
| MT026 Nonelectrically powered handtools | 578 | 907 | 1,264 | 1,148 | 1,085 | -63 | -5.5 | |
| TX005C Men's and boys' trousers | 573 | 437 | 405 | 292 | 231 | -61 | -21.0 | |
| EP001 Electrical energy | 716 | 829 | 1,039 | 1,052 | 991 | -61 | -5.8 | |
| TX005D Women's and girls' trousers | 287 | 267 | 239 | 268 | 212 | -56 | -21.0 | |
| U.S. IMPORTS | | | | | | | | |
| Increases | | | | | | | | |
| EP004 Crude petroleum | 73,527 | 100,338 | 137,331 | 171,243 | 186,476 | 15,233 | 8.9 | |
| EP005 Petroleum products | 37,280 | 51,579 | 77,684 | 89,448 | 98,577 | 9,129 | 10.2 | |
| EL002 Telecommunications equipment | 30,982 | 39,341 | 49,220 | 53,318 | 60,699 | 7,381 | 13.8 | |
| CH019 Medicinal chemicals | 49,284 | 52,677 | 56,104 | 65,218 | 71,764 | 6,546 | 10.0 | |
| MS013 Toys and games | 14,662 | 15,052 | 17,069 | 17,840 | 22,778 | 4,937 | 27.7 | |
| EL003A Television receivers and video monitors | 12,654 | 17,509 | 22,712 | 28,628 | 33,267 | 4,639 | 16.2 | |
| EL017 Computers, peripherals, and parts | 76,940 | 89,264 | 93,950 | 102,468 | 106,789 | 4,321 | 4.2 | |
| TE013 Aircraft, spacecraft, and related equipment | 16,910 | 16,485 | 16,475 | 17,557 | 21,835 | 4,278 | 24.4 | |
| EL003 Consumer electronics | 34,124 | 41,938 | 48,577 | 54,831 | 57,581 | 2,750 | 5.0 | |
| TE010 Certain motor-vehicle parts | 41,649 | 46,493 | 50,998 | 53,307 | 55,619 | 2,312 | 4.3 | |
| EL022 Medical goods | 16,576 | 19,324 | 20,947 | 22,573 | 24,878 | 2,305 | 10.2 | |
| MS017 Works of art and miscellaneous manufactured goods | 8,556 | 9,662 | 9,943 | 11,228 | 13,359 | 2,130 | 19.0 | |
| EL025 Measuring, testing, and controlling instruments | 12,638 | 14,367 | 15,359 | 16,573 | 18,678 | 2,105 | 12.7 | |
| TE001 Aircraft engines and gas turbines | 8,834 | 9,642 | 11,243 | 12,816 | 14,898 | 2,082 | 16.2 | |

See footnote(s) at end of table.

TABLE US.2 All sectors: Leading changes in U.S. exports and imports, 2003–07—*Continued*

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| TX005 Apparel | 68,274 | 72,404 | 76,503 | 79,299 | 81,366 | 2,067 | 2.6 |
| MT023 Electric motors, generators, and related equipment | 6,811 | 7,020 | 8,533 | 10,305 | 12,358 | 2,053 | 19.9 |
| MM041 Certain base metals and chemical elements | 2,248 | 3,825 | 4,417 | 5,924 | 7,959 | 2,035 | 34.4 |
| CH010 Fertilizers | 4,395 | 5,510 | 7,439 | 7,525 | 9,507 | 1,982 | 26.3 |
| MM020 Precious metals and non-numismatic coins | 6,759 | 9,055 | 10,029 | 14,232 | 16,022 | 1,790 | 12.6 |
| MM019 Natural and synthetic gemstones | 13,854 | 15,690 | 17,352 | 18,452 | 20,239 | 1,787 | 9.7 |
| EL005 Navigational instruments and remote control apparatus | 2,286 | 2,761 | 3,241 | 3,996 | 5,590 | 1,595 | 39.9 |
| CH001 Major primary olefins | 4,144 | 5,908 | 7,774 | 8,062 | 9,472 | 1,410 | 17.5 |
| EP002 Nuclear materials | 2,892 | 2,625 | 3,175 | 3,910 | 5,273 | 1,362 | 34.8 |
| MT004 Household appliances, including commercial applications | 10,782 | 12,489 | 14,464 | 16,574 | 17,904 | 1,330 | 8.0 |
| MM025L Pipes and tubes of carbon and alloy steels | 2,098 | 3,483 | 5,259 | 6,953 | 8,194 | 1,241 | 17.8 |
| MT024 Electrical transformers, static converters, and inductors | 4,680 | 5,496 | 5,973 | 6,989 | 8,179 | 1,191 | 17.0 |
| TX005H Women's and girls' dresses | 1,550 | 1,524 | 1,465 | 1,841 | 2,900 | 1,060 | 57.6 |
| CH007 Miscellaneous inorganic chemicals | 5,038 | 5,714 | 6,626 | 7,310 | 8,308 | 997 | 13.6 |
| MT019A Semiconductor manufacturing equipment | 2,750 | 3,586 | 3,857 | 4,902 | 5,629 | 727 | 14.8 |
| MT019 Semiconductor manufacturing equipment and robotics | 3,152 | 4,151 | 4,515 | 5,612 | 6,222 | 610 | 10.9 |
| Decreases | | | | | | | |
| MM025B Plates, sheets, and strips of carbon and alloy steels | 3,028 | 7,406 | 6,962 | 10,510 | 7,133 | -3,377 | -32.1 |
| MT012 Printing and related machinery | 4,844 | 5,802 | 6,340 | 6,554 | 3,376 | -3,178 | -48.5 |
| MM025 Steel mill products | 10,499 | 21,559 | 23,534 | 31,500 | 29,204 | -2,295 | -7.3 |
| FP002 Lumber | 6,007 | 8,808 | 9,005 | 8,335 | 6,508 | -1,827 | -21.9 |
| TE004 Construction and mining equipment | 6,004 | 8,959 | 11,780 | 13,670 | 12,069 | -1,601 | -11.7 |
| FP004 Wood veneer and wood panels | 4,938 | 7,115 | 7,218 | 6,623 | 5,169 | -1,453 | -21.9 |
| MM036 Copper and related articles | 3,893 | 5,565 | 7,766 | 13,803 | 12,577 | -1,226 | -8.9 |
| MM020A Unrefined and refined gold | 2,689 | 3,680 | 4,112 | 5,029 | 3,934 | -1,095 | -21.8 |
| MT030 Miscellaneous machinery | 6,917 | 8,058 | 9,343 | 10,527 | 9,474 | -1,053 | -10.0 |
| MT031 Molds and molding machinery | 3,262 | 3,525 | 4,035 | 4,290 | 3,280 | -1,010 | -23.5 |
| MM025C Bars, rods, and light shapes of carbon and alloy steels | 1,669 | 3,769 | 3,327 | 4,043 | 3,164 | -879 | -21.7 |
| FP003 Moldings, millwork, and joinery | 3,057 | 4,184 | 4,433 | 4,750 | 3,894 | -856 | -18.0 |
| MM037 Unwrought aluminum | 5,000 | 6,837 | 8,153 | 10,317 | 9,462 | -854 | -8.3 |
| EL006 Radio and television broadcasting equipment | 4,120 | 4,309 | 3,830 | 3,527 | 2,684 | -843 | -23.9 |
| MM037A Primary and secondary aluminum | 4,401 | 6,001 | 7,199 | 9,114 | 8,309 | -805 | -8.8 |
| MM025A Ingots, blooms, billets, and slabs of carbon and alloy steels | 1,078 | 2,700 | 2,944 | 3,836 | 3,050 | -786 | -20.5 |
| EL015 Semiconductors and integrated circuits | 24,190 | 26,256 | 25,425 | 27,022 | 26,259 | -762 | -2.8 |
| FP012 Newsprint | 2,991 | 2,975 | 3,074 | 3,074 | 2,384 | -690 | -22.5 |
| TE002 Internal combustion piston engines, other than for aircraft | 16,250 | 18,682 | 21,035 | 20,617 | 19,930 | -688 | -3.3 |
| TE011 Powersport vehicles | 4,375 | 5,140 | 5,781 | 5,870 | 5,208 | -662 | -11.3 |

TABLE US.2 All sectors: Leading changes in U.S. exports and imports, 2003–07—*Continued*

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|---------|---------|---------|---------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| TE009 Motor vehicles | 134,369 | 142,861 | 146,308 | 159,537 | 158,895 | -642 | -0.4 |
| AG050 Ethyl alcohol for nonbeverage purposes | 191 | 259 | 337 | 1,600 | 978 | -621 | -38.8 |
| TE011A Motorcycles and mopeds | 3,213 | 3,809 | 4,277 | 4,449 | 3,903 | -546 | -12.3 |
| MM009A Cement | 940 | 1,139 | 1,563 | 1,842 | 1,324 | -518 | -28.1 |
| MM009 Cement, stone, and related products | 4,945 | 5,897 | 7,144 | 8,151 | 7,637 | -515 | -6.3 |
| AG012A Sugar | 592 | 585 | 908 | 1,351 | 859 | -492 | -36.4 |
| AG012 Sugar and other sweeteners | 1,035 | 979 | 1,323 | 1,868 | 1,391 | -477 | -25.5 |
| MT028 Welding and soldering equipment | 996 | 1,088 | 1,054 | 1,353 | 950 | -403 | -29.8 |
| FP013 Printing and writing papers | 4,549 | 5,564 | 5,972 | 6,149 | 5,754 | -395 | -6.4 |
| MM036A Unrefined and refined copper | 1,854 | 2,411 | 3,659 | 7,093 | 6,770 | -323 | -4.6 |

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

Note: Calculations based on unrounded data.

^aThis 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.

U.S. exports of petroleum products grew by 19 percent (\$5.1 billion) to reach a record \$31.5 billion in 2007. This was largely the result of higher prices for crude petroleum, the stock from which the products were derived.

U.S. Imports

In 2007, U.S. imports for all merchandise sectors except forest products increased by a total of \$97.8 billion (5 percent) to a record \$1.9 trillion. The energy-related products sector accounted for \$25.7 billion (26 percent) of the net import increase, electronic products for \$20.5 billion (21 percent), and chemicals and related products for \$14.9 billion (15 percent). Crude petroleum, petroleum products, and telecommunications equipment recorded the largest commodity group increases in 2007, accounting for a combined \$31.7 billion (32 percent) of import growth.

Higher world prices and increasing demand drove up U.S. import values in the energy sector. Although the quantity of imported crude petroleum remained flat, the value of U.S. crude petroleum imports increased by 9 percent to \$186.5 billion and accounted for 54 percent of sector imports in 2007. U.S. imports of crude petroleum continued to account for more than 60 percent of domestic consumption.

In 2007, telecommunications equipment imports increased by \$7.4 billion (14 percent) to \$60.7 billion. This was principally due to the continuing growth in consumption of cellular telephone handsets.

Imports of medicinal chemicals increased by \$6.5 billion (10 percent) in 2007. This was a result of increased domestic demand resulting from further patient enrollment in Medicare Part D, as well as increased demand for generics as many popular medicines lost patent exclusivity.¹⁸

Significant Shifts in U.S. Bilateral/Multilateral Trade

The four principal trading partners—Canada, China, Mexico, and Japan—which, combined, accounted for 60 percent of the trade deficit, maintained their relative positions (table US.3). However, the deficits with Canada and Japan declined by 5 percent and 6 percent, respectively, while the deficit with China, the country with which the United States maintains the largest trade deficit, grew by 11 percent (\$26.6 billion), accounting for 29 percent of the total trade deficit in 2007. A contributing factor to the widening merchandise trade deficit with China was the increased movement of production from other Asian countries to China.

¹⁸ The Medicare Part D program provides beneficiaries with assistance paying for prescription drugs. This drug benefit was added to Medicare in January 2006. Unlike coverage in Medicare Parts A and B, Part D coverage is not provided within the traditional Medicare program. Instead, beneficiaries must affirmatively enroll in one of many Part D plans offered by private companies. Center for Medicare Advocacy, Inc.

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, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|------------------|------------------|------------------|------------------|------------------------|-------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | |
| Canada | 148,749 | 163,168 | 183,235 | 198,226 | 213,119 | 14,892 | 7.5 |
| China | 26,707 | 32,606 | 38,857 | 51,624 | 61,013 | 9,389 | 18.2 |
| Mexico | 83,108 | 93,018 | 101,667 | 114,562 | 119,381 | 4,819 | 4.2 |
| Japan | 48,862 | 50,493 | 51,499 | 55,596 | 58,096 | 2,500 | 4.5 |
| Germany | 26,806 | 27,223 | 29,227 | 37,850 | 44,294 | 6,445 | 17.0 |
| United Kingdom | 30,556 | 31,734 | 34,065 | 41,335 | 45,436 | 4,100 | 9.9 |
| Korea | 22,525 | 24,994 | 26,210 | 30,794 | 33,012 | 2,218 | 7.2 |
| France | 15,683 | 19,626 | 20,658 | 22,590 | 25,784 | 3,195 | 14.1 |
| Taiwan | 16,111 | 20,343 | 20,527 | 21,376 | 24,541 | 3,165 | 14.8 |
| Netherlands | 19,207 | 22,462 | 24,059 | 28,604 | 30,536 | 1,932 | 6.8 |
| All other | 213,111 | 241,517 | 273,988 | 326,929 | 391,146 | 64,218 | 19.6 |
| Total | 651,424 | 727,183 | 803,992 | 929,486 | 1,046,358 | 116,872 | 12.6 |
| EU-27 | 141,979 | 156,337 | 168,289 | 197,281 | 226,252 | 28,971 | 14.7 |
| OPEC | 18,097 | 22,643 | 31,855 | 42,469 | 49,952 | 7,483 | 17.6 |
| Latin America | 131,236 | 149,534 | 167,686 | 196,723 | 218,553 | 21,830 | 11.1 |
| CBERA | 10,946 | 11,048 | 13,521 | 16,323 | 18,850 | 2,527 | 15.5 |
| Asia | 172,329 | 192,485 | 204,120 | 237,021 | 266,513 | 29,492 | 12.4 |
| Sub-Saharan Africa | 6,665 | 8,236 | 9,919 | 11,709 | 13,860 | 2,151 | 18.4 |
| Central and Eastern Europe | 3,190 | 3,942 | 4,529 | 5,732 | 7,598 | 1,866 | 32.6 |
| U.S. imports of merchandise for consumption | | | | | | | |
| Canada | 224,016 | 255,660 | 287,534 | 303,034 | 312,505 | 9,471 | 3.1 |
| China | 151,620 | 196,160 | 242,638 | 287,052 | 323,085 | 36,033 | 12.6 |
| Mexico | 137,199 | 154,959 | 169,216 | 197,056 | 210,159 | 13,103 | 6.6 |
| Japan | 118,485 | 129,535 | 137,831 | 148,071 | 144,928 | -3,143 | -2.1 |
| Germany | 66,532 | 75,622 | 84,345 | 87,756 | 94,416 | 6,660 | 7.6 |
| United Kingdom | 42,455 | 45,920 | 50,758 | 53,502 | 56,873 | 3,371 | 6.3 |
| Korea | 36,930 | 45,064 | 43,155 | 44,714 | 45,368 | 654 | 1.5 |
| France | 28,896 | 31,505 | 33,499 | 36,837 | 41,237 | 4,399 | 11.9 |
| Taiwan | 31,490 | 34,462 | 34,574 | 38,086 | 38,052 | -33 | -0.1 |
| Netherlands | 10,973 | 12,471 | 14,854 | 18,140 | 19,260 | 1,120 | 6.2 |
| All other | 401,501 | 478,804 | 563,975 | 630,806 | 656,980 | 26,175 | 4.1 |
| Total | 1,250,097 | 1,460,160 | 1,662,380 | 1,845,053 | 1,942,863 | 97,810 | 5.3 |
| EU-27 | 251,594 | 281,115 | 308,628 | 330,898 | 352,189 | 21,291 | 6.4 |
| OPEC | 72,169 | 100,697 | 136,438 | 161,216 | 176,154 | 14,938 | 9.3 |
| Latin America | 215,298 | 253,154 | 290,720 | 329,153 | 340,983 | 11,830 | 3.6 |
| CBERA | 10,992 | 13,190 | 17,166 | 18,093 | 18,457 | 364 | 2.0 |
| Asia | 449,094 | 526,404 | 593,811 | 668,735 | 704,436 | 35,700 | 5.3 |
| Sub-Saharan Africa | 25,470 | 35,769 | 49,925 | 58,762 | 66,889 | 8,127 | 13.8 |
| Central and Eastern Europe | 8,344 | 9,716 | 10,303 | 11,071 | 11,467 | 396 | 3.6 |

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, 2003–07^a—Continued

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--------------------------------|----------|----------|----------|----------|----------|------------------------|----------------|
| | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | |
| U.S. merchandise trade balance | | | | | | | |
| Canada | -75,267 | -92,492 | -104,299 | -104,808 | -99,386 | 5,422 | 5.2 |
| China | -124,913 | -163,553 | -203,781 | -235,428 | -262,072 | -26,644 | -11.3 |
| Mexico | -54,091 | -61,941 | -67,549 | -82,493 | -90,778 | -8,284 | -10.0 |
| Japan | -69,623 | -79,042 | -86,333 | -92,475 | -86,832 | 5,643 | 6.1 |
| Germany | -39,726 | -48,399 | -55,118 | -49,907 | -50,122 | -215 | -0.4 |
| United Kingdom | -11,899 | -14,186 | -16,693 | -12,166 | -11,437 | 729 | 6.0 |
| Korea | -14,405 | -20,070 | -16,944 | -13,920 | -12,357 | 1,563 | 11.2 |
| France | -13,213 | -11,879 | -12,841 | -14,247 | -15,452 | -1,205 | -8.5 |
| Taiwan | -15,379 | -14,119 | -14,047 | -16,709 | -13,511 | 3,198 | 19.1 |
| Netherlands | 8,234 | 9,991 | 9,205 | 10,464 | 11,276 | 812 | 7.8 |
| All other | -188,390 | -237,287 | -289,987 | -303,877 | -265,834 | 38,043 | 12.5 |
| Total | -598,673 | -732,977 | -858,388 | -915,567 | -896,505 | 19,062 | 2.1 |
| EU-27 | -109,615 | -124,778 | -140,339 | -133,617 | -125,937 | 7,680 | 5.7 |
| OPEC | -54,072 | -78,054 | -104,583 | -118,746 | -126,202 | -7,455 | -6.3 |
| Latin America | -84,061 | -103,620 | -123,034 | -132,430 | -122,430 | 10,000 | 7.6 |
| CBERA | -46 | -2,143 | -3,645 | -1,770 | 394 | 2,163 | ^(b) |
| Asia | -276,765 | -333,920 | -389,691 | -431,714 | -437,923 | -6,208 | -1.4 |
| Sub-Saharan Africa | -18,806 | -27,533 | -40,005 | -47,053 | -53,028 | -5,976 | -12.7 |
| Central and Eastern Europe | -5,154 | -5,774 | -5,774 | -5,339 | -3,869 | 1,470 | 27.5 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bNot meaningful for purposes of comparison.

In 2007, the United States exported more merchandise to each of its top 10 trading partners and to selected country groups than in the previous year. The United States also imported more merchandise in 2007 from almost all of its top 10 trading partners, with the exception of Japan and Taiwan. Imports from Japan of machinery and of transportation equipment decreased by \$2.3 billion (12 percent) and \$1.6 billion (2 percent), respectively.

More detailed analysis of these and other trade shifts with seven leading U.S. merchandise trading partners is provided in the following country overviews.

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Part II: Bilateral Trade

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

Brazil

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Change in 2007 from 2006:

U.S. trade deficit: Decreased by \$5.9 billion (64 percent) to \$3.3 billion

U.S. exports: Increased by \$4.7 billion (28 percent) to \$21.7 billion

U.S. imports: Decreased by \$1.2 billion (4 percent) to \$25.0 billion

U.S. merchandise trade with Brazil, the 13th-largest individual U.S. trading partner, increased by \$3.6 billion (8 percent) to \$46.7 billion in 2007. Brazil's anti-inflationary fiscal policies, improved tax collection, grants to low-income families, easier access to credit for small businesses, increased foreign investment, and strong agricultural export market all contributed to a 5 percent increase in GDP and a 21 percent rise in per capita GDP in 2007.¹⁹

Appreciation of the Brazilian real relative to the U.S. dollar and Chinese yuan²⁰ also contributed to the increased purchasing power of consumers in Brazil in 2007 and to a 31 percent increase in Brazil's imports from all countries that year.²¹ In 2007, imports from Brazil's top two suppliers, the United States and China, grew by 28 percent and 58 percent, respectively, with the United States accounting for 16 percent of Brazil's total imports and China, 10 percent. The U.S. merchandise trade deficit with Brazil decreased by 64 percent to \$3.3 billion in 2007, while Brazil's trade balance with China deteriorated from a \$410 million surplus in 2006 to a \$1.9 billion deficit in 2007.

U.S. Exports

U.S. exports to Brazil of transportation equipment increased by \$1.6 billion (28 percent) in 2007 and accounted for one-third of the total expansion in U.S. exports to Brazil that year, while U.S. exports of chemicals and related products rose by \$1.4 billion (31 percent) and accounted for an additional 29 percent of the total increase (table BR.1).

Collectively, the increase in U.S. exports to Brazil of aircraft and aircraft engines (\$1.3 billion) accounted for over one-quarter of the growth in all U.S. exports to Brazil in 2007. U.S. exports of aircraft to Brazil rose by \$826 million (35.6 percent) to \$3.1 billion and exports of aircraft engines increased by \$432 million (38.2 percent) to \$1.6 billion (table BR.2). The rise in U.S. exports of aircraft reflected a 36 percent increase in deliveries of

¹⁹ As measured in U.S. dollars. IMF, *IMF World Economic Outlook Database*, April 2008. For information on Brazil's recent economic performance, see The Brazil Project at the Woodrow Wilson Center, <http://www.wilsoncenter.org/org/brazil>, and the Latin America Network Information Center, <http://lanic.utexas.edu/la/brazil>.

²⁰ From December 29, 2006 through December 31, 2007, the value of the Brazilian real appreciated by 21 percent relative to the U.S. dollar and 12 percent relative to the Chinese yuan. IMF, Exchange Rate Archives, October 16, 2008.

²¹ GTIS, Global Trade Atlas Database.

TABLE BR.1 Brazil: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major industry/commodity sectors, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|---------------|----------------|---------------|---------------|------------------------|----------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| Agricultural products | 361 | 247 | 203 | 265 | 394 | 129 | 48.9 | |
| Forest products | 190 | 212 | 241 | 251 | 329 | 77 | 30.8 | |
| Chemicals and related products | 2,904 | 3,604 | 3,651 | 4,399 | 5,778 | 1,379 | 31.3 | |
| Energy-related products | 319 | 486 | 705 | 891 | 1,093 | 202 | 22.6 | |
| Textiles and apparel | 98 | 125 | 136 | 169 | 195 | 26 | 15.5 | |
| Footwear | 2 | 3 | 1 | 2 | 3 | 1 | 50.3 | |
| Minerals and metals | 283 | 353 | 419 | 517 | 718 | 201 | 38.9 | |
| Machinery | 959 | 1,020 | 1,203 | 1,474 | 1,820 | 346 | 23.5 | |
| Transportation equipment | 2,478 | 3,792 | 3,980 | 5,637 | 7,209 | 1,572 | 27.9 | |
| Electronic products | 2,052 | 2,187 | 2,535 | 2,923 | 3,534 | 611 | 20.9 | |
| Miscellaneous manufactures | 64 | 101 | 93 | 129 | 154 | 24 | 18.9 | |
| Special provisions | 238 | 333 | 388 | 320 | 458 | 138 | 43.2 | |
| Total | 9,948 | 12,462 | 13,554 | 16,977 | 21,684 | 4,707 | 27.7 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| Agricultural products | 1,815 | 1,995 | 2,246 | 3,451 | 3,222 | -229 | -6.6 | |
| Forest products | 1,569 | 2,203 | 2,305 | 2,365 | 2,064 | -300 | -12.7 | |
| Chemicals and related products | 968 | 1,149 | 1,549 | 1,567 | 1,976 | 409 | 26.1 | |
| Energy-related products | 1,808 | 1,664 | 2,757 | 3,582 | 3,950 | 368 | 10.3 | |
| Textiles and apparel | 479 | 515 | 494 | 455 | 469 | 14 | 3.1 | |
| Footwear | 1,040 | 1,081 | 1,019 | 896 | 758 | -138 | -15.4 | |
| Minerals and metals | 2,521 | 4,666 | 5,347 | 5,849 | 5,249 | -600 | -10.3 | |
| Machinery | 963 | 1,127 | 1,463 | 1,484 | 1,720 | 237 | 16.0 | |
| Transportation equipment | 3,919 | 4,860 | 4,751 | 4,460 | 4,110 | -350 | -7.8 | |
| Electronic products | 1,346 | 687 | 1,000 | 770 | 479 | -291 | -37.8 | |
| Miscellaneous manufactures | 408 | 561 | 613 | 533 | 520 | -13 | -2.5 | |
| Special provisions | 880 | 591 | 800 | 759 | 501 | -258 | -34.0 | |
| Total | 17,717 | 21,098 | 24,346 | 26,169 | 25,018 | -1,151 | -4.4 | |
| U.S. merchandise trade balance | | | | | | | | |
| Agricultural products | -1,454 | -1,749 | -2,043 | -3,186 | -2,827 | 358 | 11.3 | |
| Forest products | -1,380 | -1,991 | -2,064 | -2,113 | -1,736 | 378 | 17.9 | |
| Chemicals and related products | 1,937 | 2,455 | 2,101 | 2,832 | 3,802 | 970 | 34.2 | |
| Energy-related products | -1,489 | -1,177 | -2,052 | -2,690 | -2,857 | -166 | -6.2 | |
| Textiles and apparel | -381 | -391 | -358 | -286 | -274 | 12 | 4.3 | |
| Footwear | -1,038 | -1,078 | -1,018 | -894 | -755 | 139 | 15.5 | |
| Minerals and metals | -2,238 | -4,313 | -4,928 | -5,332 | -4,531 | 801 | 15.0 | |
| Machinery | -5 | -107 | -261 | -10 | 100 | 109 | ^(b) | |
| Transportation equipment | -1,441 | -1,068 | -771 | 1,177 | 3,099 | 1,921 | 163.2 | |
| Electronic products | 707 | 1,500 | 1,534 | 2,154 | 3,055 | 902 | 41.9 | |
| Miscellaneous manufactures | -343 | -459 | -521 | -404 | -366 | 37 | 9.3 | |
| Special provisions | -643 | -258 | -411 | -439 | -43 | 396 | 90.2 | |
| Total | -7,769 | -8,636 | -10,792 | -9,192 | -3,334 | 5,858 | 63.7 | |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bNot meaningful for purposes of comparison.

TABLE BR.2 Leading changes in U.S. exports to and U.S. imports from Brazil, 2003–07

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------|-------|-------|-------|-------|------------------------|---------|
| | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | |
| U.S. EXPORTS | | | | | | | |
| Increases | | | | | | | |
| TE013 Aircraft, spacecraft, and related equipment . . . | 649 | 1,243 | 1,031 | 2,323 | 3,149 | 826 | 35.6 |
| TE001 Aircraft engines and gas turbines | 739 | 1,012 | 1,140 | 1,131 | 1,563 | 432 | 38.2 |
| CH006 Certain organic chemicals | 373 | 457 | 460 | 542 | 742 | 200 | 36.9 |
| CH010 Fertilizers | 306 | 379 | 242 | 256 | 414 | 158 | 61.9 |
| EP003 Coal, coke, and related chemical products . . | 164 | 295 | 373 | 444 | 593 | 149 | 33.6 |
| CH017 Pesticide products and formulations | 228 | 365 | 328 | 361 | 486 | 125 | 34.7 |
| CH005 Organic specialty chemicals | 220 | 296 | 290 | 320 | 439 | 120 | 37.4 |
| CH030 Other plastics in primary forms | 287 | 395 | 451 | 545 | 652 | 107 | 19.7 |
| EL022 Medical goods | 261 | 296 | 356 | 408 | 515 | 106 | 26.0 |
| EL025 Measuring, testing, and controlling instruments | 182 | 214 | 248 | 298 | 396 | 98 | 33.0 |
| MM025 Steel mill products | 28 | 47 | 61 | 75 | 173 | 98 | 130.6 |
| CH025 Polyethylene resins in primary forms | 36 | 55 | 54 | 78 | 173 | 95 | 120.9 |
| CH019 Medicinal chemicals | 360 | 413 | 517 | 665 | 759 | 94 | 14.2 |
| EL005 Navigational instruments and remote control apparatus | 53 | 34 | 31 | 36 | 127 | 91 | 254.4 |
| AG030 Cereals | 145 | 9 | 5 | 3 | 91 | 89 | 3,233.9 |
| CH004 Organic commodity chemicals | 118 | 146 | 143 | 251 | 330 | 80 | 31.7 |
| MT009 Farm and garden machinery and equipment | 137 | 187 | 163 | 185 | 261 | 76 | 41.4 |
| TE002 Internal combustion piston engines, other than for aircraft | 185 | 149 | 151 | 192 | 265 | 72 | 37.6 |
| CH033 Miscellaneous plastic products | 179 | 188 | 179 | 205 | 266 | 62 | 30.1 |
| EL004 Blank and prerecorded media | 56 | 59 | 78 | 98 | 156 | 58 | 59.7 |
| TE008 Rail locomotive and rolling stock | 33 | 90 | 202 | 107 | 163 | 56 | 52.4 |
| TE010 Certain motor-vehicle parts | 282 | 376 | 366 | 365 | 416 | 51 | 14.0 |
| EL002 Telecommunications equipment | 247 | 346 | 292 | 329 | 380 | 51 | 15.5 |
| CH031 Synthetic rubber | 91 | 121 | 145 | 201 | 251 | 50 | 24.9 |
| CH026 Polypropylene resins in primary forms | 11 | 12 | 23 | 41 | 90 | 49 | 120.4 |
| CH027 Polyvinyl chloride resins in primary forms . . . | 2 | 2 | 10 | 4 | 53 | 49 | 1,147.2 |
| EP005 Petroleum products | 147 | 186 | 328 | 443 | 491 | 48 | 10.9 |
| EL001 Office machines | 16 | 14 | 15 | 15 | 61 | 47 | 312.2 |
| EL006 Radio and television broadcasting equipment | 18 | 24 | 23 | 48 | 91 | 43 | 91.4 |
| EL003 Consumer electronics | 30 | 30 | 47 | 63 | 104 | 41 | 65.5 |
| Decreases | | | | | | | |
| EL015 Semiconductors and integrated circuits | 211 | 217 | 288 | 327 | 258 | -69 | -21.2 |
| AG049 Cotton, not carded or combed | 74 | 85 | 18 | 67 | 44 | -23 | -34.1 |
| MM020 Precious metals and non-numismatic coins . . | 8 | 10 | 23 | 23 | 7 | -16 | -70.1 |
| TE004 Construction and mining equipment | 439 | 487 | 828 | 1,246 | 1,231 | -15 | -1.2 |

See footnote at end of table.

TABLE BR.2 Leading changes in U.S. exports to and U.S. imports from Brazil, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|------------------|------------------|-------|------------------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MM026 Steel pipe and tube fittings and certain cast products | 9 | 7 | 8 | 33 | 19 | -14 | -42.3 |
| MT031 Molds and molding machinery | 38 | 42 | 71 | 58 | 50 | -8 | -14.2 |
| EL017 Computers, peripherals, and parts | 650 | 646 | 785 | 889 | 881 | -8 | -0.9 |
| MT018 Non-metalworking machine tools | 5 | 20 | 12 | 12 | 7 | -6 | -45.9 |
| EL014 Electron tubes | 11 | 27 | 22 | 9 | 3 | -6 | -62.7 |
| MT022 Boilers, turbines, and related machinery | 17 | 13 | 15 | 24 | 19 | -5 | -22.5 |
| MT026 Nonelectrically powered handtools | 7 | 6 | 14 | 19 | 15 | -5 | -23.7 |
| AG017 Miscellaneous vegetable substances | 17 | 11 | 12 | 19 | 15 | -4 | -20.8 |
| MS009 Furniture | 7 | 17 | 24 | 23 | 19 | -4 | -16.2 |
| CH028 Styrene polymers in primary forms | 11 | 22 | 22 | 27 | 24 | -3 | -10.7 |
| EL009 Printed circuits | 4 | 4 | 5 | 7 | 5 | -2 | -29.6 |
| MM017 Miscellaneous glass products | 9 | 12 | 12 | 13 | 11 | -2 | -16.1 |
| MM038D Aluminum foil | 3 | 6 | 6 | 12 | 10 | -2 | -16.8 |
| MM030 Wire products of base metal | 5 | 5 | 7 | 12 | 10 | -2 | -17.3 |
| MT003 Industrial thermal-processing equipment and furnaces | 52 | 48 | 57 | 85 | 83 | -2 | -2.3 |
| MS005 Silverware and related articles of precious metal | (^b) | 1 | 2 | 3 | 1 | -2 | -69.3 |
| MM025J Wire of stainless steels | 2 | 3 | 2 | 3 | 2 | -2 | -49.8 |
| MS008 Bicycles and certain parts | 3 | 24 | 4 | 4 | 2 | -1 | -39.7 |
| EL019 Optical fibers, optical fiber bundles and cables | 2 | 2 | 4 | 7 | 6 | -1 | -18.5 |
| EL010 Circuit apparatus exceeding 1000V | 9 | 5 | 7 | 8 | 7 | -1 | -15.0 |
| MM018 Fiberglass insulation products | 2 | 2 | 2 | 2 | 1 | -1 | -65.2 |
| CH029 Saturated polyester resins | 39 | 46 | 40 | 29 | 28 | -1 | -2.9 |
| MM022 Ferroalloys | 1 | 2 | 6 | 4 | 4 | -1 | -17.8 |
| MM015 Glass containers | (^b) | 1 | 1 | 1 | 1 | -1 | -58.2 |
| MS018 Apparel fasteners | 1 | 2 | 1 | 1 | 1 | -1 | -57.6 |
| TX005F Sweaters | 0 | (^b) | (^b) | 1 | (^b) | -1 | -59.5 |
| U.S. IMPORTS | | | | | | | |
| Increases | | | | | | | |
| TE013 Aircraft, spacecraft, and related equipment | 1,845 | 2,508 | 1,806 | 1,202 | 1,712 | 510 | 42.4 |
| AG038 Fruit and vegetable juices | 168 | 115 | 208 | 231 | 419 | 189 | 81.7 |
| MT023 Electric motors, generators, and related equipment | 186 | 141 | 302 | 370 | 526 | 156 | 42.2 |
| EP004 Crude petroleum | 500 | 628 | 1,265 | 2,546 | 2,682 | 136 | 5.3 |
| CH007 Miscellaneous inorganic chemicals | 115 | 145 | 137 | 169 | 301 | 133 | 78.5 |
| CH032 Tires and tubes | 158 | 161 | 186 | 207 | 313 | 106 | 51.2 |
| FP009 Wood pulp and wastepaper | 438 | 446 | 535 | 578 | 682 | 104 | 18.1 |
| AG028 Coffee and tea | 311 | 360 | 530 | 603 | 701 | 98 | 16.3 |
| EP006 Natural gas and components | 50 | 34 | 91 | 75 | 169 | 93 | 123.8 |
| EP005 Petroleum products | 1,209 | 947 | 1,343 | 899 | 988 | 89 | 9.9 |
| CH003 Primary aromatics | 93 | 190 | 272 | 272 | 359 | 86 | 31.8 |
| MT024 Electrical transformers, static converters, and inductors | 36 | 41 | 42 | 46 | 114 | 68 | 147.4 |

See footnote at end of table.

TABLE BR.2 Leading changes in U.S. exports to and U.S. imports from Brazil, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|-------|-------|-------|-------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MM022 Ferroalloys | 68 | 78 | 83 | 119 | 180 | 61 | 51.1 |
| FP014 Certain specialty papers | 35 | 34 | 38 | 60 | 115 | 55 | 90.5 |
| EP003 Coal, coke, and related chemical products . . | 50 | 55 | 58 | 61 | 112 | 50 | 81.6 |
| MM041 Certain base metals and chemical elements | 40 | 78 | 73 | 69 | 114 | 45 | 64.9 |
| MS019A Small arms and ammunition | 41 | 56 | 55 | 77 | 121 | 44 | 57.8 |
| AG043 Unmanufactured tobacco | 262 | 204 | 163 | 240 | 284 | 44 | 18.1 |
| AG001 Certain miscellaneous animals and meats . . | 221 | 276 | 286 | 370 | 413 | 43 | 11.7 |
| MS019 Arms, ammunition, and armored vehicles . . | 41 | 56 | 55 | 78 | 121 | 43 | 54.6 |
| TE015 Motors and engines, except internal combustion, aircraft, or electric | 5 | 7 | 9 | 26 | 62 | 36 | 138.8 |
| CH001 Major primary olefins | 33 | 23 | 26 | 3 | 39 | 35 | 1,092.9 |
| TX006 Miscellaneous textile products | 44 | 77 | 43 | 85 | 116 | 30 | 35.3 |
| MM025G Plates, sheets, and strips of stainless steels | 22 | 32 | 51 | 79 | 108 | 28 | 35.7 |
| MM025C Bars, rods, and light shapes of carbon and alloy steels | 66 | 90 | 160 | 143 | 171 | 28 | 19.6 |
| CH029 Saturated polyester resins | 6 | 1 | 10 | 6 | 31 | 25 | 380.4 |
| MM028 Metal construction components | 1 | 1 | 1 | 3 | 26 | 23 | 812.6 |
| AG020 Edible nuts | 117 | 154 | 158 | 146 | 167 | 21 | 14.2 |
| CH002 Other olefins | 1 | 0 | 6 | 3 | 24 | 21 | 617.6 |
| CH023 Miscellaneous chemicals and specialties . . . | 20 | 41 | 92 | 101 | 119 | 18 | 17.7 |
| Decreases | | | | | | | |
| AG050 Ethyl alcohol for nonbeverage purposes | 10 | 95 | 97 | 1,030 | 401 | -629 | -61.1 |
| TE002 Internal combustion piston engines, other than for aircraft | 653 | 708 | 953 | 1,213 | 831 | -382 | -31.5 |
| EL002 Telecommunications equipment | 978 | 368 | 749 | 523 | 251 | -272 | -52.1 |
| MM025 Steel mill products | 573 | 1,382 | 1,374 | 1,629 | 1,411 | -218 | -13.4 |
| TE010 Certain motor-vehicle parts | 472 | 704 | 856 | 842 | 677 | -166 | -19.7 |
| FP004 Wood veneer and wood panels | 321 | 545 | 551 | 397 | 243 | -153 | -38.6 |
| MM036 Copper and related articles | 105 | 170 | 254 | 338 | 190 | -148 | -43.8 |
| TE004 Construction and mining equipment | 187 | 442 | 570 | 664 | 517 | -147 | -22.1 |
| FW001 Footwear | 1,040 | 1,081 | 1,019 | 896 | 758 | -138 | -15.4 |
| TE009 Motor vehicles | 546 | 227 | 222 | 168 | 39 | -129 | -76.7 |
| FP003 Moldings, millwork, and joinery | 325 | 565 | 564 | 701 | 588 | -113 | -16.1 |
| MM037A Primary and secondary aluminum | 121 | 408 | 368 | 332 | 225 | -107 | -32.3 |
| MM025L Pipes and tubes of carbon and alloy steels . | 29 | 78 | 121 | 253 | 150 | -103 | -40.7 |
| MM037 Unwrought aluminum | 154 | 484 | 481 | 421 | 319 | -102 | -24.1 |
| MM020 Precious metals and non-numismatic coins . . | 180 | 236 | 188 | 203 | 116 | -87 | -42.9 |
| MM020A Unrefined and refined gold | 148 | 213 | 152 | 127 | 50 | -77 | -60.5 |

See footnote at end of table.

TABLE BR.2 Leading changes in U.S. exports to and U.S. imports from Brazil, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|------|------|------|------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MM025A Ingots, blooms, billets, and slabs of carbon and alloy steels | 369 | 787 | 670 | 564 | 488 | -76 | -13.4 |
| MM025B Plates, sheets, and strips of carbon and alloy steels | 47 | 333 | 299 | 502 | 429 | -73 | -14.6 |
| MS009 Furniture | 277 | 382 | 428 | 324 | 263 | -61 | -18.7 |
| MM012 Ceramic floor and wall tiles | 113 | 147 | 181 | 190 | 135 | -55 | -29.0 |
| FP013 Printing and writing papers | 27 | 64 | 61 | 65 | 17 | -48 | -73.8 |
| FP002 Lumber | 215 | 315 | 291 | 272 | 225 | -47 | -17.2 |
| MM003 Iron ores and concentrates | 118 | 140 | 178 | 228 | 183 | -45 | -19.6 |
| AG037 Cocoa, chocolate, and confectionery | 162 | 162 | 185 | 191 | 156 | -34 | -18.0 |
| MM040A Unwrought zinc | 19 | 29 | 60 | 37 | 4 | -33 | -88.4 |
| MM040 Zinc and related articles | 19 | 29 | 60 | 37 | 4 | -33 | -88.4 |
| TE005 Ball and rollers bearings | 69 | 83 | 95 | 102 | 70 | -32 | -31.6 |
| FP011 Industrial papers and paperboards | 30 | 44 | 55 | 52 | 20 | -32 | -61.8 |
| MM038 Aluminum mill products | 47 | 86 | 115 | 143 | 112 | -31 | -22.0 |
| MM036A Unrefined and refined copper | 24 | 47 | 108 | 124 | 92 | -31 | -25.1 |

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

Note: Calculations based on unrounded data.

^aThis 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.

^bLess than \$500,000.

Boeing model 737-800 passenger jets to GOL Airlines in Brazil, from 11 in 2006 to 15 in 2007.²² The rise in aircraft engine exports to Brazil was a function of world demand for Brazilian-made aircraft, which use U.S.-manufactured aircraft engines (GE and Rolls Royce).

Exports of agricultural chemicals (fertilizers and pesticides)²³ rose by \$283 million (46 percent) to \$900 million in 2007, accounting for 6 percent of the total increase in U.S. exports to Brazil and 21 percent of U.S. chemicals and related product exports. Rising prices are largely responsible for the \$158 million (62 percent) increase in the value of U.S. exports of fertilizers to Brazil, the fourth largest fertilizer consumer in the world (table BR.2), as the quantity of U.S. fertilizer exports to Brazil rose by only 5 percent.²⁴ Global prices for fertilizers are increasing as demand is rising faster than supply, spurred by rising agricultural commodity prices.

U.S. exports to Brazil of pesticides rose by \$125 million (35 percent) to \$486 million in 2007 (table BR.2). In Brazil, farmers are converting open range and forested land into cultivated land, increasing the demand for both fertilizers and pesticides. In addition, weather patterns that fostered insect infestations in 2007 increased the demand in Brazil for pesticides.²⁵ There is relatively little production of either fertilizer or pesticides in Brazil so most demand growth is met by increased imports from the United States, Germany, and Switzerland.²⁶

In 2007, U.S. exports to Brazil of certain organic chemicals and specialty organic chemicals collectively grew by \$320 million (36 percent) to \$1.2 billion and accounted for 7 percent of the expansion in total U.S. exports to Brazil. Increased growth of sugar cane in Brazil to meet rising demand for ethanol led to expanded exports from the United States of certain herbicides that can be used on sugar cane.²⁷ Exports to Brazil of ethylene glycol, an organic chemical used in the production of polyethylene terephthalate (PET), increased due to the opening in Ipojuca, Brazil, of the world's largest production facility for PET. Pet is used to manufacture plastic for the production of soft drink bottles.²⁸

U.S. Imports

Commodity groups contributing most to the \$1.2 billion (4 percent) decline in U.S. imports from Brazil in 2007 were ethyl alcohol for nonbeverage purposes, internal combustion piston engines, other than for aircraft, and telecommunications equipment. U.S. imports of ethanol for nonbeverage purposes fell by \$629 million (61 percent) and accounted for over one-half of the total decrease in U.S. imports from Brazil in 2007 (table BR.2). U.S. demand for imported ethanol peaked in 2006 as new U.S. capacity came online in 2007 leading to a surplus of ethanol, lower prices, and lower direct imports from Brazil. The depreciation of the U.S. dollar relative to the euro and certain Asian currencies made the United States a less attractive market for Brazil's exports in 2007. Also, rising demand for ethanol in Brazil reduced the incentive for Brazilian ethanol producers to pursue export markets.

²² The Boeing Company, "Boeing Orders and Deliveries Database," undated (accessed August 5, 2008).

²³ See commodity groups CH017 and CH010 in table BR.2.

²⁴ "Table 4—U.S. Exports of Selected Fertilizers," from Foreign Trade Statistics, U.S. Department of Commerce, prepared for the Fertilizer Institute by the U.S. Department of Agriculture, Economic Research Service.

²⁵ Matthew Phillips (Phillips McDougall), e-mail message to Commission staff, August 6, 2008.

²⁶ GTIS, Global Trade Atlas Database.

²⁷ Herbicides used on sugar cane include hexazinone, atrazine, and ametryn (classified as "certain organic chemicals") and glyphosate (classified as a "specialty organic chemicals").

²⁸ *Chemical Week*, "M&G Starts Up PET Plant," March 28, 2007.

U.S. imports of motor vehicle engines declined by \$382 million (32 percent) to \$831 million in 2007, accounting for roughly one-third of the total decrease in U.S. imports from Brazil (table BR.2). Most of the decline was in imports of diesel engines, which fell by 76 percent, from \$368.0 million in 2006 to \$88.7 million in 2007. Since nearly all diesel engines are installed in trucks in the United States, the decline is likely the result of the drop in U.S. truck production due to extensive buying of these trucks and diesel engines prior to the implementation of more stringent EPA engine standards in the United States in January 2007. U.S. medium and heavy truck production volumes fell by 45 percent in 2007 compared with 2006.

U.S. imports of telecommunications equipment from Brazil fell by \$272 million (52 percent) to \$251 million in 2007. This sustained reduction in imports from Brazil reflects continued relocation of production to China by multinational telecommunications equipment companies as labor costs have risen faster in Brazil than in China and the value of the Brazilian real appreciated relative to the Chinese yuan.

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Canada

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Change in 2007 from 2006:

U.S. trade deficit: Decreased by \$5.4 billion (5 percent) to \$99.4 billion

U.S. exports: Increased by \$14.9 billion (8 percent) to \$213.1 billion

U.S. imports: Increased by \$9.5 billion (3 percent) to \$312.5 billion

U.S. merchandise trade with Canada, the largest U.S. trading partner, increased by \$24.4 billion (5 percent) to \$525 billion in 2007. For the first time since 2002, the U.S. trade deficit with Canada declined in 2007 (by \$5.4 billion compared to 2006) as a result of a \$15 billion increase in U.S. exports to Canada and a \$9.5 billion increase in U.S. imports from Canada. In 2007, nearly one-half of the bilateral trade occurred within two industries: transportation equipment (28 percent) and energy-related products (17 percent) (table CA.1). U.S. exports increased in these two categories, along with agricultural products and minerals and metals, collectively accounting for 73 percent of the shift in U.S. exports. U.S. imports from Canada of energy-related products, minerals and metals, chemicals and related products, and agricultural products also increased; forest products was the only category of U.S. imports to experience a significant decrease in 2007.

The U.S. dollar depreciated by 15 percent relative to the Canadian dollar during 2007, ending the year approximately equal in value to the Canadian dollar.²⁹ The weakened U.S. dollar aided U.S. exports to Canada and diminished the price advantage of Canadian goods in the U.S. market. However, higher prices for imported petroleum, due to rising world energy prices, boosted the value of U.S. imports of energy-related products from Canada.

U.S. Exports

U.S. exports to Canada benefitted from strong economic growth in Canada (5.9 percent GDP growth), buoyant consumer purchases in 2007 (Canadian consumer sales rose by 6.2 percent),³⁰ as well as an appreciating Canadian dollar. U.S. exports to Canada increased by \$14.9 billion (8 percent) to \$213.1 billion in 2007.

²⁹ Board of Governors of the Federal Reserve System, *Foreign Exchange Rates (Monthly)*, July 1, 2008.

³⁰ Statistics Canada, *Gross Domestic Product, Expenditure-Based*, May 30, 2008.

TABLE CA.1 Canada: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major industry/commodity sectors, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|----------------|-----------------|-----------------|----------------|------------------------|----------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| Agricultural products | 9,805 | 10,111 | 11,151 | 12,514 | 14,882 | 2,368 | 18.9 | |
| Forest products | 7,960 | 8,536 | 9,111 | 9,846 | 10,236 | 390 | 4.0 | |
| Chemicals and related products | 21,516 | 23,495 | 26,412 | 28,475 | 29,033 | 558 | 2.0 | |
| Energy-related products | 4,296 | 5,754 | 8,487 | 8,953 | 10,563 | 1,610 | 18.0 | |
| Textiles and apparel | 3,121 | 3,275 | 3,471 | 3,561 | 3,531 | -30 | -0.8 | |
| Footwear | 57 | 59 | 65 | 73 | 78 | 5 | 6.2 | |
| Minerals and metals | 13,820 | 16,835 | 19,110 | 22,687 | 24,689 | 2,001 | 8.8 | |
| Machinery | 14,517 | 15,550 | 17,333 | 19,418 | 20,182 | 764 | 3.9 | |
| Transportation equipment | 49,874 | 53,694 | 59,821 | 64,407 | 69,291 | 4,884 | 7.6 | |
| Electronic products | 16,688 | 17,608 | 18,941 | 18,378 | 18,183 | -195 | -1.1 | |
| Miscellaneous manufactures | 3,133 | 3,446 | 3,918 | 4,425 | 5,067 | 642 | 14.5 | |
| Special provisions | 3,961 | 4,805 | 5,414 | 5,490 | 7,385 | 1,895 | 34.5 | |
| Total | 148,749 | 163,168 | 183,235 | 198,226 | 213,119 | 14,892 | 7.5 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| Agricultural products | 12,975 | 14,130 | 14,963 | 16,128 | 17,919 | 1,791 | 11.1 | |
| Forest products | 22,640 | 27,584 | 28,224 | 26,717 | 23,435 | -3,282 | -12.3 | |
| Chemicals and related products | 18,440 | 21,996 | 25,535 | 28,036 | 29,939 | 1,903 | 6.8 | |
| Energy-related products | 41,579 | 49,278 | 66,116 | 73,748 | 79,138 | 5,389 | 7.3 | |
| Textiles and apparel | 3,788 | 3,834 | 3,633 | 3,395 | 3,080 | -315 | -9.3 | |
| Footwear | 64 | 77 | 94 | 79 | 76 | -4 | -4.6 | |
| Minerals and metals | 18,003 | 22,636 | 25,590 | 32,155 | 34,562 | 2,406 | 7.5 | |
| Machinery | 9,827 | 10,986 | 11,866 | 13,124 | 13,740 | 615 | 4.7 | |
| Transportation equipment | 67,517 | 74,189 | 78,374 | 76,768 | 77,758 | 990 | 1.3 | |
| Electronic products | 9,793 | 10,982 | 12,480 | 11,958 | 12,141 | 183 | 1.5 | |
| Miscellaneous manufactures | 5,566 | 5,889 | 5,903 | 6,013 | 5,825 | -188 | -3.1 | |
| Special provisions | 13,824 | 14,079 | 14,757 | 14,911 | 14,892 | -19 | -0.1 | |
| Total | 224,016 | 255,660 | 287,534 | 303,034 | 312,505 | 9,471 | 3.1 | |
| U.S. merchandise trade balance | | | | | | | | |
| Agricultural products | -3,170 | -4,019 | -3,811 | -3,614 | -3,037 | 577 | 16.0 | |
| Forest products | -14,680 | -19,047 | -19,113 | -16,871 | -13,199 | 3,672 | 21.8 | |
| Chemicals and related products | 3,076 | 1,499 | 878 | 439 | -906 | -1,345 | ^(b) | |
| Energy-related products | -37,283 | -43,524 | -57,629 | -64,796 | -68,575 | -3,779 | -5.8 | |
| Textiles and apparel | -666 | -559 | -162 | 166 | 451 | 285 | 172.1 | |
| Footwear | -8 | -18 | -29 | -6 | 2 | 8 | ^(b) | |
| Minerals and metals | -4,183 | -5,801 | -6,480 | -9,468 | -9,873 | -405 | -4.3 | |
| Machinery | 4,690 | 4,563 | 5,467 | 6,293 | 6,442 | 148 | 2.4 | |
| Transportation equipment | -17,643 | -20,496 | -18,553 | -12,361 | -8,468 | 3,894 | 31.5 | |
| Electronic products | 6,895 | 6,626 | 6,461 | 6,419 | 6,041 | -378 | -5.9 | |
| Miscellaneous manufactures | -2,433 | -2,443 | -1,985 | -1,588 | -758 | 830 | 52.3 | |
| Special provisions | -9,863 | -9,274 | -9,343 | -9,421 | -7,507 | 1,913 | 20.3 | |
| Total | -75,267 | -92,492 | -104,299 | -104,808 | -99,386 | 5,422 | 5.2 | |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bNot meaningful for purposes of comparison.

U.S. exports of transportation equipment to Canada rose by \$4.9 billion (8 percent) to \$69.3 billion in 2007. Approximately one-half of the growth was accounted for by exports of motor vehicles (table CA.2). This growth reflects increased demand by Canadian consumers, dealers, and brokers for U.S. vehicles, as well as the appreciation of the Canadian dollar against the U.S. dollar. Although prohibited by automakers, grey market vehicle exports to Canada in 2007 rose significantly, according to U.S. automobile dealers.³¹ Reduced manufacturing costs in the United States and the reluctance of automobile companies to source vehicles from Canada because of border crossing security concerns³² contributed to an improved trade balance in transportation equipment for the United States. Aircraft and related equipment also figured significantly in the increase in transportation equipment exports to Canada. This increase was primarily due to the delivery of seven Boeing 777s, three Boeing 737–700s, and one Boeing 737–800 to fill orders placed from 18 to 24 months earlier.

In 2007, U.S. agricultural product exports to Canada rose by \$2.4 billion (19 percent) to \$14.9 billion. U.S. exports reflect gains in bulk commodity prices and export quantities. U.S. grain and oilseed exports, which represented a majority of the increase in agricultural exports, rose largely due to an approximately 40 percent rise in corn and wheat export prices (unit values). Prices were driven by increased demand for corn in ethanol production and reduced global supplies of wheat due to adverse weather conditions and export restrictions in certain major wheat-exporting countries.³³

U.S. exports of minerals and metals to Canada rose by \$2.0 billion (9 percent) to \$24.7 billion in 2007. Strong demand for steel mill products used in construction (e.g., heavy plates and structural sections) and favorable pricing due to the depreciation of the U.S. dollar resulted in a 42 and 63 percent increase in export volumes of heavy plates and structural steel, respectively. Export prices (unit values) of both products also increased between 10 and 15 percent. The growth in U.S. steel mill exports to Canada partially substituted for reduced Canadian imports from Ukraine, Brazil, and Korea. With regard to precious metals, the predominate increase in U.S. exports to Canada was gold. This increase in gold can be attributed to the cheaper gold prices (denominated in U.S. dollars) in Canada due to the appreciation of the Canadian dollar.³⁴

Higher petroleum prices contributed to the majority of the \$1.6 billion (18 percent) increase in U.S. exports to Canada of energy-related products in 2007, including crude petroleum and refined fuel oil and gasoline. Although the United States is a major importer, it does export petroleum products to Canada; under a commercial exchange agreement between refiners in both countries, crude petroleum is exchanged along the border for refined products.³⁵

³¹ The grey market refers to items (e.g., new motor vehicles) that are legally traded internationally, but without the agreement of the manufacturer (e.g., automakers). Harris, “Factories Punish Rogue Exporters,” May 12, 2008, 1 and 37.

³² Just-auto.com editorial team, “Canadian Automotive Industry May Become Unviable,” May 7, 2008.

³³ See Agricultural Products chapter for more details.

³⁴ See Precious Metals and Non-numismatic Coins chapter for more details.

³⁵ See Petroleum Products chapter for more details.

TABLE CA.2 Leading changes in U.S. exports to and U.S. imports from Canada, 2003–07

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|-------------------------------|--|--------|--------|--------|--------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| <i>Million dollars</i> | | | | | | | | |
| U.S. EXPORTS | | | | | | | | |
| Increases | | | | | | | | |
| TE009 | Motor vehicles | 17,344 | 18,104 | 20,639 | 22,936 | 25,135 | 2,199 | 9.6 |
| TE013 | Aircraft, spacecraft, and related equipment | 1,520 | 1,762 | 2,381 | 2,488 | 3,806 | 1,319 | 53.0 |
| EP005 | Petroleum products | 1,432 | 1,725 | 2,605 | 3,272 | 4,105 | 833 | 25.5 |
| EP006 | Natural gas and components | 1,285 | 2,176 | 3,171 | 2,532 | 3,308 | 776 | 30.7 |
| TE004 | Construction and mining equipment | 1,540 | 1,957 | 2,692 | 3,511 | 4,005 | 495 | 14.1 |
| MM025 | Steel mill products | 2,567 | 3,887 | 5,009 | 5,600 | 6,085 | 485 | 8.7 |
| MM020 | Precious metals and non-numismatic coins | 658 | 1,131 | 802 | 1,563 | 2,016 | 452 | 28.9 |
| MT009 | Farm and garden machinery and equipment | 1,708 | 1,724 | 1,910 | 1,947 | 2,382 | 435 | 22.3 |
| CH033 | Miscellaneous plastic products | 3,766 | 3,983 | 4,523 | 4,894 | 5,173 | 279 | 5.7 |
| AG050 | Ethyl alcohol for nonbeverage purposes | 47 | 50 | 48 | 33 | 282 | 249 | 750.6 |
| MM025D | Angles, shapes, and sections of carbon and alloy steels | 136 | 232 | 305 | 362 | 597 | 235 | 64.9 |
| AG030 | Cereals | 459 | 349 | 345 | 355 | 576 | 221 | 62.1 |
| TE012 | Trailers, semi-trailers, and parts | 786 | 1,125 | 1,489 | 2,002 | 2,214 | 212 | 10.6 |
| EL002 | Telecommunications equipment | 1,416 | 1,506 | 1,440 | 1,309 | 1,516 | 207 | 15.8 |
| TE002 | Internal combustion piston engines, other than for aircraft | 6,640 | 6,899 | 7,595 | 8,084 | 8,284 | 199 | 2.5 |
| AG013 | Animal feeds | 719 | 783 | 767 | 881 | 1,078 | 197 | 22.3 |
| MS009 | Furniture | 1,099 | 1,259 | 1,457 | 1,649 | 1,840 | 191 | 11.6 |
| MT004 | Household appliances, including commercial applications | 1,584 | 1,777 | 1,885 | 2,074 | 2,258 | 185 | 8.9 |
| MM041 | Certain base metals and chemical elements | 168 | 195 | 237 | 320 | 491 | 171 | 53.3 |
| EL022 | Medical goods | 1,388 | 1,558 | 1,748 | 1,906 | 2,069 | 163 | 8.6 |
| TE014 | Ships, tugs, pleasure boats, and similar vessels | 287 | 379 | 519 | 626 | 787 | 161 | 25.7 |
| MT005 | Centrifuges and filtering and purifying equipment | 912 | 915 | 952 | 963 | 1,121 | 158 | 16.4 |
| MT029 | Nonautomotive insulated electrical wire and related products | 507 | 629 | 771 | 999 | 1,157 | 157 | 15.7 |
| TE011 | Powersport vehicles | 643 | 619 | 704 | 768 | 924 | 157 | 20.4 |
| AG002 | Cattle and beef | 279 | 63 | 142 | 357 | 509 | 152 | 42.5 |
| EP004 | Crude petroleum | 154 | 237 | 606 | 850 | 993 | 144 | 16.9 |
| AG034 | Pasta, cereals, and other bakery goods | 812 | 867 | 1,012 | 1,152 | 1,294 | 142 | 12.3 |
| MM036 | Copper and related articles | 396 | 578 | 663 | 1,241 | 1,381 | 141 | 11.3 |
| FP011 | Industrial papers and paperboards | 1,711 | 1,860 | 2,034 | 2,197 | 2,331 | 134 | 6.1 |
| MM020A | Unrefined and refined gold | 73 | 330 | 60 | 121 | 251 | 131 | 108.1 |
| Decreases | | | | | | | | |
| EL017 | Computers, peripherals, and parts | 3,655 | 3,834 | 4,201 | 3,863 | 3,468 | -395 | -10.2 |
| EL015 | Semiconductors and integrated circuits | 1,171 | 1,475 | 1,993 | 1,292 | 1,074 | -217 | -16.8 |
| TE008 | Rail locomotive and rolling stock | 652 | 738 | 804 | 988 | 774 | -214 | -21.7 |
| MT030 | Miscellaneous machinery | 1,326 | 1,330 | 1,451 | 1,759 | 1,603 | -156 | -8.8 |
| MM025L | Pipes and tubes of carbon and alloy steels | 496 | 709 | 948 | 1,116 | 974 | -142 | -12.7 |
| MT028 | Welding and soldering equipment | 141 | 155 | 181 | 353 | 219 | -134 | -38.0 |
| MM036A | Unrefined and refined copper | 23 | 46 | 36 | 168 | 41 | -127 | -75.7 |
| EL009 | Printed circuits | 376 | 434 | 498 | 489 | 364 | -125 | -25.5 |
| CH025 | Polyethylene resins in primary forms | 710 | 831 | 1,018 | 1,228 | 1,118 | -110 | -8.9 |

TABLE CA-2 Leading changes in U.S. exports to and U.S. imports from Canada, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|-------------------------------|---|--------|--------|--------|--------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| MT023 | Electric motors, generators, and related equipment | 822 | 951 | 1,048 | 1,488 | 1,388 | -100 | -6.7 |
| MT031 | Molds and molding machinery | 456 | 510 | 543 | 531 | 440 | -91 | -17.2 |
| CH004 | Organic commodity chemicals | 301 | 501 | 549 | 634 | 555 | -78 | -12.3 |
| MM038C | Aluminum plate, sheet, and strip | 961 | 1,214 | 1,251 | 1,420 | 1,344 | -77 | -5.4 |
| EP003 | Coal, coke, and related chemical products | 660 | 752 | 1,020 | 1,172 | 1,096 | -76 | -6.5 |
| CH030 | Other plastics in primary forms | 1,503 | 1,651 | 1,929 | 1,951 | 1,885 | -67 | -3.4 |
| CH007 | Miscellaneous inorganic chemicals | 930 | 843 | 1,181 | 1,343 | 1,281 | -62 | -4.6 |
| EP001 | Electrical energy | 716 | 829 | 1,039 | 1,052 | 991 | -61 | -5.8 |
| TX001 | Fibers and yarns, except raw cotton and raw wool | 570 | 590 | 647 | 562 | 502 | -60 | -10.6 |
| MM038 | Aluminum mill products | 1,301 | 1,621 | 1,711 | 1,972 | 1,918 | -54 | -2.7 |
| TX002 | Fabrics | 1,016 | 1,022 | 1,013 | 982 | 929 | -53 | -5.4 |
| CH034 | Miscellaneous rubber products | 1,044 | 1,125 | 1,181 | 1,218 | 1,166 | -53 | -4.3 |
| MT022 | Boilers, turbines, and related machinery | 117 | 141 | 228 | 234 | 186 | -48 | -20.6 |
| EL018 | Photographic film and paper | 467 | 466 | 479 | 404 | 360 | -45 | -11.1 |
| EL003A | Television receivers and video monitors | 296 | 291 | 260 | 283 | 246 | -38 | -13.3 |
| MM042 | Nonpowered handtools | 741 | 851 | 868 | 935 | 901 | -35 | -3.7 |
| CH019 | Medicinal chemicals | 2,706 | 2,825 | 2,937 | 3,200 | 3,166 | -34 | -1.1 |
| MT002 | Air-conditioning equipment and parts | 1,651 | 1,702 | 1,876 | 1,994 | 1,961 | -33 | -1.6 |
| FP002 | Lumber | 551 | 576 | 583 | 594 | 562 | -32 | -5.4 |
| MM043 | Certain cutlery, sewing implements, and related products | 202 | 216 | 227 | 196 | 168 | -28 | -14.5 |
| TX002A | Broadwoven fabrics | 367 | 339 | 310 | 274 | 247 | -27 | -10.0 |
| U.S. IMPORTS | | | | | | | | |
| Increases | | | | | | | | |
| EP004 | Crude petroleum | 14,086 | 18,888 | 24,120 | 32,889 | 37,929 | 5,039 | 15.3 |
| EP005 | Petroleum products | 5,479 | 6,747 | 8,977 | 10,131 | 11,856 | 1,725 | 17.0 |
| TE013 | Aircraft, spacecraft, and related equipment | 6,345 | 5,347 | 6,006 | 5,082 | 6,421 | 1,339 | 26.3 |
| CH019 | Medicinal chemicals | 1,946 | 2,228 | 2,500 | 3,618 | 4,934 | 1,316 | 36.4 |
| MM041 | Certain base metals and chemical elements | 478 | 1,039 | 1,094 | 1,448 | 2,383 | 936 | 64.6 |
| MM036A | Unrefined and refined copper | 637 | 884 | 1,135 | 1,688 | 2,291 | 603 | 35.7 |
| MM025 | Steel mill products | 2,693 | 3,700 | 4,334 | 4,702 | 5,275 | 573 | 12.2 |
| CH010 | Fertilizers | 1,397 | 1,753 | 2,470 | 2,422 | 2,947 | 524 | 21.7 |
| TE001 | Aircraft engines and gas turbines | 1,594 | 1,677 | 1,801 | 1,847 | 2,313 | 465 | 25.2 |
| MM040 | Zinc and related articles | 496 | 622 | 654 | 1,437 | 1,868 | 431 | 30.0 |
| FP009 | Wood pulp and wastepaper | 1,983 | 2,269 | 2,325 | 2,391 | 2,806 | 416 | 17.4 |
| MM040A | Unwrought zinc | 449 | 568 | 595 | 1,327 | 1,734 | 407 | 30.7 |
| MT019A | Semiconductor manufacturing equipment | 32 | 50 | 46 | 57 | 459 | 401 | 699.0 |
| MT019 | Semiconductor manufacturing equipment and robotics | 67 | 107 | 112 | 132 | 523 | 392 | 296.9 |
| AG030 | Cereals | 338 | 399 | 389 | 622 | 996 | 374 | 60.2 |
| AG002 | Cattle and beef | 1,271 | 1,209 | 1,816 | 1,995 | 2,323 | 329 | 16.5 |
| TE002 | Internal combustion piston engines, other than for aircraft | 3,764 | 4,314 | 4,683 | 4,129 | 4,403 | 273 | 6.6 |
| EL017 | Computers, peripherals, and parts | 1,533 | 1,739 | 1,831 | 1,677 | 1,949 | 272 | 16.2 |
| MM020A | Unrefined and refined gold | 1,401 | 1,584 | 1,419 | 1,803 | 2,074 | 271 | 15.0 |

TABLE CA-2 Leading changes in U.S. exports to and U.S. imports from Canada, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|-------------------------------|------------------------|--------|--------|--------|--------|------------------------|---------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| MM020 | 1,778 | 2,080 | 1,960 | 2,660 | 2,922 | 262 | 9.9 | |
| AG033 | 374 | 497 | 468 | 594 | 854 | 260 | 43.8 | |
| MM025L | 537 | 901 | 1,133 | 1,331 | 1,576 | 245 | 18.4 | |
| CH004 | 492 | 903 | 1,025 | 1,056 | 1,278 | 221 | 20.9 | |
| MM028 | 634 | 769 | 824 | 970 | 1,167 | 197 | 20.3 | |
| MM036 | 1,057 | 1,606 | 2,073 | 3,364 | 3,561 | 197 | 5.9 | |
| TE004 | 589 | 760 | 990 | 1,083 | 1,278 | 196 | 18.1 | |
| EP001 | 1,382 | 1,261 | 2,479 | 2,518 | 2,713 | 195 | 7.7 | |
| MM039 | 96 | 157 | 211 | 295 | 475 | 180 | 60.8 | |
| MT001 | 321 | 398 | 473 | 522 | 700 | 177 | 34.0 | |
| MM025A | | | | | | | | |
| | 59 | 88 | 227 | 171 | 343 | 172 | 100.1 | |
| Decreases | | | | | | | | |
| EP006 | 20,043 | 21,535 | 29,357 | 27,039 | 25,410 | -1,628 | -6.0 | |
| FP002 | 4,835 | 6,997 | 6,944 | 6,308 | 5,028 | -1,280 | -20.3 | |
| FP004 | 3,152 | 4,286 | 4,087 | 3,292 | 2,230 | -1,062 | -32.3 | |
| TE009 | 41,095 | 46,744 | 48,581 | 48,623 | 47,606 | -1,017 | -2.1 | |
| FP012 | 2,907 | 2,875 | 2,979 | 2,987 | 2,345 | -642 | -21.5 | |
| FP003 | 1,268 | 1,650 | 1,764 | 1,700 | 1,314 | -386 | -22.7 | |
| MT031 | 1,190 | 1,232 | 1,434 | 1,448 | 1,117 | -331 | -22.8 | |
| CH033 | 4,465 | 5,037 | 5,645 | 5,869 | 5,554 | -315 | -5.4 | |
| MS009 | 3,846 | 4,043 | 4,102 | 4,093 | 3,788 | -305 | -7.5 | |
| EL002 | 2,470 | 2,713 | 3,275 | 3,335 | 3,084 | -251 | -7.5 | |
| TX005 | 1,740 | 1,693 | 1,469 | 1,330 | 1,105 | -224 | -16.9 | |
| MM038 | 1,409 | 1,814 | 2,050 | 2,581 | 2,367 | -215 | -8.3 | |
| MM038C | 726 | 975 | 1,102 | 1,389 | 1,225 | -164 | -11.8 | |
| EL015 | 1,052 | 1,186 | 1,628 | 1,039 | 915 | -124 | -12.0 | |
| MT004 | | | | | | | | |
| | 920 | 1,004 | 1,055 | 1,152 | 1,028 | -123 | -10.7 | |
| MT012 | 117 | 149 | 161 | 203 | 80 | -123 | -60.7 | |
| TE008 | 449 | 547 | 544 | 495 | 379 | -116 | -23.5 | |
| MM018 | 129 | 165 | 193 | 210 | 96 | -115 | -54.6 | |
| CH028 | 137 | 212 | 235 | 227 | 120 | -106 | -46.9 | |
| FP014 | 539 | 284 | 287 | 399 | 294 | -105 | -26.3 | |
| MM031 | 1,825 | 2,036 | 2,315 | 2,328 | 2,224 | -104 | -4.5 | |
| CH025 | 1,957 | 2,311 | 2,846 | 3,317 | 3,219 | -99 | -3.0 | |
| MT030 | 1,450 | 1,583 | 1,864 | 2,032 | 1,939 | -93 | -4.6 | |
| TX002B | 250 | 213 | 230 | 196 | 108 | -88 | -44.9 | |
| FP007 | 453 | 503 | 520 | 458 | 375 | -83 | -18.1 | |
| EL006 | | | | | | | | |
| | 282 | 328 | 449 | 373 | 296 | -77 | -20.7 | |
| TE010 | 11,525 | 12,378 | 13,172 | 12,597 | 12,526 | -71 | -0.6 | |
| MT028 | 110 | 178 | 131 | 153 | 82 | -71 | -46.1 | |
| TE011 | 351 | 417 | 322 | 385 | 315 | -70 | -18.2 | |
| MM007A | 24 | 77 | 188 | 163 | 97 | -66 | -40.4 | |

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

Note: Calculations based on unrounded data.

^aThis 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.

U.S. Imports

In 2007, over one-half (57 percent) of the \$9.5 billion increase in U.S. merchandise imports from Canada was accounted for by energy-related products (table CA.1). In the same year, U.S. imports of energy-related products from Canada rose by \$5.4 billion (7.3 percent) to \$79.1 billion. This increase reflects a \$6.8 billion rise in imports of crude petroleum and petroleum products in 2007 and a \$1.6 billion decline in natural gas imports. Increases in the value of imports of crude petroleum and petroleum products were the result of higher prices³⁶ and an additional 26 million barrels of imports in 2007, compared to 2006 levels.³⁷ Decreases in natural gas imports followed from lower production in Canada as a result of higher costs and the appreciation of the Canadian dollar.³⁸

U.S. imports of forest products from Canada declined by \$3.3 billion (12 percent) to \$23.4 billion in 2007. The strength of the Canadian dollar against the U.S. dollar and the weakening of the U.S. housing market and economy reduced demand for Canadian forest products in the United States.³⁹

U.S. imports of mineral and metal products accounted for one-quarter of the \$9.5 billion increase in U.S. imports from Canada in 2007. U.S. imports of minerals and metal products from Canada rose by \$2.4 billion (8 percent) to \$34.6 billion in 2007. Higher prices for iron, aluminum, steel, copper, and other metals substantially increased the unit values of these imports.⁴⁰

³⁶ The average price was \$58.70 per barrel in 2006 and \$72.86 in 2007. See Energy chapter for more details.

³⁷ USDOE, EIA, *U.S. Crude Oil and Petroleum Products Imports from Canada*, June 26, 2008.

³⁸ Scott, "Canadian Gas Exports to U.S. Set for Sharp Drop in 2007," January 2, 2007.

³⁹ NRC, "Annual Economic Review and Outlook for the Canadian Forest Sector," June 6, 2008.

⁴⁰ RBC, "The Economic Shocks Confronting Canada," October 2007.

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China

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Change in 2007 from 2006:

U.S. trade deficit: Increased by \$26.6 billion (11 percent) to \$262.1 billion

U.S. exports: Increased by \$9.4 billion (18 percent) to \$61.0 billion

U.S. imports: Increased by \$36 billion (13 percent) to \$323.1 billion

The U.S. merchandise trade deficit with China, the second-largest U.S. trading partner, accounted for 29 percent of the total trade deficit in 2007, up from 26 percent in 2006 (table US.3).⁴¹ Although the growth in U.S. exports (18 percent) outpaced that of imports (13 percent), the trade deficit with China continued to increase (11 percent) (table CH.1). The underlying factors driving this trend vary by sector but include the international fragmentation of production,⁴² the low cost of Chinese inputs, and continued U.S. demand for goods produced in China.

China overtook Japan to become the third-largest market for U.S. exports in 2007. However, despite the depreciation of the U.S. dollar, growth in U.S. exports to China slowed from 33 percent (\$12.8 billion) in 2006 to 18 percent (\$9.4 billion) in 2007. Sectors that experienced significant increases in exports were chemicals and related products (\$2.1 billion or 31 percent), transportation equipment (\$2.1 billion or 23 percent), agricultural products (\$1.7 billion or 24 percent), and minerals and metals (\$1.3 billion or 17 percent) (table CH.1).

On the import side, China overtook Canada to become the leading source of U.S. imports (\$323.1 billion) in 2007. However, the rate of increase of U.S. imports from China slowed, from 18 percent (\$44.4 billion) in 2006 to 13 percent (\$36.0 billion) in 2007. Significant sectoral increases in U.S. imports include electronic products (\$13.2 billion or 13 percent), miscellaneous manufactures (\$7.2 billion or 14 percent), and textiles and apparel (\$4.9 billion or 16 percent).

U.S. Exports

The leading export sectors in terms of absolute value remained unchanged between 2006 and 2007. Electronic products (\$11.4 billion), transportation equipment (\$11.1 billion), and minerals and metals (\$9.0 billion) continued to account collectively for more than one-half of all U.S. exports to China. Chemicals and related products (\$9.0 billion) and agricultural products (\$9.0 billion) led percentage increases with 31 and 24 percent growth, respectively. Agricultural products and transportation equipment were the only sectors in which the United States had a trade surplus.

⁴¹ The U.S. trade deficit with all countries narrowed by 2 percent from 2006 to 2007.

⁴² Dean, Fung, and Wang, "Measuring the Vertical Specialization in Chinese Trade," January 2007.

TABLE CH.1 China: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major industry/commodity sectors, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|-----------------|-----------------|-----------------|-----------------|------------------------|--------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| Agricultural products | 5,129 | 5,879 | 5,648 | 7,264 | 8,981 | 1,717 | 23.6 | |
| Forest products | 1,314 | 1,651 | 1,995 | 2,572 | 3,272 | 700 | 27.2 | |
| Chemicals and related products | 3,816 | 5,061 | 5,831 | 6,863 | 8,975 | 2,112 | 30.8 | |
| Energy-related products | 180 | 289 | 221 | 307 | 407 | 100 | 32.7 | |
| Textiles and apparel | 405 | 501 | 629 | 731 | 844 | 113 | 15.4 | |
| Footwear | 36 | 31 | 41 | 57 | 38 | -19 | -34.0 | |
| Minerals and metals | 2,636 | 3,197 | 5,215 | 7,736 | 9,043 | 1,307 | 16.9 | |
| Machinery | 3,075 | 4,699 | 4,244 | 5,275 | 6,098 | 822 | 15.6 | |
| Transportation equipment | 3,805 | 3,893 | 6,508 | 9,015 | 11,065 | 2,050 | 22.7 | |
| Electronic products | 5,935 | 6,903 | 7,952 | 11,113 | 11,433 | 320 | 2.9 | |
| Miscellaneous manufactures | 110 | 156 | 185 | 207 | 307 | 100 | 48.3 | |
| Special provisions | 266 | 346 | 389 | 483 | 551 | 68 | 14.0 | |
| Total | 26,707 | 32,606 | 38,857 | 51,624 | 61,013 | 9,389 | 18.2 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| Agricultural products | 2,470 | 2,925 | 3,365 | 4,303 | 4,945 | 641 | 14.9 | |
| Forest products | 3,362 | 4,398 | 5,463 | 6,630 | 7,317 | 686 | 10.4 | |
| Chemicals and related products | 7,438 | 9,287 | 12,240 | 14,389 | 16,889 | 2,500 | 17.4 | |
| Energy-related products | 561 | 1,063 | 1,023 | 1,139 | 641 | -498 | -43.7 | |
| Textiles and apparel | 15,426 | 18,902 | 26,937 | 31,284 | 36,162 | 4,878 | 15.6 | |
| Footwear | 10,546 | 11,348 | 12,654 | 13,795 | 14,090 | 294 | 2.1 | |
| Minerals and metals | 10,054 | 13,890 | 17,553 | 23,462 | 25,749 | 2,287 | 9.7 | |
| Machinery | 13,780 | 17,391 | 21,056 | 25,585 | 28,415 | 2,830 | 11.1 | |
| Transportation equipment | 3,274 | 4,865 | 6,476 | 8,640 | 10,155 | 1,515 | 17.5 | |
| Electronic products | 47,265 | 69,252 | 86,858 | 103,289 | 116,467 | 13,178 | 12.8 | |
| Miscellaneous manufactures | 35,636 | 40,490 | 46,122 | 51,068 | 58,306 | 7,238 | 14.2 | |
| Special provisions | 1,808 | 2,348 | 2,891 | 3,467 | 3,950 | 484 | 13.9 | |
| Total | 151,620 | 196,160 | 242,638 | 287,052 | 323,085 | 36,033 | 12.6 | |
| U.S. merchandise trade balance | | | | | | | | |
| Agricultural products | 2,659 | 2,954 | 2,283 | 2,961 | 4,036 | 1,075 | 36.3 | |
| Forest products | -2,048 | -2,747 | -3,468 | -4,058 | -4,045 | 14 | 0.3 | |
| Chemicals and related products | -3,622 | -4,225 | -6,409 | -7,526 | -7,914 | -388 | -5.2 | |
| Energy-related products | -381 | -774 | -802 | -832 | -234 | 598 | 71.9 | |
| Textiles and apparel | -15,021 | -18,401 | -26,308 | -30,553 | -35,317 | -4,765 | -15.6 | |
| Footwear | -10,510 | -11,317 | -12,613 | -13,738 | -14,052 | -314 | -2.3 | |
| Minerals and metals | -7,418 | -10,692 | -12,339 | -15,726 | -16,707 | -980 | -6.2 | |
| Machinery | -10,705 | -12,692 | -16,812 | -20,310 | -22,318 | -2,008 | -9.9 | |
| Transportation equipment | 531 | -972 | 32 | 375 | 910 | 535 | 142.8 | |
| Electronic products | -41,330 | -62,350 | -78,906 | -92,176 | -105,034 | -12,858 | -13.9 | |
| Miscellaneous manufactures | -35,526 | -40,334 | -45,938 | -50,861 | -57,999 | -7,138 | -14.0 | |
| Special provisions | -1,542 | -2,002 | -2,502 | -2,984 | -3,399 | -416 | -13.9 | |
| Total | -124,913 | -163,553 | -203,781 | -235,428 | -262,072 | -26,644 | -11.3 | |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

The continued economic growth in China increased demand for plastics as inputs to downstream manufactured goods. In the agricultural products sector, U.S. exports of oilseeds increased by \$1.6 billion (63 percent) to \$4.1 billion in 2007 (CH.2). Soybeans accounted for nearly 99 percent of all oilseeds exports to China. Continued urbanization, population growth, and income growth have increased China's import demand for soybeans⁴³ for use in animal feeds and vegetable oils for the past several years. The shift also reflects higher global prices for oilseeds.⁴⁴ In 2007, U.S. exports of poultry increased by \$273 million (84 percent) to \$598 million. Strong local demand, higher global prices, and a pork shortage that led consumers to substitute poultry meat for pork drove the increase in U.S. exports.⁴⁵

Growth in exports of transportation equipment was led by exports of aircraft, spacecraft, and related equipment, which increased by \$1.1 billion (18 percent) in 2007, reflecting growing demand for air travel.⁴⁶ Also, exports of construction and mining equipment increased by 80 percent to \$978 million. A stronger yuan, and continued infrastructure spending contributed to the increase in U.S. exports of dump trucks designed for off-highway use, which accounted for almost half of the increase in this sector.⁴⁷

In the minerals and metals sector, export growth was led by copper and related articles and copper ores and concentrates, which grew by \$386 million (23 percent) and \$209 million (97 percent) respectively. The increased value of U.S. exports of these products reflects rising global copper prices, lack of domestic production capacity, and China's net import reliance upon foreign sources of copper concentrates to meet domestic demand.⁴⁸

U.S. Imports

U.S. imports from China continued to rise (13 percent), though at a slower rate than in preceding years. With the exception of energy-related products, imports from every major sector exhibited growth. Three sectors, electronic products, miscellaneous manufactures, and textiles and apparel, collectively accounted for 70 percent (\$25.2 billion) of the increase in imports in 2007.

In the electronic products sector, imports of telecommunications equipment increased by \$5.7 billion (32 percent) in 2007, while computers, peripherals, and parts also increased by \$5.7 billion (12 percent). U.S. imports from China of cellular telephones increased by 26 percent and transmission and reception apparatus for telecommunications networks increased by 63 percent. These increases reflect the continuing trend of firms shifting

⁴³ Urbanization has shifted the food mix away from grain starches and towards animal proteins, which require additional soymeal. Cao, Cheng & Tuan. *China's Soybean Imports*, October 2004, 3–5.

⁴⁴ In 2007, the annual average soybean price received by U.S. farmers was \$7.74 per bushel compared to \$5.67 in 2006. USDA, NASS, *Agricultural Prices: 2007 Summary*, July 2008, 82–83.

⁴⁵ USDA, FAS, *China Poultry and Products*, March 1, 2008.

⁴⁶ See Transportation Equipment chapter, "Aircraft, Spacecraft, and Related Equipment" for more details.

⁴⁷ USDOC, ITA, *Industry Assessment: Construction Machinery*. October 2007.

⁴⁸ MOFCOM, "2005 China's Non-Ferrous Metal Industry Survey and Summary of 'Tenth Five-Year'." January 18, 2006.

TABLE CH.2 Leading changes in U.S. exports to and U.S. imports from China, 2003–07

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|-------------------------------|--|-------|-------|-------|-------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| <i>Million dollars</i> | | | | | | | | |
| U.S. EXPORTS | | | | | | | | |
| Increases | | | | | | | | |
| AG032 | Oilseeds | 2,832 | 2,333 | 2,255 | 2,536 | 4,121 | 1,586 | 62.5 |
| TE013 | Aircraft, spacecraft, and related equipment | 2,447 | 1,948 | 4,338 | 6,047 | 7,159 | 1,112 | 18.4 |
| FP009 | Wood pulp and wastepaper | 590 | 740 | 984 | 1,480 | 2,060 | 579 | 39.1 |
| MT019 | Semiconductor manufacturing equipment and robotics | 538 | 1,270 | 688 | 1,159 | 1,608 | 448 | 38.7 |
| MT019A | Semiconductor manufacturing equipment | 529 | 1,261 | 662 | 1,143 | 1,586 | 443 | 38.7 |
| TE004 | Construction and mining equipment | 296 | 425 | 416 | 545 | 978 | 434 | 79.6 |
| MM036 | Copper and related articles | 596 | 608 | 852 | 1,665 | 2,051 | 386 | 23.2 |
| CH030 | Other plastics in primary forms | 503 | 662 | 934 | 1,080 | 1,447 | 367 | 34.0 |
| CH004 | Organic commodity chemicals | 287 | 430 | 327 | 167 | 495 | 328 | 196.3 |
| CH006 | Certain organic chemicals | 469 | 717 | 724 | 716 | 1,012 | 296 | 41.3 |
| MM023 | Iron and steel waste and scrap | 682 | 924 | 1,258 | 1,600 | 1,876 | 276 | 17.3 |
| AG005 | Poultry | 112 | 17 | 147 | 325 | 598 | 273 | 83.9 |
| EL015 | Semiconductors and integrated circuits | 2,025 | 2,303 | 2,676 | 4,633 | 4,880 | 247 | 5.3 |
| MM025 | Steel mill products | 429 | 228 | 402 | 321 | 532 | 210 | 65.6 |
| MM004 | Copper ores and concentrates | 3 | 15 | 112 | 215 | 424 | 209 | 97.4 |
| CH033 | Miscellaneous plastic products | 354 | 514 | 547 | 714 | 923 | 209 | 29.3 |
| TE010 | Certain motor-vehicle parts | 363 | 438 | 392 | 526 | 733 | 207 | 39.4 |
| EL025 | Measuring, testing, and controlling instruments | 782 | 996 | 1,109 | 1,349 | 1,533 | 185 | 13.7 |
| CH025 | Polyethylene resins in primary forms | 113 | 240 | 350 | 381 | 555 | 174 | 45.6 |
| EL022 | Medical goods | 454 | 494 | 594 | 633 | 793 | 160 | 25.3 |
| TE002 | Internal combustion piston engines, other than for aircraft | 115 | 161 | 248 | 333 | 489 | 156 | 46.9 |
| CH019 | Medicinal chemicals | 196 | 185 | 274 | 328 | 471 | 143 | 43.7 |
| TE009 | Motor vehicles | 131 | 125 | 278 | 562 | 694 | 132 | 23.5 |
| CH005 | Organic specialty chemicals | 245 | 324 | 345 | 437 | 567 | 129 | 29.6 |
| CH007 | Miscellaneous inorganic chemicals | 196 | 393 | 449 | 846 | 967 | 122 | 14.4 |
| TE011 | Powersport vehicles | 23 | 18 | 35 | 58 | 179 | 121 | 207.6 |
| EP005 | Petroleum products | 122 | 140 | 179 | 261 | 379 | 118 | 45.4 |
| CH026 | Polypropylene resins in primary forms | 137 | 181 | 222 | 280 | 398 | 118 | 42.3 |
| MM037 | Unwrought aluminum | 240 | 356 | 730 | 1,540 | 1,652 | 112 | 7.2 |
| MT003 | Industrial thermal-processing equipment and furnaces | 153 | 291 | 331 | 306 | 414 | 108 | 35.4 |
| Decreases | | | | | | | | |
| AG049 | Cotton, not carded or combed | 733 | 1,407 | 1,397 | 2,059 | 1,454 | -605 | -29.4 |
| MM041 | Certain base metals and chemical elements | 47 | 106 | 545 | 769 | 416 | -353 | -45.9 |
| EL004 | Blank and prerecorded media | 189 | 220 | 275 | 337 | 146 | -191 | -56.7 |
| TE008 | Rail locomotive and rolling stock | 31 | 47 | 83 | 203 | 84 | -119 | -58.7 |
| CH010 | Fertilizers | 475 | 321 | 354 | 226 | 115 | -110 | -48.9 |
| EL017 | Computers, peripherals, and parts | 1,022 | 1,038 | 1,246 | 1,556 | 1,456 | -100 | -6.4 |
| MM038C | Aluminum plate, sheet, and strip | 46 | 72 | 119 | 143 | 87 | -56 | -39.0 |

See footnote at end of table.

TABLE CH.2 Leading changes in U.S. exports to and U.S. imports from China, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|------------------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| FP002 Lumber | 128 | 177 | 223 | 298 | 253 | -44 | -14.8 |
| TE015 Motors and engines, except internal combustion, aircraft, or electric | 23 | 32 | 39 | 134 | 90 | -44 | -32.8 |
| EL007 Electric sound and visual signaling apparatus | 32 | 44 | 36 | 81 | 45 | -36 | -44.7 |
| MT013 Textile machinery | 91 | 75 | 98 | 109 | 77 | -33 | -30.0 |
| MT028 Welding and soldering equipment | 38 | 68 | 60 | 77 | 49 | -28 | -36.0 |
| AG030 Cereals | 36 | 496 | 80 | 45 | 18 | -27 | -60.4 |
| MM038 Aluminum mill products | 68 | 98 | 160 | 192 | 165 | -27 | -14.0 |
| AG024 Other fresh fruit | 11 | 21 | 47 | 36 | 12 | -24 | -66.0 |
| EL002 Telecommunications equipment | 545 | 616 | 645 | 747 | 727 | -20 | -2.6 |
| FW001 Footwear | 36 | 31 | 41 | 57 | 38 | -19 | -34.0 |
| MM007A Molybdenum ores and concentrates | (^b) | (^b) | 164 | 20 | 3 | -17 | -85.2 |
| CH002 Other olefins | 9 | 17 | 11 | 36 | 21 | -15 | -41.1 |
| MT022 Boilers, turbines, and related machinery | 109 | 117 | 122 | 67 | 53 | -14 | -21.1 |
| MT008 Mineral processing machinery | 52 | 59 | 69 | 71 | 57 | -14 | -20.0 |
| EL001 Office machines | 26 | 33 | 43 | 46 | 32 | -13 | -29.4 |
| FP010 Paper boxes and bags | 28 | 40 | 31 | 29 | 17 | -12 | -42.8 |
| EP006 Natural gas and components | 38 | 50 | 31 | 12 | 1 | -12 | -93.0 |
| TX002C Specialty fabrics | 13 | 27 | 33 | 24 | 12 | -11 | -48.6 |
| MT012 Printing and related machinery | 55 | 46 | 63 | 79 | 68 | -11 | -14.3 |
| EL008 Electrical capacitors and resistors | 28 | 49 | 66 | 159 | 148 | -11 | -7.0 |
| AG036 Infant formulas, malt extracts, and other edible preparations | 160 | 209 | 87 | 99 | 89 | -11 | -10.9 |
| EL003A Television receivers and video monitors | 31 | 40 | 44 | 66 | 55 | -11 | -16.2 |
| EL006 Radio and television broadcasting equipment | 58 | 46 | 45 | 43 | 32 | -11 | -24.9 |
| U.S. IMPORTS | | | | | | | |
| Increases | | | | | | | |
| EL002 Telecommunications equipment | 5,932 | 9,556 | 14,410 | 18,083 | 23,814 | 5,731 | 31.7 |
| EL017 Computers, peripherals, and parts | 22,141 | 33,985 | 40,298 | 46,583 | 52,272 | 5,690 | 12.2 |
| MS013 Toys and games | 11,955 | 12,549 | 13,910 | 15,082 | 20,051 | 4,969 | 32.9 |
| TX005 Apparel | 11,408 | 13,640 | 19,962 | 23,191 | 27,202 | 4,012 | 17.3 |
| EL003A Television receivers and video monitors | 1,490 | 2,438 | 5,130 | 7,836 | 9,423 | 1,587 | 20.3 |
| TX005E Shirts and blouses | 2,123 | 2,522 | 3,489 | 4,432 | 5,652 | 1,220 | 27.5 |
| TE010 Certain motor-vehicle parts | 1,292 | 1,833 | 2,497 | 3,380 | 4,250 | 870 | 25.7 |
| MS009 Furniture | 7,964 | 9,773 | 11,726 | 13,481 | 14,305 | 824 | 6.1 |
| CH033 Miscellaneous plastic products | 3,742 | 4,480 | 5,600 | 6,456 | 7,237 | 782 | 12.1 |
| TX005H Women's and girls' dresses | 457 | 514 | 662 | 949 | 1,606 | 657 | 69.2 |
| EL005 Navigational instruments and remote control apparatus | 121 | 138 | 237 | 473 | 1,022 | 549 | 116.1 |
| CH032 Tires and tubes | 593 | 879 | 1,422 | 1,904 | 2,440 | 536 | 28.1 |

See footnote at end of table.

TABLE CH.2 Leading changes in U.S. exports to and U.S. imports from China, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|--------|------------------|--------|--------|------------------------|---------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| MT004 Household appliances, including commercial applications | 4,063 | 4,947 | 5,744 | 6,327 | 6,856 | 529 | 8.4 | |
| MS001 Luggage, handbags, and flat goods | 3,209 | 3,997 | 4,573 | 5,080 | 5,573 | 492 | 9.7 | |
| MT027 Electric lamps (bulbs) and portable electric lights | 538 | 715 | 851 | 1,074 | 1,537 | 463 | 43.1 | |
| MM031 Miscellaneous products of base metal | 2,252 | 3,075 | 3,734 | 4,558 | 5,017 | 460 | 10.1 | |
| TX004 Home furnishings | 1,737 | 2,434 | 3,364 | 3,994 | 4,441 | 447 | 11.2 | |
| TX005I Robes, nightwear, and underwear | 480 | 544 | 1,018 | 1,205 | 1,647 | 442 | 36.6 | |
| MT002 Air-conditioning equipment and parts | 1,685 | 1,978 | 2,442 | 3,048 | 3,450 | 401 | 13.2 | |
| EL020 Optical goods, including ophthalmic goods | 903 | 1,057 | 1,179 | 1,516 | 1,904 | 388 | 25.6 | |
| MM025 Steel mill products | 269 | 1,104 | 1,687 | 3,605 | 3,968 | 363 | 10.1 | |
| TX005F Sweaters | 540 | 505 | 1,367 | 1,429 | 1,791 | 362 | 25.3 | |
| MM025L Pipes and tubes of carbon and alloy steels | 122 | 311 | 761 | 1,540 | 1,899 | 359 | 23.3 | |
| MT019 Semiconductor manufacturing equipment and robotics | 25 | 31 | 36 | 86 | 437 | 351 | 407.5 | |
| MT020 Taps, cocks, valves, and similar devices | 629 | 994 | 1,272 | 1,763 | 2,113 | 350 | 19.9 | |
| MT019A Semiconductor manufacturing equipment | 25 | 31 | 34 | 85 | 435 | 350 | 412.0 | |
| MT029 Nonautomotive insulated electrical wire and related products | 783 | 1,047 | 1,223 | 1,685 | 2,014 | 328 | 19.5 | |
| TX005B Men's and boys' coats and jackets | 382 | 410 | 872 | 1,158 | 1,484 | 326 | 28.1 | |
| FP016 Printed matter | 725 | 945 | 1,193 | 1,408 | 1,715 | 307 | 21.8 | |
| TX005D Women's and girls' trousers | 887 | 1,201 | 1,752 | 2,055 | 2,352 | 297 | 14.4 | |
| Decreases | | | | | | | | |
| MT012 Printing and related machinery | 1,238 | 1,350 | 1,743 | 1,886 | 807 | -1,079 | -57.2 | |
| MM025B Plates, sheets, and strips of carbon and alloy steels | 2 | 181 | 165 | 772 | 489 | -283 | -36.7 | |
| MM009A Cement | 58 | 73 | 202 | 472 | 246 | -226 | -47.9 | |
| EP004 Crude petroleum | 62 | 99 | 219 | 278 | 64 | -215 | -77.2 | |
| MM025C Bars, rods, and light shapes of carbon and alloy steels | 62 | 309 | 299 | 574 | 360 | -214 | -37.3 | |
| EL004 Blank and prerecorded media | 463 | 948 | 975 | 1,234 | 1,053 | -182 | -14.7 | |
| EP003 Coal, coke, and related chemical products | 108 | 657 | 379 | 415 | 250 | -165 | -39.8 | |
| MM009 Cement, stone, and related products | 886 | 1,028 | 1,314 | 1,737 | 1,600 | -137 | -7.9 | |
| EL003 Consumer electronics | 10,251 | 14,020 | 18,764 | 22,696 | 22,561 | -134 | -0.6 | |
| TX005O Leather apparel and accessories | 1,264 | 1,167 | 1,115 | 1,074 | 954 | -120 | -11.2 | |
| AG009 Shellfish | 647 | 585 | 559 | 737 | 630 | -106 | -14.4 | |
| TE012 Trailers, semi-trailers, and parts | 193 | 343 | 579 | 738 | 658 | -79 | -10.8 | |
| AG050 Ethyl alcohol for nonbeverage purposes | 0 | 0 | (^b) | 82 | 3 | -79 | -96.1 | |
| EP005 Petroleum products | 282 | 224 | 324 | 379 | 314 | -65 | -17.1 | |
| MM040A Unwrought zinc | (^b) | 14 | 3 | 90 | 28 | -62 | -68.5 | |
| MM040 Zinc and related articles | 21 | 43 | 40 | 148 | 97 | -51 | -34.6 | |
| MM037A Primary and secondary aluminum | 2 | 25 | 136 | 157 | 107 | -50 | -31.9 | |
| EP002 Nuclear materials | 104 | 77 | 77 | 53 | 3 | -50 | -94.6 | |
| MM037 Unwrought aluminum | 15 | 54 | 158 | 184 | 134 | -49 | -26.9 | |

See footnote at end of table.

TABLE CH.2 Leading changes in U.S. exports to and U.S. imports from China, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|------------------|-------|-------|-------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MM039A Refined lead | (^b) | (^b) | 23 | 50 | 2 | -48 | -95.2 |
| TE011A Motorcycles and mopeds | 263 | 499 | 330 | 289 | 244 | -45 | -15.6 |
| EL018 Photographic film and paper | 40 | 175 | 159 | 58 | 13 | -45 | -78.0 |
| MM039 Lead and related articles | 2 | 3 | 25 | 54 | 13 | -41 | -75.3 |
| CH029 Saturated polyester resins | (^b) | 11 | 125 | 105 | 69 | -36 | -34.2 |
| TE008 Rail locomotive and rolling stock | 123 | 138 | 267 | 340 | 306 | -34 | -10.0 |
| FP003 Moldings, millwork, and joinery | 394 | 591 | 763 | 940 | 915 | -25 | -2.7 |
| EL006 Radio and television broadcasting equipment | 429 | 606 | 740 | 882 | 857 | -25 | -2.8 |
| MS011 Lamps and lighting fittings | 3,025 | 3,432 | 3,784 | 4,078 | 4,054 | -24 | -0.6 |
| TX005P Fur apparel and other fur articles | 127 | 174 | 155 | 131 | 107 | -24 | -18.1 |
| MM038A Aluminum bars, rods, and profiles | 49 | 119 | 230 | 395 | 372 | -23 | -5.7 |

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

Note: Calculations based on unrounded data.

^aThis 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.

^bLess than \$500,000.

production facilities to China, foreign invested enterprises engaged in processing trade⁴⁹ and strong consumer demand.⁵⁰

U.S. imports from China of miscellaneous manufactures consisted largely of high labor content products. Toys and games led the increase of imports in miscellaneous manufactures, increasing by \$5 billion (33 percent) in 2007, and accounting for 88 percent of all imports in this product sector.

U.S. imports of apparel from China rose by 17 percent to \$27.2 billion in 2007, accounting for 33 percent of all U.S. apparel imports. China's advantage in this sector is due to an abundant labor force, relatively low production costs, the ability to make almost any type of garment at any quality level and in large volumes, and strong customer service.

⁴⁹ Processing trade refers to the business activity of importing all or part of the raw and auxiliary materials, parts and components, accessories, and packaging materials from abroad in bond, and re-exporting the finished products after processing or assembly by enterprises within China. It includes processing with supplied materials and processing with imported materials. Hong Kong Trade Development Council, "Guide to Doing Business in China 2004/05."

⁵⁰ Koopman, Wang, and Shang, "How Much of Chinese Exports is Really Made in China?" 2008. Also see Machinery chapter, "Semiconductor Manufacturing Equipment," for more details.

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European Union-27⁵¹

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Change in 2007 from 2006:

U.S. trade deficit: Decreased by \$7.7 billion (6 percent) to \$125.9 billion

U.S. exports: Increased by \$29.0 billion (15 percent) to \$226.3 billion

U.S. imports: Increased by \$21.3 billion (6 percent) to \$352.2 billion

The U.S. trade deficit with the European Union (EU) decreased for the second year in a row, declining by 6 percent to \$125.9 billion in 2007, even as total bilateral trade increased by 10 percent. The United States and the EU continue to account for the largest bilateral trade relationship in the world.⁵² The EU was the largest market for U.S. exports and the third-largest source of U.S. imports in 2007, following China and Canada. The economies of the United States and the EU are highly interdependent with almost one-quarter of all trade consisting of intrafirm transfers.⁵³ The United Kingdom, Germany, the Netherlands, France, and Belgium, combined, accounted for 75 percent of U.S. exports to the EU in 2007, and Germany, the United Kingdom, France, Italy, and Ireland combined for 73 percent of U.S. imports.

U.S. Exports

U.S. exports to the EU increased by 15 percent to \$226.3 billion in 2007. Although exports in all product sectors increased, transportation equipment, chemicals and related products, and minerals and metals accounted for 74 percent of the total increase (table EU.1).

Exports of aircraft, spacecraft, and related equipment, principally large civil aircraft (LCA), increased by 31 percent to \$20.8 billion (table EU.2), as a result of Boeing shipments to the EU increasing from 72 units to 88 units.⁵⁴ These exports were driven in part by the strong EU economic growth (3 percent increase in GDP in 2007),⁵⁵ leading to increased demand for air transportation service.

⁵¹ On January 1, 2007, the European Union (EU) admitted two additional countries, bringing the total membership of the EU to 27. Prior Commission reports on shifts in merchandise trade considered the EU-15 or EU-25. The EU member countries in 2007 are: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, and the United Kingdom.

⁵² EC, *United States: Barriers to Trade and Investment*, April 2008, 5.

⁵³ EC, "Bilateral Trade Relations," undated (accessed August 5, 2008).

⁵⁴ The Boeing Company, "Boeing Orders and Deliveries Database," undated (accessed August 5, 2008).

⁵⁵ Eurostat, Euro-indicators, February 14, 2008; Eurostat, "Euro Area GDP up by 0.4% and EU27 up by 0.5%," undated (accessed August 5, 2008).

TABLE EU.1 EU-27: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major industry/commodity sectors, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|-----------------|-----------------|-----------------|-----------------|------------------------|-------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| Agricultural products | 7,610 | 7,997 | 8,160 | 8,704 | 10,210 | 1,506 | 17.3 | |
| Forest products | 4,019 | 4,385 | 4,745 | 4,947 | 5,539 | 592 | 12.0 | |
| Chemicals and related products | 29,663 | 35,398 | 37,550 | 43,015 | 49,656 | 6,641 | 15.4 | |
| Energy-related products | 1,754 | 3,128 | 4,119 | 6,896 | 7,449 | 553 | 8.0 | |
| Textiles and apparel | 1,518 | 1,582 | 1,749 | 1,899 | 2,064 | 165 | 8.7 | |
| Footwear | 61 | 66 | 65 | 60 | 65 | 5 | 7.5 | |
| Minerals and metals | 7,747 | 8,101 | 11,040 | 16,389 | 20,757 | 4,368 | 26.7 | |
| Machinery | 11,918 | 13,209 | 14,607 | 16,439 | 17,594 | 1,154 | 7.0 | |
| Transportation equipment | 33,481 | 35,812 | 37,320 | 45,091 | 55,438 | 10,348 | 22.9 | |
| Electronic products | 35,762 | 37,797 | 39,009 | 41,767 | 43,632 | 1,865 | 4.5 | |
| Miscellaneous manufactures | 3,409 | 3,891 | 4,461 | 5,684 | 6,639 | 955 | 16.8 | |
| Special provisions | 5,038 | 4,971 | 5,466 | 6,389 | 7,208 | 819 | 12.8 | |
| Total | 141,979 | 156,337 | 168,289 | 197,281 | 226,252 | 28,971 | 14.7 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| Agricultural products | 12,962 | 13,913 | 14,871 | 16,220 | 17,558 | 1,337 | 8.2 | |
| Forest products | 5,234 | 6,276 | 6,668 | 6,797 | 6,140 | -657 | -9.7 | |
| Chemicals and related products | 57,801 | 63,165 | 68,160 | 74,042 | 78,521 | 4,479 | 6.0 | |
| Energy-related products | 12,177 | 16,028 | 22,623 | 26,057 | 28,011 | 1,955 | 7.5 | |
| Textiles and apparel | 5,972 | 6,291 | 6,095 | 5,988 | 6,287 | 300 | 5.0 | |
| Footwear | 1,918 | 1,904 | 1,738 | 1,700 | 1,776 | 75 | 4.4 | |
| Minerals and metals | 16,987 | 22,094 | 24,533 | 27,836 | 29,375 | 1,539 | 5.5 | |
| Machinery | 25,569 | 29,316 | 33,464 | 36,544 | 39,950 | 3,407 | 9.3 | |
| Transportation equipment | 58,449 | 62,448 | 66,934 | 69,998 | 73,105 | 3,107 | 4.4 | |
| Electronic products | 30,778 | 34,145 | 36,184 | 36,405 | 38,114 | 1,708 | 4.7 | |
| Miscellaneous manufactures | 11,164 | 12,250 | 12,473 | 13,602 | 15,931 | 2,329 | 17.1 | |
| Special provisions | 12,583 | 13,285 | 14,885 | 15,709 | 17,420 | 1,711 | 10.9 | |
| Total | 251,594 | 281,115 | 308,628 | 330,898 | 352,189 | 21,291 | 6.4 | |
| U.S. merchandise trade balance | | | | | | | | |
| Agricultural products | -5,352 | -5,916 | -6,712 | -7,516 | -7,348 | 169 | 2.2 | |
| Forest products | -1,215 | -1,892 | -1,923 | -1,850 | -602 | 1,249 | 67.5 | |
| Chemicals and related products | -28,138 | -27,767 | -30,610 | -31,027 | -28,865 | 2,162 | 7.0 | |
| Energy-related products | -10,424 | -12,899 | -18,504 | -19,161 | -20,563 | -1,402 | -7.3 | |
| Textiles and apparel | -4,454 | -4,710 | -4,347 | -4,089 | -4,223 | -134 | -3.3 | |
| Footwear | -1,857 | -1,838 | -1,673 | -1,640 | -1,711 | -71 | -4.3 | |
| Minerals and metals | -9,239 | -13,993 | -13,493 | -11,446 | -8,618 | 2,829 | 24.7 | |
| Machinery | -13,651 | -16,107 | -18,857 | -20,105 | -22,357 | -2,252 | -11.2 | |
| Transportation equipment | -24,968 | -26,636 | -29,614 | -24,908 | -17,667 | 7,241 | 29.1 | |
| Electronic products | 4,984 | 3,652 | 2,825 | 5,362 | 5,519 | 157 | 2.9 | |
| Miscellaneous manufactures | -7,755 | -8,359 | -8,012 | -7,918 | -9,292 | -1,374 | -17.4 | |
| Special provisions | -7,545 | -8,313 | -9,420 | -9,320 | -10,212 | -892 | -9.6 | |
| Total | -109,615 | -124,778 | -140,339 | -133,617 | -125,937 | 7,680 | 5.7 | |

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

Note: Calculations based on unrounded data.

^aImport 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 EU27, 2003–07

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|--------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | |
| U.S. EXPORTS | | | | | | | |
| Increases | | | | | | | |
| TE013 Aircraft, spacecraft, and related equipment . . . | 12,605 | 15,029 | 13,594 | 15,916 | 20,798 | 4,883 | 30.7 |
| CH019 Medicinal chemicals | 13,202 | 17,045 | 17,924 | 19,753 | 23,273 | 3,520 | 17.8 |
| TE009 Motor vehicles | 5,518 | 3,929 | 3,334 | 7,594 | 10,322 | 2,728 | 35.9 |
| MM020 Precious metals and non-numismatic coins . . . | 2,085 | 1,580 | 2,198 | 5,581 | 7,395 | 1,814 | 32.5 |
| MM020A Unrefined and refined gold | 1,135 | 390 | 958 | 2,823 | 4,235 | 1,412 | 50.0 |
| EL002 Telecommunications equipment | 2,761 | 3,563 | 4,066 | 3,918 | 5,121 | 1,202 | 30.7 |
| TE001 Aircraft engines and gas turbines | 7,157 | 8,165 | 10,184 | 10,658 | 11,580 | 922 | 8.6 |
| TE004 Construction and mining equipment | 1,520 | 1,678 | 2,119 | 1,944 | 2,859 | 915 | 47.1 |
| AG030 Cereals | 427 | 401 | 340 | 257 | 1,083 | 826 | 321.3 |
| EL022 Medical goods | 8,194 | 9,009 | 10,033 | 11,114 | 11,887 | 773 | 7.0 |
| CH023 Miscellaneous chemicals and specialties . . . | 915 | 939 | 961 | 1,182 | 1,927 | 744 | 63.0 |
| MS017 Works of art and miscellaneous manufactured goods | 806 | 1,019 | 1,303 | 1,905 | 2,570 | 665 | 34.9 |
| MM025 Steel mill products | 604 | 509 | 754 | 843 | 1,417 | 574 | 68.1 |
| EP003 Coal, coke, and related chemical products . . | 674 | 817 | 1,339 | 1,711 | 2,168 | 457 | 26.7 |
| CH033 Miscellaneous plastic products | 1,925 | 2,200 | 2,379 | 2,651 | 3,087 | 436 | 16.4 |
| CH030 Other plastics in primary forms | 1,657 | 1,877 | 1,949 | 2,322 | 2,724 | 401 | 17.3 |
| AG032 Oilseeds | 1,186 | 937 | 662 | 789 | 1,115 | 326 | 41.3 |
| TE003 Forklift trucks and similar industrial vehicles . | 279 | 387 | 476 | 714 | 1,039 | 325 | 45.6 |
| MM041 Certain base metals and chemical elements | 760 | 873 | 1,205 | 1,540 | 1,860 | 319 | 20.7 |
| MT009 Farm and garden machinery and equipment | 1,276 | 1,415 | 1,840 | 2,068 | 2,365 | 297 | 14.4 |
| EL025 Measuring, testing, and controlling instruments | 4,044 | 4,491 | 4,867 | 5,470 | 5,756 | 286 | 5.2 |
| MM019 Natural and synthetic gemstones | 67 | 181 | 656 | 902 | 1,173 | 271 | 30.1 |
| MM023 Iron and steel waste and scrap | 172 | 217 | 219 | 271 | 532 | 261 | 96.1 |
| TE011 Powersport vehicles | 518 | 613 | 749 | 826 | 1,084 | 258 | 31.2 |
| EP002 Nuclear materials | 329 | 516 | 826 | 883 | 1,109 | 225 | 25.5 |
| TE014 Ships, tugs, pleasure boats, and similar vessels | 380 | 443 | 606 | 646 | 867 | 221 | 34.1 |
| EL005 Navigational instruments and remote control apparatus | 1,008 | 1,145 | 1,114 | 1,209 | 1,429 | 220 | 18.2 |
| MM031 Miscellaneous products of base metal | 491 | 573 | 741 | 865 | 1,074 | 210 | 24.2 |
| TE002 Internal combustion piston engines, other than for aircraft | 1,753 | 1,692 | 1,997 | 2,143 | 2,351 | 208 | 9.7 |
| MM025B Plates, sheets, and strips of carbon and alloy steels | 282 | 143 | 292 | 170 | 376 | 206 | 120.7 |
| Decreases | | | | | | | |
| EL017 Computers, peripherals, and parts | 9,581 | 8,578 | 8,485 | 8,493 | 7,335 | -1,158 | -13.6 |
| TE010 Certain motor-vehicle parts | 2,545 | 2,760 | 3,004 | 3,224 | 2,971 | -253 | -7.8 |
| EP005 Petroleum products | 726 | 1,785 | 1,935 | 4,270 | 4,142 | -128 | -3.0 |
| EL006 Radio and television broadcasting equipment | 300 | 385 | 409 | 395 | 288 | -107 | -27.1 |

See footnote(s) at end of table.

TABLE EU.2 Leading changes in U.S. exports to and U.S. imports from EU27, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| AG001 Certain miscellaneous animals and meats . . . | 232 | 258 | 382 | 408 | 327 | -81 | -19.8 |
| EL015 Semiconductors and integrated circuits | 3,683 | 3,597 | 3,167 | 3,659 | 3,590 | -69 | -1.9 |
| MT030 Miscellaneous machinery | 1,171 | 1,386 | 1,610 | 1,778 | 1,709 | -69 | -3.9 |
| MM006A Zinc ores and concentrates | 138 | 135 | 148 | 338 | 270 | -68 | -20.2 |
| MS006 Precious jewelry and related articles | 230 | 316 | 431 | 786 | 719 | -67 | -8.6 |
| MM006 Zinc ores, concentrates, and residues | 139 | 135 | 148 | 338 | 272 | -67 | -19.7 |
| FP002 Lumber | 447 | 508 | 535 | 580 | 513 | -66 | -11.4 |
| MT018 Non-metalworking machine tools | 177 | 173 | 280 | 246 | 182 | -64 | -26.0 |
| AG013 Animal feeds | 644 | 643 | 522 | 501 | 448 | -53 | -10.6 |
| MT012 Printing and related machinery | 407 | 493 | 535 | 527 | 474 | -53 | -10.0 |
| AG043 Unmanufactured tobacco | 509 | 518 | 517 | 585 | 538 | -47 | -8.1 |
| CH002 Other olefins | 147 | 179 | 153 | 228 | 181 | -47 | -20.6 |
| TX005Q Rubber, plastic, and coated-fabric apparel . . | 12 | 39 | 45 | 76 | 32 | -44 | -58.3 |
| EL004 Blank and prerecorded media | 760 | 873 | 871 | 795 | 755 | -40 | -5.0 |
| EL008 Electrical capacitors and resistors | 211 | 233 | 210 | 320 | 284 | -36 | -11.3 |
| AG038 Fruit and vegetable juices | 133 | 129 | 119 | 164 | 139 | -25 | -15.4 |
| EL009 Printed circuits | 394 | 343 | 251 | 205 | 184 | -21 | -10.3 |
| MT028 Welding and soldering equipment | 113 | 117 | 150 | 169 | 149 | -20 | -11.8 |
| AG020 Edible nuts | 898 | 1,148 | 1,608 | 1,513 | 1,494 | -19 | -1.3 |
| TX002F Other fabrics | 196 | 220 | 274 | 287 | 269 | -18 | -6.1 |
| FP015 Miscellaneous paper products | 159 | 149 | 161 | 182 | 165 | -17 | -9.4 |
| MS016 Brooms, brushes, and hair grooming articles | 34 | 61 | 71 | 74 | 58 | -16 | -22.1 |
| MS016A Brooms and brushes | 31 | 56 | 66 | 70 | 55 | -15 | -21.8 |
| MT017 Metal forming machine tools | 147 | 153 | 175 | 227 | 212 | -15 | -6.4 |
| AG006 Fresh or frozen fish | 348 | 502 | 568 | 641 | 628 | -13 | -2.1 |
| CH012 Synthetic organic pigments | 119 | 140 | 163 | 181 | 169 | -12 | -6.5 |
| U.S. IMPORTS | | | | | | | |
| Increases | | | | | | | |
| CH019 Medicinal chemicals | 38,059 | 40,893 | 42,901 | 48,030 | 51,785 | 3,755 | 7.8 |
| MS017 Works of art and miscellaneous manufactured goods | 3,853 | 4,741 | 4,759 | 5,697 | 7,304 | 1,607 | 28.2 |
| TE013 Aircraft, spacecraft, and related equipment . . | 6,756 | 6,581 | 6,214 | 7,992 | 9,532 | 1,540 | 19.3 |
| EP002 Nuclear materials | 1,273 | 1,187 | 1,373 | 1,985 | 3,220 | 1,235 | 62.2 |
| MT023 Electric motors, generators, and related equipment | 1,650 | 1,423 | 2,097 | 2,785 | 3,981 | 1,196 | 42.9 |
| MT019A Semiconductor manufacturing equipment . . | 1,098 | 1,202 | 1,348 | 1,757 | 2,863 | 1,106 | 62.9 |
| MT019 Semiconductor manufacturing equipment and robotics | 1,238 | 1,387 | 1,604 | 1,960 | 3,047 | 1,087 | 55.5 |
| EP005 Petroleum products | 7,776 | 11,757 | 17,157 | 21,354 | 22,244 | 889 | 4.2 |
| TE001 Aircraft engines and gas turbines | 5,666 | 6,120 | 7,302 | 8,390 | 9,238 | 848 | 10.1 |
| EL022 Medical goods | 7,632 | 9,763 | 10,250 | 10,662 | 11,499 | 837 | 7.9 |
| TE009 Motor vehicles | 31,645 | 32,737 | 33,637 | 32,883 | 33,701 | 817 | 2.5 |
| EL025 Measuring, testing, and controlling instruments | 4,050 | 4,887 | 5,283 | 5,677 | 6,457 | 781 | 13.8 |

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See footnote(s) at end of table.

TABLE EU.2 Leading changes in U.S. exports to and U.S. imports from EU27, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|-------------------------------|---|-------|-------|-------|-------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| MM020 | Precious metals and non-numismatic coins | 895 | 1,176 | 1,439 | 2,390 | 3,161 | 772 | 32.3 |
| MM025 | Steel mill products | 2,716 | 5,004 | 5,988 | 6,753 | 7,348 | 595 | 8.8 |
| MM025L | Pipes and tubes of carbon and alloy steels | 478 | 699 | 1,069 | 1,378 | 1,925 | 547 | 39.7 |
| AG042 | Distilled spirits | 2,557 | 2,833 | 3,181 | 3,475 | 3,902 | 427 | 12.3 |
| MT022 | Boilers, turbines, and related machinery | 342 | 345 | 492 | 399 | 769 | 370 | 92.9 |
| EL015 | Semiconductors and integrated circuits | 2,796 | 2,610 | 2,540 | 2,639 | 2,985 | 346 | 13.1 |
| MM025G | Plates, sheets, and strips of stainless steels | 246 | 460 | 524 | 583 | 928 | 345 | 59.2 |
| AG041 | Wine and certain other fermented beverages | 2,363 | 2,358 | 2,584 | 2,934 | 3,269 | 335 | 11.4 |
| MT021 | Mechanical power transmission equipment | 932 | 1,189 | 1,546 | 1,647 | 1,937 | 290 | 17.6 |
| MM041 | Certain base metals and chemical elements | 514 | 769 | 995 | 1,242 | 1,501 | 259 | 20.9 |
| TE015 | Motors and engines, except internal combustion, aircraft, or electric | 441 | 590 | 749 | 826 | 1,073 | 247 | 30.0 |
| CH007 | Miscellaneous inorganic chemicals | 1,385 | 1,576 | 1,753 | 1,960 | 2,187 | 227 | 11.6 |
| MM019 | Natural and synthetic gemstones | 2,864 | 2,977 | 3,000 | 3,016 | 3,242 | 225 | 7.5 |
| MS019 | Arms, ammunition, and armored vehicles | 658 | 790 | 896 | 1,081 | 1,304 | 222 | 20.6 |
| MM025F | Ingots, blooms, billets, and slabs of stainless steels | 166 | 385 | 404 | 405 | 617 | 213 | 52.5 |
| EL020 | Optical goods, including ophthalmic goods | 1,426 | 1,686 | 1,766 | 1,968 | 2,177 | 209 | 10.6 |
| MT005 | Centrifuges and filtering and purifying equipment | 954 | 1,041 | 1,142 | 1,412 | 1,616 | 205 | 14.5 |
| CH021 | Perfumes, cosmetics, and toiletries | 1,809 | 2,104 | 2,327 | 2,484 | 2,679 | 195 | 7.9 |
| Decreases | | | | | | | | |
| EL017 | Computers, peripherals, and parts | 5,178 | 5,245 | 5,124 | 5,036 | 4,254 | -782 | -15.5 |
| TE004 | Construction and mining equipment | 2,767 | 3,820 | 5,030 | 5,539 | 5,062 | -477 | -8.6 |
| MT030 | Miscellaneous machinery | 2,818 | 3,228 | 3,668 | 3,854 | 3,482 | -373 | -9.7 |
| FP002 | Lumber | 410 | 692 | 961 | 807 | 444 | -363 | -45.0 |
| MT031 | Molds and molding machinery | 1,120 | 1,215 | 1,398 | 1,467 | 1,134 | -333 | -22.7 |
| MT012 | Printing and related machinery | 1,194 | 1,429 | 1,548 | 1,674 | 1,345 | -329 | -19.6 |
| MM025C | Bars, rods, and light shapes of carbon and alloy steels | 327 | 890 | 778 | 716 | 433 | -283 | -39.5 |
| MM025B | Plates, sheets, and strips of carbon and alloy steels | 769 | 1,455 | 1,618 | 1,842 | 1,585 | -257 | -13.9 |
| FP013 | Printing and writing papers | 1,290 | 1,452 | 1,441 | 1,708 | 1,461 | -247 | -14.4 |
| MM023 | Iron and steel waste and scrap | 127 | 511 | 253 | 367 | 131 | -235 | -64.2 |
| EP004 | Crude petroleum | 2,023 | 1,669 | 2,718 | 1,264 | 1,043 | -221 | -17.5 |
| FP004 | Wood veneer and wood panels | 513 | 745 | 827 | 726 | 524 | -202 | -27.8 |
| TE003 | Forklift trucks and similar industrial vehicles | 623 | 842 | 1,123 | 1,200 | 1,001 | -199 | -16.6 |
| EL006 | Radio and television broadcasting equipment | 390 | 489 | 503 | 396 | 215 | -180 | -45.6 |
| MM012 | Ceramic floor and wall tiles | 963 | 1,049 | 1,093 | 1,119 | 940 | -180 | -16.0 |
| CH003 | Primary aromatics | 159 | 246 | 287 | 478 | 316 | -162 | -33.9 |
| MM009 | Cement, stone, and related products | 1,245 | 1,442 | 1,562 | 1,600 | 1,447 | -153 | -9.6 |
| EP006 | Natural gas and components | 648 | 710 | 744 | 600 | 467 | -133 | -22.1 |
| MM025A | Ingots, blooms, billets, and slabs of carbon and alloy steels | 110 | 179 | 314 | 396 | 272 | -124 | -31.2 |

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See footnote(s) at end of table.

TABLE EU.2 Leading changes in U.S. exports to and U.S. imports from EU27, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|-------|-------|-------|-------|------------------------|---------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| MM036 Copper and related articles | 519 | 774 | 928 | 1,245 | 1,125 | -120 | -9.6 | |
| MM009A Cement | 128 | 175 | 226 | 214 | 111 | -103 | -48.1 | |
| MM037 Unwrought aluminum | 47 | 64 | 89 | 140 | 53 | -87 | -62.0 | |
| AG033 Animal or vegetable fats and oils | 568 | 761 | 864 | 968 | 882 | -86 | -8.9 | |
| MM038 Aluminum mill products | 670 | 813 | 1,141 | 1,275 | 1,191 | -84 | -6.6 | |
| MM037A Primary and secondary aluminum | 39 | 53 | 81 | 126 | 44 | -82 | -65.1 | |
| CH017 Pesticide products and formulations | 844 | 875 | 1,000 | 923 | 848 | -75 | -8.1 | |
| CH005 Organic specialty chemicals | 4,066 | 3,963 | 4,121 | 4,218 | 4,146 | -72 | -1.7 | |
| CH020 Essential oils and other flavoring materials | 1,143 | 1,925 | 2,278 | 2,267 | 2,199 | -68 | -3.0 | |
| MM038C Aluminum plate, sheet, and strip | 348 | 440 | 709 | 815 | 749 | -66 | -8.1 | |
| CH013 Synthetic dyes and azoic couplers | 159 | 167 | 162 | 150 | 88 | -61 | -41.0 | |

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

Note: Calculations based on unrounded data.

^aThis 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.

Exports of motor vehicles to the EU increased by 36 percent to \$10.3 billion. German imports of U.S. motor vehicles increased by 20 percent (\$971 million) in 2007 and accounted for 57 percent of EU-bound U.S. motor vehicle exports. U.S. exports to Germany increased despite a higher VAT rate in 2007 and an overall decline in light vehicle sales in Germany. The popularity of U.S.-produced German-brand vehicles and the dollar's depreciation relative to the euro, which makes it cheaper for European automakers to build vehicles in the United States, combined to spur U.S. exports to Germany.

Exports of medicinal chemicals increased by 18 percent to \$23.3 billion in 2007, driven by increasing global demand for pharmaceuticals and related-party transfers. Most of the increase was due to exports of blood fractions⁵⁶ and prepackaged psychotherapeutic agents such as tranquilizers and antidepressants, likely from U.S. companies to related companies in the EU.

The increase in exports of minerals and metals was principally due to increased exports of gold to the United Kingdom, a major international banking center as well as a center for fabricating and trading precious metals, further spurred by the depreciation of the dollar and rising gold prices.

U.S. Imports

In 2007, U.S. imports from the EU increased by 6 percent to \$352.2 billion. Imports in all product sectors except forest products increased, with chemicals and related products, transportation equipment, machinery, and electronic products accounting for 65 percent of U.S. imports from the EU in 2007. The largest absolute increases in U.S. imports from the EU in 2007 were in the chemicals and related products, machinery, and transportation equipment sectors (table EU.1).

U.S. imports of medicinal chemicals increased by 8 percent to \$51.8 billion in 2007, down from a 12 percent increase in 2006. The EU is home to the top three suppliers to the United States of medicinal chemicals—Ireland, the UK, and Germany—which, combined, accounted for one-half of U.S. medicinal chemicals imports. Increased demand resulting from greater enrollment in Medicare Part D and greater availability of generic pharmaceuticals as patents on many popular medicines expired contributed to increased imports from the EU.⁵⁷

In 2007, U.S. imports of aircraft, spacecraft, and related equipment increased by 19 percent to \$9.5 billion, with LCA from Airbus accounting for most of this increase. Airbus delivered more units in 2007 than ever before as U.S. airlines replaced older aircraft with more efficient aircraft to reduce operating costs and improve profitability.

Imports of semiconductor manufacturing equipment (SME) from the EU increased by 9 percent to \$1.9 billion in 2007. Only Japan and the Netherlands produce photolithography equipment, essential to semiconductor manufacturing, and imports of SME from the Netherlands increased by 20 percent in 2007 (table MT.3).

⁵⁶ Blood fractions are components of blood, such as red blood cells, white blood cells, platelets, and plasma. By administering blood fractions to patients, rather than whole blood, the supply of donated blood can be stretched to serve more patients and wastage can be reduced.

⁵⁷ IMS Health, "IMS Health Reports U.S. Prescription Sales Grew 3.8 Percent in 2007," March 12, 2008.

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India

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Change in 2007 from 2006:

U.S. trade deficit: Decreased by \$5.1 billion (40 percent) to \$7.5 billion

U.S. exports: Increased by \$7.3 billion (81 percent) to \$16.3 billion

U.S. imports: Increased by \$2.2 billion (10 percent) to \$23.9 billion

U.S. bilateral trade with India increased by more than \$9.4 billion (31 percent) in 2007, exceeding \$40 billion for the first time. U.S. trade with India grew at an average annual rate of approximately 24 percent during the 2003–07 period (table IN.1). India is in the midst of rapid economic expansion, with GDP growth exceeding 9 percent in each of the past three years, a population greater than 1 billion, and a middle class estimated to be nearly the size of the total U.S. population.⁵⁸ In 2007, the United States was surpassed by China as India's largest trading partner. However, the United States still accounted for approximately 9 percent of India's world trade in that year.⁵⁹ The U.S. trade deficit with India rose steadily between 2003–06; however, it decreased by 40 percent to \$7.5 billion in 2007.

U.S. Exports

In 2007, U.S. exports to India continued to benefit from India's strong economic growth, as well as the dollar's depreciation compared to the rupee and other major trading currencies. In 2007, exports to India increased by \$7.3 billion (81 percent) to \$16.3 billion, versus an average annual growth rate of 27 percent during 2003–06. In 2007, the largest absolute increase in exports was in transportation equipment, particularly aircraft. Exports of minerals and metals and chemicals and related products also increased significantly (table IN.1).

The transportation equipment sector accounted for the largest share of growth in U.S. exports to India in 2007, increasing by \$4.8 billion (225 percent) to \$6.9 billion. Most of this growth consisted of aircraft and related equipment, which increased by \$4.4 billion (294 percent), as U.S.-based Boeing Co. delivered 36 new aircraft to Indian airlines in 2007, compared to 11 aircraft delivered in 2006.⁶⁰ Exports of aircraft engines and gas turbines also rose by \$104 million, or 46 percent. Increased aircraft exports responded to India's increased demand for air travel. India's growing economy has made its airline industry the fastest growing aviation market in the world.⁶¹

⁵⁸ IMF, *World Economic Outlook Database, April 2008*, undated (accessed August 21, 2008).

⁵⁹ GIS, World Trade Atlas Database.

⁶⁰ The Boeing Co., "Orders and Deliveries Database," undated, (accessed August 4, 2008); The Boeing Co., "Jet Prices," undated (accessed August 4, 2008).

⁶¹ Grammatical, "Sky's the Limit for India Flight Boom," July 31, 2008, 1.

TABLE IN.1 India: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major industry/commodity sectors, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|----------------|----------------|----------------|---------------|------------------------|----------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | |
| Agricultural products | 307 | 251 | 296 | 363 | 465 | 102 | 28.1 |
| Forest products | 166 | 179 | 225 | 239 | 378 | 138 | 57.8 |
| Chemicals and related products | 1,122 | 1,094 | 1,470 | 1,849 | 2,354 | 505 | 27.3 |
| Energy-related products | 147 | 316 | 381 | 414 | 429 | 15 | 3.7 |
| Textiles and apparel | 54 | 68 | 78 | 101 | 101 | ^(b) | -0.3 |
| Footwear | 2 | 4 | 8 | 7 | 4 | -3 | -43.0 |
| Minerals and metals | 235 | 388 | 719 | 902 | 1,981 | 1,079 | 119.7 |
| Machinery | 344 | 542 | 715 | 784 | 1,113 | 329 | 42.0 |
| Transportation equipment | 603 | 671 | 1,027 | 2,114 | 6,881 | 4,766 | 225.4 |
| Electronic products | 1,219 | 1,576 | 1,709 | 1,859 | 2,139 | 280 | 15.0 |
| Miscellaneous manufactures | 69 | 90 | 167 | 191 | 191 | -1 | -0.3 |
| Special provisions | 99 | 118 | 171 | 200 | 273 | 72 | 36.1 |
| Total | 4,367 | 5,295 | 6,965 | 9,025 | 16,309 | 7,284 | 80.7 |
| U.S. imports of merchandise for consumption | | | | | | | |
| Agricultural products | 1,077 | 1,217 | 1,226 | 1,261 | 1,320 | 59 | 4.7 |
| Forest products | 79 | 84 | 94 | 109 | 134 | 25 | 22.9 |
| Chemicals and related products | 1,273 | 1,334 | 1,732 | 2,230 | 2,952 | 722 | 32.4 |
| Energy-related products | 230 | 248 | 579 | 287 | 767 | 480 | 167.4 |
| Textiles and apparel | 3,668 | 4,106 | 5,194 | 5,568 | 5,611 | 43 | 0.8 |
| Footwear | 110 | 125 | 139 | 155 | 164 | 9 | 5.6 |
| Minerals and metals | 3,730 | 4,748 | 5,091 | 5,816 | 6,424 | 608 | 10.5 |
| Machinery | 420 | 552 | 858 | 1,255 | 1,485 | 230 | 18.3 |
| Transportation equipment | 278 | 400 | 588 | 748 | 883 | 135 | 18.0 |
| Electronic products | 395 | 529 | 674 | 896 | 865 | -31 | -3.4 |
| Miscellaneous manufactures | 1,618 | 1,958 | 2,310 | 3,021 | 2,915 | -106 | -3.5 |
| Special provisions | 156 | 203 | 223 | 327 | 337 | 9 | 2.9 |
| Total | 13,034 | 15,503 | 18,710 | 21,674 | 23,857 | 2,183 | 10.1 |
| U.S. merchandise trade balance | | | | | | | |
| Agricultural products | -771 | -966 | -930 | -898 | -855 | 43 | 4.8 |
| Forest products | 86 | 95 | 131 | 131 | 244 | 113 | 86.9 |
| Chemicals and related products | -151 | -240 | -263 | -381 | -598 | -217 | -57.0 |
| Energy-related products | -84 | 69 | -199 | 127 | -338 | -465 | ^(c) |
| Textiles and apparel | -3,614 | -4,039 | -5,117 | -5,467 | -5,510 | -44 | -0.8 |
| Footwear | -107 | -122 | -131 | -148 | -160 | -12 | -7.8 |
| Minerals and metals | -3,494 | -4,360 | -4,372 | -4,915 | -4,443 | 471 | 9.6 |
| Machinery | -75 | -10 | -143 | -471 | -371 | 100 | 21.2 |
| Transportation equipment | 325 | 272 | 439 | 1,366 | 5,998 | 4,631 | 339.0 |
| Electronic products | 824 | 1,047 | 1,035 | 963 | 1,274 | 310 | 32.2 |
| Miscellaneous manufactures | -1,549 | -1,868 | -2,144 | -2,830 | -2,724 | 106 | 3.7 |
| Special provisions | -57 | -85 | -52 | -127 | -64 | 63 | 49.6 |
| Total | -8,666 | -10,208 | -11,745 | -12,649 | -7,548 | 5,101 | 40.3 |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

^cNot meaningful for purposes of comparison.

U.S. exports of minerals and metals increased by \$1.1 billion (120 percent) to \$2.0 billion in 2007. Two product categories accounted for the majority of the increase. Exports of precious metals and non-numismatic coins increased by \$536 million, while exports of unrefined and refined gold increased by \$373 million (table IN.2). India is the world's largest consumer of gold because it is a global hub for jewelry production due to its low production costs.⁶² U.S. exports of gold and precious metals to India increased substantially in 2007, boosted by unprecedented demand for Indian-made jewelry, by the rising price of gold on world markets, and by the depreciation of the U.S. dollar versus the rupee. Total Indian imports of gold increased in value by 72 percent in 2007, registering an all-time high in the first half of the year.

U.S. exports of chemicals and related products to India increased by \$505 million (27 percent) to \$2.4 billion in 2007. One product category—fertilizer—increased by \$191 million (33 percent) to \$778 million and accounted for the largest portion of the increase in this sector. Demand for imports of fertilizer in India has increased as the use of modern agricultural techniques has grown. India is reportedly the third-largest fertilizer consumer in the world, relying on imports of phosphate fertilizers, because the domestic availability of phosphate rock is limited.⁶³ The United States is the world's largest consumer and producer, as well as a large exporter of phosphate fertilizers. The United States supplies significant quantities of phosphate fertilizers in the form of granular diammonium phosphate (DAP) and monoammonium phosphate (MAP), both of which are in high demand in India.⁶⁴ Fertilizer prices, specifically for both DAP and MAP, also increased significantly during 2007 and raised the total value of exports.

U.S. Imports

U.S. imports from India increased by \$2.2 billion (10 percent) to \$23.9 billion in 2007, the smallest annual percentage increase during 2003–07. In 2007, the largest absolute increases in imports were in chemicals and related products, minerals and metals, and energy-related products.

U.S. imports of chemicals and related products increased by \$722 million (32 percent) to \$3.0 billion in 2007. Increased imports of medicinal chemicals accounted for the majority of the increase in imports in the chemical sector; such imports increased by \$528 million (65 percent) to \$1.3 billion. The growth is attributable to greater U.S. demand for less expensive generic drugs made in India and to India's large and increasing concentration of U.S. Food and Drug Administration-approved manufacturing plants, more than any other country.⁶⁵

U.S. imports of minerals and metals increased by \$608 million (11 percent) to \$6.4 billion in 2007. Minerals and metal imports comprised primarily pipes and tubes of carbon and alloy steel, as well as natural and synthetic gemstones. Imports of pipes and tubes of carbon and alloy steels increased by \$458 million (392 percent) to \$575 million in 2007. Large

⁶² Lal Pai, "India's Metamorphosis to a Global Hub for Gems and Jewelry," September 25, 2008.

⁶³ Economy Watch, "Fertilizer Industry," undated (accessed August 7, 2008).

⁶⁴ Jaskinski, "Minerals, Phosphate Rock," January 2007.

⁶⁵ Grace, *The Effect of Changing Intellectual Property*, June 2004, 20.

TABLE IN.2 Leading changes in U.S. exports to and U.S. imports from India, 2003–07

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------|------------------|------------------|------------------|------------------|------------------------|------------------|
| | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | |
| U.S. EXPORTS | | | | | | | |
| Increases | | | | | | | |
| TE013 Aircraft, spacecraft, and related equipment | 270 | 286 | 595 | 1,510 | 5,955 | 4,445 | 294.4 |
| MM020 Precious metals and non-numismatic coins | 11 | 14 | 47 | 10 | 546 | 536 | 5,639.0 |
| MM020A Unrefined and refined gold | (^b) | (^b) | 34 | (^b) | 373 | 373 | (^c) |
| MM019 Natural and synthetic gemstones | 16 | 37 | 63 | 241 | 510 | 269 | 111.6 |
| CH010 Fertilizers | 105 | 114 | 415 | 587 | 778 | 191 | 32.6 |
| MM023 Iron and steel waste and scrap | 21 | 91 | 221 | 168 | 337 | 168 | 99.9 |
| TE004 Construction and mining equipment | 111 | 101 | 147 | 169 | 282 | 113 | 67.2 |
| TE001 Aircraft engines and gas turbines | 121 | 158 | 128 | 225 | 329 | 104 | 46.2 |
| EL025 Measuring, testing, and controlling instruments | 142 | 212 | 273 | 319 | 416 | 97 | 30.2 |
| EL002 Telecommunications equipment | 235 | 309 | 304 | 277 | 350 | 74 | 26.6 |
| MT030 Miscellaneous machinery | 44 | 78 | 98 | 92 | 164 | 72 | 78.5 |
| FP009 Wood pulp and wastepaper | 117 | 111 | 135 | 157 | 227 | 71 | 45.2 |
| CH005 Organic specialty chemicals | 64 | 105 | 110 | 103 | 159 | 56 | 54.2 |
| EP005 Petroleum products | 82 | 86 | 124 | 90 | 142 | 52 | 57.1 |
| MM025 Steel mill products | 42 | 71 | 170 | 152 | 203 | 51 | 33.9 |
| EL004 Blank and prerecorded media | 107 | 142 | 136 | 130 | 178 | 47 | 36.3 |
| CH030 Other plastics in primary forms | 49 | 62 | 76 | 103 | 148 | 45 | 44.0 |
| EL022 Medical goods | 143 | 196 | 203 | 253 | 294 | 41 | 16.0 |
| AG019 Prepared or preserved vegetables, mushrooms, and olives | 2 | 3 | 14 | 27 | 65 | 38 | 141.5 |
| CH019 Medicinal chemicals | 436 | 180 | 113 | 115 | 152 | 37 | 32.4 |
| MT005 Centrifuges and filtering and purifying equipment | 16 | 26 | 39 | 47 | 79 | 33 | 70.4 |
| TE008 Rail locomotive and rolling stock | 12 | 11 | 14 | 29 | 60 | 30 | 104.0 |
| FP016 Printed matter | 27 | 36 | 36 | 45 | 76 | 30 | 66.7 |
| MT001 Pumps for liquids | 14 | 23 | 31 | 29 | 58 | 29 | 99.1 |
| CH033 Miscellaneous plastic products | 54 | 54 | 77 | 98 | 126 | 28 | 28.6 |
| MT020 Taps, cocks, valves, and similar devices | 19 | 31 | 35 | 40 | 67 | 27 | 68.8 |
| MT003 Industrial thermal-processing equipment and furnaces | 16 | 30 | 43 | 54 | 81 | 27 | 49.5 |
| MT002 Air-conditioning equipment and parts | 29 | 60 | 54 | 55 | 82 | 26 | 47.9 |
| CH031 Synthetic rubber | 10 | 17 | 40 | 52 | 78 | 26 | 50.6 |
| AG049 Cotton, not carded or combed | 135 | 58 | 42 | 52 | 79 | 26 | 49.7 |
| Decreases | | | | | | | |
| EL005 Navigational instruments and remote control apparatus | 24 | 23 | 53 | 62 | 22 | -40 | -64.5 |
| EP003 Coal, coke, and related chemical products | 63 | 228 | 254 | 320 | 284 | -37 | -11.5 |
| MM004 Copper ores and concentrates | (^b) | (^b) | (^b) | 36 | (^b) | -36 | -99.6 |
| MS019 Arms, ammunition, and armored vehicles | (^b) | (^b) | (^b) | 12 | (^b) | -12 | -98.7 |
| MT013 Textile machinery | 17 | 29 | 46 | 49 | 41 | -8 | -16.2 |
| TX002D Coated and other fabrics | 4 | 6 | 7 | 14 | 6 | -8 | -55.8 |

See footnote at end of table.

TABLE IN.2 Leading changes in U.S. exports to and U.S. imports from India, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|------------------|------------------|-------|------------------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| EL008 Electrical capacitors and resistors | 10 | 12 | 18 | 23 | 16 | -7 | -31.2 |
| MS006 Precious jewelry and related articles | 40 | 62 | 109 | 126 | 119 | -7 | -5.3 |
| MS005 Silverware and related articles of precious metal | 9 | (^b) | 4 | 7 | (^b) | -7 | -97.8 |
| TX002 Fabrics | 12 | 14 | 16 | 24 | 17 | -6 | -26.7 |
| MT018 Non-metalworking machine tools | 2 | 3 | 7 | 9 | 3 | -6 | -65.0 |
| AG024 Other fresh fruit | 4 | 9 | 11 | 12 | 7 | -5 | -39.9 |
| AG033 Animal or vegetable fats and oils | 25 | 26 | 17 | 19 | 15 | -3 | -18.0 |
| MT027 Electric lamps (bulbs) and portable electric lights | 6 | 6 | 6 | 6 | 3 | -3 | -54.8 |
| EL007 Electric sound and visual signaling apparatus | 6 | 10 | 13 | 15 | 12 | -3 | -19.9 |
| MM029 Metallic containers | 1 | 1 | 2 | 10 | 7 | -3 | -29.2 |
| FW001 Footwear | 2 | 4 | 8 | 7 | 4 | -3 | -43.0 |
| CH003 Primary aromatics | (^b) | 1 | 0 | 2 | 0 | -2 | -100.0 |
| CH002 Other olefins | 23 | 28 | 34 | 36 | 33 | -2 | -6.5 |
| TX005 Apparel | 1 | 1 | 2 | 3 | 1 | -2 | -61.7 |
| AG034 Pasta, cereals, and other bakery goods | 8 | 12 | 7 | 10 | 8 | -2 | -20.2 |
| AG005 Poultry | 1 | (^b) | 1 | 2 | (^b) | -2 | -97.4 |
| TX003 Carpets and rugs | 6 | 8 | 10 | 17 | 15 | -1 | -8.8 |
| TX005D Women's and girls' trousers | (^b) | (^b) | (^b) | 1 | (^b) | -1 | -96.5 |
| CH009 Chlor-alkali chemicals | (^b) | 2 | 3 | 3 | 2 | -1 | -37.3 |
| CH027 Polyvinyl chloride resins in primary forms . . . | 15 | 11 | 20 | 8 | 7 | -1 | -12.7 |
| MM014 Flat glass | 3 | 5 | 7 | 4 | 3 | -1 | -23.9 |
| AG018 Fresh, chilled, or frozen vegetables | (^b) | (^b) | (^b) | 1 | (^b) | -1 | -89.7 |
| TX005E Shirts and blouses | (^b) | (^b) | (^b) | 1 | (^b) | -1 | -93.7 |
| MS010 Writing instruments and related articles | (^b) | 1 | 1 | 2 | 1 | -1 | -45.1 |
| U.S. IMPORTS | | | | | | | |
| Increases | | | | | | | |
| CH019 Medicinal chemicals | 528 | 456 | 575 | 814 | 1,342 | 528 | 64.9 |
| EP005 Petroleum products | 230 | 231 | 559 | 277 | 749 | 472 | 170.1 |
| MM025L Pipes and tubes of carbon and alloy steels . . | 56 | 91 | 198 | 117 | 575 | 458 | 391.8 |
| MM019 Natural and synthetic gemstones | 2,730 | 2,991 | 3,203 | 3,385 | 3,824 | 439 | 13.0 |
| MM025 Steel mill products | 232 | 713 | 608 | 909 | 1,043 | 134 | 14.7 |
| CH005 Organic specialty chemicals | 177 | 233 | 239 | 308 | 412 | 104 | 33.8 |
| CH003 Primary aromatics | 0 | 4 | 9 | 36 | 129 | 93 | 254.4 |
| MT009 Farm and garden machinery and equipment | 97 | 131 | 196 | 187 | 270 | 83 | 44.4 |
| TX005H Women's and girls' dresses | 124 | 118 | 116 | 145 | 218 | 73 | 50.7 |
| TX005D Women's and girls' trousers | 120 | 129 | 184 | 231 | 301 | 70 | 30.3 |
| TE010 Certain motor-vehicle parts | 124 | 188 | 268 | 326 | 393 | 68 | 20.8 |
| TX004C Table/kitchen linens and towels | 297 | 372 | 416 | 473 | 538 | 66 | 13.9 |
| AG029 Spices | 46 | 54 | 51 | 67 | 123 | 56 | 84.0 |

See footnote at end of table.

TABLE IN.2 Leading changes in U.S. exports to and U.S. imports from India, 2003–07—Continued

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|------------------|------------------|-------|-------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| TX004 Home furnishings | 689 | 815 | 1,015 | 1,102 | 1,150 | 48 | 4.3 |
| TX004B Pillowcases and sheets | 143 | 183 | 300 | 320 | 368 | 48 | 14.8 |
| MT020 Taps, cocks, valves, and similar devices . . . | 63 | 83 | 137 | 184 | 230 | 46 | 25.0 |
| AG010 Dairy produce | 17 | 33 | 63 | 40 | 86 | 45 | 112.0 |
| MM026 Steel pipe and tube fittings and certain cast products | 42 | 67 | 102 | 142 | 183 | 41 | 28.7 |
| TX005C Men's and boys' trousers | 112 | 161 | 217 | 254 | 294 | 40 | 15.9 |
| CH001 Major primary olefins | 0 | 13 | 40 | 7 | 45 | 38 | 533.4 |
| MT023 Electric motors, generators, and related equipment | 80 | 80 | 115 | 351 | 388 | 37 | 10.6 |
| MM025H Bars, rods, and light shapes of stainless steels | 38 | 50 | 61 | 72 | 107 | 35 | 48.6 |
| TE002 Internal combustion piston engines, other than for aircraft | 63 | 97 | 158 | 230 | 264 | 34 | 14.9 |
| TX005I Robes, nightwear, and underwear | 103 | 135 | 181 | 214 | 245 | 30 | 14.2 |
| MM027 Fabricated structurals | 1 | 1 | 2 | 8 | 34 | 26 | 325.7 |
| MM025A Ingots, blooms, billets, and slabs of carbon and alloy steels | (^b) | (^b) | (^b) | 2 | 27 | 24 | 1,099.1 |
| MM025M Pipes and tubes of stainless steels | 3 | 2 | 4 | 2 | 24 | 22 | 989.7 |
| CH006 Certain organic chemicals | 43 | 23 | 37 | 43 | 65 | 21 | 49.6 |
| AG030 Cereals | 39 | 37 | 45 | 56 | 76 | 20 | 36.6 |
| MM025J Wire of stainless steels | 18 | 32 | 31 | 41 | 61 | 20 | 48.4 |
| Decreases | | | | | | | |
| MM025B Plates, sheets, and strips of carbon and alloy steels | 98 | 509 | 275 | 610 | 190 | -420 | -68.9 |
| TX005G Women's and girls' suits, skirts, and coats . . | 241 | 281 | 533 | 443 | 265 | -178 | -40.2 |
| MS006 Precious jewelry and related articles | 1,199 | 1,500 | 1,769 | 2,421 | 2,334 | -88 | -3.6 |
| CH029 Saturated polyester resins | 44 | 17 | 51 | 105 | 37 | -68 | -64.8 |
| AG009 Shellfish | 441 | 391 | 354 | 301 | 240 | -61 | -20.3 |
| EL003 Consumer electronics | 13 | 33 | 89 | 172 | 116 | -57 | -32.8 |
| EL003A Television receivers and video monitors | 1 | 27 | 84 | 162 | 111 | -51 | -31.4 |
| TX005E Shirts and blouses | 1,116 | 1,158 | 1,465 | 1,608 | 1,558 | -49 | -3.1 |
| TX004E Bedspreads and other furnishing articles . . . | 108 | 109 | 108 | 116 | 86 | -30 | -25.8 |
| TX004D Curtains | 73 | 75 | 93 | 91 | 66 | -25 | -27.8 |
| MM040A Unwrought zinc | 0 | 0 | 0 | 42 | 17 | -25 | -59.8 |
| TX005 Apparel | 2,161 | 2,360 | 3,152 | 3,320 | 3,296 | -24 | -0.7 |
| MM040 Zinc and related articles | 14 | 19 | 22 | 72 | 50 | -22 | -30.6 |
| MM009 Cement, stone, and related products | 195 | 273 | 333 | 394 | 372 | -22 | -5.5 |
| MM025C Bars, rods, and light shapes of carbon and alloy steels | 11 | 8 | 4 | 24 | 6 | -18 | -75.3 |
| AG020 Edible nuts | 195 | 260 | 269 | 221 | 204 | -16 | -7.4 |
| AG017 Miscellaneous vegetable substances | 109 | 110 | 152 | 214 | 198 | -16 | -7.3 |
| CH017 Pesticide products and formulations | 20 | 44 | 85 | 104 | 89 | -16 | -14.9 |

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See footnote at end of table.

TABLE IN.2 Leading changes in U.S. exports to and U.S. imports from India, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|------------------|------|------|------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MS017 Works of art and miscellaneous manufactured goods | 60 | 62 | 88 | 135 | 121 | -14 | -10.4 |
| TX005O Leather apparel and accessories | 80 | 80 | 65 | 65 | 51 | -14 | -20.9 |
| MS011 Lamps and lighting fittings | 81 | 88 | 86 | 90 | 77 | -13 | -14.4 |
| TX005S Other wearing apparel | 89 | 100 | 149 | 145 | 133 | -13 | -8.8 |
| TX004F Pillows, cushions, and sleeping bags | 49 | 56 | 71 | 72 | 60 | -11 | -15.8 |
| CH025 Polyethylene resins in primary forms | (^b) | (^b) | 13 | 14 | 3 | -11 | -78.2 |
| MT030 Miscellaneous machinery | 12 | 18 | 32 | 47 | 36 | -11 | -23.6 |
| CH036 Natural rubber | 1 | 2 | 4 | 11 | 2 | -10 | -84.4 |
| MM038C Aluminum plate, sheet, and strip | 2 | 6 | 29 | 25 | 17 | -8 | -33.9 |
| MM020 Precious metals and non-numismatic coins | 3 | 3 | 4 | 13 | 5 | -8 | -64.5 |
| MS007 Costume jewelry and related articles | 22 | 18 | 46 | 38 | 29 | -8 | -21.5 |
| CH028 Styrene polymers in primary forms | 1 | 2 | 10 | 10 | 2 | -8 | -76.3 |

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

Note: Calculations based on unrounded data.

^aThis 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.

^bLess than \$500,000.

^cUndefined.

diameter line pipe used in oil and gas pipelines accounted for the bulk of U.S. import growth of this product group between 2006 and 2007, mainly because Indian line pipe producers won large diameter line pipe contracts to supply energy pipelines in the southern United States.⁶⁶

In 2007, U.S. imports of natural and synthetic gemstones increased by \$439 million (13 percent) to \$3.8 billion. As noted, India has become a major producer of jewelry and also is a leader in diamond cutting and polishing. The cut and polished diamond industry in India has experienced tremendous export growth as the industry has continued to expand.⁶⁷

U.S. imports of energy-related products increased by \$480 million (167 percent) to \$767 million in 2007. Imports of petroleum products from India, which increased by \$472 million (170 percent) to reach \$749 million, accounted for almost all imports of energy-related products. India's exports of petroleum products such as gasoline and jet fuel have expanded as refining capacity has increased.⁶⁸

⁶⁶ Industry official, telephone interview by Commission staff, August 20, 2008.

⁶⁷ Gem and Jewelry Export Promotion Council, India, "India's Gem and Jewellery Exports," September 5, 2006.

⁶⁸ USGAO, "Energy Markets," December 2007, 36; Sud, "India as Petroleum Products Export Hub," October 11, 2005.

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Japan

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Change in 2007 from 2006:

U.S. trade deficit: Decreased by \$5.6 billion (6 percent) to \$86.8 billion

U.S. exports: Increased by \$2.5 billion (5 percent) to \$58.1 billion

U.S. imports: Decreased by \$3.1 billion (2 percent) to \$144.9 billion

U.S. merchandise trade with Japan decreased by \$643 million in 2007, as a result of a \$2.5 billion (4.5 percent) increase in U.S. exports to Japan and a \$3.1 billion (2 percent) decrease in U.S. imports from Japan (table JA.1). In 2007, Japan's economy continued to expand, with an increase in GDP of 2.8 percent⁶⁹ compared to 2.0 percent in 2006.⁷⁰ This economic expansion likely contributed to the rise in U.S. exports to Japan. Agricultural products, transportation equipment, and minerals and metals accounted for most of the increase in U.S. exports to Japan in 2007.

In contrast, the slowing U.S. economy likely had a negative impact on U.S. imports from Japan. The depreciation of the dollar relative to the yen also contributed to the decrease in the trade deficit in 2007.⁷¹ Most of the decline in U.S. imports from Japan occurred in transportation equipment and machinery products.

U.S. Exports

In 2007, U.S. agricultural exports to Japan increased by \$1.4 billion (14 percent). A majority of the increase was accounted for by cereals (wheat, corn, and rice), which increased by \$873 million (30 percent) (table JA.2). Industry sources attribute the increase in export value largely to record high prices for cereals. The price increase was a result of a reduction in global supplies of cereal due to severe weather,⁷² export restrictions in certain major exporting countries,⁷³ and increased demand in the United States for corn to produce ethanol.

⁶⁹ DOC, U.S. Commercial Service, "The 2008 Country Commercial Guide for U.S. Companies," 2008, 3.

⁷⁰ IMF, *World Economic Outlook*, October 2007, 6 and 8.

⁷¹ Bach, "U.S. International Transactions in 2007," April 2008, 22.

⁷² Schnepf, *High Wheat Prices: What Are the Issues?* February 29, 2008, 3.

⁷³ USDA, OCE, Joint Economic Committee written testimony, May 1, 2008. See Cereals chapter for more details.

TABLE JA.1 Japan: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major industry/commodity sectors, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|----------------|----------------|----------------|----------------|------------------------|------------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | |
| Agricultural products | 10,845 | 10,087 | 9,840 | 10,342 | 11,750 | 1,408 | 13.6 |
| Forest products | 1,887 | 1,963 | 1,907 | 1,964 | 1,859 | -105 | -5.3 |
| Chemicals and related products | 6,176 | 7,153 | 7,797 | 8,383 | 8,847 | 464 | 5.5 |
| Energy-related products | 1,513 | 1,744 | 1,394 | 1,348 | 1,556 | 208 | 15.5 |
| Textiles and apparel | 546 | 592 | 649 | 629 | 544 | -85 | -13.5 |
| Footwear | 24 | 27 | 27 | 28 | 33 | 5 | 17.1 |
| Minerals and metals | 1,654 | 1,955 | 2,385 | 3,221 | 4,094 | 873 | 27.1 |
| Machinery | 3,447 | 4,575 | 4,526 | 5,151 | 4,877 | -274 | -5.3 |
| Transportation equipment | 8,631 | 8,120 | 8,630 | 9,611 | 10,556 | 945 | 9.8 |
| Electronic products | 11,355 | 11,236 | 10,967 | 11,538 | 10,794 | -744 | -6.4 |
| Miscellaneous manufactures | 1,415 | 1,501 | 1,728 | 2,034 | 1,915 | -119 | -5.8 |
| Special provisions | 1,369 | 1,540 | 1,650 | 1,346 | 1,271 | -75 | -5.6 |
| Total | 48,862 | 50,493 | 51,499 | 55,596 | 58,096 | 2,500 | 4.5 |
| U.S. imports of merchandise for consumption | | | | | | | |
| Agricultural products | 482 | 503 | 540 | 573 | 601 | 28 | 4.9 |
| Forest products | 610 | 683 | 692 | 649 | 648 | -2 | -0.2 |
| Chemicals and related products | 10,121 | 10,684 | 11,100 | 10,739 | 11,065 | 326 | 3.0 |
| Energy-related products | 333 | 225 | 534 | 970 | 1,191 | 221 | 22.8 |
| Textiles and apparel | 815 | 964 | 730 | 737 | 784 | 47 | 6.4 |
| Footwear | 2 | 2 | 3 | 2 | 2 | (^b) | -17.3 |
| Minerals and metals | 4,036 | 4,724 | 5,013 | 5,871 | 5,780 | -91 | -1.5 |
| Machinery | 13,816 | 16,810 | 18,333 | 19,455 | 17,146 | -2,310 | -11.9 |
| Transportation equipment | 53,581 | 57,126 | 62,745 | 71,493 | 69,851 | -1,642 | -2.3 |
| Electronic products | 29,179 | 32,023 | 31,512 | 30,838 | 31,542 | 704 | 2.3 |
| Miscellaneous manufactures | 1,879 | 1,906 | 2,474 | 2,026 | 1,969 | -57 | -2.8 |
| Special provisions | 3,630 | 3,886 | 4,155 | 4,718 | 4,349 | -369 | -7.8 |
| Total | 118,485 | 129,535 | 137,831 | 148,071 | 144,928 | -3,143 | -2.1 |
| U.S. merchandise trade balance | | | | | | | |
| Agricultural products | 10,362 | 9,583 | 9,301 | 9,769 | 11,149 | 1,379 | 14.1 |
| Forest products | 1,278 | 1,280 | 1,214 | 1,315 | 1,212 | -103 | -7.9 |
| Chemicals and related products | -3,945 | -3,531 | -3,304 | -2,356 | -2,218 | 138 | 5.9 |
| Energy-related products | 1,180 | 1,519 | 859 | 378 | 365 | -13 | -3.4 |
| Textiles and apparel | -269 | -371 | -81 | -108 | -240 | -132 | -122.9 |
| Footwear | 22 | 25 | 24 | 26 | 31 | 5 | 20.4 |
| Minerals and metals | -2,382 | -2,770 | -2,628 | -2,650 | -1,687 | 963 | 36.3 |
| Machinery | -10,369 | -12,234 | -13,807 | -14,304 | -12,269 | 2,035 | 14.2 |
| Transportation equipment | -44,951 | -49,006 | -54,115 | -61,882 | -59,296 | 2,586 | 4.2 |
| Electronic products | -17,824 | -20,787 | -20,545 | -19,300 | -20,748 | -1,448 | -7.5 |
| Miscellaneous manufactures | -464 | -404 | -746 | 8 | -54 | -62 | (^c) |
| Special provisions | -2,261 | -2,346 | -2,505 | -3,372 | -3,079 | 293 | 8.7 |
| Total | -69,623 | -79,042 | -86,333 | -92,475 | -86,832 | 5,643 | 6.1 |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

^cNot meaningful for purposes of comparison.

TABLE JA.2 Leading changes in U.S. exports to and U.S. imports from Japan, 2003–07

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|-------------------------------|--|----------------|-------|-------|-------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. EXPORTS | | | | | | | | |
| Increases | | | | | | | | |
| AG030 | Cereals | 2,381 | 2,697 | 2,428 | 2,895 | 3,768 | 873 | 30.1 |
| TE013 | Aircraft, spacecraft, and related equipment | 4,757 | 4,750 | 5,182 | 5,721 | 6,528 | 807 | 14.1 |
| MM020 | Precious metals and non-numismatic coins | 161 | 204 | 333 | 504 | 952 | 448 | 88.9 |
| CH007 | Miscellaneous inorganic chemicals | 716 | 812 | 1,042 | 1,280 | 1,604 | 324 | 25.3 |
| AG032 | Oilseeds | 966 | 1,010 | 788 | 870 | 1,116 | 247 | 28.4 |
| EP002 | Nuclear materials | 808 | 713 | 486 | 582 | 824 | 241 | 41.5 |
| TE001 | Aircraft engines and gas turbines | 1,043 | 1,237 | 1,224 | 1,439 | 1,674 | 235 | 16.3 |
| MM023 | Iron and steel waste and scrap | 31 | 42 | 29 | 52 | 263 | 210 | 402.8 |
| AG002 | Cattle and beef | 1,331 | 4 | 8 | 66 | 244 | 178 | 267.4 |
| EL002 | Telecommunications equipment | 858 | 1,135 | 895 | 770 | 888 | 118 | 15.3 |
| AG003 | Swine and pork | 752 | 953 | 1,067 | 1,015 | 1,127 | 112 | 11.1 |
| MT019A | Semiconductor manufacturing equipment | 1,293 | 2,020 | 1,922 | 2,248 | 2,358 | 109 | 4.9 |
| EL022 | Medical goods | 2,314 | 2,413 | 2,628 | 2,731 | 2,834 | 103 | 3.8 |
| MT019 | Semiconductor manufacturing equipment and robotics | 1,330 | 2,080 | 1,964 | 2,302 | 2,388 | 86 | 3.7 |
| CH017 | Pesticide products and formulations | 60 | 60 | 61 | 76 | 156 | 80 | 105.9 |
| MT005 | Centrifuges and filtering and purifying equipment | 273 | 289 | 247 | 339 | 415 | 77 | 22.6 |
| MT009 | Farm and garden machinery and equipment | 139 | 133 | 131 | 116 | 185 | 69 | 59.2 |
| AG013 | Animal feeds | 732 | 709 | 815 | 848 | 912 | 63 | 7.5 |
| CH005 | Organic specialty chemicals | 477 | 582 | 583 | 654 | 716 | 63 | 9.6 |
| AG022 | Citrus fruit | 219 | 215 | 168 | 210 | 268 | 58 | 27.5 |
| MM042 | Nonpowered handtools | 84 | 87 | 85 | 81 | 139 | 57 | 70.8 |
| EP005 | Petroleum products | 473 | 473 | 536 | 512 | 564 | 53 | 10.3 |
| MS006 | Precious jewelry and related articles | 293 | 326 | 384 | 589 | 637 | 48 | 8.2 |
| FP013 | Printing and writing papers | 29 | 21 | 17 | 26 | 70 | 44 | 165.8 |
| AG046 | Hides, skins, and leather | 116 | 111 | 82 | 94 | 137 | 43 | 45.7 |
| MM009 | Cement, stone, and related products | 80 | 93 | 140 | 163 | 205 | 42 | 26.0 |
| AG012 | Sugar and other sweeteners | 58 | 60 | 66 | 63 | 102 | 38 | 60.9 |
| MM010 | Industrial ceramics | 37 | 38 | 49 | 46 | 84 | 38 | 82.7 |
| MM004 | Copper ores and concentrates | ^(b) | 7 | 58 | 97 | 134 | 37 | 38.1 |
| MM041 | Certain base metals and chemical elements | 165 | 196 | 264 | 350 | 385 | 36 | 10.2 |
| Decreases | | | | | | | | |
| EL017 | Computers, peripherals, and parts | 2,246 | 2,040 | 1,871 | 1,890 | 1,595 | -295 | -15.6 |
| MT030 | Miscellaneous machinery | 249 | 378 | 421 | 537 | 267 | -270 | -50.3 |
| EL015 | Semiconductors and integrated circuits | 1,936 | 1,607 | 1,281 | 1,279 | 1,014 | -266 | -20.8 |
| EL025 | Measuring, testing, and controlling instruments | 1,391 | 1,508 | 1,405 | 1,685 | 1,457 | -228 | -13.6 |
| AG045 | Cigarettes | 929 | 870 | 878 | 931 | 759 | -173 | -18.5 |
| AG006 | Fresh or frozen fish | 795 | 871 | 920 | 787 | 661 | -126 | -16.0 |
| EL005 | Navigational instruments and remote control apparatus | 351 | 276 | 358 | 682 | 588 | -94 | -13.8 |

See footnote(s) at end of table.

TABLE JA.2 Leading changes in U.S. exports to and U.S. imports from Japan, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|---|------------------------|--------|--------|--------|--------|------------------------|---------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| MT003 Industrial thermal-processing equipment and furnaces | 139 | 214 | 263 | 272 | 181 | -91 | -33.3 | |
| TE002 Internal combustion piston engines, other than for aircraft | 639 | 233 | 280 | 359 | 271 | -88 | -24.6 | |
| TE010 Certain motor-vehicle parts | 1,246 | 1,036 | 923 | 1,008 | 921 | -88 | -8.7 | |
| EL016 Miscellaneous electrical equipment | 129 | 190 | 301 | 257 | 182 | -76 | -29.4 | |
| MT015 Metal cutting machine tools | 110 | 130 | 151 | 175 | 103 | -72 | -41.0 | |
| EP006 Natural gas and components | 182 | 142 | 139 | 183 | 111 | -71 | -39.1 | |
| MS001 Luggage, handbags, and flat goods | 84 | 86 | 108 | 141 | 71 | -71 | -50.0 | |
| MS019 Arms, ammunition, and armored vehicles | 286 | 360 | 495 | 499 | 432 | -68 | -13.5 | |
| MS019A Small arms and ammunition | 116 | 170 | 128 | 212 | 146 | -66 | -31.2 | |
| MM014 Flat glass | 132 | 174 | 148 | 188 | 131 | -57 | -30.2 | |
| TX005 Apparel | 254 | 273 | 330 | 277 | 228 | -49 | -17.6 | |
| MS001B Handbags | 41 | 31 | 60 | 79 | 31 | -48 | -60.3 | |
| FP009 Wood pulp and wastepaper | 368 | 365 | 377 | 447 | 402 | -45 | -10.0 | |
| FP011 Industrial papers and paperboards | 380 | 412 | 427 | 428 | 385 | -43 | -10.1 | |
| CH019 Medicinal chemicals | 1,492 | 1,679 | 1,892 | 2,077 | 2,035 | -42 | -2.0 | |
| MM017 Miscellaneous glass products | 72 | 107 | 90 | 129 | 87 | -41 | -32.0 | |
| FP011A Paperboard | 357 | 384 | 393 | 388 | 351 | -37 | -9.5 | |
| FP001 Logs and rough wood products | 527 | 602 | 583 | 559 | 524 | -35 | -6.2 | |
| MT018 Non-metalworking machine tools | 69 | 149 | 123 | 113 | 81 | -32 | -28.2 | |
| EL006 Radio and television broadcasting equipment | 133 | 82 | 124 | 52 | 22 | -31 | -58.8 | |
| CH031 Synthetic rubber | 70 | 87 | 136 | 163 | 133 | -31 | -18.7 | |
| TE006 Primary cells and batteries and electric storage batteries | 64 | 57 | 65 | 81 | 54 | -26 | -32.7 | |
| MT023 Electric motors, generators, and related equipment | 126 | 105 | 116 | 124 | 97 | -26 | -21.3 | |
| U.S. IMPORTS | | | | | | | | |
| Increases | | | | | | | | |
| MT019A Semiconductor manufacturing equipment | 1,292 | 1,811 | 1,972 | 2,375 | 3,406 | 1,031 | 43.4 | |
| MT019 Semiconductor manufacturing equipment and robotics | 1,484 | 2,060 | 2,229 | 2,701 | 3,646 | 945 | 35.0 | |
| EL017 Computers, peripherals, and parts | 6,977 | 6,799 | 6,536 | 6,681 | 7,399 | 718 | 10.7 | |
| TE013 Aircraft, spacecraft, and related equipment | 848 | 872 | 1,058 | 1,443 | 1,850 | 407 | 28.2 | |
| TE009 Motor vehicles | 33,062 | 33,171 | 35,947 | 44,609 | 44,965 | 356 | 0.8 | |
| CH007 Miscellaneous inorganic chemicals | 984 | 1,124 | 1,254 | 1,329 | 1,578 | 249 | 18.8 | |
| EP005 Petroleum products | 92 | 84 | 357 | 808 | 1,029 | 220 | 27.3 | |
| TE001 Aircraft engines and gas turbines | 567 | 667 | 745 | 955 | 1,131 | 176 | 18.4 | |
| CH019 Medicinal chemicals | 3,166 | 3,007 | 2,816 | 2,327 | 2,478 | 151 | 6.5 | |
| EL004 Blank and prerecorded media | 1,287 | 1,440 | 1,603 | 1,619 | 1,764 | 145 | 9.0 | |
| TE014 Ships, tugs, pleasure boats, and similar vessels | 42 | 35 | 30 | 28 | 161 | 133 | 483.3 | |
| TE008 Rail locomotive and rolling stock | 91 | 134 | 136 | 104 | 235 | 131 | 125.7 | |
| EL025 Measuring, testing, and controlling instruments | 2,017 | 2,359 | 2,356 | 2,447 | 2,578 | 131 | 5.4 | |

See footnote(s) at end of table.

TABLE JA.2 Leading changes in U.S. exports to and U.S. imports from Japan, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|-------------------------------|------------------------|-------|------------------|-------|-------|------------------------|---------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| EL015 | 2,505 | 2,959 | 2,788 | 3,264 | 3,393 | 129 | 4.0 | |
| EL001 | 139 | 152 | 184 | 205 | 321 | 117 | 57.1 | |
| EL002 | 1,477 | 1,588 | 1,851 | 1,719 | 1,835 | 116 | 6.8 | |
| CH005 | 1,179 | 1,267 | 1,233 | 1,180 | 1,292 | 112 | 9.5 | |
| MM020 | 51 | 80 | 68 | 138 | 250 | 112 | 80.8 | |
| MT024 | | | | | | | | |
| | 316 | 420 | 462 | 525 | 635 | 109 | 20.8 | |
| EL005 | | | | | | | | |
| | 320 | 476 | 548 | 544 | 645 | 101 | 18.5 | |
| MT023 | | | | | | | | |
| | 959 | 1,113 | 1,279 | 1,341 | 1,425 | 84 | 6.3 | |
| EL021 | 894 | 807 | 562 | 456 | 539 | 83 | 18.2 | |
| CH023 | 145 | 161 | 174 | 193 | 232 | 39 | 20.1 | |
| MT003 | | | | | | | | |
| | 190 | 226 | 343 | 422 | 458 | 36 | 8.5 | |
| FP016 | 81 | 86 | 90 | 96 | 128 | 32 | 33.4 | |
| CH021 | 76 | 106 | 122 | 107 | 136 | 29 | 27.1 | |
| EL023 | 725 | 664 | 668 | 645 | 671 | 26 | 4.1 | |
| MS010 | 279 | 288 | 254 | 269 | 293 | 23 | 8.7 | |
| TX001 | | | | | | | | |
| | 171 | 184 | 183 | 196 | 219 | 23 | 11.5 | |
| TX002 | 293 | 346 | 350 | 351 | 373 | 22 | 6.3 | |
| Decreases | | | | | | | | |
| MT012 | 1,913 | 2,425 | 2,455 | 2,237 | 763 | -1,474 | -65.9 | |
| TE004 | 1,530 | 2,513 | 3,165 | 3,615 | 2,592 | -1,023 | -28.3 | |
| MT030 | 1,003 | 1,143 | 1,288 | 1,506 | 763 | -743 | -49.3 | |
| TE011 | 2,775 | 3,126 | 3,821 | 3,799 | 3,086 | -713 | -18.8 | |
| TE002 | | | | | | | | |
| | 4,995 | 5,218 | 5,732 | 5,111 | 4,397 | -713 | -14.0 | |
| TE011A | 2,070 | 2,386 | 2,938 | 3,069 | 2,516 | -553 | -18.0 | |
| EL003A | 2,229 | 2,987 | 2,605 | 1,781 | 1,305 | -476 | -26.7 | |
| EL006 | | | | | | | | |
| | 372 | 445 | 453 | 506 | 110 | -395 | -78.2 | |
| TE010 | 7,362 | 8,625 | 9,003 | 8,612 | 8,257 | -354 | -4.1 | |
| MT031 | 634 | 706 | 719 | 808 | 491 | -316 | -39.2 | |
| MT009 | | | | | | | | |
| | 1,078 | 1,569 | 1,658 | 1,581 | 1,281 | -301 | -19.0 | |
| EL003 | 6,767 | 7,510 | 6,909 | 5,677 | 5,404 | -273 | -4.8 | |
| MT028 | 483 | 438 | 325 | 565 | 317 | -248 | -43.8 | |
| CH032 | 1,208 | 1,305 | 1,519 | 1,592 | 1,411 | -181 | -11.3 | |
| MM025 | 744 | 1,015 | 1,392 | 1,886 | 1,727 | -159 | -8.4 | |
| MT015 | 1,073 | 1,266 | 1,652 | 1,926 | 1,813 | -113 | -5.8 | |
| MM025L | 237 | 292 | 485 | 663 | 573 | -91 | -13.7 | |
| EL016 | 390 | 551 | 604 | 643 | 576 | -67 | -10.3 | |
| MM025A | | | | | | | | |
| | 11 | 14 | (^a) | 153 | 92 | -61 | -39.8 | |
| MM025B | | | | | | | | |
| | 130 | 209 | 248 | 334 | 273 | -61 | -18.2 | |
| MT017 | 252 | 240 | 324 | 342 | 292 | -50 | -14.7 | |
| MT018 | 81 | 111 | 109 | 115 | 70 | -45 | -38.9 | |

TABLE JA.2 Leading changes in U.S. exports to and U.S. imports from Japan, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|-------|-------|-------|-------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| CH016 Photographic chemicals and preparations . . | 274 | 274 | 299 | 319 | 279 | -40 | -12.5 |
| MT021 Mechanical power transmission equipment . | 448 | 515 | 567 | 603 | 565 | -39 | -6.4 |
| MT026 Nonelectrically powered handtools | 233 | 279 | 286 | 274 | 235 | -39 | -14.2 |
| MS013 Toys and games | 757 | 661 | 1,303 | 914 | 876 | -38 | -4.1 |
| MM031 Miscellaneous products of base metal | 679 | 733 | 764 | 791 | 754 | -37 | -4.6 |
| MM042 Nonpowered handtools | 710 | 783 | 521 | 698 | 662 | -36 | -5.2 |
| TE003 Forklift trucks and similar industrial vehicles . | 223 | 298 | 341 | 400 | 369 | -32 | -7.9 |
| EL020 Optical goods, including ophthalmic goods . . | 1,012 | 1,366 | 1,279 | 1,296 | 1,264 | -32 | -2.4 |

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

Note: Calculations based on unrounded data.

^aThis 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.

^bLess than \$500,000.

The second-largest shift in U.S. exports to Japan was in transportation equipment, which increased by \$945 million (10 percent) in 2007. Aircraft, spacecraft, and related equipment accounted for 85 percent of this increase, owing to Japan's growing imports of new cargo transport aircraft, which take from 18 to 24 months to be delivered from the time of order. In 2005, Nippon Cargo Airlines (NCA), Japan's largest cargo airline, ordered four Boeing 747-400Fs cargo freighters, each valued at approximately \$200 million.⁷⁴ The purchases of the new Boeing 747 aircraft are an integral part of NCA's efforts⁷⁵ to participate in the expanding international air freight market. The company expects to buy 22 additional aircraft by 2015.

In 2007, precious metals and non-numismatic coins accounted for about one-half of the increase in the value of exports which increased minerals and metals by \$448 million (89 percent) to \$952 million.⁷⁶ The increase reflects higher global prices and Japan's reliance on imported precious metals. During 2007, a significant share of the export increase was attributable to platinum-group metals, which reached \$326 million. Japan uses unwrought platinum in the manufacture of transportation equipment, particularly motor vehicles (for use in catalytic converters), and chemical synthesis.⁷⁷

U.S. Imports

U.S. imports of machinery from Japan decreased by \$2.3 billion (12 percent) in 2007, largely as a result of a \$1.5 billion decrease in printing and related equipment⁷⁸ and a \$1.0 billion (28 percent) decrease in construction and mining equipment (table JA.2).

Imports of semiconductor manufacturing equipment (SME) increased by \$1.0 billion (43 percent). Industry sources attribute the rise to increased demand for photolithography equipment, essential for processing wafers in semiconductor manufacturing.⁷⁹ Photolithography equipment is manufactured by three companies, two of which are based in Japan.⁸⁰ In 2007, semiconductor firms (including those in the United States) were replacing their outdated 200mm photolithography equipment with more advanced 300mm equipment. Another significant factor contributing to the increased value of imports of SME was the rising price of photolithography equipment.⁸¹

In 2007, U.S. imports of computers, peripherals, and parts from Japan increased by \$718 million (11 percent) to \$7.4 billion. Primary products imported from Japan included

⁷⁴ NCA, "Placing Order for New B747-400F," August 30, 2005.

⁷⁵ NCA, "NCA Phoenix Project," November 2005.

⁷⁶ See the Minerals and Metals chapter for more details.

⁷⁷ Japanese production of motor vehicles, such as passenger cars, full-size and small trucks, and buses that contain platinum group metals rose by 112,000 units (1 percent) in 2007 compared to the previous year. JAMA, *The Motor Industry of Japan 2008*, May 2008, 6; JAMA, *Motor Vehicle Statistics of Japan 2008*, 2008, 16.

⁷⁸ The significant decline in U.S. imports of printing and related machinery (MT012) from Japan is largely attributable to changes in the Harmonized Tariff Schedule (HTS) for these products. In 2007, major changes to the HTS were implemented that significantly altered the HTS subheadings that constitute the printing and related machinery commodity grouping used in this report. Based on staff analysis, the apparent shift in trade in this sector during 2007 is largely attributable to reclassification of certain HTS subheadings rather than a significant change in actual import values.

⁷⁹ Zino, "Semiconductor Equipment," 2008, 14–17.

⁸⁰ *Ibid.*, 8.

⁸¹ SEMI, "SEMI Reports 2007 Global Semiconductor Equipment Sales of \$42.77 Billion," March 24, 2008.

printers and printer parts. The growth in imports was credited to rising consumer demand in the United States for printers, printer parts, and multifunction devices,⁸² as the use of digital cameras increased.

U.S. imports of construction and mining equipment from Japan decreased by \$1.0 billion (28 percent) to \$2.6 billion in 2007. This decrease is attributable to a decline in U.S. housing market construction, and to an increase in domestic production of construction and mining equipment.⁸³

⁸² Varmazis, "What To Look For in Multi-function Products in 2008," January 17, 2008.

⁸³ Manfredi & Associates, "Hitachi Construction Profits Rise," February 2008.

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Mexico

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Change in 2007 from 2006:

U.S. trade deficit: Increased by \$8.3 billion (10 percent) to \$90.8 billion

U.S. exports: Increased by \$4.8 billion (4 percent) to \$119.4 billion

U.S. imports: Increased by \$13.1 billion (7 percent) to \$210.2 billion

The U.S. merchandise trade deficit with Mexico, the third-largest individual U.S. trading partner, increased by \$8.3 billion (10 percent) to \$90.8 billion in 2007 (table MX.1). U.S. exports to Mexico rose by \$4.8 billion (4 percent) to \$119.4 billion, in part because of the depreciation of the U.S. dollar and a 3.3 percent economic growth rate in the Mexican economy.⁸⁴ The largest export increases to Mexico were agricultural goods (\$1.8 billion), transportation equipment (\$1.2 billion), and energy-related products (\$1.1 billion). U.S. imports from Mexico increased by \$13.1 billion (7 percent) to \$210.2 billion in 2007. Leading U.S. imports were electronic products, transportation equipment and parts, energy-related products, machinery, and minerals and metals. The Mexican economy is strongly linked to the U.S. business cycle (table MX.2). A very large proportion of U.S.-Mexico bilateral trade is accounted for by intra-company trade and other foreign-based manufacturers' foreign direct investment (FDI) through subsidiaries and joint-ventures.⁸⁵

U.S. Exports

The value of U.S. exports of agricultural products to Mexico increased by \$1.8 billion (16 percent) to \$12.9 billion in 2007, partly because of high global commodity prices, especially for wheat, corn, and soybeans, and strong domestic demand.⁸⁶ The United States supplied more than 72 percent of Mexico's total agricultural imports in 2007, largely because of price advantages and preferential NAFTA access that benefits U.S. products. Corn, dry edible beans, soybean meal, nonfat dry milk, red meats, and poultry meat were the leading U.S. agricultural exports to Mexico in 2007.⁸⁷

In 2007, U.S. exports of energy-related products to Mexico rose by \$1.1 billion (18 percent) to \$7.0 billion. The bulk of Mexico's energy-related imports continues to be largely related to a shortage of domestic refinery capacity for unleaded gasoline; the construction of a petrochemical facility represents a major investment of approximately \$7 billion.⁸⁸ Mexico imports a significant amount of unleaded gasoline and light motor fuel oils from the Deer Park petrochemical refinery facility outside of Houston, Texas, owned jointly by Pemex and Shell.

⁸⁴ EIU, *Country Report: Mexico*, August 2008, 16.

⁸⁵ Solunet: Info-Mex, "2007 Complete Twin Plant Guide," 2007.

⁸⁶ BanaMex, "Review of the Economic Situation of Mexico," February 2008, 28.

⁸⁷ USDA, FAS, "Factsheet: North American Free Trade Agreement (NAFTA)," January 2008.

⁸⁸ Los Angeles Times, "Pemex Seeks Site for New Oil Refinery," July 5, 2008.

TABLE MX.1 Mexico: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major industry/commodity sectors, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|----------------|----------------|----------------|----------------|------------------------|--------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| Agricultural products | 8,176 | 8,994 | 9,678 | 11,066 | 12,876 | 1,809 | 16.3 | |
| Forest products | 3,217 | 3,451 | 3,860 | 4,258 | 4,312 | 55 | 1.3 | |
| Chemicals and related products | 13,300 | 15,797 | 18,122 | 20,573 | 21,385 | 812 | 3.9 | |
| Energy-related products | 2,897 | 3,379 | 5,508 | 5,925 | 7,015 | 1,090 | 18.4 | |
| Textiles and apparel | 4,696 | 4,730 | 4,705 | 4,551 | 3,947 | -603 | -13.3 | |
| Footwear | 90 | 60 | 46 | 47 | 44 | -3 | -7.2 | |
| Minerals and metals | 6,454 | 7,958 | 9,258 | 11,635 | 11,896 | 261 | 2.2 | |
| Machinery | 8,813 | 9,754 | 11,132 | 12,121 | 11,627 | -494 | -4.1 | |
| Transportation equipment | 14,248 | 16,368 | 17,370 | 19,936 | 21,143 | 1,206 | 6.1 | |
| Electronic products | 16,429 | 17,403 | 16,649 | 18,357 | 18,394 | 37 | 0.2 | |
| Miscellaneous manufactures | 1,246 | 1,344 | 1,358 | 1,665 | 2,031 | 365 | 21.9 | |
| Special provisions | 3,541 | 3,781 | 3,981 | 4,428 | 4,711 | 284 | 6.4 | |
| Total | 83,108 | 93,018 | 101,667 | 114,562 | 119,381 | 4,819 | 4.2 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| Agricultural products | 7,220 | 8,189 | 9,323 | 10,498 | 11,360 | 862 | 8.2 | |
| Forest products | 1,075 | 1,274 | 1,420 | 1,559 | 1,584 | 25 | 1.6 | |
| Chemicals and related products | 3,779 | 4,790 | 5,429 | 6,347 | 6,360 | 13 | 0.2 | |
| Energy-related products | 14,792 | 18,966 | 25,029 | 32,116 | 33,549 | 1,433 | 4.5 | |
| Textiles and apparel | 9,015 | 8,826 | 8,305 | 7,497 | 6,712 | -785 | -10.5 | |
| Footwear | 275 | 242 | 247 | 274 | 248 | -26 | -9.5 | |
| Minerals and metals | 7,116 | 9,623 | 11,366 | 13,266 | 13,877 | 611 | 4.6 | |
| Machinery | 12,092 | 13,562 | 15,500 | 18,305 | 20,045 | 1,740 | 9.5 | |
| Transportation equipment | 38,255 | 40,496 | 42,032 | 49,028 | 50,954 | 1,926 | 3.9 | |
| Electronic products | 34,599 | 38,991 | 40,221 | 47,107 | 53,999 | 6,892 | 14.6 | |
| Miscellaneous manufactures | 3,125 | 3,506 | 3,845 | 3,953 | 3,800 | -153 | -3.9 | |
| Special provisions | 5,855 | 6,493 | 6,499 | 7,105 | 7,671 | 566 | 8.0 | |
| Total | 137,199 | 154,959 | 169,216 | 197,056 | 210,159 | 13,103 | 6.6 | |
| U.S. merchandise trade balance | | | | | | | | |
| Agricultural products | 956 | 805 | 355 | 568 | 1,516 | 947 | 166.7 | |
| Forest products | 2,142 | 2,177 | 2,440 | 2,698 | 2,728 | 30 | 1.1 | |
| Chemicals and related products | 9,521 | 11,007 | 12,694 | 14,226 | 15,025 | 799 | 5.6 | |
| Energy-related products | -11,894 | -15,587 | -19,522 | -26,191 | -26,534 | -343 | -1.3 | |
| Textiles and apparel | -4,319 | -4,097 | -3,600 | -2,946 | -2,765 | 182 | 6.2 | |
| Footwear | -185 | -183 | -201 | -227 | -204 | 23 | 9.9 | |
| Minerals and metals | -661 | -1,665 | -2,108 | -1,631 | -1,981 | -350 | -21.5 | |
| Machinery | -3,280 | -3,808 | -4,368 | -6,185 | -8,418 | -2,234 | -36.1 | |
| Transportation equipment | -24,007 | -24,128 | -24,661 | -29,091 | -29,811 | -720 | -2.5 | |
| Electronic products | -18,170 | -21,588 | -23,572 | -28,750 | -35,605 | -6,855 | -23.8 | |
| Miscellaneous manufactures | -1,879 | -2,162 | -2,488 | -2,288 | -1,769 | 519 | 22.7 | |
| Special provisions | -2,314 | -2,713 | -2,518 | -2,677 | -2,959 | -282 | -10.5 | |
| Total | -54,091 | -61,941 | -67,549 | -82,493 | -90,778 | -8,284 | -10.0 | |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

TABLE MX.2 Leading changes in U.S. exports to and U.S. imports from Mexico, 2003–07

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|-------------------------------|--|-------|-------|-------|-------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| <i>Million dollars</i> | | | | | | | | |
| U.S. EXPORTS | | | | | | | | |
| Increases | | | | | | | | |
| EP005 | Petroleum products | 2,318 | 2,799 | 4,781 | 5,024 | 5,725 | 702 | 14.0 |
| AG030 | Cereals | 1,514 | 1,695 | 1,553 | 2,038 | 2,711 | 672 | 33.0 |
| TE010 | Certain motor-vehicle parts | 5,816 | 6,068 | 6,004 | 7,130 | 7,724 | 594 | 8.3 |
| EL017 | Computers, peripherals, and parts | 2,660 | 2,646 | 2,442 | 2,839 | 3,407 | 568 | 20.0 |
| TE009 | Motor vehicles | 3,224 | 4,015 | 4,350 | 3,990 | 4,504 | 514 | 12.9 |
| MS013 | Toys and games | 84 | 92 | 117 | 302 | 809 | 507 | 167.9 |
| EP006 | Natural gas and components | 430 | 442 | 589 | 724 | 1,134 | 411 | 56.7 |
| TE002 | Internal combustion piston engines, other than for aircraft | 2,031 | 2,665 | 2,834 | 2,779 | 3,179 | 399 | 14.4 |
| AG010 | Dairy produce | 227 | 332 | 427 | 394 | 780 | 386 | 98.0 |
| CH006 | Certain organic chemicals | 1,262 | 1,848 | 2,160 | 2,378 | 2,756 | 378 | 15.9 |
| AG032 | Oilseeds | 1,032 | 853 | 917 | 1,000 | 1,256 | 256 | 25.6 |
| AG033 | Animal or vegetable fats and oils | 381 | 496 | 421 | 383 | 607 | 224 | 58.5 |
| TE008 | Rail locomotive and rolling stock | 164 | 240 | 317 | 401 | 606 | 205 | 51.2 |
| CH004 | Organic commodity chemicals | 805 | 1,116 | 1,193 | 1,318 | 1,522 | 204 | 15.5 |
| MT019 | Semiconductor manufacturing equipment and robotics | 232 | 352 | 344 | 350 | 548 | 197 | 56.4 |
| MT019A | Semiconductor manufacturing equipment | 214 | 333 | 315 | 320 | 513 | 193 | 60.4 |
| MM025 | Steel mill products | 1,120 | 1,338 | 1,690 | 1,998 | 2,189 | 191 | 9.6 |
| CH033 | Miscellaneous plastic products | 3,773 | 4,105 | 4,544 | 4,930 | 5,116 | 186 | 3.8 |
| EL005 | Navigational instruments and remote control apparatus | 68 | 100 | 89 | 123 | 302 | 178 | 144.5 |
| AG031 | Milled grains, malts, and starches | 354 | 322 | 408 | 502 | 675 | 172 | 34.3 |
| CH026 | Polypropylene resins in primary forms | 400 | 514 | 774 | 948 | 1,115 | 167 | 17.6 |
| TE004 | Construction and mining equipment | 577 | 583 | 665 | 1,035 | 1,201 | 166 | 16.0 |
| EL025 | Measuring, testing, and controlling instruments | 1,346 | 1,597 | 1,490 | 1,438 | 1,585 | 147 | 10.2 |
| MT029 | Nonautomotive insulated electrical wire and related products | 1,311 | 1,362 | 1,418 | 1,759 | 1,896 | 137 | 7.8 |
| EL002 | Telecommunications equipment | 1,229 | 1,573 | 1,459 | 1,949 | 2,081 | 133 | 6.8 |
| AG013 | Animal feeds | 392 | 474 | 647 | 756 | 878 | 122 | 16.1 |
| AG012 | Sugar and other sweeteners | 42 | 68 | 130 | 272 | 392 | 120 | 43.9 |
| CH032 | Tires and tubes | 477 | 536 | 659 | 671 | 774 | 103 | 15.4 |
| MT009 | Farm and garden machinery and equipment | 517 | 635 | 570 | 655 | 753 | 99 | 15.1 |
| MM041 | Certain base metals and chemical elements | 80 | 95 | 127 | 157 | 255 | 97 | 62.0 |
| Decreases | | | | | | | | |
| TE013 | Aircraft, spacecraft, and related equipment | 600 | 792 | 801 | 1,581 | 828 | -752 | -47.6 |
| EL015 | Semiconductors and integrated circuits | 2,482 | 2,444 | 2,307 | 2,338 | 2,053 | -285 | -12.2 |
| MT023 | Electric motors, generators, and related equipment | 1,056 | 1,061 | 1,234 | 1,303 | 1,022 | -281 | -21.6 |
| TX005 | Apparel | 1,496 | 1,138 | 924 | 787 | 518 | -269 | -34.2 |
| AG036 | Infant formulas, malt extracts, and other edible preparations | 224 | 354 | 531 | 620 | 397 | -223 | -35.9 |
| TX002A | Broadwoven fabrics | 1,106 | 1,196 | 1,090 | 900 | 686 | -214 | -23.8 |

See footnote(s) at end of table.

TABLE MX.2 Leading changes in U.S. exports to and U.S. imports from Mexico, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|-------------------------------|--|--------|--------|--------|--------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| CH034 | Miscellaneous rubber products | 633 | 720 | 730 | 809 | 620 | -190 | -23.4 |
| EL011 | Circuit apparatus not exceeding 1000V | 1,586 | 1,826 | 1,948 | 2,049 | 1,867 | -183 | -8.9 |
| MT002 | Air-conditioning equipment and parts | 1,059 | 1,031 | 1,274 | 1,307 | 1,126 | -181 | -13.9 |
| EL014 | Electron tubes | 1,117 | 886 | 512 | 218 | 43 | -174 | -80.0 |
| MT004 | Household appliances, including commercial applications | 617 | 702 | 870 | 1,064 | 904 | -160 | -15.1 |
| TX001 | Fibers and yarns, except raw cotton and raw wool | 389 | 463 | 549 | 674 | 516 | -159 | -23.5 |
| MT031 | Molds and molding machinery | 320 | 418 | 552 | 609 | 472 | -137 | -22.5 |
| TX002 | Fabrics | 2,401 | 2,661 | 2,685 | 2,506 | 2,370 | -137 | -5.5 |
| TX005E | Shirts and blouses | 496 | 348 | 279 | 278 | 156 | -121 | -43.7 |
| CH019 | Medicinal chemicals | 585 | 592 | 682 | 858 | 743 | -115 | -13.4 |
| MT026 | Nonelectrically powered handtools | 51 | 260 | 503 | 208 | 95 | -113 | -54.4 |
| EL006 | Radio and television broadcasting equipment | 167 | 171 | 191 | 203 | 93 | -111 | -54.4 |
| EL018 | Photographic film and paper | 371 | 382 | 303 | 540 | 449 | -91 | -16.9 |
| MS002 | Certain other leather goods | 26 | 72 | 158 | 173 | 88 | -84 | -48.9 |
| CH029 | Saturated polyester resins | 173 | 138 | 172 | 225 | 144 | -81 | -36.0 |
| MT030 | Miscellaneous machinery | 648 | 833 | 886 | 876 | 798 | -78 | -8.9 |
| MM036 | Copper and related articles | 467 | 779 | 959 | 1,594 | 1,519 | -75 | -4.7 |
| EL008 | Electrical capacitors and resistors | 781 | 779 | 433 | 524 | 451 | -73 | -13.9 |
| MM007A | Molybdenum ores and concentrates | 17 | 27 | 34 | 112 | 42 | -70 | -62.8 |
| MM007 | Certain ores, concentrates, ash, and residues | 22 | 41 | 82 | 137 | 67 | -70 | -51.3 |
| AG003 | Swine and pork | 229 | 436 | 382 | 406 | 341 | -65 | -16.0 |
| EL009 | Printed circuits | 464 | 478 | 467 | 550 | 487 | -63 | -11.5 |
| TE014 | Ships, tugs, pleasure boats, and similar vessels | 82 | 88 | 94 | 148 | 90 | -58 | -39.2 |
| CH022 | Soaps, detergents, and surface-active agents | 222 | 235 | 247 | 329 | 274 | -55 | -16.8 |
| U.S. IMPORTS | | | | | | | | |
| Increases | | | | | | | | |
| EL003A | Television receivers and video monitors | 5,532 | 7,743 | 10,029 | 14,386 | 18,769 | 4,383 | 30.5 |
| EL003 | Consumer electronics | 7,817 | 10,034 | 12,213 | 16,549 | 20,826 | 4,277 | 25.8 |
| EL002 | Telecommunications equipment | 4,664 | 5,913 | 5,645 | 7,123 | 8,961 | 1,838 | 25.8 |
| TE010 | Certain motor-vehicle parts | 13,122 | 14,005 | 15,219 | 16,791 | 18,215 | 1,424 | 8.5 |
| EP004 | Crude petroleum | 13,630 | 17,186 | 22,364 | 29,195 | 29,848 | 652 | 2.2 |
| EL022 | Medical goods | 2,355 | 2,621 | 3,077 | 3,515 | 4,101 | 586 | 16.7 |
| EP005 | Petroleum products | 1,086 | 1,698 | 2,500 | 2,697 | 3,243 | 546 | 20.2 |
| MT004 | Household appliances, including commercial applications | 2,092 | 2,322 | 2,739 | 3,862 | 4,300 | 438 | 11.4 |
| MT005 | Centrifuges and filtering and purifying equipment | 374 | 394 | 375 | 491 | 893 | 401 | 81.7 |

See footnote(s) at end of table.

TABLE MX.2 Leading changes in U.S. exports to and U.S. imports from Mexico, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|-------------------------------|--|--------|--------|------------------|--------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| TE007 | Ignition, starting, lighting, and other electrical equipment | 1,165 | 1,303 | 1,418 | 1,561 | 1,901 | 340 | 21.8 |
| EL012 | Circuit apparatus assemblies | 1,444 | 1,435 | 1,442 | 1,675 | 2,008 | 334 | 19.9 |
| MT004A | Major household appliances and parts | 943 | 1,153 | 1,548 | 2,463 | 2,764 | 301 | 12.2 |
| MT024 | Electrical transformers, static converters, and inductors | 1,297 | 1,364 | 1,475 | 1,669 | 1,967 | 298 | 17.9 |
| EL025 | Measuring, testing, and controlling instruments | 3,106 | 2,872 | 2,850 | 2,800 | 3,066 | 267 | 9.5 |
| AG018 | Fresh, chilled, or frozen vegetables | 2,103 | 2,373 | 2,529 | 2,774 | 3,036 | 262 | 9.5 |
| MT030 | Miscellaneous machinery | 525 | 590 | 679 | 815 | 1,074 | 260 | 31.9 |
| AG021 | Tropical fruit | 209 | 246 | 422 | 406 | 646 | 240 | 59.1 |
| MM036A | Unrefined and refined copper | 71 | 85 | 107 | 175 | 414 | 239 | 136.9 |
| TE001 | Aircraft engines and gas turbines | 217 | 275 | 337 | 394 | 629 | 235 | 59.7 |
| EP006 | Natural gas and components | 53 | 54 | 128 | 198 | 423 | 224 | 113.2 |
| MM036 | Copper and related articles | 329 | 509 | 774 | 1,060 | 1,277 | 216 | 20.4 |
| AG024 | Other fresh fruit | 453 | 520 | 652 | 596 | 805 | 209 | 35.0 |
| MT023 | Electric motors, generators, and related equipment | 2,161 | 2,175 | 2,282 | 2,424 | 2,631 | 207 | 8.5 |
| MM031 | Miscellaneous products of base metal | 1,473 | 1,736 | 1,934 | 2,066 | 2,200 | 133 | 6.5 |
| CH033 | Miscellaneous plastic products | 1,105 | 1,387 | 1,633 | 1,783 | 1,909 | 126 | 7.0 |
| MT029 | Nonautomotive insulated electrical wire and related products | 1,222 | 1,441 | 1,785 | 2,228 | 2,346 | 118 | 5.3 |
| MM025C | Bars, rods, and light shapes of carbon and alloy steels | 116 | 210 | 215 | 164 | 274 | 110 | 66.8 |
| MM039 | Lead and related articles | 4 | 7 | 15 | 18 | 117 | 99 | 544.3 |
| MM037A | Primary and secondary aluminum | 7 | 3 | (^a) | 15 | 106 | 91 | 597.9 |
| AG034 | Pasta, cereals, and other bakery goods | 265 | 287 | 323 | 391 | 480 | 89 | 22.7 |
| Decreases | | | | | | | | |
| TX005 | Apparel | 7,200 | 6,944 | 6,322 | 5,530 | 4,708 | -822 | -14.9 |
| MM020A | Unrefined and refined gold | 130 | 132 | 267 | 917 | 561 | -356 | -38.8 |
| TX005E | Shirts and blouses | 2,019 | 1,845 | 1,689 | 1,578 | 1,255 | -323 | -20.5 |
| AG012 | Sugar and other sweeteners | 54 | 48 | 159 | 404 | 130 | -275 | -67.9 |
| AG012A | Sugar | 15 | 22 | 130 | 378 | 103 | -274 | -72.6 |
| TE009 | Motor vehicles | 19,327 | 19,116 | 18,521 | 23,548 | 23,300 | -248 | -1.1 |
| CH019 | Medicinal chemicals | 291 | 504 | 380 | 405 | 208 | -198 | -48.7 |
| TX005D | Women's and girls' trousers | 1,430 | 1,497 | 1,239 | 900 | 705 | -195 | -21.7 |
| CH001 | Major primary olefins | 78 | 71 | 46 | 320 | 146 | -173 | -54.2 |
| EL014 | Electron tubes | 385 | 475 | 411 | 253 | 88 | -166 | -65.3 |
| MM025B | Plates, sheets, and strips of carbon and alloy steels | 265 | 570 | 502 | 480 | 324 | -156 | -32.5 |
| TX005C | Men's and boys' trousers | 1,887 | 1,838 | 1,804 | 1,669 | 1,523 | -146 | -8.8 |
| MT025 | Portable electric handtools | 415 | 622 | 713 | 731 | 611 | -120 | -16.4 |
| MS009 | Furniture | 1,028 | 1,179 | 1,239 | 1,299 | 1,182 | -117 | -9.0 |
| TE002 | Internal combustion piston engines, other than for aircraft | 3,024 | 4,110 | 4,399 | 4,415 | 4,317 | -98 | -2.2 |
| EL016 | Miscellaneous electrical equipment | 442 | 529 | 521 | 738 | 647 | -91 | -12.3 |
| EL008 | Electrical capacitors and resistors | 478 | 453 | 611 | 790 | 704 | -86 | -10.9 |

See footnote(s) at end of table.

TABLE MX.2 Leading changes in U.S. exports to and U.S. imports from Mexico, 2003–07—*Continued*

| Sector/commodity ^a | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|------|-------|-------|-------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| TX001 Fibers and yarns, except raw cotton and raw wool | 435 | 464 | 498 | 452 | 370 | -82 | -18.1 |
| MT009 Farm and garden machinery and equipment | 257 | 377 | 463 | 506 | 424 | -82 | -16.1 |
| EL021 Photographic cameras and equipment | 329 | 271 | 172 | 228 | 147 | -81 | -35.5 |
| MM009 Cement, stone, and related products | 349 | 414 | 539 | 643 | 569 | -75 | -11.6 |
| EL019 Optical fibers, optical fiber bundles and cables | 63 | 123 | 183 | 246 | 185 | -61 | -24.9 |
| CH006 Certain organic chemicals | 167 | 160 | 230 | 274 | 221 | -54 | -19.5 |
| TX005S Other wearing apparel | 413 | 397 | 391 | 351 | 304 | -48 | -13.6 |
| MM025A Ingots, blooms, billets, and slabs of carbon and alloy steels | 383 | 899 | 1,023 | 860 | 818 | -42 | -4.9 |
| MS017 Works of art and miscellaneous manufactured goods | 135 | 163 | 162 | 153 | 115 | -38 | -24.9 |
| MM045 Certain builders' hardware | 611 | 730 | 957 | 967 | 931 | -36 | -3.7 |
| TX005I Robes, nightwear, and underwear | 273 | 242 | 200 | 151 | 117 | -34 | -22.4 |
| MM006 Zinc ores, concentrates, and residues | 7 | 6 | 17 | 43 | 11 | -32 | -75.1 |
| MM020 Precious metals and non-numismatic coins | 530 | 732 | 927 | 2,023 | 1,993 | -30 | -1.5 |

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

Note: Calculations based on unrounded data.

^aThis 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.

^bLess than \$500,000.

U.S. exports of transportation equipment and parts increased by \$1.2 billion (6 percent) to \$21.1 billion in 2007. Leading U.S. exports of transportation equipment and parts consisted largely of automobile components destined for the assembly of new vehicles by the Big Three OEMs,⁸⁹ for re-export to the North American market. Additionally, increased liberalization and availability of credit lines by foreign-owned Mexican banks has resulted in a rapid increase in car ownership in Mexico. There were approximately 20.6 million Mexican-owned motor vehicles in 2007, an increase from 18.6 million in 2005. Also, Mexican demand increased for imported car accessories that enhance the appearance of a motor vehicle such as luxury style seat covers, door and window handles, chrome-plated exhaust pipes, and large-sized wheels and tires for automobiles, pick-ups, and trucks.⁹⁰

U.S. Imports

U.S. imports of electronic products from Mexico rose by \$6.9 billion (15 percent) to \$54.0 billion in 2007; the predominate types of goods were television receivers and other consumer electronics, telecommunications equipment, medical goods, and circuit apparatus assemblies, accounting for 17 percent (\$35.9 billion) of imports. U.S. demand for electronic products from Mexico continued to expand as prices fell and consumers replaced conventional cathode-ray tube television sets with digital sets. Other leading electronic product imports from Mexico during 2007 included digital set top boxes, digital cable receivers, and digital satellite receivers.

In 2007, U.S. imports of automotive parts and motor vehicles from Mexico increased by \$1.1 billion (3 percent) to \$41.5 billion. The rise in U.S. imports was in response to increased FDI in Mexican assembly lines by Ford, Volkswagen, and Nissan. Mexican-made automotive components such as brakes, axles, wiring harnesses, and motor vehicle engines and related parts are used in motor vehicle assembly throughout North America. Increasingly, Mexican automotive assembly plants are requiring their basic auto part suppliers to be near plant installations so that they can reduce inventory investment and make use of just-in-time supply-line systems. U.S. consumer demand for small, fuel efficient motor vehicles increased in response to rising energy prices. Certain motor vehicle import models such as the Ford Focus, Nissan Sentra, and Volkswagen Beetle provide U.S.-based automotive makers with a broader product mix.⁹¹

U.S. imports of machinery and parts from Mexico increased by \$1.7 billion (9 percent) to \$20.0 billion in 2007, reflecting Mexico's continued growth as a manufacturing center for North America, due to its geographical proximity and relatively inexpensive labor. The bulk of the increase occurred in centrifuges and filtering and purifying equipment, which rose by \$401 million (82 percent) to \$893 million; electrical transformers, static converters, and inductors, which increased by \$298 million (18 percent) to \$2.0 billion; and major household appliances and parts, which increased by \$301 million (12 percent) to \$2.8 billion. The increase in imports of these products was largely due to strong demand for environmental technologies (water and wastewater) and power-generation equipment and larger orders for major household appliances.⁹²

⁸⁹ The Big Three original equipment manufacturers (OEMs) are Chrysler, General Motors, and Ford.

⁹⁰ USDOC, U.S. Commercial Service Mexico, *Automotive Manufacturing Industry in Mexico*, August 2008.

⁹¹ Ibid.

⁹² Downer, "Machine Sales Booming in Maquiladora Area," December 4, 2007.

U.S. imports of agricultural products from Mexico, which largely consisted of tropical fruit; vegetables; other fresh fruit; and pasta, cereals, and other bakery goods; increased by \$862 million (8 percent) to \$11.4 billion. The increase in value of U.S. agricultural imports continued to reflect price advantages and preferential access for Mexican products as a result of NAFTA.⁹³

⁹³ USDA, FAS, "Factsheet: North American Free Trade Agreement (NAFTA), January 2008.

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Part III: Commodities

This part of the report examines shifts in trade for each of 10 merchandise sectors. In addition to the sectors, 17 industries, subsets of the sectors, are examined in greater detail. These industries were selected because a shift in imports, exports, or the balance of trade from 2006–07 both on an absolute and percentage basis exceeded \$1.5 billion dollars and 10 percent.

Agricultural Products

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Change in 2007 from 2006:

U.S. trade balance: Improved by \$12.4 billion, from \$4.5 billion deficit to \$7.9 billion surplus

U.S. exports: Increased by \$19.1 billion (25 percent) to \$96.0 billion

U.S. imports: Increased by \$6.7 billion (8 percent) to \$88.1 billion

Relatively high global prices, combined with some increase in export volumes and comparatively little change in import values, transformed the 2006 trade deficit in agricultural products into a \$7.9 billion surplus in 2007, the first trade surplus in four years.⁹⁴ U.S. exports increased by \$19.1 billion (25 percent) to \$96.0 billion, while U.S. imports rose by \$6.7 billion (8 percent) to \$88.1 billion (table AG.1).⁹⁵ U.S. bulk commodity exports of cereals, oilseeds, meat, animal/vegetable oils, and dairy products accounted for most of the increase in U.S. agricultural exports in 2007 (table AG.2). The rise in cereal exports (40 percent), accounting for the largest share of U.S. agricultural export growth, was driven by higher grain prices globally, a decline in exportable supplies in several cereal-exporting countries,⁹⁶ and the depreciation of the U.S. dollar against several major currencies.

Slower growth in U.S. imports of agricultural products during 2007, in comparison with previous years, was due largely to a decline in U.S. ethanol and sugar/sweeteners imports because of increased U.S. domestic ethanol production in 2007, stemming from the recovery of U.S. sugar production that was negatively impacted by weather factors in 2006. Increased U.S. agricultural imports included animal/vegetable fats, juices, beer and distilled spirits, and coffee (table AG.2).

U.S. Exports

U.S. agricultural exports rose by \$19.1 billion (25 percent) to \$96.0 billion in 2007. The four leading markets for U.S. agricultural exports in 2007 (unchanged from 2006) were Canada, Mexico, Japan, and China, which together accounted for \$48.4 billion (50 percent) of the total (table AG.1). Exports to Canada, Mexico, China, and Japan increased by \$2.4 billion (19 percent), \$1.8 billion (16 percent), \$1.7 billion (24 percent), and \$1.4 billion (14 percent), respectively.

⁹⁴ See USDA, ERS, *Outlook for U.S. Agricultural Trade*, November 30, 2007, 1.

⁹⁵ The Commission includes distilled spirits, fish, shellfish, and manufactured tobacco products among these agricultural products. The U.S. Department of Agriculture (USDA) excludes these products from its coverage of agricultural products, and therefore reported agricultural trade surpluses since 2003, and totaling \$11.9 billion in 2007. USDA, ERS, *Outlook for U.S. Agricultural Trade*, May 29, 2008, 1.

⁹⁶ See USDA, ERS, *Outlook for U.S. Agricultural Trade*, November 30, 2007, 1.

TABLE AG.1 Agricultural products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|--------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise: | | | | | | | |
| Canada | 9,805 | 10,111 | 11,151 | 12,514 | 14,882 | 2,368 | 18.9 |
| Mexico | 8,176 | 8,994 | 9,678 | 11,066 | 12,876 | 1,809 | 16.3 |
| China | 5,129 | 5,879 | 5,648 | 7,264 | 8,981 | 1,717 | 23.6 |
| Japan | 10,845 | 10,087 | 9,840 | 10,342 | 11,750 | 1,408 | 13.6 |
| France | 505 | 520 | 573 | 632 | 686 | 54 | 8.6 |
| Italy | 673 | 697 | 777 | 736 | 918 | 182 | 24.7 |
| Korea | 3,307 | 2,863 | 2,646 | 3,279 | 3,904 | 625 | 19.1 |
| Netherlands | 1,215 | 1,220 | 1,260 | 1,789 | 1,680 | -109 | -6.1 |
| Thailand | 700 | 719 | 687 | 717 | 919 | 202 | 28.2 |
| Brazil | 361 | 247 | 203 | 265 | 394 | 129 | 48.9 |
| All other | 23,990 | 25,572 | 26,234 | 28,321 | 39,052 | 10,732 | 37.9 |
| Total | 64,706 | 66,908 | 68,698 | 76,924 | 96,041 | 19,117 | 24.9 |
| EU-27 | 7,610 | 7,997 | 8,160 | 8,704 | 10,210 | 1,506 | 17.3 |
| OPEC | 3,100 | 3,310 | 3,531 | 3,948 | 5,865 | 1,917 | 48.6 |
| Latin America | 13,052 | 14,249 | 15,157 | 17,502 | 21,446 | 3,943 | 22.5 |
| CBERA | 1,319 | 1,436 | 1,528 | 1,677 | 2,088 | 411 | 24.5 |
| Asia | 26,484 | 26,035 | 25,594 | 29,015 | 35,321 | 6,306 | 21.7 |
| Sub-Saharan Africa | 1,100 | 1,408 | 1,508 | 1,349 | 1,967 | 618 | 45.8 |
| Central and Eastern Europe | 231 | 362 | 402 | 317 | 328 | 11 | 3.6 |
| U.S. imports of merchandise for consumption: | | | | | | | |
| Canada | 12,975 | 14,130 | 14,963 | 16,128 | 17,919 | 1,791 | 11.1 |
| Mexico | 7,220 | 8,189 | 9,323 | 10,498 | 11,360 | 862 | 8.2 |
| China | 2,470 | 2,925 | 3,365 | 4,303 | 4,945 | 641 | 14.9 |
| Japan | 482 | 503 | 540 | 573 | 601 | 28 | 4.9 |
| France | 2,614 | 2,723 | 2,935 | 3,277 | 3,723 | 445 | 13.6 |
| Italy | 2,401 | 2,640 | 2,927 | 3,173 | 3,464 | 291 | 9.2 |
| Korea | 266 | 296 | 330 | 343 | 363 | 20 | 5.8 |
| Netherlands | 2,023 | 2,079 | 2,044 | 2,293 | 2,472 | 179 | 7.8 |
| Thailand | 2,121 | 2,116 | 2,291 | 2,742 | 2,830 | 88 | 3.2 |
| Brazil | 1,815 | 1,995 | 2,246 | 3,451 | 3,222 | -229 | -6.6 |
| All other | 26,511 | 29,417 | 32,086 | 34,675 | 37,237 | 2,562 | 7.4 |
| Total | 60,899 | 67,012 | 73,050 | 81,456 | 88,136 | 6,679 | 8.2 |
| EU-27 | 12,962 | 13,913 | 14,871 | 16,220 | 17,558 | 1,337 | 8.2 |
| OPEC | 2,387 | 2,571 | 2,881 | 3,054 | 3,172 | 118 | 3.8 |
| Latin America | 18,041 | 20,092 | 22,876 | 26,589 | 28,109 | 1,519 | 5.7 |
| CBERA | 1,529 | 1,546 | 1,656 | 2,052 | 2,167 | 115 | 5.6 |
| Asia | 10,164 | 11,369 | 12,421 | 14,418 | 15,931 | 1,513 | 10.5 |
| Sub-Saharan Africa | 1,138 | 1,149 | 1,334 | 1,285 | 1,157 | -128 | -10.0 |
| Central and Eastern Europe | 428 | 494 | 479 | 468 | 509 | 41 | 8.7 |

TABLE AG.1 Agricultural products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—Continued

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---------------------------------|--------|--------|--------|--------|--------|------------------------|------------------|
| | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | |
| U.S. merchandise trade balance: | | | | | | | |
| Canada | -3,170 | -4,019 | -3,811 | -3,614 | -3,037 | 577 | 16.0 |
| Mexico | 956 | 805 | 355 | 568 | 1,516 | 947 | 166.7 |
| China | 2,659 | 2,954 | 2,283 | 2,961 | 4,036 | 1,075 | 36.3 |
| Japan | 10,362 | 9,583 | 9,301 | 9,769 | 11,149 | 1,379 | 14.1 |
| France | -2,109 | -2,203 | -2,361 | -2,646 | -3,037 | -391 | -14.8 |
| Italy | -1,728 | -1,942 | -2,150 | -2,437 | -2,546 | -109 | -4.5 |
| Korea | 3,041 | 2,567 | 2,316 | 2,936 | 3,541 | 605 | 20.6 |
| Netherlands | -808 | -859 | -785 | -504 | -792 | -288 | -57.1 |
| Thailand | -1,420 | -1,397 | -1,604 | -2,025 | -1,911 | 114 | 5.7 |
| Brazil | -1,454 | -1,749 | -2,043 | -3,186 | -2,827 | 358 | 11.3 |
| All other | -2,522 | -3,845 | -5,852 | -6,355 | 1,815 | 8,170 | (^b) |
| Total | 3,807 | -104 | -4,352 | -4,532 | 7,906 | 12,438 | (^b) |
| EU-27 | -5,352 | -5,916 | -6,712 | -7,516 | -7,348 | 169 | 2.2 |
| OPEC | 713 | 739 | 651 | 893 | 2,693 | 1,799 | 201.4 |
| Latin America | -4,989 | -5,843 | -7,718 | -9,087 | -6,663 | 2,424 | 26.7 |
| CBERA | -210 | -110 | -128 | -375 | -79 | 296 | 78.9 |
| Asia | 16,320 | 14,666 | 13,173 | 14,597 | 19,390 | 4,793 | 32.8 |
| Sub-Saharan Africa | -38 | 259 | 175 | 63 | 810 | 746 | 1,176.9 |
| Central and Eastern Europe | -197 | -132 | -77 | -151 | -181 | -29 | -19.3 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bNot meaningful for purposes of comparison.

TABLE AG.2 Agricultural products: Leading changes in U.S. exports and imports, 2003–07

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|--------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | |
| U.S. EXPORTS: | | | | | | | |
| Increases: | | | | | | | |
| AG030 Cereals | 10,429 | 12,683 | 11,096 | 13,341 | 20,860 | 7,519 | 56.4 |
| AG032 Oilseeds | 8,153 | 6,911 | 6,527 | 7,172 | 10,346 | 3,173 | 44.2 |
| AG013 Animal feeds | 4,207 | 4,160 | 4,535 | 5,065 | 6,144 | 1,079 | 21.3 |
| AG005 Poultry | 2,022 | 2,280 | 2,795 | 2,588 | 3,655 | 1,067 | 41.2 |
| AG033 Animal or vegetable fats and oils | 1,986 | 1,965 | 1,808 | 2,010 | 2,981 | 971 | 48.3 |
| AG010 Dairy produce | 679 | 1,066 | 1,195 | 1,387 | 2,358 | 971 | 70.0 |
| AG002 Cattle and beef | 3,501 | 605 | 1,041 | 1,655 | 2,156 | 502 | 30.3 |
| AG031 Milled grains, malts, and starches | 599 | 610 | 668 | 858 | 1,179 | 321 | 37.4 |
| AG012 Sugar and other sweeteners | 391 | 435 | 538 | 754 | 1,074 | 320 | 42.5 |
| AG003 Swine and pork | 1,330 | 1,866 | 2,246 | 2,422 | 2,709 | 288 | 11.9 |
| AG050 Ethyl alcohol for nonbeverage purposes | 103 | 81 | 109 | 76 | 357 | 281 | 370.7 |
| AG034 Pasta, cereals, and other bakery goods | 1,287 | 1,381 | 1,575 | 1,771 | 2,015 | 243 | 13.7 |
| AG019 Prepared or preserved vegetables, mushrooms, and olives | 1,326 | 1,417 | 1,548 | 1,708 | 1,943 | 235 | 13.8 |
| AG020 Edible nuts | 1,785 | 2,242 | 2,925 | 3,092 | 3,311 | 219 | 7.1 |
| AG046 Hides, skins, and leather | 2,492 | 2,730 | 2,580 | 2,755 | 2,932 | 177 | 6.4 |
| AG023 Deciduous fruit | 810 | 813 | 995 | 1,065 | 1,233 | 167 | 15.7 |
| AG015 Seeds | 859 | 1,066 | 940 | 893 | 1,051 | 158 | 17.7 |
| AG042 Distilled spirits | 592 | 727 | 763 | 893 | 1,035 | 142 | 15.9 |
| AG037 Cocoa, chocolate, and confectionery | 914 | 946 | 991 | 1,066 | 1,206 | 140 | 13.1 |
| AG018 Fresh, chilled, or frozen vegetables | 1,408 | 1,449 | 1,621 | 1,766 | 1,902 | 136 | 7.7 |
| AG024 Other fresh fruit | 775 | 854 | 1,021 | 1,052 | 1,170 | 118 | 11.2 |
| AG038 Fruit and vegetable juices | 674 | 660 | 731 | 862 | 979 | 117 | 13.6 |
| AG001 Certain miscellaneous animals and meats | 1,778 | 1,460 | 1,821 | 2,055 | 2,158 | 103 | 5.0 |
| AG028 Coffee and tea | 348 | 349 | 450 | 559 | 657 | 98 | 17.6 |
| AG017 Miscellaneous vegetable substances | 510 | 558 | 554 | 602 | 697 | 95 | 15.9 |
| AG039 Nonalcoholic beverages, excluding fruit and vegetable juices | 397 | 407 | 478 | 554 | 643 | 89 | 16.0 |
| AG049 Cotton, not carded or combed | 3,203 | 4,222 | 3,920 | 4,501 | 4,578 | 78 | 1.7 |
| AG012B High fructose corn sweetener | 76 | 69 | 78 | 146 | 220 | 73 | 49.9 |
| AG041 Wine and certain other fermented beverages | 634 | 793 | 658 | 842 | 910 | 68 | 8.0 |
| AG035 Sauces, condiments, and soups | 813 | 842 | 869 | 947 | 1,014 | 67 | 7.1 |
| Decreases: | | | | | | | |
| AG045 Cigarettes | 1,403 | 1,294 | 1,200 | 1,214 | 1,012 | -201 | -16.6 |
| AG021 Tropical fruit | 54 | 63 | 71 | 80 | 62 | -18 | -22.4 |
| AG009 Shellfish | 761 | 798 | 883 | 961 | 949 | -13 | -1.3 |
| AG004 Sheep and meat of sheep | 17 | 14 | 17 | 30 | 21 | -9 | -29.1 |
| AG008 Cured and other fish | 161 | 164 | 170 | 181 | 178 | -2 | -1.4 |

See footnote(s) at end of table.

TABLE AG.2 Agricultural products: Leading changes in U.S. exports and imports, 2003–07—*Continued*

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|---|-------|-------|-------|-------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. IMPORTS: | | | | | | | | |
| Increases: | | | | | | | | |
| AG033 | Animal or vegetable fats and oils | 1,491 | 2,193 | 2,294 | 2,753 | 3,358 | 606 | 22.0 |
| AG038 | Fruit and vegetable juices | 793 | 835 | 1,029 | 1,145 | 1,738 | 594 | 51.8 |
| AG042 | Distilled spirits | 3,453 | 3,734 | 4,106 | 4,527 | 5,081 | 554 | 12.2 |
| AG041 | Wine and certain other fermented beverages | 3,307 | 3,445 | 3,797 | 4,176 | 4,658 | 483 | 11.6 |
| AG028 | Coffee and tea | 2,228 | 2,560 | 3,309 | 3,694 | 4,173 | 479 | 13.0 |
| AG030 | Cereals | 646 | 699 | 657 | 963 | 1,425 | 462 | 48.0 |
| AG002 | Cattle and beef | 3,302 | 3,909 | 4,410 | 4,443 | 4,844 | 401 | 9.0 |
| AG018 | Fresh, chilled, or frozen vegetables | 3,250 | 3,650 | 3,871 | 4,310 | 4,701 | 390 | 9.1 |
| AG006 | Fresh or frozen fish | 3,354 | 3,520 | 3,963 | 4,555 | 4,922 | 367 | 8.1 |
| AG034 | Pasta, cereals, and other bakery goods | 2,501 | 2,719 | 3,016 | 3,335 | 3,690 | 355 | 10.6 |
| AG021 | Tropical fruit | 1,754 | 1,772 | 2,035 | 2,219 | 2,530 | 311 | 14.0 |
| AG019 | Prepared or preserved vegetables, mushrooms, and olives | 1,779 | 2,044 | 2,147 | 2,290 | 2,550 | 260 | 11.3 |
| AG039 | Nonalcoholic beverages, excluding fruit and vegetable juices | 966 | 1,158 | 1,329 | 1,769 | 2,012 | 244 | 13.8 |
| AG024 | Other fresh fruit | 1,200 | 1,396 | 1,684 | 1,826 | 2,035 | 209 | 11.5 |
| AG010 | Dairy produce | 1,654 | 1,911 | 2,102 | 2,018 | 2,212 | 194 | 9.6 |
| AG032 | Oilseeds | 208 | 335 | 335 | 387 | 572 | 185 | 47.8 |
| AG013 | Animal feeds | 705 | 873 | 789 | 905 | 1,084 | 178 | 19.7 |
| AG031 | Milled grains, malts, and starches | 441 | 518 | 490 | 550 | 721 | 171 | 31.0 |
| AG001 | Certain miscellaneous animals and meats | 1,683 | 1,972 | 2,128 | 2,234 | 2,399 | 164 | 7.4 |
| AG029 | Spices | 682 | 625 | 503 | 543 | 677 | 134 | 24.7 |
| AG027 | Prepared or preserved fruit | 688 | 768 | 858 | 985 | 1,116 | 131 | 13.3 |
| AG022 | Citrus fruit | 437 | 444 | 519 | 602 | 723 | 121 | 20.1 |
| AG043 | Unmanufactured tobacco | 757 | 702 | 652 | 751 | 840 | 89 | 11.8 |
| AG035 | Sauces, condiments, and soups | 663 | 743 | 790 | 850 | 937 | 87 | 10.2 |
| AG020 | Edible nuts | 775 | 1,079 | 1,121 | 1,101 | 1,184 | 82 | 7.5 |
| AG023 | Deciduous fruit | 306 | 358 | 324 | 393 | 462 | 69 | 17.5 |
| AG015 | Seeds | 452 | 460 | 525 | 624 | 692 | 68 | 11.0 |
| AG016 | Cut flowers | 611 | 706 | 709 | 768 | 831 | 63 | 8.2 |
| AG017 | Miscellaneous vegetable substances | 880 | 921 | 1,038 | 1,193 | 1,256 | 62 | 5.2 |
| AG026 | Frozen fruit | 202 | 225 | 286 | 356 | 415 | 59 | 16.5 |
| Decreases: | | | | | | | | |
| AG050 | Ethyl alcohol for nonbeverage purposes | 191 | 259 | 337 | 1,600 | 978 | -621 | -38.8 |
| AG012A | Sugar | 592 | 585 | 908 | 1,351 | 859 | -492 | -36.4 |
| AG012 | Sugar and other sweeteners | 1,035 | 979 | 1,323 | 1,868 | 1,391 | -477 | -25.5 |

See footnote(s) at end of table.

TABLE AG.2 Agricultural products: Leading changes in U.S. exports and imports, 2003–07—*Continued*

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|-------|-------|-------|-------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| AG009 Shellfish | 6,492 | 6,472 | 6,696 | 7,288 | 7,246 | -42 | -0.6 |
| AG046 Hides, skins, and leather | 817 | 886 | 896 | 841 | 810 | -30 | -3.6 |
| AG045 Cigarettes | 234 | 231 | 194 | 190 | 170 | -20 | -10.6 |
| AG048 Wool and other animal hair | 38 | 45 | 41 | 41 | 35 | -6 | -15.0 |
| AG049 Cotton, not carded or combed | 26 | 16 | 14 | 13 | 8 | -6 | -42.2 |
| AG007 Canned fish | 777 | 843 | 889 | 953 | 950 | -3 | -0.3 |

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

Note: Calculations based on unrounded data.

^aThis 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.

The largest shift among agricultural product exports in 2007 was the \$7.5 billion (56 percent) increase in U.S. cereals exports (table AG.2). About 87 percent of the \$20.9 billion in U.S. cereals exports in 2007 consisted of corn and wheat.⁹⁷ In 2007, increased domestic demand for corn to produce ethanol resulted in record-high corn prices, a U.S. grower shift to corn production from other grains,⁹⁸ and subsequently, record-high price levels for most grains. As a result, U.S. corn exports fell by 2 percent to 57 million metric tons (MMT), and corn export unit prices increased by 41 percent in 2007.⁹⁹ Similarly, wheat export unit prices also reached new highs in 2007, although wheat export volumes increased substantially in part because of reduced volumes available for export in traditional wheat-exporting countries such as Australia, Canada, and Ukraine and government-imposed export restrictions in Ukraine and Argentina.¹⁰⁰ U.S. wheat export volumes increased by 41 percent, and export unit prices rose by 40 percent.¹⁰¹

Oilseeds (chiefly soybeans) registered the second-largest shift in U.S. agricultural exports in 2007, increasing by \$3.2 billion (44 percent) over 2006. The volume of U.S. soybean exports rose by 6 percent, while export prices increased by 37 percent. The increase in export volumes was the result of record domestic production during the 2006/07 crop year,¹⁰² strong import demand by China,¹⁰³ and reduced competition from Brazil in third-country markets because of increased Brazilian domestic demand for soybeans.¹⁰⁴ Soybean prices were also influenced by strong increases in U.S. wheat and corn prices, which reached record levels in 2007 and encouraged producers to shift acreage otherwise intended for growing soybeans to these crops, particularly corn. Similarly, animal feeds, for which grains are a major component, saw an increase of \$1.1 billion (21 percent) in 2007, the third-largest shift in U.S. agricultural exports for the period.

U.S. poultry exports recorded the fourth-largest shift in U.S. agricultural exports in 2007, increasing by \$1.1 billion (41 percent) over 2006. The volume of U.S. poultry exports increased by 16 percent, while export prices rose by 26 percent. The increase in export volumes was the result of strong demand influenced by the declining relative value of the U.S. dollar. U.S. poultry exports to Russia and China accounted for a combined 30 percent of the overall increase in 2007. Poultry export prices were also influenced by increased feed costs related to rising cereals prices.

U.S. Imports

U.S. agricultural imports rose by \$6.7 billion (8 percent) to \$88.1 billion in 2007. Higher fuel prices and the negative effect of the declining housing market on disposable incomes contributed to the slower growth in imports as compared to 2006.¹⁰⁵ As in each of the previous four years, Canada, at \$17.9 billion, was the leading supplier of agricultural products to the United States in 2007, with Mexico second at \$11.4 billion. Imports from Canada and Mexico also experienced the largest increases in 2007 (\$1.8 billion and

⁹⁷ USITC, Dataweb (accessed October 21, 2008).

⁹⁸ World Bank, "Commodity Markets Briefs: Wheat," May 20, 2008.

⁹⁹ USITC, Dataweb (accessed October 21, 2008).

¹⁰⁰ USDA, ERS, *Outlook for U.S. Agricultural Trade*, November 30, 2007, 13–14; World Bank, "Commodity Markets Briefs: Wheat," May 20, 2008.

¹⁰¹ USITC, Dataweb (accessed October 21, 2008).

¹⁰² Crop year begins September 1 and ends August 31 for soybeans.

¹⁰³ USDA, ERS, *Outlook for U.S. Agricultural Trade*, August 31, 2007, 3.

¹⁰⁴ See the Oilseeds section for more details.

¹⁰⁵ USDA, ERS, *Outlook for U.S. Agricultural Trade*, August 31, 2007, 1.

\$862 million, respectively). U.S. imports from China, the third-largest supplier, rose by \$641 million (15 percent) to \$4.9 billion.

Imports from Brazil experienced the largest decline of any import source, declining by \$229 million (7 percent) to \$3.2 billion in 2007. Brazil is a major source of U.S. sugar imports and the primary source of U.S. ethanol imports, which registered the largest shift of any U.S. agricultural import category. Total ethanol imports declined by \$621 million (39 percent) to \$978 million in 2007 because of increased U.S. domestic ethanol production. In 2007, sugar imports declined by \$492 million (36 percent) to \$859 million as import levels reverted to more normal patterns following the negative effects of Hurricane Katrina on domestic sugar production in 2006. Imports of sugar from Mexico declined the most, falling by \$275 million (68 percent) to \$130 million in 2007.

Cereals (Food and Feed Grains)¹⁰⁶

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Change in 2007 from 2006:

U.S. trade surplus: Increased by \$7.1 billion (57 percent) to \$19.4 billion

U.S. exports: Increased by \$7.5 billion (56 percent) to \$20.9 billion

U.S. imports: Increased by \$462 million (48 percent) to \$1.4 billion

The significant increase in grain prices globally and some increase in U.S. wheat and corn export quantities because of reduced foreign competition were key factors in the large U.S. cereal trade growth during 2007. The U.S. trade surplus in cereals rose by \$7.1 billion (57 percent) to \$19.4 billion (table AG.3). The value of U.S. cereal exports increased by \$7.5 billion (56 percent) to \$20.9 billion, while the quantity exported increased by 12 percent to 10 MMT.¹⁰⁷ Wheat and corn exports, the dominant components of U.S. grain exports, increased by \$4.1 billion (97 percent) and \$2.8 billion (38 percent), respectively. U.S. cereal imports increased by \$462 million (48 percent) to \$1.4 billion, and, as with U.S. cereal exports, this value increase was affected more by global cereal price increases, as import volumes rose by 851,000 metric tons (MT) (17 percent).¹⁰⁸

U.S. Exports

Wheat and corn prices rose to record levels in 2007,¹⁰⁹ contributing to a significant increase in the total value of cereal exports. These high prices were caused by record world consumption of wheat and feed grains during 2007 with global grain stocks at a 30-year low, as a result of world consumption exceeding production in seven of the previous eight years.¹¹⁰ The quantity of U.S. wheat exports increased in 2007 because of greater exportable supplies of U.S. wheat and a reduction in competitors' export supplies in the 2007/08 (July/June) crop year, particularly from Australia, Canada,¹¹¹ the EU, and Ukraine.¹¹² All four major competitors suffered weather-related wheat production declines in 2007. The

¹⁰⁶ Grains include rice, wheat, barley, corn, sorghum, oats, and rye. Milled grain products, such as wheat flour, are not included.

¹⁰⁷ USITC, Dataweb (accessed October 21, 2008).

¹⁰⁸ Ibid.

¹⁰⁹ The U.S. farm price for wheat increased by 52 percent from 2006 to 2007 to \$6.48 per bushel and the farm price for corn increased by 32 percent from 2006 to 2007 to \$4.00 per bushel. USDA, NASS, *Agricultural Prices: 2007 Summary*, July 2008, 34, 44.

¹¹⁰ Schnepf, *High Wheat Prices: What Are the Issues?* February 29, 2008, 3–4; USDA, ERS, *Outlook for U.S. Agricultural Trade*, November 30, 2007, 14.

¹¹¹ Although Canada and the United States produce wheat in contiguous locations in the Canadian Prairies and the Northern Plains respectively, U.S. wheat production is more geographically diverse, with production in the Pacific Northwest, Corn Belt, Southern Plains, Delta, and Southeastern regions. This allows U.S. wheat production to be less affected by weather-related factors than wheat production in Canada.

¹¹² Schnepf, *High Wheat Prices: What Are the Issues?* February 29, 2008, 3.

TABLE AG.3 Cereals (AG030): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|---------------|---------------|---------------|---------------|------------------------|-------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. exports of domestic merchandise: | | | | | | | |
| Japan | 2,381 | 2,697 | 2,428 | 2,895 | 3,768 | 873 | 30.1 |
| Mexico | 1,514 | 1,695 | 1,553 | 2,038 | 2,711 | 672 | 33.0 |
| Canada | 459 | 349 | 345 | 355 | 576 | 221 | 62.1 |
| Egypt | 782 | 768 | 553 | 685 | 1,346 | 661 | 96.5 |
| Korea | 279 | 793 | 426 | 943 | 1,202 | 259 | 27.4 |
| Taiwan | 682 | 812 | 749 | 747 | 1,123 | 376 | 50.3 |
| Colombia | 281 | 308 | 355 | 456 | 728 | 271 | 59.5 |
| Nigeria | 271 | 390 | 513 | 457 | 653 | 196 | 42.9 |
| Iraq | 19 | 51 | 312 | 435 | 516 | 80 | 18.4 |
| Spain | 106 | 53 | 68 | 50 | 491 | 441 | 879.7 |
| All other | 3,655 | 4,767 | 3,793 | 4,277 | 7,746 | 3,469 | 81.1 |
| Total | 10,429 | 12,683 | 11,096 | 13,341 | 20,860 | 7,519 | 56.4 |
| EU-27 | 427 | 401 | 340 | 257 | 1,083 | 826 | 321.3 |
| OPEC | 824 | 1,030 | 1,322 | 1,634 | 2,685 | 1,051 | 64.3 |
| Latin America | 3,324 | 3,671 | 3,500 | 4,335 | 6,261 | 1,926 | 44.4 |
| CBERA | 408 | 478 | 480 | 527 | 688 | 161 | 30.6 |
| Asia | 3,852 | 5,320 | 4,185 | 5,322 | 7,174 | 1,852 | 34.8 |
| Sub-Saharan Africa | 626 | 776 | 921 | 776 | 1,167 | 391 | 50.4 |
| Central and Eastern Europe | 30 | 69 | 3 | 2 | 13 | 10 | 448.2 |
| U.S. imports of merchandise for consumption: | | | | | | | |
| Japan | (b) | (b) | (b) | 1 | 1 | (b) | -22.1 |
| Mexico | 8 | 11 | 7 | 14 | 41 | 27 | 193.9 |
| Canada | 338 | 399 | 389 | 622 | 996 | 374 | 60.2 |
| Egypt | (b) | (b) | (b) | 10 | 9 | -1 | -13.5 |
| Korea | (b) | (b) | (b) | (b) | 1 | 1 | 872.9 |
| Taiwan | (b) | (b) | (b) | (b) | (b) | (b) | -3.8 |
| Colombia | (b) | (b) | 0 | (b) | (b) | (b) | 7.8 |
| Nigeria | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| Iraq | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| Spain | (b) | (b) | (b) | 1 | 1 | (b) | -2.5 |
| All other | 298 | 289 | 260 | 316 | 377 | 62 | 19.6 |
| Total | 646 | 699 | 657 | 963 | 1,425 | 462 | 48.0 |
| EU-27 | 91 | 45 | 48 | 14 | 14 | (b) | 0.5 |
| OPEC | 1 | 1 | 2 | 2 | 1 | (b) | -24.5 |
| Latin America | 14 | 23 | 9 | 23 | 47 | 24 | 105.9 |
| CBERA | (b) | (b) | (b) | (b) | (b) | (b) | 31.8 |
| Asia | 201 | 231 | 209 | 291 | 356 | 65 | 22.3 |
| Sub-Saharan Africa | (b) | (b) | (b) | (b) | (b) | (b) | 23.2 |
| Central and Eastern Europe | (b) | (b) | 1 | (b) | (b) | (b) | -37.5 |

See footnote(s) at end of table.

TABLE AG.3 Cereals (AG030): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—Continued

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---------------------------------|------------------------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. merchandise trade balance: | | | | | | | |
| Japan | 2,380 | 2,697 | 2,428 | 2,894 | 3,767 | 873 | 30.2 |
| Mexico | 1,506 | 1,684 | 1,546 | 2,025 | 2,670 | 645 | 31.9 |
| Canada | 121 | -49 | -44 | -266 | -419 | -153 | -57.6 |
| Egypt | 782 | 768 | 553 | 675 | 1,338 | 662 | 98.1 |
| Korea | 279 | 793 | 426 | 943 | 1,201 | 258 | 27.3 |
| Taiwan | 682 | 812 | 749 | 747 | 1,123 | 376 | 50.3 |
| Colombia | 281 | 308 | 355 | 456 | 728 | 271 | 59.5 |
| Nigeria | 271 | 390 | 513 | 457 | 653 | 196 | 42.9 |
| Iraq | 19 | 51 | 312 | 435 | 516 | 80 | 18.4 |
| Spain | 106 | 53 | 67 | 50 | 491 | 441 | 890.1 |
| All other | 3,357 | 4,478 | 3,533 | 3,961 | 7,368 | 3,407 | 86.0 |
| Total | 9,784 | 11,984 | 10,439 | 12,378 | 19,435 | 7,057 | 57.0 |
| EU-27 | 336 | 356 | 293 | 243 | 1,069 | 826 | 339.2 |
| OPEC | 824 | 1,030 | 1,320 | 1,632 | 2,683 | 1,052 | 64.4 |
| Latin America | 3,310 | 3,648 | 3,490 | 4,312 | 6,213 | 1,901 | 44.1 |
| CBERA | 407 | 478 | 479 | 527 | 688 | 161 | 30.6 |
| Asia | 3,650 | 5,089 | 3,977 | 5,031 | 6,818 | 1,787 | 35.5 |
| Sub-Saharan Africa | 626 | 776 | 921 | 776 | 1,167 | 391 | 50.4 |
| Central and Eastern Europe | 29 | 68 | 2 | 2 | 12 | 11 | 566.6 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

quantity of U.S. corn exports also increased in 2007, largely the result of a record U.S. crop in 2007 and a reduction in export competition from Argentina¹¹³ and China. Strong economic growth and rising disposable incomes led to an increase in China's meat consumption in 2007, increasing its domestic corn feed use¹¹⁴ and reducing exportable corn supplies¹¹⁵ during a period when Chinese corn production also leveled off.¹¹⁶ Among the major U.S. export markets for cereals, U.S. exports to Japan increased by \$873 million (30 percent) to \$3.8 billion in 2007, while exports to Mexico and Egypt increased by \$692 million (33 percent) and \$661 million (97 percent), respectively (table AG.3).

U.S. Imports

Similar to U.S. exports, a large proportion of the increase in the value of U.S. cereal imports in 2007 was the result of record-high prices for these grains,¹¹⁷ although import quantities increased by relatively smaller amounts as well (wheat by 16 percent, rice by 10 percent, and oats by 4 percent). Wheat (\$501 million), rice (\$386 million), and oats (\$355 million) represented 76 percent of all U.S. cereal imports by value in 2007.

Canada supplied virtually all U.S. imports of wheat, barley, and oats in 2007. Factors behind the increase in the quantity of these imports include reduced supplies of U.S. wheat in the 2006/07 crop year¹¹⁸ and the continued decline of U.S. oats and barley production since the early 1990s because of relatively higher returns¹¹⁹ for other crops, such as corn and soybeans.¹²⁰

The value of U.S. imports of rice from Thailand, the largest supplier of rice to the United States, increased by \$34 million (19 percent) to \$218 million in 2007. Other leading suppliers with notable increases in 2007 were India, up by \$20 million (36 percent), and China, up by \$8 million (21 percent). The quantity of rice imported from these countries also increased as the United States does not currently produce aromatic varieties of the same quality as produced in Asia.¹²¹ The U.S. market for aromatic rice has grown steadily in part because of increased Asian immigration to the United States. Rice prices also increased in 2007 because of strong price increases for other grains, which diverted cropland from rice production, and rice export bans imposed by India and Vietnam, put upward pressure on prices by limiting export supply.¹²²

¹¹³ Argentina imposed a ban on corn exports. USDA, ERS, *Outlook for U.S. Agricultural Trade*, February 21, 2008, 3.

¹¹⁴ See Ronald Trostle, USDA, ERS, *Global Agricultural Supply and Demand: Factors Contributing to the Recent Increase in Food Commodity Prices*, July 2008, 12.

¹¹⁵ USDA, ERS, *Grain: World Markets and Trade*, March 2008, 1.

¹¹⁶ World Bank, "Commodity Markets Briefs: Maize," May 20, 2008.

¹¹⁷ USDA, ERS, *Outlook for U.S. Agricultural Trade*, November 30, 2007, 9.

¹¹⁸ USDA, ERS, *Wheat Situation and Outlook Yearbook*, table 6, May 2006.

¹¹⁹ These relatively higher returns for corn and soybeans compared to oats come in the form of higher prices, stronger annual yield growth, and more attractive government farm program payments.

¹²⁰ USDA, ERS, *Feedgrains Background*, March 2007, 16–17; USDA, ERS, *Outlook for U.S. Agricultural Trade*, August 31, 2007, 9.

¹²¹ USDA, ERS, *Rice Situation and Outlook Yearbook*, November 2007, 12.

¹²² *Ibid.*, November 2007, 3. See World Bank, "Commodity Markets Briefs: Rice, Milled," May 20, 2008.

Change in 2007 from 2006:

U.S. trade surplus: Increased by \$3.0 billion (44 percent) to \$9.8 billion

U.S. exports: Increased by \$3.2 billion (44 percent) to \$10.3 billion

U.S. imports: Increased by \$185 million (48 percent) to \$572 million

Sharply higher global oilseed prices, record production of U.S. soybeans during the 2006/07 (September/August) crop year, reduced export competition from Brazil, and continued strong import demand from China were all instrumental in the \$3.0 billion (44 percent) rise in the U.S. trade surplus in oilseeds to \$9.8 billion in 2007 (table AG.4). The value of U.S. oilseed exports increased by \$3.2 billion (44 percent) while the quantity exported increased by significantly less (6 percent) to 1.8 million metric tons (MMT). The value of U.S. oilseed imports increased by \$185 million (48 percent) to \$572 million with the quantity imported increasing by 82,000 metric tons (MT) (45 percent) to 262,000 MT.

U.S. Exports

U.S. exports of oilseeds rose by \$3.2 billion (44 percent) to \$10.3 billion in 2007. Soybeans were the largest component of this group, accounting for \$10.0 billion (97 percent) of the value of U.S. oilseed exports in 2007.¹²⁰ The value increase of U.S. soybean exports (by \$3.1 billion, or 45 percent) was significantly greater than the volume increase (by 1.7 MMT, or 6 percent) as global soybean prices increased sharply in 2007 compared to 2006.¹²¹ Soybean prices rose in 2007 because of greater demand for soybean meal and soybean oil worldwide, especially the latter as domestic demand for biodiesel increased greatly from 2006.¹²² Soybean prices were also influenced by strong gains in U.S. wheat and corn prices, which reached record levels in 2007 because of low global grain supplies.¹²³ Increasing wheat and corn prices caused soybean prices to rise during the first half of 2007 in anticipation of strong competition between the three crops for acreage in the next crop year (2007/08) during spring planting in the United States.¹²⁴ The increase in soybean prices occurred despite record U.S. soybean production in the 2006/07 crop year as farmers planted

¹¹⁹ Oilseeds include soybeans, rapeseed, sunflower, and flaxseed. Meals and oils obtained from the processing of oilseeds are not included in this group.

¹²⁰ USITC, Dataweb (accessed May 22, 2008).

¹²¹ In 2007, the annual average soybean price received by U.S. farmers was \$7.74 per bushel compared to \$5.67 in 2006. USDA, NASS, *Agricultural Prices: 2007 Summary*, July 2008, 82–83.

¹²² USDA, ERS, *Oil Crops Yearend Review: U.S. Soybean Demand Powered by Record 2006/07 Supply*, March 2008, 7; World Bank, “Commodity Markets Briefs: Soybeans,” May 20, 2008.

¹²³ USDA, ERS, *Oil Crops Yearend Review: U.S. Soybean Demand Powered by Record 2006/07 Supply*, March 2008, 8.

¹²⁴ *Ibid.*

TABLE AG.4 Oilseeds (AG032): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|---|------------------------|--------------|--------------|--------------|---------------|------------------------|-------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise: | | | | | | | | |
| China | 2,832 | 2,333 | 2,255 | 2,536 | 4,121 | 1,586 | 62.5 | |
| Mexico | 1,032 | 853 | 917 | 1,000 | 1,256 | 256 | 25.6 | |
| Japan | 966 | 1,010 | 788 | 870 | 1,116 | 247 | 28.4 | |
| Taiwan | 420 | 303 | 430 | 474 | 715 | 241 | 50.9 | |
| Canada | 232 | 208 | 134 | 109 | 142 | 33 | 30.3 | |
| Indonesia | 324 | 264 | 302 | 289 | 402 | 113 | 39.0 | |
| Germany | 299 | 394 | 211 | 35 | 342 | 307 | 866.3 | |
| Netherlands | 189 | 74 | 120 | 491 | 338 | -153 | -31.2 | |
| Korea | 294 | 295 | 210 | 127 | 174 | 47 | 37.4 | |
| Egypt | 29 | 42 | 93 | 94 | 166 | 72 | 77.0 | |
| All other | 1,536 | 1,137 | 1,067 | 1,148 | 1,573 | 424 | 36.9 | |
| Total | 8,153 | 6,911 | 6,527 | 7,172 | 10,346 | 3,173 | 44.2 | |
| EU-27 | 1,186 | 937 | 662 | 789 | 1,115 | 326 | 41.3 | |
| OPEC | 381 | 299 | 324 | 331 | 447 | 116 | 35.1 | |
| Latin America | 1,175 | 994 | 1,094 | 1,176 | 1,507 | 331 | 28.2 | |
| CBERA | 74 | 75 | 83 | 68 | 107 | 39 | 57.2 | |
| Asia | 5,110 | 4,399 | 4,175 | 4,504 | 6,810 | 2,305 | 51.2 | |
| Sub-Saharan Africa | 1 | (b) | 4 | 2 | (b) | -2 | -93.7 | |
| Central and Eastern Europe | 4 | 5 | 5 | 6 | 10 | 4 | 71.4 | |
| U.S. imports of merchandise for consumption: | | | | | | | | |
| China | 8 | 20 | 31 | 25 | 29 | 5 | 18.5 | |
| Mexico | 6 | 9 | 9 | 7 | 6 | -2 | -22.1 | |
| Japan | (b) | (b) | (b) | (b) | (b) | (b) | 11.5 | |
| Taiwan | 1 | 1 | (b) | (b) | (b) | (b) | -14.3 | |
| Canada | 125 | 202 | 200 | 266 | 427 | 160 | 60.3 | |
| Indonesia | (b) | (b) | (b) | (b) | (b) | (b) | -100.0 | |
| Germany | (b) | (b) | (b) | (b) | (b) | (b) | 75.1 | |
| Netherlands | 2 | 2 | 1 | 2 | 2 | (b) | 5.7 | |
| Korea | (b) | (b) | (b) | (b) | (b) | (b) | 143.5 | |
| Egypt | (b) | (b) | (b) | 0 | (b) | (b) | (c) | |
| All other | 65 | 100 | 93 | 85 | 107 | 21 | 25.0 | |
| Total | 208 | 335 | 335 | 387 | 572 | 185 | 47.8 | |
| EU-27 | 2 | 4 | 5 | 4 | 6 | 2 | 66.9 | |
| OPEC | 3 | 13 | 12 | 13 | 10 | -3 | -26.0 | |
| Latin America | 25 | 47 | 44 | 37 | 34 | -3 | -8.3 | |
| CBERA | (b) | (b) | 0 | 0 | 0 | 0 | 0.0 | |
| Asia | 40 | 61 | 64 | 64 | 75 | 11 | 16.8 | |
| Sub-Saharan Africa | 11 | 17 | 17 | 9 | 23 | 13 | 138.1 | |
| Central and Eastern Europe | (b) | 1 | 2 | (b) | 1 | 1 | 137.4 | |

See footnote(s) at end of table.

TABLE AG.4 Oilseeds (AG032): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—Continued

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|---------------------------------|------------------------|-------|-------|-------|-------|------------------------|---------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. merchandise trade balance: | | | | | | | | |
| China | 2,824 | 2,313 | 2,224 | 2,511 | 4,092 | 1,581 | 63.0 | |
| Mexico | 1,026 | 843 | 908 | 993 | 1,251 | 258 | 26.0 | |
| Japan | 966 | 1,010 | 788 | 869 | 1,116 | 247 | 28.4 | |
| Taiwan | 418 | 302 | 430 | 473 | 715 | 241 | 51.0 | |
| Canada | 107 | 6 | -66 | -158 | -285 | -128 | -81.0 | |
| Indonesia | 324 | 264 | 302 | 289 | 402 | 113 | 39.0 | |
| Germany | 299 | 394 | 211 | 35 | 342 | 307 | 868.0 | |
| Netherlands | 187 | 72 | 119 | 488 | 335 | -153 | -31.3 | |
| Korea | 294 | 295 | 210 | 127 | 174 | 47 | 37.4 | |
| Egypt | 29 | 42 | 93 | 94 | 166 | 72 | 77.0 | |
| All other | 1,470 | 1,037 | 973 | 1,063 | 1,466 | 403 | 37.9 | |
| Total | 7,945 | 6,576 | 6,192 | 6,786 | 9,774 | 2,988 | 44.0 | |
| EU-27 | 1,184 | 933 | 657 | 785 | 1,108 | 323 | 41.2 | |
| OPEC | 378 | 286 | 312 | 318 | 437 | 119 | 37.6 | |
| Latin America | 1,150 | 947 | 1,050 | 1,138 | 1,473 | 334 | 29.4 | |
| CBERA | 74 | 75 | 83 | 68 | 107 | 39 | 57.2 | |
| Asia | 5,071 | 4,338 | 4,110 | 4,440 | 6,734 | 2,294 | 51.7 | |
| Sub-Saharan Africa | -11 | -17 | -13 | -8 | -22 | -15 | -197.4 | |
| Central and Eastern Europe | 4 | 5 | 3 | 6 | 9 | 4 | 66.4 | |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

^cNot meaningful for purposes of comparison.

75.5 million acres, an all-time high.¹²⁵ This production increase facilitated an increase in U.S. soybean export share in 2007 because of reduced competition from Brazil in third-country markets. Brazil crushed greater amounts of soybeans for meal in order to meet its growing domestic demand for poultry feed in 2007, resulting in lower export levels.¹²⁶

China remained the leading destination for U.S. oilseed exports in 2007, representing 40 percent of total export value (table AG.4). Exports to China increased by 63 percent to \$4.1 billion in 2007. Continued urbanization, as well as population and income growth contributed to increased Chinese demand for soybeans for use in animal feeds and vegetable oils over the past several years.¹²⁷ This trend continued in 2007 as the quantity of U.S. exports to China increased by 1.4 MMT (14 percent) to 11.8 MMT.¹²⁸ Reduced export competition from Argentina¹²⁹ and Brazil also contributed to increased U.S. soybean exports to China. Other major destinations for U.S. soybean exports in 2007 were Mexico and Japan, increasing to \$1.3 billion (26 percent) and \$1.1 billion (28 percent), respectively.¹³⁰

U.S. Imports

U.S. oilseed imports, driven by higher import values, increased by \$185 million (48 percent) to \$572 million in 2007. U.S. import quantities of oilseeds increased by a comparatively lesser amount, by 179,000 MT (16 percent) to 1.3 MMT in 2007, although select oilseed imports experienced larger increases in volume than in value.¹³¹

Canada was the dominant supplier of U.S. oilseeds in 2007, with \$427 million (75 percent) of total imports. Canola (the largest oilseed import),¹³² flaxseed, and sunflowerseed accounted for the majority of the value of these imports from Canada (84 percent). Canola imports from Canada declined by 96,000 MT in 2007, but because the unit value of those imports increased more than 45 percent, the total value of canola imports from Canada increased by 26 percent.¹³³ Countering general sector trends, soybean and sunflower seed imports from Canada increased by roughly 200 percent by volume and experienced the largest absolute volume increases in 2007, whereas the unit values of those imports increased only 7–8 percent.

The escalation in the value of all types of oilseed imports reflects continuing strong global demand for oilseeds and oilseed products for food and biofuel uses.¹³⁴ In particular, U.S. food manufacturers continued to demand healthy oils derived from canola and sunflower seed, which experienced reduced domestic supplies in 2007 as their acreage decreased at the expense of greater acreage for corn, soybeans, and wheat.¹³⁵

¹²⁵ Ibid., March 2008, 3.

¹²⁶ Ibid., 19.

¹²⁷ USDA, ERS, *China's Soybean Imports Expected to Grow*, October 2004, 3–5.

¹²⁸ USITC, Dataweb (accessed October 21, 2008).

¹²⁹ USDA, ERS, *Outlook for U.S. Agricultural Trade*, August 31, 2007, 3.

¹³⁰ USITC, Dataweb (accessed May 22, 2008).

¹³¹ Ibid.

¹³² By value, canola represented 69 percent of total oilseed imports from Canada in 2006 and 55 percent in 2007. USITC, Dataweb (accessed May 22, 2008).

¹³³ USITC, Dataweb (accessed May 22, 2008).

¹³⁴ USDA, ERS, *Outlook for U.S. Agricultural Trade*, November 30, 2007, 9.

¹³⁵ USDA, FAS, "Production, Supply, and Distribution Online."

TABLE AG.5 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b | Industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|--|--------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| AG001 | Certain miscellaneous animals and meats: | | | | | | | |
| | Exports | 1,778 | 1,460 | 1,821 | 2,055 | 2,158 | 103 | 5.0 |
| | Imports | 1,683 | 1,972 | 2,128 | 2,234 | 2,399 | 164 | 7.4 |
| | Trade balance | 96 | -512 | -307 | -179 | -240 | -61 | -34.0 |
| AG002 | Cattle and beef: | | | | | | | |
| | Exports | 3,501 | 605 | 1,041 | 1,655 | 2,156 | 502 | 30.3 |
| | Imports | 3,302 | 3,909 | 4,410 | 4,443 | 4,844 | 401 | 9.0 |
| | Trade balance | 200 | -3,304 | -3,369 | -2,788 | -2,688 | 100 | 3.6 |
| AG003 | Swine and pork: | | | | | | | |
| | Exports | 1,330 | 1,866 | 2,246 | 2,422 | 2,709 | 288 | 11.9 |
| | Imports | 1,143 | 1,335 | 1,314 | 1,205 | 1,224 | 19 | 1.6 |
| | Trade balance | 187 | 531 | 931 | 1,216 | 1,485 | 268 | 22.1 |
| AG004 | Sheep and meat of sheep: | | | | | | | |
| | Exports | 17 | 14 | 17 | 30 | 21 | -9 | -29.1 |
| | Imports | 339 | 400 | 462 | 425 | 456 | 31 | 7.3 |
| | Trade balance | -321 | -386 | -446 | -395 | -435 | -40 | -10.1 |
| AG005 | Poultry: | | | | | | | |
| | Exports | 2,022 | 2,280 | 2,795 | 2,588 | 3,655 | 1,067 | 41.2 |
| | Imports | 126 | 169 | 169 | 194 | 242 | 49 | 25.0 |
| | Trade balance | 1,896 | 2,112 | 2,625 | 2,395 | 3,413 | 1,018 | 42.5 |
| AG006 | Fresh or frozen fish: | | | | | | | |
| | Exports | 2,008 | 2,357 | 2,602 | 2,672 | 2,706 | 34 | 1.3 |
| | Imports | 3,354 | 3,520 | 3,963 | 4,555 | 4,922 | 367 | 8.1 |
| | Trade balance | -1,346 | -1,162 | -1,361 | -1,884 | -2,217 | -333 | -17.7 |
| AG007 | Canned fish: | | | | | | | |
| | Exports | 185 | 214 | 223 | 224 | 239 | 14 | 6.3 |
| | Imports | 777 | 843 | 889 | 953 | 950 | -3 | -0.3 |
| | Trade balance | -592 | -629 | -666 | -729 | -711 | 18 | 2.4 |
| AG008 | Cured and other fish: | | | | | | | |
| | Exports | 161 | 164 | 170 | 181 | 178 | -2 | -1.4 |
| | Imports | 307 | 333 | 371 | 382 | 394 | 12 | 3.1 |
| | Trade balance | -146 | -168 | -201 | -201 | -216 | -15 | -7.2 |

See footnote(s) at end of table.

TABLE AG.5 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b | Industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|-------------------------------|--------|--------|--------|--------|--------|------------------------|------------------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| AG009 | Shellfish: | | | | | | | |
| | Exports | 761 | 798 | 883 | 961 | 949 | -13 | -1.3 |
| | Imports | 6,492 | 6,472 | 6,696 | 7,288 | 7,246 | -42 | -0.6 |
| | Trade balance | -5,731 | -5,674 | -5,813 | -6,327 | -6,297 | 29 | 0.5 |
| AG010 | Dairy produce: | | | | | | | |
| | Exports | 679 | 1,066 | 1,195 | 1,387 | 2,358 | 971 | 70.0 |
| | Imports | 1,654 | 1,911 | 2,102 | 2,018 | 2,212 | 194 | 9.6 |
| | Trade balance | -976 | -845 | -907 | -630 | 146 | 776 | (^c) |
| AG011 | Eggs: | | | | | | | |
| | Exports | 164 | 196 | 227 | 235 | 293 | 58 | 24.9 |
| | Imports | 22 | 33 | 21 | 31 | 43 | 12 | 39.9 |
| | Trade balance | 142 | 163 | 205 | 204 | 250 | 46 | 22.6 |
| AG012 | Sugar and other sweeteners: | | | | | | | |
| | Exports | 391 | 435 | 538 | 754 | 1,074 | 320 | 42.5 |
| | Imports | 1,035 | 979 | 1,323 | 1,868 | 1,391 | -477 | -25.5 |
| | Trade balance | -645 | -543 | -785 | -1,114 | -317 | 797 | 71.5 |
| AG012A | Sugar: | | | | | | | |
| | Exports | 61 | 86 | 122 | 188 | 230 | 43 | 22.7 |
| | Imports | 592 | 585 | 908 | 1,351 | 859 | -492 | -36.4 |
| | Trade balance | -531 | -499 | -786 | -1,164 | -629 | 535 | 46.0 |
| AG012B | High fructose corn sweetener: | | | | | | | |
| | Exports | 76 | 69 | 78 | 146 | 220 | 73 | 49.9 |
| | Imports | 42 | 43 | 41 | 48 | 57 | 9 | 18.5 |
| | Trade balance | 34 | 25 | 37 | 99 | 163 | 64 | 65.1 |
| AG013 | Animal feeds: | | | | | | | |
| | Exports | 4,207 | 4,160 | 4,535 | 5,065 | 6,144 | 1,079 | 21.3 |
| | Imports | 705 | 873 | 789 | 905 | 1,084 | 178 | 19.7 |
| | Trade balance | 3,502 | 3,288 | 3,746 | 4,160 | 5,060 | 900 | 21.6 |
| AG014 | Live plants: | | | | | | | |
| | Exports | 128 | 148 | 170 | 188 | 189 | 1 | 0.3 |
| | Imports | 539 | 569 | 558 | 564 | 588 | 23 | 4.1 |
| | Trade balance | -411 | -421 | -388 | -376 | -399 | -23 | -6.1 |
| AG015 | Seeds: | | | | | | | |
| | Exports | 859 | 1,066 | 940 | 893 | 1,051 | 158 | 17.7 |
| | Imports | 452 | 460 | 525 | 624 | 692 | 68 | 11.0 |
| | Trade balance | 407 | 606 | 415 | 269 | 358 | 89 | 33.2 |

See footnote(s) at end of table.

TABLE AG.5 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b | Industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|---|--------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| AG016 | Cut flowers: | | | | | | | |
| | Exports | 33 | 27 | 25 | 27 | 37 | 11 | 39.5 |
| | Imports | 611 | 706 | 709 | 768 | 831 | 63 | 8.2 |
| | Trade balance | -578 | -679 | -684 | -741 | -794 | -53 | -7.1 |
| AG017 | Miscellaneous vegetable substances: | | | | | | | |
| | Exports | 510 | 558 | 554 | 602 | 697 | 95 | 15.9 |
| | Imports | 880 | 921 | 1,038 | 1,193 | 1,256 | 62 | 5.2 |
| | Trade balance | -369 | -363 | -484 | -592 | -559 | 33 | 5.6 |
| AG018 | Fresh, chilled, or frozen vegetables: | | | | | | | |
| | Exports | 1,408 | 1,449 | 1,621 | 1,766 | 1,902 | 136 | 7.7 |
| | Imports | 3,250 | 3,650 | 3,871 | 4,310 | 4,701 | 390 | 9.1 |
| | Trade balance | -1,842 | -2,201 | -2,250 | -2,544 | -2,799 | -255 | -10.0 |
| AG019 | Prepared or preserved vegetables, mushrooms, and olives: | | | | | | | |
| | Exports | 1,326 | 1,417 | 1,548 | 1,708 | 1,943 | 235 | 13.8 |
| | Imports | 1,779 | 2,044 | 2,147 | 2,290 | 2,550 | 260 | 11.3 |
| | Trade balance | -453 | -626 | -599 | -583 | -607 | -25 | -4.2 |
| AG020 | Edible nuts: | | | | | | | |
| | Exports | 1,785 | 2,242 | 2,925 | 3,092 | 3,311 | 219 | 7.1 |
| | Imports | 775 | 1,079 | 1,121 | 1,101 | 1,184 | 82 | 7.5 |
| | Trade balance | 1,010 | 1,163 | 1,804 | 1,990 | 2,128 | 137 | 6.9 |
| AG021 | Tropical fruit: | | | | | | | |
| | Exports | 54 | 63 | 71 | 80 | 62 | -18 | -22.4 |
| | Imports | 1,754 | 1,772 | 2,035 | 2,219 | 2,530 | 311 | 14.0 |
| | Trade balance | -1,700 | -1,709 | -1,964 | -2,140 | -2,468 | -329 | -15.4 |
| AG022 | Citrus fruit: | | | | | | | |
| | Exports | 679 | 691 | 664 | 744 | 749 | 6 | 0.7 |
| | Imports | 437 | 444 | 519 | 602 | 723 | 121 | 20.1 |
| | Trade balance | 242 | 248 | 145 | 142 | 26 | -115 | -81.5 |
| AG023 | Deciduous fruit: | | | | | | | |
| | Exports | 810 | 813 | 995 | 1,065 | 1,233 | 167 | 15.7 |
| | Imports | 306 | 358 | 324 | 393 | 462 | 69 | 17.5 |
| | Trade balance | 504 | 455 | 670 | 672 | 770 | 98 | 14.6 |
| AG024 | Other fresh fruit: | | | | | | | |
| | Exports | 775 | 854 | 1,021 | 1,052 | 1,170 | 118 | 11.2 |
| | Imports | 1,200 | 1,396 | 1,684 | 1,826 | 2,035 | 209 | 11.5 |
| | Trade balance | -425 | -542 | -663 | -774 | -866 | -91 | -11.8 |

See footnote(s) at end of table.

TABLE AG.5 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b | Industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|-------------------------------------|--------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| AG025 | Dried fruit other than tropical: | | | | | | | |
| | Exports | 366 | 394 | 382 | 418 | 481 | 62 | 14.9 |
| | Imports | 133 | 142 | 150 | 153 | 182 | 29 | 19.0 |
| | Trade balance | 234 | 251 | 232 | 266 | 299 | 33 | 12.6 |
| AG026 | Frozen fruit: | | | | | | | |
| | Exports | 81 | 84 | 90 | 110 | 132 | 21 | 19.1 |
| | Imports | 202 | 225 | 286 | 356 | 415 | 59 | 16.5 |
| | Trade balance | -122 | -141 | -196 | -246 | -283 | -38 | -15.3 |
| AG027 | Prepared or preserved fruit: | | | | | | | |
| | Exports | 203 | 237 | 235 | 288 | 324 | 37 | 12.7 |
| | Imports | 688 | 768 | 858 | 985 | 1,116 | 131 | 13.3 |
| | Trade balance | -485 | -531 | -623 | -697 | -791 | -94 | -13.5 |
| AG028 | Coffee and tea: | | | | | | | |
| | Exports | 348 | 349 | 450 | 559 | 657 | 98 | 17.6 |
| | Imports | 2,228 | 2,560 | 3,309 | 3,694 | 4,173 | 479 | 13.0 |
| | Trade balance | -1,880 | -2,211 | -2,859 | -3,135 | -3,515 | -381 | -12.1 |
| AG029 | Spices: | | | | | | | |
| | Exports | 76 | 82 | 80 | 86 | 94 | 8 | 9.4 |
| | Imports | 682 | 625 | 503 | 543 | 677 | 134 | 24.7 |
| | Trade balance | -606 | -543 | -423 | -457 | -583 | -126 | -27.6 |
| AG030 | Cereals: | | | | | | | |
| | Exports | 10,429 | 12,683 | 11,096 | 13,341 | 20,860 | 7,519 | 56.4 |
| | Imports | 646 | 699 | 657 | 963 | 1,425 | 462 | 48.0 |
| | Trade balance | 9,784 | 11,984 | 10,439 | 12,378 | 19,435 | 7,057 | 57.0 |
| AG031 | Milled grains, malts, and starches: | | | | | | | |
| | Exports | 599 | 610 | 668 | 858 | 1,179 | 321 | 37.4 |
| | Imports | 441 | 518 | 490 | 550 | 721 | 171 | 31.0 |
| | Trade balance | 159 | 92 | 177 | 308 | 458 | 150 | 48.8 |
| AG032 | Oilseeds: | | | | | | | |
| | Exports | 8,153 | 6,911 | 6,527 | 7,172 | 10,346 | 3,173 | 44.2 |
| | Imports | 208 | 335 | 335 | 387 | 572 | 185 | 47.8 |
| | Trade balance | 7,945 | 6,576 | 6,192 | 6,786 | 9,774 | 2,988 | 44.0 |
| AG033 | Animal or vegetable fats and oils: | | | | | | | |
| | Exports | 1,986 | 1,965 | 1,808 | 2,010 | 2,981 | 971 | 48.3 |
| | Imports | 1,491 | 2,193 | 2,294 | 2,753 | 3,358 | 606 | 22.0 |
| | Trade balance | 495 | -228 | -486 | -743 | -377 | 365 | 49.2 |

See footnote(s) at end of table.

TABLE AG.5 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b | Industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|---|--------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| AG034 | Pasta, cereals, and other bakery goods: | | | | | | | |
| | Exports | 1,287 | 1,381 | 1,575 | 1,771 | 2,015 | 243 | 13.7 |
| | Imports | 2,501 | 2,719 | 3,016 | 3,335 | 3,690 | 355 | 10.6 |
| | Trade balance | -1,214 | -1,338 | -1,442 | -1,563 | -1,675 | -112 | -7.1 |
| AG035 | Sauces, condiments, and soups: | | | | | | | |
| | Exports | 813 | 842 | 869 | 947 | 1,014 | 67 | 7.1 |
| | Imports | 663 | 743 | 790 | 850 | 937 | 87 | 10.2 |
| | Trade balance | 150 | 99 | 80 | 97 | 78 | -20 | -20.1 |
| AG036 | Infant formulas, malt extracts, and other edible preparations: | | | | | | | |
| | Exports | 2,546 | 2,868 | 3,149 | 3,422 | 3,458 | 36 | 1.0 |
| | Imports | 920 | 1,211 | 1,345 | 1,528 | 1,556 | 28 | 1.8 |
| | Trade balance | 1,626 | 1,657 | 1,804 | 1,894 | 1,902 | 8 | 0.4 |
| AG037 | Cocoa, chocolate, and confectionery: | | | | | | | |
| | Exports | 914 | 946 | 991 | 1,066 | 1,206 | 140 | 13.1 |
| | Imports | 3,535 | 3,627 | 3,927 | 3,846 | 3,882 | 35 | 0.9 |
| | Trade balance | -2,621 | -2,681 | -2,936 | -2,781 | -2,676 | 105 | 3.8 |
| AG038 | Fruit and vegetable juices: | | | | | | | |
| | Exports | 674 | 660 | 731 | 862 | 979 | 117 | 13.6 |
| | Imports | 793 | 835 | 1,029 | 1,145 | 1,738 | 594 | 51.8 |
| | Trade balance | -119 | -176 | -298 | -283 | -759 | -476 | -168.2 |
| AG039 | Nonalcoholic beverages, excluding fruit and vegetable juices: | | | | | | | |
| | Exports | 397 | 407 | 478 | 554 | 643 | 89 | 16.0 |
| | Imports | 966 | 1,158 | 1,329 | 1,769 | 2,012 | 244 | 13.8 |
| | Trade balance | -569 | -752 | -851 | -1,214 | -1,369 | -155 | -12.7 |
| AG040 | Malt beverages: | | | | | | | |
| | Exports | 172 | 164 | 201 | 209 | 246 | 36 | 17.4 |
| | Imports | 2,664 | 2,752 | 3,081 | 3,563 | 3,602 | 40 | 1.1 |
| | Trade balance | -2,492 | -2,588 | -2,879 | -3,353 | -3,357 | -3 | -0.1 |
| AG041 | Wine and certain other fermented beverages: | | | | | | | |
| | Exports | 634 | 793 | 658 | 842 | 910 | 68 | 8.0 |
| | Imports | 3,307 | 3,445 | 3,797 | 4,176 | 4,658 | 483 | 11.6 |
| | Trade balance | -2,673 | -2,652 | -3,139 | -3,333 | -3,749 | -415 | -12.5 |

See footnote(s) at end of table.

TABLE AG.5 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b | Industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|--|--------|--------|--------|--------|------------------|------------------------|------------------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| AG042 | Distilled spirits: | | | | | | | |
| | Exports | 592 | 727 | 763 | 893 | 1,035 | 142 | 15.9 |
| | Imports | 3,453 | 3,734 | 4,106 | 4,527 | 5,081 | 554 | 12.2 |
| | Trade balance | -2,861 | -3,007 | -3,343 | -3,634 | -4,046 | -412 | -11.3 |
| AG043 | Unmanufactured tobacco: | | | | | | | |
| | Exports | 1,035 | 1,044 | 983 | 1,141 | 1,208 | 67 | 5.9 |
| | Imports | 757 | 702 | 652 | 751 | 840 | 89 | 11.8 |
| | Trade balance | 278 | 342 | 332 | 390 | 369 | -22 | -5.5 |
| AG044 | Cigars and certain other manufactured tobacco: | | | | | | | |
| | Exports | 442 | 272 | 98 | 107 | 109 | 2 | 2.0 |
| | Imports | 307 | 333 | 346 | 392 | 416 | 25 | 6.3 |
| | Trade balance | 135 | -62 | -248 | -285 | -307 | -23 | -7.9 |
| AG045 | Cigarettes: | | | | | | | |
| | Exports | 1,403 | 1,294 | 1,200 | 1,214 | 1,012 | -201 | -16.6 |
| | Imports | 234 | 231 | 194 | 190 | 170 | -20 | -10.6 |
| | Trade balance | 1,169 | 1,063 | 1,006 | 1,024 | 843 | -181 | -17.7 |
| AG046 | Hides, skins, and leather: | | | | | | | |
| | Exports | 2,492 | 2,730 | 2,580 | 2,755 | 2,932 | 177 | 6.4 |
| | Imports | 817 | 886 | 896 | 841 | 810 | -30 | -3.6 |
| | Trade balance | 1,675 | 1,844 | 1,684 | 1,915 | 2,122 | 207 | 10.8 |
| AG047 | Furskins: | | | | | | | |
| | Exports | 158 | 191 | 195 | 246 | 266 | 20 | 8.3 |
| | Imports | 87 | 106 | 97 | 116 | 124 | 8 | 7.0 |
| | Trade balance | 70 | 85 | 98 | 130 | 142 | 12 | 9.5 |
| AG048 | Wool and other animal hair: | | | | | | | |
| | Exports | 29 | 27 | 34 | 31 | 35 | 4 | 12.2 |
| | Imports | 38 | 45 | 41 | 41 | 35 | -6 | -15.0 |
| | Trade balance | -10 | -18 | -7 | -10 | (^d) | 10 | (^e) |
| AG049 | Cotton, not carded or combed: | | | | | | | |
| | Exports | 3,203 | 4,222 | 3,920 | 4,501 | 4,578 | 78 | 1.7 |
| | Imports | 26 | 16 | 14 | 13 | 8 | -6 | -42.2 |
| | Trade balance | 3,177 | 4,206 | 3,906 | 4,487 | 4,571 | 83 | 1.9 |

See footnote(s) at end of table.

TABLE AG.5 Agricultural products: U.S. trade for industry/commodity groups and subgroups, 2003–07^a—*Continued*

| USITC code ^b | Industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|---|------|------|------|--------|------|------------------------|---------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| AG050 | Ethyl alcohol for nonbeverage purposes: | | | | | | | |
| | Exports | 103 | 81 | 109 | 76 | 357 | 281 | 370.7 |
| | Imports | 191 | 259 | 337 | 1,600 | 978 | -621 | -38.8 |
| | Trade balance | -88 | -179 | -228 | -1,524 | -621 | 902 | 59.2 |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bThis 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

^cNot meaningful for purposes of comparison.

^dLess than \$500,000.

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Forest Products

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Change in 2007 from 2006:

U.S. trade deficit: Decreased by \$6.8 billion (33 percent) to \$13.5 billion

U.S. exports: Increased by \$2.9 billion (10 percent) to \$33.1 billion

U.S. imports: Decreased by \$3.9 billion (8 percent) to \$46.6 billion

For the second year in a row, the trade deficit in forest products decreased, but by a much larger amount than the 2006 decrease of 9 percent. The absolute decrease in the deficit matched in magnitude the large increase in the deficit, which occurred between 2003 and 2004, as the U.S. market for forest products drove towards its peak in 2005 (table FP.1). The shift in the deficit was in large part due to the downturn in the U.S. market for residential housing. Total trade in forest products decreased by 1 percent, as the large decrease in imports more than offset the gain in U.S. exports.

U.S. exports of forest products posted a sixth consecutive annual increase and the fourth consecutive increase in excess of \$2 billion. Because forest products are relatively low-value, trade is often influenced by exchange rate trends. In 2007, U.S. exports across all forest products sub-sectors (commodity groups) continued to benefit from favorable exchange rates (table FP.2).¹³⁶ With respect to U.S. imports of forest products, the decline in the U.S. housing market in 2007 drove decreases in imports of lumber, wood panels (e.g., plywood and oriented strand board), and moldings, millwork, and joinery, all of which are used primarily in the construction of residential housing.

Trade with the top two U.S. trading partners proceeded in different directions in 2007. Canadian forest products firms benefitted from Canada's significant forest resources, capacity in excess of domestic requirements, and proximity to U.S. markets. In 2007, Canada remained the U.S. sector's largest trading partner, accounting for 42 percent of total U.S. trade and 51 percent of U.S. exports. Not surprisingly, however, the trade deficit in forest products with Canada decreased significantly (by \$3.7 billion or 54 percent of the total deficit reduction), due largely to the weakness of the U.S. housing market and the relative strength of the Canadian dollar against the U.S. dollar. Since 2003, China has been the second-largest trading partner in forest products. Its expanding forest products industry and consequent need for imported raw materials continued to drive rapid expansion of U.S. trade with China. Bilateral trade increased by \$1.4 billion, and China accounted for 13 percent of all U.S. trade in forest products in 2007.¹³⁷

¹³⁶ In 2007, the value of the U.S. dollar generally declined, decreasing 5.3 percent and 9.1 percent, respectively, against the Canadian dollar and the euro. CEA, *Economic Report of the President*, table 110, 2008.

¹³⁷ From 2003 to 2007, forest products trade with China increased at an average annual rate of 18 percent.

TABLE FP.1 Forest products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|---------------|---------------|---------------|---------------|------------------------|-------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| Canada | 7,960 | 8,536 | 9,111 | 9,846 | 10,236 | 390 | 4.0 | |
| China | 1,314 | 1,651 | 1,995 | 2,572 | 3,272 | 700 | 27.2 | |
| Mexico | 3,217 | 3,451 | 3,860 | 4,258 | 4,312 | 55 | 1.3 | |
| Japan | 1,887 | 1,963 | 1,907 | 1,964 | 1,859 | -105 | -5.3 | |
| Germany | 565 | 608 | 685 | 717 | 902 | 185 | 25.8 | |
| Brazil | 190 | 212 | 241 | 251 | 329 | 77 | 30.8 | |
| United Kingdom | 1,014 | 1,118 | 1,191 | 1,220 | 1,300 | 80 | 6.6 | |
| Italy | 674 | 718 | 788 | 839 | 954 | 115 | 13.7 | |
| Korea | 699 | 696 | 688 | 683 | 814 | 132 | 19.3 | |
| Finland | 22 | 22 | 23 | 19 | 23 | 4 | 20.0 | |
| All other | 6,025 | 6,663 | 7,322 | 7,787 | 9,086 | 1,299 | 16.7 | |
| Total | 23,566 | 25,637 | 27,809 | 30,156 | 33,088 | 2,933 | 9.7 | |
| EU-27 | 4,019 | 4,385 | 4,745 | 4,947 | 5,539 | 592 | 12.0 | |
| OPEC | 526 | 637 | 665 | 713 | 881 | 168 | 23.5 | |
| Latin America | 4,844 | 5,341 | 6,014 | 6,645 | 7,076 | 432 | 6.5 | |
| CBERA | 435 | 505 | 605 | 690 | 735 | 45 | 6.5 | |
| Asia | 5,571 | 6,052 | 6,403 | 7,090 | 8,228 | 1,137 | 16.0 | |
| Sub-Saharan Africa | 135 | 140 | 164 | 185 | 206 | 21 | 11.6 | |
| Central and Eastern Europe | 88 | 108 | 135 | 134 | 198 | 65 | 48.2 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| Canada | 22,640 | 27,584 | 28,224 | 26,717 | 23,435 | -3,282 | -12.3 | |
| China | 3,362 | 4,398 | 5,463 | 6,630 | 7,317 | 686 | 10.4 | |
| Mexico | 1,075 | 1,274 | 1,420 | 1,559 | 1,584 | 25 | 1.6 | |
| Japan | 610 | 683 | 692 | 649 | 648 | -2 | -0.2 | |
| Germany | 1,057 | 1,461 | 1,664 | 1,733 | 1,602 | -131 | -7.6 | |
| Brazil | 1,569 | 2,203 | 2,305 | 2,365 | 2,064 | -300 | -12.7 | |
| United Kingdom | 751 | 784 | 825 | 702 | 748 | 46 | 6.6 | |
| Italy | 396 | 416 | 424 | 455 | 470 | 16 | 3.4 | |
| Korea | 467 | 517 | 544 | 601 | 559 | -41 | -6.9 | |
| Finland | 948 | 1,107 | 1,024 | 1,210 | 1,151 | -59 | -4.9 | |
| All other | 5,895 | 7,164 | 7,418 | 7,795 | 6,982 | -812 | -10.4 | |
| Total | 38,769 | 47,591 | 50,003 | 50,416 | 46,561 | -3,855 | -7.6 | |
| EU-27 | 5,234 | 6,276 | 6,668 | 6,797 | 6,140 | -657 | -9.7 | |
| OPEC | 580 | 614 | 652 | 755 | 816 | 61 | 8.1 | |
| Latin America | 3,680 | 4,935 | 5,180 | 5,603 | 4,980 | -623 | -11.1 | |
| CBERA | 35 | 46 | 52 | 55 | 43 | -11 | -20.9 | |
| Asia | 6,317 | 7,651 | 8,806 | 10,213 | 10,983 | 770 | 7.5 | |
| Sub-Saharan Africa | 139 | 178 | 191 | 166 | 183 | 17 | 10.1 | |
| Central and Eastern Europe | 61 | 98 | 167 | 147 | 126 | -20 | -14.0 | |

TABLE FP.1 Forest products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—Continued

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--------------------------------|------------------------|---------|---------|---------|---------|------------------------|------------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. merchandise trade balance | | | | | | | |
| Canada | -14,680 | -19,047 | -19,113 | -16,871 | -13,199 | 3,672 | 21.8 |
| China | -2,048 | -2,747 | -3,468 | -4,058 | -4,045 | 14 | 0.3 |
| Mexico | 2,142 | 2,177 | 2,440 | 2,698 | 2,728 | 30 | 1.1 |
| Japan | 1,278 | 1,280 | 1,214 | 1,315 | 1,212 | -103 | -7.9 |
| Germany | -493 | -853 | -978 | -1,016 | -699 | 316 | 31.1 |
| Brazil | -1,380 | -1,991 | -2,064 | -2,113 | -1,736 | 378 | 17.9 |
| United Kingdom | 263 | 334 | 366 | 518 | 551 | 34 | 6.5 |
| Italy | 278 | 302 | 363 | 384 | 483 | 99 | 25.9 |
| Korea | 232 | 178 | 143 | 82 | 255 | 173 | 211.4 |
| Finland | -926 | -1,084 | -1,001 | -1,191 | -1,128 | 63 | 5.3 |
| All other | 130 | -501 | -96 | -8 | 2,104 | 2,112 | (^b) |
| Total | -15,204 | -21,953 | -22,194 | -20,260 | -13,473 | 6,787 | 33.5 |
| EU-27 | -1,215 | -1,892 | -1,923 | -1,850 | -602 | 1,249 | 67.5 |
| OPEC | -55 | 23 | 12 | -42 | 65 | 106 | (^b) |
| Latin America | 1,164 | 406 | 833 | 1,041 | 2,096 | 1,055 | 101.3 |
| CBERA | 399 | 458 | 553 | 636 | 692 | 56 | 8.8 |
| Asia | -747 | -1,598 | -2,404 | -3,123 | -2,755 | 367 | 11.8 |
| Sub-Saharan Africa | -4 | -38 | -28 | 19 | 23 | 5 | 24.8 |
| Central and Eastern Europe | 27 | 9 | -32 | -13 | 72 | 85 | (^b) |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bNot meaningful for purposes of comparison.

TABLE FP.2 Forest products: Leading changes in U.S. exports and imports, 2003–07

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|---|-------|-------|-------|-------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| <i>Million dollars</i> | | | | | | | | |
| U.S. EXPORTS | | | | | | | | |
| Increases | | | | | | | | |
| FP009 | Wood pulp and wastepaper | 4,112 | 4,521 | 5,081 | 5,749 | 6,916 | 1,167 | 20.3 |
| FP011 | Industrial papers and paperboards | 5,312 | 5,733 | 6,287 | 6,788 | 7,518 | 730 | 10.8 |
| FP011A | Paperboard | 3,723 | 3,993 | 4,432 | 4,769 | 5,356 | 587 | 12.3 |
| FP016 | Printed matter | 4,160 | 4,431 | 4,906 | 5,217 | 5,652 | 435 | 8.3 |
| FP001 | Logs and rough wood products | 1,468 | 1,708 | 1,741 | 1,744 | 2,061 | 316 | 18.1 |
| FP013 | Printing and writing papers | 625 | 692 | 811 | 902 | 1,135 | 233 | 25.9 |
| FP014 | Certain specialty papers | 1,114 | 1,232 | 1,304 | 1,360 | 1,529 | 169 | 12.4 |
| FP011B | Tissue and tissue products | 1,094 | 1,166 | 1,240 | 1,363 | 1,454 | 91 | 6.7 |
| FP012 | Newsprint | 325 | 322 | 383 | 355 | 410 | 56 | 15.7 |
| FP011C | Industrial paper | 494 | 573 | 615 | 656 | 708 | 52 | 7.9 |
| FP004 | Wood veneer and wood panels | 905 | 1,037 | 1,028 | 1,128 | 1,174 | 46 | 4.1 |
| FP003 | Moldings, millwork, and joinery | 495 | 551 | 585 | 633 | 664 | 31 | 4.9 |
| FP006 | Tools and tool handles of wood | 50 | 51 | 37 | 46 | 50 | 4 | 9.8 |
| FP007 | Miscellaneous articles of wood | 167 | 188 | 218 | 224 | 228 | 4 | 1.8 |
| FP005 | Wooden containers | 154 | 145 | 176 | 210 | 212 | 2 | 1.2 |
| Decreases | | | | | | | | |
| FP002 | Lumber | 1,725 | 1,930 | 2,026 | 2,275 | 2,124 | -151 | -6.6 |
| FP015 | Miscellaneous paper products | 1,541 | 1,551 | 1,663 | 1,811 | 1,755 | -55 | -3.1 |
| FP008 | Cork and rattan | 65 | 57 | 70 | 90 | 62 | -28 | -31.0 |
| FP010 | Paper boxes and bags | 1,348 | 1,490 | 1,492 | 1,625 | 1,598 | -27 | -1.6 |
| U.S. IMPORTS | | | | | | | | |
| Increases | | | | | | | | |
| FP009 | Wood pulp and wastepaper | 2,603 | 2,953 | 3,074 | 3,194 | 3,750 | 556 | 17.4 |
| FP016 | Printed matter | 3,901 | 4,230 | 4,660 | 4,842 | 5,227 | 385 | 7.9 |
| FP015 | Miscellaneous paper products | 1,779 | 1,900 | 2,041 | 2,113 | 2,336 | 224 | 10.6 |
| FP011 | Industrial papers and paperboards | 3,492 | 4,240 | 4,388 | 4,713 | 4,895 | 182 | 3.9 |
| FP011B | Tissue and tissue products | 1,283 | 1,544 | 1,695 | 1,724 | 1,834 | 109 | 6.3 |
| FP010 | Paper boxes and bags | 1,231 | 1,357 | 1,492 | 1,710 | 1,801 | 91 | 5.3 |
| FP011C | Industrial paper | 479 | 634 | 672 | 669 | 724 | 55 | 8.3 |
| FP014 | Certain specialty papers | 1,046 | 817 | 859 | 1,033 | 1,062 | 28 | 2.7 |
| FP008 | Cork and rattan | 616 | 643 | 673 | 678 | 698 | 21 | 3.0 |
| FP011A | Paperboard | 1,731 | 2,063 | 2,021 | 2,320 | 2,337 | 18 | 0.8 |
| FP005 | Wooden containers | 605 | 635 | 698 | 737 | 754 | 17 | 2.3 |
| FP006 | Tools and tool handles of wood | 139 | 151 | 171 | 173 | 182 | 9 | 5.1 |

See footnote(s) at end of table.

TABLE FP.2 Forest products: Leading changes in U.S. exports and imports, 2003–07—*Continued*

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|-------|-------|-------|-------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| Decreases | | | | | | | |
| FP002 Lumber | 6,007 | 8,808 | 9,005 | 8,335 | 6,508 | -1,827 | -21.9 |
| FP004 Wood veneer and wood panels | 4,938 | 7,115 | 7,218 | 6,623 | 5,169 | -1,453 | -21.9 |
| FP003 Moldings, millwork, and joinery | 3,057 | 4,184 | 4,433 | 4,750 | 3,894 | -856 | -18.0 |
| FP012 Newsprint | 2,991 | 2,975 | 3,074 | 3,074 | 2,384 | -690 | -22.5 |
| FP013 Printing and writing papers | 4,549 | 5,564 | 5,972 | 6,149 | 5,754 | -395 | -6.4 |
| FP001 Logs and rough wood products | 577 | 658 | 782 | 832 | 746 | -85 | -10.3 |
| FP007 Miscellaneous articles of wood | 1,236 | 1,359 | 1,465 | 1,462 | 1,402 | -60 | -4.1 |

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

Note: Calculations based on unrounded data.

^aThis 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.

U.S. Exports

The value of U.S. exports of forest products expanded by 10 percent, with 12 of 16 commodity groups posting export gains.¹³⁸ Traditionally, exports have not factored heavily into the business plans of U.S. forest products firms, which tend to focus on the much larger domestic U.S. market. However, in 2007, exchange rate trends continued to be favorable for U.S. exports of forest products, and slow domestic demand provided an incentive for U.S. forest products firms to seek opportunities in export markets.¹³⁹

As in the previous two years, wood pulp and waste paper, which are used primarily as raw materials in the production of paper, posted the largest export trade shift among all forest products commodity groups and was the only group with an export shift exceeding \$1 billion in 2007 (table FP.2). From 2003 through 2007, the value of U.S. exports of wood pulp and waste paper increased at an average annual rate of 11 percent.¹⁴⁰ This increase was due in large part to increasing exports to China, the largest U.S. customer for wood pulp and waste paper. With steadily increasing quantities and prices, the value of U.S. exports of wood pulp and waste paper to China increased at an average annual rate of 29 percent over the five year period.¹⁴¹ Factors affecting this increase 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 trans-Pacific transportation rates.

U.S. Imports

In 2007, lumber, wood panels (e.g., plywood and oriented strand board), and moldings, millwork, and joinery posted the largest import trade shifts of all forest products commodity groups. Declining values and quantities of imports in these groups were driven principally by a downturn in the U.S. residential housing market that began in 2006, after a prolonged period of growth.¹⁴² U.S. housing starts dropped to the lowest level since 1995, decreasing by 25 percent to 1.4 million starts from 2006 to 2007.¹⁴³ U.S. expenditures for repair and remodeling of existing homes also declined in 2007.¹⁴⁴ Reductions in mill capacity and supply reportedly were insufficient to match the decrease in U.S. demand.¹⁴⁵ Thus, by 2007, U.S. average prices for lumber and structural panels had declined by 37 percent and

¹³⁸ The quantities of U.S. exports in key subsectors also increased from 2006 to 2007.

¹³⁹ *Random Lengths International*, "U.S. OSB Exports Challenging Records," November 28, 2007, 1.

¹⁴⁰ During the same period, the quantity of U.S. exports of wood pulp and waste paper increased at an average annual rate of 6 percent.

¹⁴¹ Price increases for wood pulp and waste paper have resulted from increasing production costs for wood pulp and rising U.S. wastepaper recoveries.

¹⁴² *Crow's Weekly Market Report*, "A Downturn Without Parallels," October 12, 2007, 1.

¹⁴³ In 1991, the U.S. housing market began a period of steady expansion that continued until 2005, when almost 2.1 million homes were started. During that period, residential housing starts expanded in all but two years (1995 and 2000), and housing starts more than doubled, increasing at an overall average annual rate of 5.2 percent. USDOC, Census Bureau, "New Privately Owned Housing Unit Started," undated, (accessed March 24, 2008).

¹⁴⁴ Through the third quarter of 2007, they were 6 percent less than in 2006. USDOC, Census Bureau, "Expenditures for Residential Improvements and Repairs," undated, (accessed March 24, 2008).

¹⁴⁵ Some 40 Canadian and 38 U.S. sawmills reportedly have been permanently closed since 2005. *Crow's Weekly Market Report*, "Sawmill Summary Shows Mismatch of Capacity and Demand Despite Shuts," December 7, 2007, 1, *Wood Markets Monthly International Report*, "U.S. Commodities Meltdown," February 2008, 1.

40 percent, respectively, below the peak prices in 2005.¹⁴⁶ Canada remained the largest foreign supplier to the U.S. market. The exodus of European suppliers from the U.S. market continued in 2007,¹⁴⁷ so despite a summer strike in British Columbia, export taxes, and the appreciation of the Canadian dollar, Canadian producers actually increased their share of U.S. imports of lumber (by quantity), most likely as a consequence of on-going efforts in British Columbia and Alberta to salvage beetle-killed timber.¹⁴⁸

The value of U.S. imports of newsprint declined by \$690 million or 23 percent in 2007. Although the United States remains the world's largest consumer of newsprint, U.S. demand dropped by 5 percent in 2006 and a further 11 percent through the first three quarters of 2007, primarily as a result of reduced use by U.S. daily newspapers amid shrinking advertising and circulation.¹⁴⁹ As Canada is by far the largest foreign supplier of newsprint to the U.S. market, the impact of soft U.S. demand was exacerbated for Canadian firms by the exchange rate trend.¹⁵⁰

The increase in U.S. imports from China in 2007 was due primarily to an increase in imports of printed matter (e.g., books and magazines), which accounted for 45 percent of the total increase. China's expanding printing and publishing industry became the top foreign supplier of printed matter to the U.S. market in 2006. In 2007, U.S. imports from China increased in 10 of the 16 forest products commodity groups.

¹⁴⁶ The average U.S. prices of softwood framing lumber and structural panels continued to retreat in 2007, declining 12 percent and 5 percent, respectively. *Random Lengths Yardstick*, "Five Year Data Histories," February 2008, 19.

¹⁴⁷ *Random Lengths Yardstick*, "European Lumber Supply in U.S. Retracts as Losses Mount," March 19, 2008, 1.

¹⁴⁸ British Columbia and Alberta are currently undergoing an outbreak of the Mountain pine beetle (*Dendroctonus ponderosae*). *Crow's Weekly Market Report*, "Parity Hurts Canadian Outlook," September 21, 2007, 1, 16; *Lumber Track*, "Strike Pushes Production Down 35 Percent in Coast B.C.," August 1, 2007, 1.

¹⁴⁹ *Pulp & Paper*, "Newsprint: Shakeout Looms as Industry Grapples with Oversupply," December 2007, 19.

¹⁵⁰ In 2007, Canada alone accounted for 98 percent (by value) of all U.S. newsprint imports.

TABLE FP.3 Forest products: U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|---|---------------------------------|--------|--------|--------|--------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| FP001 | Logs and rough wood products | | | | | | | |
| | Exports | 1,468 | 1,708 | 1,741 | 1,744 | 2,061 | 316 | 18.1 |
| | Imports | 577 | 658 | 782 | 832 | 746 | -85 | -10.3 |
| | Trade balance | 891 | 1,051 | 959 | 913 | 1,314 | 402 | 44.0 |
| FP002 | Lumber | | | | | | | |
| | Exports | 1,725 | 1,930 | 2,026 | 2,275 | 2,124 | -151 | -6.6 |
| | Imports | 6,007 | 8,808 | 9,005 | 8,335 | 6,508 | -1,827 | -21.9 |
| | Trade balance | -4,282 | -6,879 | -6,978 | -6,060 | -4,384 | 1,676 | 27.7 |
| FP003 | Moldings, millwork, and joinery | | | | | | | |
| | Exports | 495 | 551 | 585 | 633 | 664 | 31 | 4.9 |
| | Imports | 3,057 | 4,184 | 4,433 | 4,750 | 3,894 | -856 | -18.0 |
| | Trade balance | -2,563 | -3,633 | -3,848 | -4,116 | -3,230 | 887 | 21.5 |
| FP004 | Wood veneer and wood panels | | | | | | | |
| | Exports | 905 | 1,037 | 1,028 | 1,128 | 1,174 | 46 | 4.1 |
| | Imports | 4,938 | 7,115 | 7,218 | 6,623 | 5,169 | -1,453 | -21.9 |
| | Trade balance | -4,033 | -6,078 | -6,190 | -5,495 | -3,995 | 1,500 | 27.3 |
| FP005 | Wooden containers | | | | | | | |
| | Exports | 154 | 145 | 176 | 210 | 212 | 2 | 1.2 |
| | Imports | 605 | 635 | 698 | 737 | 754 | 17 | 2.3 |
| | Trade balance | -451 | -490 | -522 | -527 | -541 | -14 | -2.7 |
| FP006 | Tools and tool handles of wood | | | | | | | |
| | Exports | 50 | 51 | 37 | 46 | 50 | 4 | 9.8 |
| | Imports | 139 | 151 | 171 | 173 | 182 | 9 | 5.1 |
| | Trade balance | -89 | -99 | -133 | -127 | -131 | -4 | -3.4 |
| FP007 | Miscellaneous articles of wood | | | | | | | |
| | Exports | 167 | 188 | 218 | 224 | 228 | 4 | 1.8 |
| | Imports | 1,236 | 1,359 | 1,465 | 1,462 | 1,402 | -60 | -4.1 |
| | Trade balance | -1,069 | -1,171 | -1,246 | -1,239 | -1,174 | 64 | 5.2 |
| FP008 | Cork and rattan | | | | | | | |
| | Exports | 65 | 57 | 70 | 90 | 62 | -28 | -31.0 |
| | Imports | 616 | 643 | 673 | 678 | 698 | 21 | 3.0 |
| | Trade balance | -551 | -586 | -602 | -587 | -636 | -49 | -8.3 |

See footnote(s) at end of table.

TABLE FP.3 Forest products: U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|---|-----------------------------------|--------|--------|--------|--------|------------------------|---------|--------|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| FP009 | Wood pulp and wastepaper | | | | | | | |
| | Exports | 4,112 | 4,521 | 5,081 | 5,749 | 6,916 | 1,167 | 20.3 |
| | Imports | 2,603 | 2,953 | 3,074 | 3,194 | 3,750 | 556 | 17.4 |
| | Trade balance | 1,509 | 1,567 | 2,006 | 2,554 | 3,165 | 611 | 23.9 |
| FP010 | Paper boxes and bags | | | | | | | |
| | Exports | 1,348 | 1,490 | 1,492 | 1,625 | 1,598 | -27 | -1.6 |
| | Imports | 1,231 | 1,357 | 1,492 | 1,710 | 1,801 | 91 | 5.3 |
| | Trade balance | 117 | 133 | 1 | -85 | -203 | -118 | -137.7 |
| FP011 | Industrial papers and paperboards | | | | | | | |
| | Exports | 5,312 | 5,733 | 6,287 | 6,788 | 7,518 | 730 | 10.8 |
| | Imports | 3,492 | 4,240 | 4,388 | 4,713 | 4,895 | 182 | 3.9 |
| | Trade balance | 1,819 | 1,492 | 1,900 | 2,075 | 2,623 | 547 | 26.4 |
| FP011A | Paperboard | | | | | | | |
| | Exports | 3,723 | 3,993 | 4,432 | 4,769 | 5,356 | 587 | 12.3 |
| | Imports | 1,731 | 2,063 | 2,021 | 2,320 | 2,337 | 18 | 0.8 |
| | Trade balance | 1,992 | 1,930 | 2,411 | 2,449 | 3,018 | 569 | 23.2 |
| FP011B | Tissue and tissue products | | | | | | | |
| | Exports | 1,094 | 1,166 | 1,240 | 1,363 | 1,454 | 91 | 6.7 |
| | Imports | 1,283 | 1,544 | 1,695 | 1,724 | 1,834 | 109 | 6.3 |
| | Trade balance | -188 | -377 | -455 | -361 | -379 | -18 | -5.0 |
| FP011C | Industrial paper | | | | | | | |
| | Exports | 494 | 573 | 615 | 656 | 708 | 52 | 7.9 |
| | Imports | 479 | 634 | 672 | 669 | 724 | 55 | 8.3 |
| | Trade balance | 15 | -60 | -57 | -13 | -16 | -4 | -27.6 |
| FP012 | Newsprint | | | | | | | |
| | Exports | 325 | 322 | 383 | 355 | 410 | 56 | 15.7 |
| | Imports | 2,991 | 2,975 | 3,074 | 3,074 | 2,384 | -690 | -22.5 |
| | Trade balance | -2,667 | -2,653 | -2,691 | -2,719 | -1,973 | 746 | 27.4 |
| FP013 | Printing and writing papers | | | | | | | |
| | Exports | 625 | 692 | 811 | 902 | 1,135 | 233 | 25.9 |
| | Imports | 4,549 | 5,564 | 5,972 | 6,149 | 5,754 | -395 | -6.4 |
| | Trade balance | -3,924 | -4,872 | -5,162 | -5,247 | -4,619 | 628 | 12.0 |

See footnote(s) at end of table.

TABLE FP.3 Forest products: U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|-------|-------|-------|-------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| FP014 Certain specialty papers | | | | | | | |
| Exports | 1,114 | 1,232 | 1,304 | 1,360 | 1,529 | 169 | 12.4 |
| Imports | 1,046 | 817 | 859 | 1,033 | 1,062 | 28 | 2.7 |
| Trade balance | 68 | 415 | 445 | 327 | 467 | 141 | 43.0 |
| FP015 Miscellaneous paper products | | | | | | | |
| Exports | 1,541 | 1,551 | 1,663 | 1,811 | 1,755 | -55 | -3.1 |
| Imports | 1,779 | 1,900 | 2,041 | 2,113 | 2,336 | 224 | 10.6 |
| Trade balance | -238 | -350 | -378 | -302 | -581 | -279 | -92.4 |
| FP016 Printed matter | | | | | | | |
| Exports | 4,160 | 4,431 | 4,906 | 5,217 | 5,652 | 435 | 8.3 |
| Imports | 3,901 | 4,230 | 4,660 | 4,842 | 5,227 | 385 | 7.9 |
| Trade balance | 259 | 200 | 246 | 375 | 425 | 50 | 13.4 |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bThis 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

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Chemicals and Related Products

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Change in 2007 from 2006:

U.S. trade deficit: Decreased by \$4.6 billion (16 percent) to \$24.9 billion

U.S. exports: Increased by \$19.6 billion (13 percent) to \$169.4 billion

U.S. imports: Increased by \$14.9 billion (8 percent) to \$194.3 billion

In 2007, the U.S. trade deficit in chemicals and related products declined by \$4.6 billion (16 percent), after a smaller decline in 2006 (table CH.1). The decrease in the trade deficit resulted from expanding global demand, driven primarily by continuing economic growth in Asia, the depreciation of the U.S. dollar relative to the currencies of a number of trading partners, and changes in feedstock costs compared to certain foreign competitors. Growth in U.S. demand for chemicals was reduced by weakness in the construction sector caused by the decline in housing starts. However, foreign demand growth remained strong, particularly in Asia. The depreciation of the dollar relative to other currencies, especially the euro, helped to boost U.S. exports of chemical products. Rising energy prices may have squeezed chemical company profits, but the decrease in the relative price of natural gas and crude petroleum feedstocks gave some U.S. basic chemical producers an advantage over European and Asian competitors.¹⁵¹ The price for natural gas, which U.S. producers often use as a feedstock for basic chemicals, remained constant over the year, while the price of crude petroleum, which is the feedstock most often used by European and Asian producers, almost doubled.¹⁵² Because of these changes in feedstock costs, U.S. producers became more cost competitive, leading to an increase in exports.¹⁵³

U.S. Exports

U.S. exports increased by \$19.6 billion (13 percent) to \$169.4 billion in 2007. Medicinal chemicals accounted for 23 percent of the total increase in U.S. exports (table CH.2). Exports of medicinal chemicals increased because of the availability of new drugs. Exporters of chemical products also benefitted from a depreciation of the dollar relative to other currencies and continued economic growth in Asia. Canada and Mexico were the most important markets for U.S. exports, accounting for almost 30 percent of all U.S. chemical product exports. However, the fastest U.S. export growth rates occurred with respect to China and Germany, which together accounted for 23 percent of the total increase in U.S. chemical product exports. Continued economic growth in China has increased demand for chemical products, particularly plastics, as inputs in downstream manufactured goods.

¹⁵¹ Tullo, "World Economic Outlook," January 14, 2008, 16–19.

¹⁵² USDOE, EIA, "Natural Gas Prices;" EIA, "World Crude Oil Prices Database." Undated.

¹⁵³ Tullo, "World Economic Outlook," January 14, 2008, 16–19.

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, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|----------------|----------------|----------------|----------------|----------------|------------------------|-------------|
| | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise: | | | | | | | |
| Canada | 21,516 | 23,495 | 26,412 | 28,475 | 29,033 | 558 | 2.0 |
| Mexico | 13,300 | 15,797 | 18,122 | 20,573 | 21,385 | 812 | 3.9 |
| China | 3,816 | 5,061 | 5,831 | 6,863 | 8,975 | 2,112 | 30.8 |
| Germany | 3,769 | 4,922 | 5,235 | 6,601 | 8,941 | 2,339 | 35.4 |
| Ireland | 1,391 | 1,591 | 1,656 | 1,475 | 1,721 | 247 | 16.7 |
| United Kingdom | 5,089 | 5,413 | 6,183 | 7,492 | 7,746 | 254 | 3.4 |
| Japan | 6,176 | 7,153 | 7,797 | 8,383 | 8,847 | 464 | 5.5 |
| France | 3,488 | 4,142 | 4,311 | 4,418 | 5,107 | 689 | 15.6 |
| Belgium | 6,856 | 7,295 | 7,457 | 8,793 | 10,061 | 1,268 | 14.4 |
| Netherlands | 5,219 | 7,294 | 7,659 | 8,956 | 9,345 | 389 | 4.3 |
| All other | 31,710 | 39,220 | 42,071 | 47,819 | 58,248 | 10,429 | 21.8 |
| Total | 102,330 | 121,383 | 132,734 | 149,848 | 169,409 | 19,561 | 13.1 |
| EU-27 | 29,663 | 35,398 | 37,550 | 43,015 | 49,656 | 6,641 | 15.4 |
| OPEC | 1,854 | 2,505 | 2,952 | 3,784 | 4,663 | 878 | 23.2 |
| Latin America | 21,913 | 26,557 | 29,910 | 35,134 | 39,506 | 4,372 | 12.4 |
| CBERA | 1,213 | 1,334 | 1,629 | 1,917 | 2,138 | 221 | 11.6 |
| Asia | 22,490 | 27,513 | 29,618 | 32,443 | 37,591 | 5,148 | 15.9 |
| Sub-Saharan Africa | 717 | 867 | 958 | 1,235 | 1,387 | 152 | 12.3 |
| Central and Eastern Europe | 333 | 365 | 438 | 493 | 580 | 87 | 17.6 |
| U.S. imports of merchandise for consumption: | | | | | | | |
| Canada | 18,440 | 21,996 | 25,535 | 28,036 | 29,939 | 1,903 | 6.8 |
| Mexico | 3,779 | 4,790 | 5,429 | 6,347 | 6,360 | 13 | 0.2 |
| China | 7,438 | 9,287 | 12,240 | 14,389 | 16,889 | 2,500 | 17.4 |
| Germany | 9,497 | 11,064 | 12,116 | 13,370 | 15,251 | 1,881 | 14.1 |
| Ireland | 19,117 | 19,488 | 20,409 | 20,884 | 22,082 | 1,198 | 5.7 |
| United Kingdom | 9,450 | 9,843 | 9,772 | 12,207 | 13,523 | 1,316 | 10.8 |
| Japan | 10,121 | 10,684 | 11,100 | 10,739 | 11,065 | 326 | 3.0 |
| France | 6,338 | 7,333 | 8,171 | 8,262 | 8,527 | 266 | 3.2 |
| Belgium | 1,895 | 2,569 | 2,376 | 3,444 | 3,407 | -37 | -1.1 |
| Netherlands | 1,681 | 1,867 | 1,969 | 2,280 | 2,305 | 24 | 1.1 |
| All other | 36,165 | 42,762 | 53,933 | 59,452 | 64,984 | 5,532 | 9.3 |
| Total | 123,922 | 141,683 | 163,050 | 179,410 | 194,331 | 14,922 | 8.3 |
| EU-27 | 57,801 | 63,165 | 68,160 | 74,042 | 78,521 | 4,479 | 6.0 |
| OPEC | 6,967 | 9,765 | 12,283 | 12,465 | 15,026 | 2,561 | 20.5 |
| Latin America | 8,917 | 11,315 | 13,950 | 14,453 | 15,668 | 1,215 | 8.4 |
| CBERA | 1,504 | 1,842 | 2,517 | 2,800 | 3,148 | 348 | 12.4 |
| Asia | 26,810 | 30,487 | 36,805 | 41,739 | 46,520 | 4,781 | 11.5 |
| Sub-Saharan Africa | 598 | 716 | 875 | 778 | 992 | 214 | 27.4 |
| Central and Eastern Europe | 1,385 | 1,198 | 1,228 | 1,228 | 1,268 | 40 | 3.3 |

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, 2003–07^a—*Continued*

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---------------------------------|------------------------|---------|---------|---------|---------|------------------------|----------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. merchandise trade balance: | | | | | | | |
| Canada | 3,076 | 1,499 | 878 | 439 | -906 | -1,345 | ^(b) |
| Mexico | 9,521 | 11,007 | 12,694 | 14,226 | 15,025 | 799 | 5.6 |
| China | -3,622 | -4,225 | -6,409 | -7,526 | -7,914 | -388 | -5.2 |
| Germany | -5,728 | -6,142 | -6,881 | -6,769 | -6,310 | 459 | 6.8 |
| Ireland | -17,727 | -17,897 | -18,754 | -19,409 | -20,360 | -951 | -4.9 |
| United Kingdom | -4,361 | -4,429 | -3,588 | -4,714 | -5,777 | -1,062 | -22.5 |
| Japan | -3,945 | -3,531 | -3,304 | -2,356 | -2,218 | 138 | 5.9 |
| France | -2,850 | -3,191 | -3,860 | -3,844 | -3,421 | 423 | 11.0 |
| Belgium | 4,961 | 4,726 | 5,081 | 5,349 | 6,654 | 1,305 | 24.4 |
| Netherlands | 3,537 | 5,427 | 5,689 | 6,676 | 7,040 | 365 | 5.5 |
| All other | -4,455 | -3,541 | -11,862 | -11,633 | -6,736 | 4,898 | 42.1 |
| Total | -21,592 | -20,299 | -30,317 | -29,562 | -24,923 | 4,639 | 15.7 |
| EU-27 | -28,138 | -27,767 | -30,610 | -31,027 | -28,865 | 2,162 | 7.0 |
| OPEC | -5,113 | -7,260 | -9,331 | -8,680 | -10,364 | -1,683 | -19.4 |
| Latin America | 12,996 | 15,242 | 15,960 | 20,681 | 23,838 | 3,157 | 15.3 |
| CBERA | -291 | -509 | -889 | -883 | -1,010 | -127 | -14.3 |
| Asia | -4,320 | -2,973 | -7,187 | -9,295 | -8,929 | 367 | 3.9 |
| Sub-Saharan Africa | 118 | 151 | 83 | 457 | 396 | -61 | -13.4 |
| Central and Eastern Europe | -1,052 | -832 | -790 | -735 | -688 | 46 | 6.3 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bNot meaningful for purposes of comparison.

TABLE CH.2 Chemicals and related products: Leading changes in U.S. exports and imports, 2003–07

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|---|--------|--------|--------|--------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. EXPORTS: | | | | | | | | |
| Increases: | | | | | | | | |
| CH019 | Medicinal chemicals | 22,527 | 27,098 | 29,296 | 32,460 | 37,036 | 4,576 | 14.1 |
| CH033 | Miscellaneous plastic products | 13,041 | 14,307 | 15,826 | 17,570 | 19,218 | 1,649 | 9.4 |
| CH006 | Certain organic chemicals | 8,857 | 11,283 | 11,991 | 14,263 | 15,796 | 1,533 | 10.8 |
| CH007 | Miscellaneous inorganic chemicals | 4,903 | 5,608 | 7,003 | 8,737 | 10,169 | 1,432 | 16.4 |
| CH004 | Organic commodity chemicals | 2,692 | 4,631 | 4,295 | 4,360 | 5,787 | 1,427 | 32.7 |
| CH025 | Polyethylene resins in primary forms | 2,817 | 3,698 | 4,448 | 5,103 | 6,312 | 1,209 | 23.7 |
| CH030 | Other plastics in primary forms | 7,694 | 9,106 | 10,531 | 11,746 | 12,860 | 1,114 | 9.5 |
| CH023 | Miscellaneous chemicals and specialties | 3,149 | 3,444 | 3,708 | 4,249 | 5,259 | 1,010 | 23.8 |
| CH026 | Polypropylene resins in primary forms | 1,416 | 1,767 | 2,202 | 2,648 | 3,551 | 903 | 34.1 |
| CH021 | Perfumes, cosmetics, and toiletries | 3,435 | 3,900 | 4,418 | 5,018 | 5,601 | 583 | 11.6 |
| CH032 | Tires and tubes | 2,310 | 2,658 | 2,926 | 3,164 | 3,709 | 546 | 17.3 |
| CH005 | Organic specialty chemicals | 6,004 | 6,731 | 6,999 | 8,089 | 8,634 | 545 | 6.7 |
| CH011 | Paints, inks, and related items, and certain components thereof | 3,918 | 4,200 | 4,509 | 4,988 | 5,456 | 468 | 9.4 |
| CH010 | Fertilizers | 2,429 | 2,718 | 3,005 | 3,014 | 3,470 | 456 | 15.1 |
| CH017 | Pesticide products and formulations | 2,316 | 2,674 | 2,708 | 3,105 | 3,537 | 432 | 13.9 |
| CH031 | Synthetic rubber | 1,802 | 2,175 | 2,664 | 3,120 | 3,536 | 416 | 13.3 |
| CH027 | Polyvinyl chloride resins in primary forms | 837 | 1,044 | 1,112 | 1,323 | 1,628 | 305 | 23.0 |
| CH022 | Soaps, detergents, and surface-active agents | 2,524 | 2,929 | 3,192 | 3,608 | 3,899 | 291 | 8.1 |
| CH001 | Major primary olefins | 217 | 474 | 451 | 611 | 801 | 190 | 31.1 |
| CH018 | Adhesives and glues | 600 | 702 | 807 | 911 | 1,087 | 176 | 19.4 |
| CH020 | Essential oils and other flavoring materials | 1,389 | 1,462 | 1,420 | 1,525 | 1,674 | 149 | 9.8 |
| CH029 | Saturated polyester resins | 814 | 1,014 | 1,059 | 1,159 | 1,295 | 136 | 11.7 |
| CH028 | Styrene polymers in primary forms | 783 | 929 | 1,039 | 1,322 | 1,413 | 91 | 6.9 |
| CH009 | Chlor-alkali chemicals | 897 | 953 | 1,269 | 1,479 | 1,536 | 56 | 3.8 |
| CH024 | Explosives, propellant powders, and related items | 385 | 472 | 476 | 542 | 580 | 38 | 7.0 |
| CH016 | Photographic chemicals and preparations | 475 | 435 | 460 | 512 | 538 | 26 | 5.2 |
| CH013 | Synthetic dyes and azoic couplers | 226 | 287 | 283 | 304 | 325 | 21 | 6.8 |
| CH003 | Primary aromatics | 368 | 782 | 548 | 375 | 392 | 17 | 4.6 |
| CH036 | Natural rubber | 59 | 37 | 34 | 33 | 44 | 11 | 33.9 |
| CH015 | Natural tanning and dyeing materials | 26 | 44 | 77 | 67 | 75 | 8 | 12.1 |
| Decreases: | | | | | | | | |
| CH034 | Miscellaneous rubber products | 2,400 | 2,623 | 2,743 | 3,055 | 2,917 | -138 | -4.5 |
| CH002 | Other olefins | 343 | 430 | 420 | 556 | 463 | -93 | -16.7 |
| CH035 | Gelatin | 92 | 89 | 88 | 76 | 68 | -8 | -10.8 |
| CH014 | Synthetic tanning agents | 32 | 35 | 28 | 29 | 24 | -5 | -17.3 |
| CH008 | Inorganic acids | 219 | 267 | 296 | 323 | 318 | -5 | -1.5 |
| CH012 | Synthetic organic pigments | 332 | 376 | 400 | 405 | 401 | -4 | -1.1 |

See footnote(s) at end of table.

TABLE CH.2 Chemicals and related products: Leading changes in U.S. exports and imports, 2003-2007—*Continued*

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|---|--------|--------|--------|--------|------------------------|------------------|-------|
| | | | | | | Absolute | Percent | |
| <i>Million dollars</i> | | | | | | | | |
| U.S. IMPORTS: | | | | | | | | |
| Increases: | | | | | | | | |
| CH019 | Medicinal chemicals | 49,284 | 52,677 | 56,104 | 65,218 | 71,764 | 6,546 | 10.0 |
| CH010 | Fertilizers | 4,395 | 5,510 | 7,439 | 7,525 | 9,507 | 1,982 | 26.3 |
| CH001 | Major primary olefins | 4,144 | 5,908 | 7,774 | 8,062 | 9,472 | 1,410 | 17.5 |
| CH007 | Miscellaneous inorganic chemicals | 5,038 | 5,714 | 6,626 | 7,310 | 8,308 | 997 | 13.6 |
| CH032 | Tires and tubes | 5,306 | 6,321 | 7,786 | 8,743 | 9,462 | 719 | 8.2 |
| CH023 | Miscellaneous chemicals and specialties | 2,150 | 2,497 | 2,907 | 3,249 | 3,799 | 549 | 16.9 |
| CH021 | Perfumes, cosmetics, and toiletries | 3,111 | 3,652 | 4,099 | 4,374 | 4,924 | 549 | 12.6 |
| CH033 | Miscellaneous plastic products | 14,979 | 17,342 | 19,994 | 21,738 | 22,235 | 498 | 2.3 |
| CH005 | Organic specialty chemicals | 6,675 | 6,852 | 7,744 | 7,981 | 8,435 | 454 | 5.7 |
| CH004 | Organic commodity chemicals | 1,319 | 1,997 | 2,398 | 2,736 | 3,141 | 405 | 14.8 |
| CH003 | Primary aromatics | 1,450 | 2,202 | 2,802 | 3,101 | 3,454 | 353 | 11.4 |
| CH006 | Certain organic chemicals | 4,878 | 5,811 | 7,263 | 7,103 | 7,441 | 338 | 4.8 |
| CH034 | Miscellaneous rubber products | 3,040 | 3,568 | 3,884 | 4,074 | 4,358 | 284 | 7.0 |
| CH011 | Paints, inks, and related items, and certain components thereof | 2,078 | 2,241 | 2,598 | 2,825 | 2,958 | 134 | 4.7 |
| CH030 | Other plastics in primary forms | 3,022 | 3,488 | 4,050 | 4,244 | 4,362 | 118 | 2.8 |
| CH036 | Natural rubber | 1,047 | 1,466 | 1,552 | 2,029 | 2,119 | 89 | 4.4 |
| CH026 | Polypropylene resins in primary forms | 298 | 359 | 415 | 395 | 463 | 67 | 17.1 |
| CH012 | Synthetic organic pigments | 333 | 368 | 396 | 411 | 452 | 41 | 10.0 |
| CH018 | Adhesives and glues | 251 | 305 | 333 | 338 | 377 | 40 | 11.7 |
| CH022 | Soaps, detergents, and surface-active agents | 1,369 | 1,568 | 1,680 | 1,835 | 1,874 | 39 | 2.1 |
| CH024 | Explosives, propellant powders, and related items | 353 | 402 | 459 | 534 | 563 | 28 | 5.3 |
| CH017 | Pesticide products and formulations | 1,419 | 1,589 | 1,898 | 1,882 | 1,899 | 17 | 0.9 |
| CH008 | Inorganic acids | 229 | 337 | 362 | 415 | 426 | 11 | 2.8 |
| CH015 | Natural tanning and dyeing materials | 63 | 70 | 74 | 76 | 85 | 9 | 11.3 |
| CH002 | Other olefins | 127 | 158 | 261 | 442 | 448 | 6 | 1.4 |
| CH035 | Gelatin | 115 | 113 | 116 | 138 | 143 | 5 | 3.7 |
| Decreases: | | | | | | | | |
| CH025 | Polyethylene resins in primary forms | 2,158 | 2,505 | 3,227 | 3,712 | 3,510 | -202 | -5.4 |
| CH028 | Styrene polymers in primary forms | 628 | 833 | 1,153 | 1,102 | 914 | -188 | -17.0 |
| CH027 | Polyvinyl chloride resins in primary forms | 287 | 383 | 593 | 546 | 381 | -165 | -30.3 |
| CH009 | Chlor-alkali chemicals | 206 | 252 | 452 | 460 | 398 | -62 | -13.5 |
| CH016 | Photographic chemicals and preparations | 382 | 409 | 446 | 476 | 424 | -52 | -10.9 |
| CH013 | Synthetic dyes and azoic couplers | 395 | 415 | 407 | 389 | 337 | -52 | -13.3 |
| CH020 | Essential oils and other flavoring materials | 1,754 | 2,540 | 3,019 | 3,089 | 3,062 | -27 | -0.9 |
| CH031 | Synthetic rubber | 973 | 1,093 | 1,532 | 1,520 | 1,510 | -10 | -0.7 |
| CH029 | Saturated polyester resins | 656 | 728 | 1,199 | 1,329 | 1,322 | -7 | -0.5 |
| CH014 | Synthetic tanning agents | 8 | 8 | 8 | 7 | 7 | (^b) | -2.9 |

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

Note: Calculations based on unrounded data.

^aThis 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.

^bLess than \$500,000.

Strong growth in exports to Germany was likely caused by related-party transfers of a relatively new class of therapeutics, monoclonal antibodies, which is experiencing increased use in the EU.¹⁵⁴

U.S. Imports

In 2007, U.S. imports of chemicals and related products increased by \$14.9 billion (8 percent) to \$194.3 billion. The largest sources of such imports were Canada and Ireland, which accounted for 15 percent and 11 percent of total U.S. imports of these products, respectively. However, at the same time, U.S. imports from China saw the largest growth (17 percent). U.S. imports of medicinal chemicals grew rapidly, accounting for 44 percent of the increase in U.S. imports of chemicals and related products (table CH.2). Imports of pharmaceuticals increased in part because of increased domestic demand for both name brand and generic drugs as the population ages and the use of Medicare Part D expands (see discussion on next page).

¹⁵⁴ Monoclonal antibodies are a relatively new class of medicinal chemicals for the detection and treatment of a number of diseases, including cancer. Due to the high costs of development and production of monoclonal antibodies, unit costs of these drugs can be high relative to other pharmaceuticals. The market for monoclonal antibodies in the EU was valued at \$7.9 billion in 2007 and is expected to grow to \$22.2 billion by 2012. For more information, see Frost & Sullivan, "Use of Therapeutic Monoclonal Antibodies Increasing in Europe," September 15, 2008.

Change in 2007 from 2006:

U.S. trade deficit: Increased by \$2.0 billion (6 percent) to \$34.7 billion

U.S. exports: Increased by \$4.6 billion (14 percent) to \$37.0 billion

U.S. imports: Increased by \$6.5 billion (10 percent) to \$71.8 billion

In 2007, the U.S. trade deficit in medicinal chemicals continued to rise as imports increased by \$6.5 billion, while exports increased by \$4.6 billion (table CH.3). The deficit increase resulted from continued growth in domestic demand for pharmaceuticals in part because of increased enrollment in the Medicare Part D prescription drug program.¹⁵⁶

In 2007, the United States was by far the largest market for medicinal chemicals with \$356 billion in retail sales of pharmaceuticals, followed by Japan at \$67 billion.¹⁵⁷ U.S. sales of prescription pharmaceuticals grew by 4 percent in 2007, down from 8 percent in 2006.¹⁵⁸ In both 2006 and 2007, the growth in demand was driven, in part, by the new Medicare Part D prescription drug plan. Enrollment in Medicare Part D first became available in January 2006 and many patients enrolled that year, leading to a large increase in prescription drug sales. While the number of new enrollees in the program in 2007 was fewer than in the previous year, Medicare Part D still contributed to growth in demand in 2007.

The increase in the deficit was also affected by an increase in the use of generic drugs, which are increasingly being made in developing countries, particularly China and India.¹⁵⁹ Use of generics increased as major branded drugs lost their U.S. patent exclusivity and fewer new branded products were introduced.¹⁶⁰ Drugs with combined sales of \$17 billion lost their exclusivity in 2007 while new branded medicines only accounted for \$441 million in sales.¹⁶¹ Medicare Part D also contributed to the increased use of generic drugs.¹⁶² In an effort to reduce costs, more than 60 percent of prescriptions under Medicare Part D are for generic drugs, compared to about 55 percent for all prescriptions.¹⁶³

¹⁵⁵ This industry/commodity group includes pharmaceutical active ingredients and formulated products containing pharmaceutical active ingredients.

¹⁵⁶ U.S. Department of Health and Human Services, "Medicare Prescription Drug Coverage," <http://www.medicare.gov/pdphome.asp>.

¹⁵⁷ EIU, "United States of America: Healthcare and Pharmaceuticals Profile," February 27, 2008.

¹⁵⁸ IMS Health, "IMS Health Reports U.S. Prescription Sales Grew 3.8 Percent in 2007, to \$286.5 Billion," March 12, 2008.

¹⁵⁹ Ainsworth, "Pharma Adapts," December 3, 2007.

¹⁶⁰ IMS Health, "IMS Health Reports U.S. Prescription Sales Grew 3.8 percent in 2007, to \$286.5 Billion," March 12, 2008.

¹⁶¹ Ibid.

¹⁶² Ainsworth, "Pharma Adapts," December 3, 2007.

¹⁶³ Ibid.

TABLE CH.3 Medicinal chemicals (CH019): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|---|------------------------|---------------|---------------|---------------|---------------|------------------------|-------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise: | | | | | | | | |
| Ireland | 604 | 683 | 841 | 703 | 967 | 264 | 37.5 | |
| United Kingdom | 2,342 | 2,574 | 3,138 | 4,027 | 4,052 | 26 | 0.6 | |
| Germany | 1,656 | 2,608 | 2,599 | 3,196 | 5,025 | 1,829 | 57.2 | |
| Canada | 2,706 | 2,825 | 2,937 | 3,200 | 3,166 | -34 | -1.1 | |
| France | 2,017 | 2,495 | 2,580 | 2,377 | 2,905 | 528 | 22.2 | |
| Belgium | 2,190 | 2,182 | 2,084 | 2,574 | 3,093 | 518 | 20.1 | |
| Switzerland | 1,057 | 1,309 | 1,496 | 1,874 | 2,237 | 363 | 19.4 | |
| Netherlands | 2,459 | 4,071 | 4,185 | 4,716 | 4,113 | -604 | -12.8 | |
| Japan | 1,492 | 1,679 | 1,892 | 2,077 | 2,035 | -42 | -2.0 | |
| Singapore | 116 | 137 | 344 | 210 | 199 | -11 | -5.2 | |
| All other | 5,887 | 6,536 | 7,200 | 7,505 | 9,244 | 1,739 | 23.2 | |
| Total | 22,527 | 27,098 | 29,296 | 32,460 | 37,036 | 4,576 | 14.1 | |
| EU-27 | 13,202 | 17,045 | 17,924 | 19,753 | 23,273 | 3,520 | 17.8 | |
| OPEC | 224 | 247 | 269 | 325 | 413 | 88 | 27.2 | |
| Latin America | 1,491 | 1,622 | 1,955 | 2,314 | 2,530 | 216 | 9.3 | |
| CBERA | 197 | 211 | 281 | 254 | 325 | 72 | 28.3 | |
| Asia | 2,928 | 2,905 | 3,446 | 3,663 | 3,952 | 289 | 7.9 | |
| Sub-Saharan Africa | 113 | 117 | 162 | 201 | 132 | -70 | -34.6 | |
| Central and Eastern Europe | 114 | 140 | 132 | 107 | 107 | (^b) | 0.1 | |
| U.S. imports of merchandise for consumption: | | | | | | | | |
| Ireland | 16,199 | 16,091 | 16,536 | 17,088 | 18,519 | 1,430 | 8.4 | |
| United Kingdom | 6,426 | 6,793 | 6,240 | 8,627 | 9,921 | 1,295 | 15.0 | |
| Germany | 4,344 | 5,267 | 5,712 | 6,532 | 8,097 | 1,565 | 24.0 | |
| Canada | 1,946 | 2,228 | 2,500 | 3,618 | 4,934 | 1,316 | 36.4 | |
| France | 3,405 | 3,982 | 4,664 | 4,600 | 4,832 | 232 | 5.0 | |
| Belgium | 1,167 | 1,739 | 1,302 | 2,318 | 2,278 | -40 | -1.7 | |
| Switzerland | 1,900 | 1,968 | 2,325 | 2,871 | 2,824 | -48 | -1.7 | |
| Netherlands | 701 | 548 | 502 | 616 | 557 | -59 | -9.6 | |
| Japan | 3,166 | 3,007 | 2,816 | 2,327 | 2,478 | 151 | 6.5 | |
| Singapore | 1,632 | 1,512 | 1,632 | 2,922 | 3,562 | 640 | 21.9 | |
| All other | 8,399 | 9,542 | 11,874 | 13,698 | 13,762 | 64 | 0.5 | |
| Total | 49,284 | 52,677 | 56,104 | 65,218 | 71,764 | 6,546 | 10.0 | |
| EU-27 | 38,059 | 40,893 | 42,901 | 48,030 | 51,785 | 3,755 | 7.8 | |
| OPEC | 3 | 3 | 5 | 5 | 6 | 1 | 12.5 | |
| Latin America | 319 | 544 | 421 | 441 | 254 | -187 | -42.3 | |
| CBERA | 7 | 8 | 6 | 4 | 5 | (^b) | 10.5 | |
| Asia | 5,819 | 5,549 | 5,756 | 6,917 | 8,491 | 1,573 | 22.7 | |
| Sub-Saharan Africa | 10 | 12 | 11 | 9 | 12 | 3 | 27.6 | |
| Central and Eastern Europe | 903 | 619 | 408 | 526 | 416 | -110 | -21.0 | |

See footnote(s) at end of table.

TABLE CH.3 Medicinal chemicals (CH019): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—*Continued*

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|---------------------------------|------------------------|----------------|----------------|----------------|----------------|------------------------|-------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. merchandise trade balance: | | | | | | | | |
| Ireland | -15,595 | -15,408 | -15,695 | -16,385 | -17,552 | -1,166 | -7.1 | |
| United Kingdom | -4,084 | -4,220 | -3,103 | -4,600 | -5,869 | -1,269 | -27.6 | |
| Germany | -2,687 | -2,658 | -3,114 | -3,336 | -3,073 | 264 | 7.9 | |
| Canada | 761 | 597 | 437 | -418 | -1,768 | -1,350 | -323.2 | |
| France | -1,388 | -1,486 | -2,084 | -2,223 | -1,927 | 295 | 13.3 | |
| Belgium | 1,023 | 443 | 782 | 256 | 815 | 559 | 218.2 | |
| Switzerland | -843 | -659 | -829 | -997 | -586 | 411 | 41.2 | |
| Netherlands | 1,758 | 3,523 | 3,683 | 4,100 | 3,556 | -545 | -13.3 | |
| Japan | -1,674 | -1,328 | -924 | -250 | -443 | -193 | -77.5 | |
| Singapore | -1,516 | -1,376 | -1,288 | -2,712 | -3,363 | -651 | -24.0 | |
| All other | -2,512 | -3,006 | -4,674 | -6,193 | -4,518 | 1,675 | 27.1 | |
| Total | -26,757 | -25,578 | -26,808 | -32,758 | -34,728 | -1,970 | -6.0 | |
| EU-27 | -24,857 | -23,848 | -24,976 | -28,277 | -28,512 | -235 | -0.8 | |
| OPEC | 221 | 244 | 265 | 319 | 407 | 88 | 27.4 | |
| Latin America | 1,172 | 1,078 | 1,533 | 1,873 | 2,275 | 403 | 21.5 | |
| CBERA | 190 | 203 | 275 | 249 | 321 | 71 | 28.6 | |
| Asia | -2,891 | -2,645 | -2,311 | -3,254 | -4,539 | -1,285 | -39.5 | |
| Sub-Saharan Africa | 104 | 105 | 152 | 192 | 120 | -72 | -37.7 | |
| Central and Eastern Europe | -789 | -479 | -276 | -419 | -309 | 111 | 26.4 | |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

U.S. Exports

U.S. exports of medicinal products increased by 14 percent to \$37.0 billion in 2007. This growth in exports was driven by increasing global demand for pharmaceuticals and related-party transfers between the United States and the EU. Worldwide sales of prescription and over-the-counter drugs increased by 7 percent to \$794.9 billion in 2007.¹⁶⁴ For the top five markets in the EU (France, Germany, Italy, Spain, and the United Kingdom), prescription drugs sales experienced a combined increase of 5 percent.¹⁶⁵ U.S. exports of medicinal chemicals to Germany accounted for 40 percent of the increase.¹⁶⁶ This large increase in exports to one country under a single HTS subheading may have been caused by transfers of therapeutic products, likely monoclonal antibodies,¹⁶⁷ from a U.S. company to a related company in Germany. The German affiliate would then handle the distribution of the product in the European market. Because the pharmaceutical industry in the United States and the EU is dominated by large multinational companies, most of which have subsidiaries in the United States and multiple countries in the EU, these types of related-party transfers are common. Companies often transfer pharmaceutical active ingredients to their subsidiaries in other countries, where they are formulated into individual doses according to the safety and regulatory requirements of the local market.

U.S. Imports

U.S. imports of medicinal chemicals increased by \$6.5 billion (10 percent) to \$71.8 billion in 2007. The major suppliers of pharmaceuticals to the United States were the same as in previous years, namely Ireland (\$18.5 billion), the United Kingdom (\$9.9 billion), and Germany (\$8.1 billion). These three countries supplied 51 percent of U.S. medicinal chemical imports in 2007. The fastest growth rate occurred with respect to imports from Canada, which grew by 36 percent to \$4.9 billion. U.S. imports increased in 2007 because of increased domestic demand resulting from further patient enrollment in Medicare Part D as well as increased demand for generics as many popular medicines lost patent exclusivity.

¹⁶⁴ EIU, *Data Tool*, undated (accessed September 11, 2008).

¹⁶⁵ IMS Health, "IMS Health Reports Global Prescription Sales Grew 6.4 Percent in 2007, to \$712 Billion," April 16, 2008.

¹⁶⁶ Most of these exports to Germany fell under HTS subheading 3002.10.

¹⁶⁷ Monoclonal antibodies are a relatively new class of medicinal chemicals for the detection and treatment of a number of diseases, including cancer. Due to the high costs of development and production of monoclonal antibodies, unit costs of these drugs can be high relative to other pharmaceuticals. The market for monoclonal antibodies in the EU was valued at \$7.9 billion in 2007 and is expected to grow to \$22.2 billion by 2012. For more information, see Frost & Sullivan, "Use of Therapeutic Monoclonal Antibodies Increasing in Europe," September 15, 2008.

TABLE CH.4 Chemicals and related products : U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------------------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| CH001 | Major primary olefins: | | | | | | |
| | Exports | 474 | 451 | 611 | 801 | 190 | 31.1 |
| | Imports | 4,144 | 5,908 | 7,774 | 8,062 | 1,410 | 17.5 |
| | Trade balance | -3,927 | -5,434 | -7,324 | -7,451 | -1,220 | -16.4 |
| CH002 | Other olefins: | | | | | | |
| | Exports | 343 | 430 | 420 | 556 | -93 | -16.7 |
| | Imports | 127 | 158 | 261 | 442 | 6 | 1.4 |
| | Trade balance | 217 | 272 | 159 | 114 | -99 | -87.1 |
| CH003 | Primary aromatics: | | | | | | |
| | Exports | 368 | 782 | 548 | 375 | 17 | 4.6 |
| | Imports | 1,450 | 2,202 | 2,802 | 3,101 | 353 | 11.4 |
| | Trade balance | -1,082 | -1,420 | -2,254 | -2,726 | -336 | -12.3 |
| CH004 | Organic commodity chemicals: | | | | | | |
| | Exports | 2,692 | 4,631 | 4,295 | 4,360 | 1,427 | 32.7 |
| | Imports | 1,319 | 1,997 | 2,398 | 2,736 | 405 | 14.8 |
| | Trade balance | 1,373 | 2,635 | 1,897 | 1,625 | 1,022 | 62.9 |
| CH005 | Organic specialty chemicals: | | | | | | |
| | Exports | 6,004 | 6,731 | 6,999 | 8,089 | 545 | 6.7 |
| | Imports | 6,675 | 6,852 | 7,744 | 7,981 | 454 | 5.7 |
| | Trade balance | -671 | -121 | -744 | 108 | 92 | 85.0 |
| CH006 | Certain organic chemicals: | | | | | | |
| | Exports | 8,857 | 11,283 | 11,991 | 14,263 | 1,533 | 10.8 |
| | Imports | 4,878 | 5,811 | 7,263 | 7,103 | 338 | 4.8 |
| | Trade balance | 3,979 | 5,472 | 4,729 | 7,159 | 1,196 | 16.7 |
| CH007 | Miscellaneous inorganic chemicals: | | | | | | |
| | Exports | 4,903 | 5,608 | 7,003 | 8,737 | 1,432 | 16.4 |
| | Imports | 5,038 | 5,714 | 6,626 | 7,310 | 997 | 13.6 |
| | Trade balance | -135 | -106 | 377 | 1,426 | 435 | 30.5 |
| CH008 | Inorganic acids: | | | | | | |
| | Exports | 219 | 267 | 296 | 323 | -5 | -1.5 |
| | Imports | 229 | 337 | 362 | 415 | 11 | 2.8 |
| | Trade balance | -10 | -70 | -66 | -91 | -16 | -17.9 |
| CH009 | Chlor-alkali chemicals: | | | | | | |
| | Exports | 897 | 953 | 1,269 | 1,479 | 56 | 3.8 |
| | Imports | 206 | 252 | 452 | 460 | -62 | -13.5 |
| | Trade balance | 691 | 701 | 817 | 1,020 | 118 | 11.6 |

See footnote(s) at end of table.

TABLE CH.4 Chemicals and related products : U.S. trade for industry/commodity groups and subgroups, 2003–07^a—*Continued*

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|---|--|--------|--------|--------|--------|------------------------|---------|--------|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| CH010 | Fertilizers: | | | | | | | |
| | Exports | 2,429 | 2,718 | 3,005 | 3,014 | 3,470 | 456 | 15.1 |
| | Imports | 4,395 | 5,510 | 7,439 | 7,525 | 9,507 | 1,982 | 26.3 |
| | Trade balance | -1,966 | -2,792 | -4,434 | -4,512 | -6,037 | -1,526 | -33.8 |
| CH011 | Paints, inks, and related items, and certain components thereof: | | | | | | | |
| | Exports | 3,918 | 4,200 | 4,509 | 4,988 | 5,456 | 468 | 9.4 |
| | Imports | 2,078 | 2,241 | 2,598 | 2,825 | 2,958 | 134 | 4.7 |
| | Trade balance | 1,840 | 1,959 | 1,911 | 2,164 | 2,498 | 334 | 15.4 |
| CH012 | Synthetic organic pigments: | | | | | | | |
| | Exports | 332 | 376 | 400 | 405 | 401 | -4 | -1.1 |
| | Imports | 333 | 368 | 396 | 411 | 452 | 41 | 10.0 |
| | Trade balance | -1 | 8 | 5 | -6 | -51 | -45 | -774.4 |
| CH013 | Synthetic dyes and azoic couplers: | | | | | | | |
| | Exports | 226 | 287 | 283 | 304 | 325 | 21 | 6.8 |
| | Imports | 395 | 415 | 407 | 389 | 337 | -52 | -13.3 |
| | Trade balance | -169 | -128 | -125 | -85 | -13 | 73 | 85.0 |
| CH014 | Synthetic tanning agents: | | | | | | | |
| | Exports | 32 | 35 | 28 | 29 | 24 | -5 | -17.3 |
| | Imports | 8 | 8 | 8 | 7 | 7 | (°) | -2.9 |
| | Trade balance | 24 | 27 | 21 | 22 | 17 | -5 | -22.1 |
| CH015 | Natural tanning and dyeing materials: | | | | | | | |
| | Exports | 26 | 44 | 77 | 67 | 75 | 8 | 12.1 |
| | Imports | 63 | 70 | 74 | 76 | 85 | 9 | 11.3 |
| | Trade balance | -36 | -26 | 3 | -9 | -10 | -1 | -5.6 |
| CH016 | Photographic chemicals and preparations: | | | | | | | |
| | Exports | 475 | 435 | 460 | 512 | 538 | 26 | 5.2 |
| | Imports | 382 | 409 | 446 | 476 | 424 | -52 | -10.9 |
| | Trade balance | 93 | 26 | 14 | 36 | 114 | 79 | 220.5 |
| CH017 | Pesticide products and formulations: | | | | | | | |
| | Exports | 2,316 | 2,674 | 2,708 | 3,105 | 3,537 | 432 | 13.9 |
| | Imports | 1,419 | 1,589 | 1,898 | 1,882 | 1,899 | 17 | 0.9 |
| | Trade balance | 897 | 1,085 | 811 | 1,223 | 1,638 | 416 | 34.0 |

See footnote(s) at end of table.

TABLE CH.4 Chemicals and related products : U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|---------|---------|---------|---------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| CH018 Adhesives and glues: | | | | | | | |
| Exports | 600 | 702 | 807 | 911 | 1,087 | 176 | 19.4 |
| Imports | 251 | 305 | 333 | 338 | 377 | 40 | 11.7 |
| Trade balance | 349 | 397 | 473 | 573 | 710 | 137 | 23.9 |
| CH019 Medicinal chemicals: | | | | | | | |
| Exports | 22,527 | 27,098 | 29,296 | 32,460 | 37,036 | 4,576 | 14.1 |
| Imports | 49,284 | 52,677 | 56,104 | 65,218 | 71,764 | 6,546 | 10.0 |
| Trade balance | -26,757 | -25,578 | -26,808 | -32,758 | -34,728 | -1,970 | -6.0 |
| CH020 Essential oils and other flavoring materials: | | | | | | | |
| Exports | 1,389 | 1,462 | 1,420 | 1,525 | 1,674 | 149 | 9.8 |
| Imports | 1,754 | 2,540 | 3,019 | 3,089 | 3,062 | -27 | -0.9 |
| Trade balance | -365 | -1,078 | -1,598 | -1,564 | -1,388 | 175 | 11.2 |
| CH021 Perfumes, cosmetics, and toiletries: | | | | | | | |
| Exports | 3,435 | 3,900 | 4,418 | 5,018 | 5,601 | 583 | 11.6 |
| Imports | 3,111 | 3,652 | 4,099 | 4,374 | 4,924 | 549 | 12.6 |
| Trade balance | 324 | 248 | 319 | 643 | 678 | 34 | 5.3 |
| CH022 Soaps, detergents, and surface-active agents: | | | | | | | |
| Exports | 2,524 | 2,929 | 3,192 | 3,608 | 3,899 | 291 | 8.1 |
| Imports | 1,369 | 1,568 | 1,680 | 1,835 | 1,874 | 39 | 2.1 |
| Trade balance | 1,156 | 1,361 | 1,511 | 1,773 | 2,025 | 252 | 14.2 |
| CH023 Miscellaneous chemicals and specialties: | | | | | | | |
| Exports | 3,149 | 3,444 | 3,708 | 4,249 | 5,259 | 1,010 | 23.8 |
| Imports | 2,150 | 2,497 | 2,907 | 3,249 | 3,799 | 549 | 16.9 |
| Trade balance | 999 | 947 | 801 | 1,000 | 1,461 | 461 | 46.1 |
| CH024 Explosives, propellant powders, and related items: | | | | | | | |
| Exports | 385 | 472 | 476 | 542 | 580 | 38 | 7.0 |
| Imports | 353 | 402 | 459 | 534 | 563 | 28 | 5.3 |
| Trade balance | 33 | 70 | 16 | 8 | 18 | 9 | 116.1 |
| CH025 Polyethylene resins in primary forms: | | | | | | | |
| Exports | 2,817 | 3,698 | 4,448 | 5,103 | 6,312 | 1,209 | 23.7 |
| Imports | 2,158 | 2,505 | 3,227 | 3,712 | 3,510 | -202 | -5.4 |
| Trade balance | 658 | 1,192 | 1,221 | 1,391 | 2,801 | 1,411 | 101.4 |

See footnote(s) at end of table.

TABLE CH.4 Chemicals and related products : U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|---|--------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| CH026 | Polypropylene resins in primary forms: | | | | | | |
| Exports | 1,416 | 1,767 | 2,202 | 2,648 | 3,551 | 903 | 34.1 |
| Imports | 298 | 359 | 415 | 395 | 463 | 67 | 17.1 |
| Trade balance | 1,118 | 1,408 | 1,787 | 2,253 | 3,088 | 835 | 37.1 |
| CH027 | Polyvinyl chloride resins in primary forms: | | | | | | |
| Exports | 837 | 1,044 | 1,112 | 1,323 | 1,628 | 305 | 23.0 |
| Imports | 287 | 383 | 593 | 546 | 381 | -165 | -30.3 |
| Trade balance | 550 | 661 | 519 | 777 | 1,247 | 470 | 60.5 |
| CH028 | Styrene polymers in primary forms: | | | | | | |
| Exports | 783 | 929 | 1,039 | 1,322 | 1,413 | 91 | 6.9 |
| Imports | 628 | 833 | 1,153 | 1,102 | 914 | -188 | -17.0 |
| Trade balance | 155 | 96 | -114 | 220 | 499 | 279 | 126.9 |
| CH029 | Saturated polyester resins: | | | | | | |
| Exports | 814 | 1,014 | 1,059 | 1,159 | 1,295 | 136 | 11.7 |
| Imports | 656 | 728 | 1,199 | 1,329 | 1,322 | -7 | -0.5 |
| Trade balance | 158 | 285 | -141 | -170 | -27 | 143 | 83.9 |
| CH030 | Other plastics in primary forms: | | | | | | |
| Exports | 7,694 | 9,106 | 10,531 | 11,746 | 12,860 | 1,114 | 9.5 |
| Imports | 3,022 | 3,488 | 4,050 | 4,244 | 4,362 | 118 | 2.8 |
| Trade balance | 4,673 | 5,618 | 6,481 | 7,502 | 8,498 | 996 | 13.3 |
| CH031 | Synthetic rubber: | | | | | | |
| Exports | 1,802 | 2,175 | 2,664 | 3,120 | 3,536 | 416 | 13.3 |
| Imports | 973 | 1,093 | 1,532 | 1,520 | 1,510 | -10 | -0.7 |
| Trade balance | 830 | 1,082 | 1,132 | 1,600 | 2,026 | 426 | 26.6 |
| CH032 | Tires and tubes: | | | | | | |
| Exports | 2,310 | 2,658 | 2,926 | 3,164 | 3,709 | 546 | 17.3 |
| Imports | 5,306 | 6,321 | 7,786 | 8,743 | 9,462 | 719 | 8.2 |
| Trade balance | -2,996 | -3,663 | -4,860 | -5,579 | -5,752 | -173 | -3.1 |
| CH033 | Miscellaneous plastic products: | | | | | | |
| Exports | 13,041 | 14,307 | 15,826 | 17,570 | 19,218 | 1,649 | 9.4 |
| Imports | 14,979 | 17,342 | 19,994 | 21,738 | 22,235 | 498 | 2.3 |
| Trade balance | -1,938 | -3,035 | -4,167 | -4,168 | -3,017 | 1,151 | 27.6 |
| CH034 | Miscellaneous rubber products: | | | | | | |
| Exports | 2,400 | 2,623 | 2,743 | 3,055 | 2,917 | -138 | -4.5 |
| Imports | 3,040 | 3,568 | 3,884 | 4,074 | 4,358 | 284 | 7.0 |
| Trade balance | -641 | -945 | -1,141 | -1,019 | -1,441 | -422 | -41.4 |

See footnote(s) at end of table.

TABLE CH.4 Chemicals and related products : U.S. trade for industry/commodity groups and subgroups, 2003–07^a—*Continued*

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| CH035 Gelatin: | | | | | | | |
| Exports | 92 | 89 | 88 | 76 | 68 | -8 | -10.8 |
| Imports | 115 | 113 | 116 | 138 | 143 | 5 | 3.7 |
| Trade balance | -23 | -24 | -28 | -62 | -75 | -13 | -21.6 |
| CH036 Natural rubber: | | | | | | | |
| Exports | 59 | 37 | 34 | 33 | 44 | 11 | 33.9 |
| Imports | 1,047 | 1,466 | 1,552 | 2,029 | 2,119 | 89 | 4.4 |
| Trade balance | -988 | -1,429 | -1,517 | -1,996 | -2,074 | -78 | -3.9 |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bThis 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

^cLess than \$500,000.

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Energy-Related Products

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Change in 2007 from 2006:

U.S. trade deficit: Increased by \$18.0 billion (6 percent) to \$298.2 billion

U.S. exports: Increased by \$7.7 billion (20 percent) to \$46.7 billion

U.S. imports: Increased by \$25.7 billion (8 percent) to \$344.8 billion

Historically, the U.S. trade deficit in the energy sector¹⁶⁸ has continued to grow due to increasing consumption coupled with relatively stagnant domestic production. In 2007, the overall U.S. trade deficit in energy-related products increased by 6 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 24 percent from an average of \$58.70 per barrel in 2006 to an average of \$72.86 per barrel in 2007. During 2007, the per barrel price of crude petroleum increased each quarter, reaching a high of \$90.32 during the fourth quarter.

The rise in crude petroleum prices in 2007 is attributable to continued tight supplies on the world market due to an increase in world consumption (particularly in developing countries such as China and India), depreciation of the U.S. dollar against most major currencies (oil is priced primarily in U.S. dollars), and virtually unchanged world production.¹⁶⁹

The energy-related products with the largest year-to-year shifts, in terms of value, (table EP.2) included increased U.S. exports of petroleum products (19 percent) and natural gas (33 percent). The energy-related products with the largest year-to-year import shifts, in terms of value, included crude petroleum (9 percent) and petroleum products (10 percent).

¹⁶⁸ The data presented in this chapter are derived primarily from official statistics of the U.S. Department of Energy, found in USDOE, EIA, *Monthly Energy Review*, various issues; *Petroleum Supply Monthly*, various issues, *Quarterly Coal Report*, various issues; and *Short-term Energy Outlook*, March 2008.

¹⁶⁹ Preliminary data indicate a slight decline in world production during 2007, with a small decline in OPEC country production more than offsetting a small increase in non-OPEC country production.

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, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|----------------|----------------|----------------|----------------|------------------------|-------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. exports of domestic merchandise: | | | | | | | |
| Canada | 4,296 | 5,754 | 8,487 | 8,953 | 10,563 | 1,610 | 18.0 |
| Mexico | 2,897 | 3,379 | 5,508 | 5,925 | 7,015 | 1,090 | 18.4 |
| Venezuela | 184 | 170 | 202 | 636 | 644 | 8 | 1.3 |
| Nigeria | 22 | 28 | 38 | 120 | 84 | -36 | -30.0 |
| Saudi Arabia | 38 | 48 | 57 | 49 | 69 | 21 | 42.5 |
| Algeria | 23 | 25 | 30 | 47 | 191 | 144 | 305.8 |
| Angola | 3 | 1 | 2 | 3 | 7 | 3 | 95.6 |
| Russia | 125 | 26 | 81 | 48 | 84 | 36 | 75.5 |
| United Kingdom | 206 | 464 | 834 | 1,126 | 732 | -395 | -35.0 |
| Iraq | ^(b) | ^(b) | ^(b) | 1 | ^(b) | ^(b) | -61.3 |
| All other | 8,843 | 11,887 | 14,655 | 22,091 | 27,285 | 5,194 | 23.5 |
| Total | 16,639 | 21,783 | 29,892 | 38,999 | 46,674 | 7,675 | 19.7 |
| EU-27 | 1,754 | 3,128 | 4,119 | 6,896 | 7,449 | 553 | 8.0 |
| OPEC | 511 | 531 | 862 | 1,990 | 1,860 | -130 | -6.5 |
| Latin America | 6,159 | 7,249 | 11,644 | 15,311 | 19,151 | 3,840 | 25.1 |
| CBERA | 1,325 | 1,420 | 2,128 | 2,875 | 4,149 | 1,274 | 44.3 |
| Asia | 3,348 | 4,442 | 4,117 | 5,258 | 6,014 | 756 | 14.4 |
| Sub-Saharan Africa | 166 | 187 | 233 | 548 | 667 | 119 | 21.8 |
| Central and Eastern Europe | 50 | 102 | 253 | 311 | 365 | 54 | 17.4 |
| U.S. imports of merchandise for consumption: | | | | | | | |
| Canada | 41,579 | 49,278 | 66,116 | 73,748 | 79,138 | 5,389 | 7.3 |
| Mexico | 14,792 | 18,966 | 25,029 | 32,116 | 33,549 | 1,433 | 4.5 |
| Venezuela | 13,791 | 20,261 | 28,016 | 32,598 | 34,031 | 1,433 | 4.4 |
| Nigeria | 10,028 | 16,233 | 23,713 | 27,800 | 32,431 | 4,632 | 16.7 |
| Saudi Arabia | 14,538 | 17,851 | 23,268 | 28,154 | 31,381 | 3,227 | 11.5 |
| Algeria | 3,365 | 5,435 | 8,517 | 12,062 | 14,325 | 2,263 | 18.8 |
| Angola | 4,137 | 4,432 | 8,393 | 11,467 | 12,148 | 681 | 5.9 |
| Russia | 3,932 | 4,935 | 8,471 | 10,195 | 11,234 | 1,039 | 10.2 |
| United Kingdom | 5,436 | 6,071 | 8,298 | 7,478 | 8,561 | 1,083 | 14.5 |
| Iraq | 3,297 | 6,496 | 7,008 | 9,253 | 8,776 | -477 | -5.2 |
| All other | 32,288 | 45,596 | 66,367 | 74,297 | 79,254 | 4,957 | 6.7 |
| Total | 147,183 | 195,553 | 273,197 | 319,168 | 344,829 | 25,661 | 8.0 |
| EU-27 | 12,177 | 16,028 | 22,623 | 26,057 | 28,011 | 1,955 | 7.5 |
| OPEC | 52,988 | 77,301 | 108,718 | 132,738 | 144,785 | 12,046 | 9.1 |
| Latin America | 41,240 | 56,061 | 77,970 | 90,843 | 92,898 | 2,056 | 2.3 |
| CBERA | 4,417 | 6,160 | 9,236 | 9,254 | 8,972 | -281 | -3.0 |
| Asia | 2,611 | 3,928 | 5,348 | 7,311 | 8,178 | 867 | 11.9 |
| Sub-Saharan Africa | 17,674 | 26,299 | 40,327 | 47,814 | 54,238 | 6,424 | 13.4 |
| Central and Eastern Europe | 168 | 233 | 297 | 308 | 128 | -179 | -58.3 |
| U.S. merchandise trade balance: | | | | | | | |
| Canada | -37,283 | -43,524 | -57,629 | -64,796 | -68,575 | -3,779 | -5.8 |
| Mexico | -11,894 | -15,587 | -19,522 | -26,191 | -26,534 | -343 | -1.3 |
| Venezuela | -13,607 | -20,090 | -27,814 | -31,962 | -33,387 | -1,425 | -4.5 |

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, 2003–2007^a—*Continued*

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------------|------------------------|-----------------|-----------------|-----------------|-----------------|------------------------|-------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| Nigeria | -10,006 | -16,205 | -23,675 | -27,679 | -32,347 | -4,668 | -16.9 |
| Saudi Arabia | -14,500 | -17,803 | -23,211 | -28,106 | -31,312 | -3,206 | -11.4 |
| Algeria | -3,342 | -5,410 | -8,487 | -12,015 | -14,135 | -2,119 | -17.6 |
| Angola | -4,133 | -4,430 | -8,391 | -11,464 | -12,141 | -678 | -5.9 |
| Russia | -3,806 | -4,910 | -8,390 | -10,147 | -11,150 | -1,003 | -9.9 |
| United Kingdom | -5,230 | -5,607 | -7,464 | -6,352 | -7,829 | -1,477 | -23.3 |
| Iraq | -3,297 | -6,495 | -7,008 | -9,252 | -8,775 | 477 | 5.2 |
| All other | -23,445 | -33,709 | -51,712 | -52,206 | -51,969 | 237 | 0.5 |
| Total | -130,544 | -173,770 | -243,304 | -280,170 | -298,155 | -17,986 | -6.4 |
| EU-27 | -10,424 | -12,899 | -18,504 | -19,161 | -20,563 | -1,402 | -7.3 |
| OPEC | -52,476 | -76,770 | -107,856 | -130,749 | -142,925 | -12,176 | -9.3 |
| Latin America | -35,081 | -48,812 | -66,326 | -75,532 | -73,748 | 1,784 | 2.4 |
| CBERA | -3,092 | -4,740 | -7,108 | -6,379 | -4,823 | 1,555 | 24.4 |
| Asia | 737 | 514 | -1,230 | -2,053 | -2,164 | -111 | -5.4 |
| Sub-Saharan Africa | -17,508 | -26,112 | -40,094 | -47,266 | -53,571 | -6,305 | -13.3 |
| Central and Eastern Europe | -118 | -131 | -44 | 3 | 236 | 233 | 7,773.0 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

TABLE EP.2 Energy-related products: Leading changes in U.S. exports and imports, 2003–07

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|---------|---------|---------|---------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. EXPORTS: | | | | | | | |
| Increases: | | | | | | | |
| EP005 Petroleum products | 9,783 | 12,651 | 18,302 | 26,407 | 31,484 | 5,077 | 19.2 |
| EP006 Natural gas and components | 2,074 | 2,906 | 4,045 | 3,688 | 4,905 | 1,217 | 33.0 |
| EP003 Coal, coke, and related chemical products . . | 2,360 | 3,556 | 4,318 | 5,179 | 5,877 | 698 | 13.5 |
| EP002 Nuclear materials | 1,551 | 1,575 | 1,562 | 1,822 | 2,424 | 602 | 33.1 |
| EP004 Crude petroleum | 155 | 265 | 627 | 852 | 993 | 142 | 16.6 |
| Decreases: | | | | | | | |
| EP001 Electrical energy | 716 | 829 | 1,039 | 1,052 | 991 | -61 | -5.8 |
| U.S. IMPORTS: | | | | | | | |
| Increases: | | | | | | | |
| EP004 Crude petroleum | 73,527 | 100,338 | 137,331 | 171,243 | 186,476 | 15,233 | 8.9 |
| EP005 Petroleum products | 37,280 | 51,579 | 77,684 | 89,448 | 98,577 | 9,129 | 10.2 |
| EP002 Nuclear materials | 2,892 | 2,625 | 3,175 | 3,910 | 5,273 | 1,362 | 34.8 |
| EP001 Electrical energy | 1,382 | 1,261 | 2,479 | 2,518 | 2,713 | 195 | 7.7 |
| Decreases: | | | | | | | |
| EP006 Natural gas and components | 28,885 | 34,195 | 46,211 | 45,118 | 44,910 | -209 | -0.5 |
| EP003 Coal, coke, and related chemical products . . | 3,217 | 5,555 | 6,316 | 6,930 | 6,880 | -50 | -0.7 |

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

Note: Calculations based on unrounded data.

^aThis coding system is used by the U.S. International Trade Commission to identify major grouping and subgroupings of HTS import and export items for trade monitoring purposes.

U.S. Exports

In terms of quantity, U.S. exports of crude petroleum increased by 12 percent from 25,000 barrels per day (b/d) in 2006 to 28,000 b/d in 2007.¹⁷⁰ Historically, Canada, which accounted for 100 percent of the total quantity of U.S. crude petroleum exports in 2007, is 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. exports of natural gas increased to 822 billion cubic feet in 2007 from 724 billion cubic feet in 2006. Growth in the value of U.S. exports of natural gas did not keep pace with the growth in the quantity of exports; the city gate price¹⁷¹ of natural gas decreased to \$8.11 per thousand cubic feet in 2007 from \$8.61 per thousand cubic feet in 2006. The price decline was attributable to increased domestic production, which supplies about 93 percent of domestic natural gas consumption. As a result of the lower prices, a cold winter in 2007, and increased pipeline capacity, residential consumption of natural gas reached its highest level since 2003. Canada remains the primary U.S. export market (70 percent of pipeline gas exports) as most of the U.S. trade in natural gas is via pipelines shared with Canada and, to a lesser extent, Mexico. Annual trade fluctuates from year to year based on market availability along the pipeline.

U.S. exports of coal increased by about 20 percent to 59 million short tons in 2007. 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. Nearly all of the rise in U.S. exports was accounted for by tightening world supplies of metallurgical coals (used for industrial purposes) coupled with increased demand for these coals in Europe and high growth nations, such as India and South Korea.

U.S. Imports

In terms of quantity, U.S. imports of crude petroleum declined by less than 1 percent (108,000 b/d) to 10.0 million b/d in 2007 because of declines in domestic consumption coupled with increased U.S. production in the Gulf of Mexico. As was the case during the 2002–06 period, Canada, Nigeria, Mexico, Venezuela, and Saudi Arabia were the leading sources of U.S. imports of crude petroleum in 2007. OPEC members, which account for nearly 70 percent of the world's proven reserves and 40 percent of the world's production of crude petroleum, were again the largest suppliers to the U.S. market, accounting for 41 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.

In terms of quantity, U.S. imports of natural gas increased to 4.6 trillion cubic feet in 2007 from 4.1 trillion cubic feet in 2006. As noted, most of the U.S. trade in natural gas is via pipelines shared with Canada and, to a lesser extent, Mexico, and trade fluctuates annually.

¹⁷⁰ 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.

¹⁷¹ The city gate price is the point or measuring station at which a gas distribution company receives natural gas from a pipeline company or transmission system.

Canada remained the primary U.S. import source (99 percent of pipeline gas). In terms of quantity, U.S. imports of liquefied natural gas (LNG), which accounts for about 8 percent of total natural gas imports, increased slightly in 2007, as a result of the expansion of liquefaction capacity in Trinidad and Tobago.

U.S. imports of coal remained constant at 36 million short tons in 2007. The price of coal also remained relatively constant at about \$50 per short ton in 2007.

Petroleum Products

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Change in 2007 from 2006:

U.S. trade deficit: Increased by \$4.1 billion (6 percent) to \$67.1 billion

U.S. exports: Increased by \$5.1 billion (19 percent) to \$31.5 billion

U.S. imports: Increased by \$9.1 billion (10 percent) to \$98.6 billion

The U.S. trade deficit in petroleum products increased by \$4.1 billion (6 percent) in 2007 as a result of price increases caused by the rising cost of crude petroleum, the feedstock for petroleum products (table EP.3). The United States is a major producer and consumer of petroleum products but is not a leading exporter as U.S. refineries are generally geared toward supplying 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 2007. The quantity of U.S. exports of petroleum products, primarily distillate and residual fuel oils to Mexico and Canada, increased slightly from 1.3 million b/d in 2006 to 1.4 million b/d in 2007. These exports generally fluctuate based on refinery output on either side of the borders.¹⁷² The much larger increase in the value of exports in 2007 was due to significant price increases.

U.S. Imports

Although the value of U.S. petroleum product imports increased by 10 percent in 2007 because of the increased price for crude petroleum, the quantity of U.S. imports decreased by 6 percent. The decrease in imports is largely attributable to increased domestic production in 2007, as three refineries previously shut down for maintenance were reactivated. U.S. imports of petroleum products, on average, account for only about 6–8 percent of domestic consumption. The primary sources of U.S. imports of petroleum products in 2007 continued to be Canada, Saudi Arabia, and Venezuela. Residual fuel oils (used primarily as industrial heating and bunker fuels for heating and power), motor fuels, and jet fuels accounted for nearly all of the quantity decrease in U.S. imports.

¹⁷² 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.

TABLE EP.3 Petroleum products (EP005): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|---------------|---------------|---------------|---------------|------------------------|-------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. exports of domestic merchandise: | | | | | | | |
| Canada | 1,432 | 1,725 | 2,605 | 3,272 | 4,105 | 833 | 25.5 |
| Saudi Arabia | 36 | 45 | 52 | 45 | 60 | 15 | 33.4 |
| Venezuela | 177 | 165 | 185 | 629 | 638 | 9 | 1.4 |
| Mexico | 2,318 | 2,799 | 4,781 | 5,024 | 5,725 | 702 | 14.0 |
| Russia | 23 | 22 | 38 | 40 | 56 | 16 | 39.0 |
| United Kingdom | 54 | 198 | 471 | 466 | 309 | -157 | -33.7 |
| Algeria | 3 | 1 | 1 | 23 | 153 | 130 | 558.8 |
| Netherlands | 148 | 547 | 497 | 1,716 | 1,799 | 83 | 4.8 |
| Belgium | 116 | 216 | 275 | 445 | 424 | -22 | -4.8 |
| Aruba | 25 | 74 | 63 | 125 | 128 | 3 | 2.1 |
| All other | 5,452 | 6,859 | 9,334 | 14,620 | 18,086 | 3,466 | 23.7 |
| Total | 9,783 | 12,651 | 18,302 | 26,407 | 31,484 | 5,077 | 19.2 |
| EU-27 | 726 | 1,785 | 1,935 | 4,270 | 4,142 | -128 | -3.0 |
| OPEC | 463 | 483 | 764 | 1,898 | 1,734 | -164 | -8.6 |
| Latin America | 5,281 | 6,251 | 10,378 | 13,738 | 16,957 | 3,218 | 23.4 |
| CBERA | 1,296 | 1,408 | 2,115 | 2,843 | 4,122 | 1,278 | 44.9 |
| Asia | 1,610 | 2,010 | 2,360 | 3,012 | 3,631 | 618 | 20.5 |
| Sub-Saharan Africa | 139 | 157 | 211 | 512 | 627 | 115 | 22.6 |
| Central and Eastern Europe | 23 | 36 | 30 | 75 | 72 | -3 | -3.9 |
| U.S. imports of merchandise for consumption: | | | | | | | |
| Canada | 5,479 | 6,747 | 8,977 | 10,131 | 11,856 | 1,725 | 17.0 |
| Saudi Arabia | 4,734 | 5,739 | 8,073 | 9,734 | 11,424 | 1,690 | 17.4 |
| Venezuela | 4,152 | 6,382 | 9,161 | 10,452 | 9,271 | -1,181 | -11.3 |
| Mexico | 1,086 | 1,698 | 2,500 | 2,697 | 3,243 | 546 | 20.2 |
| Russia | 2,107 | 2,929 | 5,741 | 7,392 | 8,238 | 846 | 11.4 |
| United Kingdom | 2,315 | 3,352 | 4,432 | 4,689 | 5,864 | 1,174 | 25.0 |
| Algeria | 1,235 | 1,742 | 2,857 | 3,993 | 4,868 | 875 | 21.9 |
| Netherlands | 1,000 | 1,662 | 3,421 | 4,434 | 3,170 | -1,263 | -28.5 |
| Belgium | 1,016 | 1,513 | 1,720 | 1,960 | 2,384 | 424 | 21.6 |
| Aruba | 752 | 1,530 | 2,715 | 2,464 | 2,653 | 189 | 7.7 |
| All other | 13,405 | 18,283 | 28,087 | 31,503 | 35,608 | 4,105 | 13.0 |
| Total | 37,280 | 51,579 | 77,684 | 89,448 | 98,577 | 9,129 | 10.2 |
| EU-27 | 7,776 | 11,757 | 17,157 | 21,354 | 22,244 | 889 | 4.2 |
| OPEC | 12,818 | 18,236 | 26,663 | 30,901 | 33,039 | 2,138 | 6.9 |
| Latin America | 9,891 | 13,575 | 20,722 | 20,988 | 20,341 | -647 | -3.1 |
| CBERA | 1,847 | 2,621 | 4,742 | 4,515 | 4,422 | -93 | -2.1 |
| Asia | 1,594 | 2,053 | 3,484 | 5,126 | 6,445 | 1,320 | 25.7 |
| Sub-Saharan Africa | 862 | 1,149 | 2,528 | 2,041 | 2,004 | -37 | -1.8 |
| Central and Eastern Europe | 159 | 57 | 125 | 229 | 121 | -108 | -47.1 |
| U.S. merchandise trade balance: | | | | | | | |
| Canada | -4,047 | -5,022 | -6,372 | -6,859 | -7,750 | -891 | -13.0 |
| Saudi Arabia | -4,698 | -5,694 | -8,021 | -9,688 | -11,363 | -1,675 | -17.3 |
| Venezuela | -3,975 | -6,217 | -8,976 | -9,823 | -8,632 | 1,190 | 12.1 |
| Mexico | 1,232 | 1,101 | 2,281 | 2,327 | 2,483 | 156 | 6.7 |
| Russia | -2,084 | -2,907 | -5,703 | -7,351 | -8,182 | -831 | -11.3 |

See footnote(s) at end of table.

TABLE EP.3 Petroleum products (EP005): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—*Continued*

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|------------------------|----------------|----------------|----------------|----------------|------------------------|-------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| United Kingdom | -2,261 | -3,155 | -3,962 | -4,223 | -5,555 | -1,332 | -31.5 |
| Algeria | -1,231 | -1,741 | -2,856 | -3,970 | -4,715 | -745 | -18.8 |
| Netherlands | -853 | -1,115 | -2,924 | -2,718 | -1,372 | 1,347 | 49.5 |
| Belgium | -900 | -1,298 | -1,445 | -1,515 | -1,961 | -446 | -29.4 |
| Aruba | -728 | -1,455 | -2,652 | -2,338 | -2,525 | -186 | -8.0 |
| All other | -7,953 | -11,424 | -18,753 | -16,882 | -17,522 | -640 | -3.8 |
| Total | -27,497 | -38,928 | -59,382 | -63,042 | -67,094 | -4,052 | -6.4 |
| EU-27 | -7,050 | -9,973 | -15,222 | -17,085 | -18,102 | -1,017 | -6.0 |
| OPEC | -12,355 | -17,753 | -25,899 | -29,003 | -31,305 | -2,302 | -7.9 |
| Latin America | -4,610 | -7,324 | -10,345 | -7,250 | -3,384 | 3,865 | 53.3 |
| CBERA | -551 | -1,213 | -2,627 | -1,672 | -301 | 1,371 | 82.0 |
| Asia | 16 | -42 | -1,124 | -2,113 | -2,815 | -701 | -33.2 |
| Sub-Saharan Africa | -722 | -992 | -2,316 | -1,529 | -1,377 | 152 | 10.0 |
| Central and Eastern Europe | -136 | -22 | -95 | -154 | -49 | 105 | 68.1 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

TABLE EP.4 Energy-related products: U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|--|---------|----------|----------|----------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| EP001 | Electrical energy: | | | | | | |
| | Exports | 829 | 1,039 | 1,052 | 991 | -61 | -5.8 |
| | Imports | 1,382 | 2,479 | 2,518 | 2,713 | 195 | 7.7 |
| | Trade balance | -666 | -1,440 | -1,466 | -1,722 | -256 | -17.4 |
| EP002 | Nuclear materials: | | | | | | |
| | Exports | 1,551 | 1,562 | 1,822 | 2,424 | 602 | 33.1 |
| | Imports | 2,892 | 3,175 | 3,910 | 5,273 | 1,362 | 34.8 |
| | Trade balance | -1,341 | -1,613 | -2,088 | -2,848 | -760 | -36.4 |
| EP003 | Coal, coke, and related chemical products: | | | | | | |
| | Exports | 2,360 | 4,318 | 5,179 | 5,877 | 698 | 13.5 |
| | Imports | 3,217 | 6,316 | 6,930 | 6,880 | -50 | -0.7 |
| | Trade balance | -857 | -1,998 | -1,751 | -1,003 | 748 | 42.7 |
| EP004 | Crude petroleum: | | | | | | |
| | Exports | 155 | 627 | 852 | 993 | 142 | 16.6 |
| | Imports | 73,527 | 100,338 | 137,331 | 171,243 | 15,233 | 8.9 |
| | Trade balance | -73,372 | -100,073 | -136,704 | -170,391 | -15,091 | -8.9 |
| EP005 | Petroleum products: | | | | | | |
| | Exports | 9,783 | 18,302 | 26,407 | 31,484 | 5,077 | 19.2 |
| | Imports | 37,280 | 77,684 | 89,448 | 98,577 | 9,129 | 10.2 |
| | Trade balance | -27,497 | -59,382 | -63,042 | -67,094 | -4,052 | -6.4 |
| EP006 | Natural gas and components: | | | | | | |
| | Exports | 2,074 | 4,045 | 3,688 | 4,905 | 1,217 | 33.0 |
| | Imports | 28,885 | 46,211 | 45,118 | 44,910 | -209 | -0.5 |
| | Trade balance | -26,811 | -42,166 | -41,430 | -40,005 | 1,425 | 3.4 |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bThis 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.

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Textiles, Apparel, and Footwear

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Textiles and Apparel¹⁷³

Change in 2007 from 2006:

U.S. trade deficit: Increased by \$3.7 billion (4 percent) to \$90.1 billion
U.S. exports: Decreased by \$553 million (3 percent) to \$17.5 billion
U.S. imports: Increased by \$3.1 billion (3 percent) to \$107.7 billion

In 2007, the U.S. trade deficit in textiles and apparel widened to \$90.1 billion because of an increase in U.S. imports and a decrease in U.S. exports (table TX.1). Much of the \$3.1 billion increase in imports reflects the continued effects of the elimination of quotas, 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). In 2007, apparel accounted for 76 percent of sector imports (table TX.2), of which shirts and blouses comprised almost one-third (\$26.0 billion). Fabrics and yarns were the leading U.S. exports in 2007, together accounting for 61 percent (table TX.2). Much of the decrease in U.S. exports was accounted for by declines in apparel (\$648 million) and fabric exports (\$349 million).

The growing trade deficit in textiles and apparel in 2007 stemmed principally from continued growth in imports from Asia, particularly China. The trade deficit with Asia increased by \$4.9 billion (7 percent) to \$72.2 billion, as the \$5.1 billion increase in U.S. imports from the region far exceeded a \$130 million increase in U.S. exports to the region (table TX.1). The U.S. trade deficit with Indonesia, another leading Asian apparel supplier, rose by \$333 million (8 percent) in 2007 to \$4.3 billion, a smaller increase than in previous years, which some industry sources attributed to growing competition from Vietnam.¹⁷⁴

U.S. Exports

U.S. exports of textiles and apparel decreased by \$553 million (3 percent) to \$17.5 billion in 2007 (table TX.1). The primary U.S. export items (table TX.2) were fibers and yarns and fabrics used primarily in making finished apparel products. Latin America was the single

¹⁷³ 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).

¹⁷⁴ *Emergingtextiles.com*, “U.S. Apparel Imports from Indonesia,” March 12, 2008.

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, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|---------------|----------------|----------------|----------------|------------------------|-------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| China | 405 | 501 | 629 | 731 | 844 | 113 | 15.4 | |
| Mexico | 4,696 | 4,730 | 4,705 | 4,551 | 3,947 | -603 | -13.3 | |
| Canada | 3,121 | 3,275 | 3,471 | 3,561 | 3,531 | -30 | -0.8 | |
| India | 54 | 68 | 78 | 101 | 101 | (^b) | -0.3 | |
| Vietnam | 16 | 19 | 21 | 33 | 44 | 11 | 33.9 | |
| Indonesia | 59 | 77 | 79 | 91 | 99 | 7 | 7.8 | |
| Honduras | 1,522 | 1,547 | 1,459 | 1,416 | 1,518 | 101 | 7.1 | |
| Pakistan | 13 | 15 | 24 | 27 | 37 | 10 | 38.7 | |
| Bangladesh | 7 | 9 | 11 | 12 | 14 | 2 | 19.5 | |
| Italy | 120 | 129 | 137 | 142 | 156 | 14 | 10.2 | |
| All other | 7,019 | 7,294 | 7,250 | 7,423 | 7,244 | -179 | -2.4 | |
| Total | 17,033 | 17,663 | 17,864 | 18,088 | 17,535 | -553 | -3.1 | |
| EU-27 | 1,518 | 1,582 | 1,749 | 1,899 | 2,064 | 165 | 8.7 | |
| OPEC | 229 | 297 | 311 | 434 | 402 | -32 | -7.4 | |
| Latin America | 9,803 | 9,916 | 9,549 | 9,247 | 8,371 | -875 | -9.5 | |
| CBERA | 723 | 695 | 666 | 621 | 463 | -158 | -25.5 | |
| Asia | 1,963 | 2,171 | 2,353 | 2,522 | 2,652 | 130 | 5.1 | |
| Sub-Saharan Africa | 131 | 139 | 134 | 141 | 167 | 26 | 18.8 | |
| Central and Eastern Europe | 38 | 42 | 42 | 53 | 63 | 11 | 19.9 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| China | 15,426 | 18,902 | 26,937 | 31,284 | 36,162 | 4,878 | 15.6 | |
| Mexico | 9,015 | 8,826 | 8,305 | 7,497 | 6,712 | -785 | -10.5 | |
| Canada | 3,788 | 3,834 | 3,633 | 3,395 | 3,080 | -315 | -9.3 | |
| India | 3,668 | 4,106 | 5,194 | 5,568 | 5,611 | 43 | 0.8 | |
| Vietnam | 2,426 | 2,644 | 2,807 | 3,326 | 4,503 | 1,177 | 35.4 | |
| Indonesia | 2,462 | 2,714 | 3,230 | 4,073 | 4,413 | 340 | 8.3 | |
| Honduras | 2,578 | 2,754 | 2,701 | 2,535 | 2,613 | 78 | 3.1 | |
| Pakistan | 2,347 | 2,671 | 3,042 | 3,397 | 3,308 | -89 | -2.6 | |
| Bangladesh | 1,961 | 2,092 | 2,486 | 3,025 | 3,216 | 191 | 6.3 | |
| Italy | 2,526 | 2,627 | 2,505 | 2,422 | 2,623 | 201 | 8.3 | |
| All other | 41,045 | 42,874 | 39,645 | 38,041 | 35,437 | -2,604 | -6.8 | |
| Total | 87,241 | 94,045 | 100,485 | 104,563 | 107,678 | 3,114 | 3.0 | |
| EU-27 | 5,972 | 6,291 | 6,095 | 5,988 | 6,287 | 300 | 5.0 | |
| OPEC | 3,036 | 3,239 | 3,695 | 4,464 | 4,736 | 272 | 6.1 | |
| Latin America | 20,553 | 21,058 | 20,274 | 18,721 | 17,237 | -1,485 | -7.9 | |
| CBERA | 1,041 | 981 | 994 | 1,009 | 944 | -65 | -6.5 | |
| Asia | 49,371 | 54,783 | 63,395 | 69,796 | 74,846 | 5,050 | 7.2 | |
| Sub-Saharan Africa | 1,552 | 1,802 | 1,504 | 1,339 | 1,334 | -5 | -0.4 | |
| Central and Eastern Europe | 562 | 565 | 488 | 500 | 488 | -11 | -2.3 | |

See footnote(s) at end of table.

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, 2003–07^a—Continued

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--------------------------------|------------------------|---------|---------|---------|---------|------------------------|---------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. merchandise trade balance | | | | | | | | |
| China | -15,021 | -18,401 | -26,308 | -30,553 | -35,317 | -4,765 | -15.6 | |
| Mexico | -4,319 | -4,097 | -3,600 | -2,946 | -2,765 | 182 | 6.2 | |
| Canada | -666 | -559 | -162 | 166 | 451 | 285 | 172.1 | |
| India | -3,614 | -4,039 | -5,117 | -5,467 | -5,510 | -44 | -0.8 | |
| Vietnam | -2,410 | -2,625 | -2,786 | -3,293 | -4,459 | -1,166 | -35.4 | |
| Indonesia | -2,402 | -2,636 | -3,151 | -3,982 | -4,314 | -333 | -8.4 | |
| Honduras | -1,056 | -1,207 | -1,243 | -1,118 | -1,095 | 23 | 2.1 | |
| Pakistan | -2,333 | -2,656 | -3,018 | -3,371 | -3,271 | 99 | 2.9 | |
| Bangladesh | -1,953 | -2,083 | -2,474 | -3,013 | -3,202 | -189 | -6.3 | |
| Italy | -2,407 | -2,498 | -2,368 | -2,280 | -2,467 | -187 | -8.2 | |
| All other | -34,026 | -35,580 | -32,396 | -30,618 | -28,193 | 2,425 | 7.9 | |
| Total | -70,208 | -76,382 | -82,621 | -86,476 | -90,143 | -3,668 | -4.2 | |
| EU-27 | -4,454 | -4,710 | -4,347 | -4,089 | -4,223 | -134 | -3.3 | |
| OPEC | -2,807 | -2,942 | -3,384 | -4,030 | -4,334 | -305 | -7.6 | |
| Latin America | -10,750 | -11,141 | -10,724 | -9,475 | -8,866 | 609 | 6.4 | |
| CBERA | -318 | -286 | -328 | -388 | -481 | -93 | -24.0 | |
| Asia | -47,408 | -52,612 | -61,042 | -67,273 | -72,194 | -4,920 | -7.3 | |
| Sub-Saharan Africa | -1,421 | -1,663 | -1,370 | -1,198 | -1,167 | 31 | 2.6 | |
| Central and Eastern Europe | -523 | -523 | -446 | -447 | -425 | 22 | 4.9 | |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

TABLE TX.2 Textiles and apparel: Leading changes in U.S. exports and imports, 2003–07

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|--|--------|--------|--------|--------|------------------------|------------------|-------|
| | | | | | | Absolute | Percent | |
| <i>Million dollars</i> | | | | | | | | |
| U.S. EXPORTS | | | | | | | | |
| Increases | | | | | | | | |
| TX001 | Fibers and yarns, except raw cotton and raw wool | 2,872 | 3,192 | 3,328 | 3,780 | 4,041 | 261 | 6.9 |
| TX006 | Miscellaneous textile products | 1,534 | 1,701 | 1,825 | 2,037 | 2,174 | 137 | 6.7 |
| TX002D | Coated and other fabrics | 1,154 | 1,098 | 1,097 | 1,119 | 1,213 | 93 | 8.3 |
| TX005O | Leather apparel and accessories | 92 | 108 | 175 | 165 | 220 | 55 | 33.4 |
| TX002B | Knit fabrics | 1,392 | 1,624 | 1,778 | 1,611 | 1,659 | 48 | 3.0 |
| TX005R | Nonwoven apparel | 37 | 34 | 27 | 25 | 65 | 40 | 157.2 |
| TX005H | Women's and girls' dresses | 59 | 61 | 61 | 87 | 121 | 34 | 38.5 |
| TX002E | Glass fiber fabrics | 118 | 146 | 147 | 178 | 211 | 33 | 18.7 |
| TX003 | Carpets and rugs | 681 | 763 | 881 | 960 | 983 | 23 | 2.4 |
| TX004 | Home furnishings | 339 | 365 | 417 | 442 | 465 | 23 | 5.2 |
| TX004F | Pillows, cushions, and sleeping bags | 74 | 93 | 108 | 130 | 149 | 19 | 14.3 |
| TX004D | Curtains | 30 | 39 | 49 | 58 | 71 | 13 | 22.2 |
| TX005N | Headwear | 89 | 102 | 111 | 114 | 126 | 12 | 10.2 |
| TX004E | Bedspreads and other furnishing articles | 43 | 49 | 59 | 65 | 73 | 8 | 11.8 |
| TX005P | Fur apparel and other fur articles | 19 | 18 | 16 | 22 | 29 | 7 | 31.4 |
| TX005M | Gloves, including gloves for sports | 109 | 104 | 101 | 100 | 106 | 7 | 6.8 |
| TX005F | Sweaters | 32 | 33 | 28 | 35 | 35 | (^b) | 0.7 |
| Decreases | | | | | | | | |
| TX005 | Apparel | 4,965 | 4,414 | 4,129 | 3,854 | 3,206 | -648 | -16.8 |
| TX002A | Broadwoven fabrics | 2,575 | 2,754 | 2,478 | 2,210 | 1,822 | -388 | -17.6 |
| TX002 | Fabrics | 6,641 | 7,228 | 7,285 | 7,015 | 6,666 | -349 | -5.0 |
| TX005E | Shirts and blouses | 1,097 | 800 | 841 | 802 | 582 | -220 | -27.4 |
| TX005I | Robes, nightwear, and underwear | 715 | 700 | 479 | 394 | 203 | -192 | -48.6 |
| TX005K | Body-supporting garments | 289 | 310 | 275 | 166 | 57 | -109 | -65.8 |
| TX002F | Other fabrics | 914 | 1,027 | 1,240 | 1,392 | 1,303 | -89 | -6.4 |
| TX005S | Other wearing apparel | 845 | 668 | 599 | 564 | 481 | -83 | -14.7 |
| TX005C | Men's and boys' trousers | 573 | 437 | 405 | 292 | 231 | -61 | -21.0 |
| TX005D | Women's and girls' trousers | 287 | 267 | 239 | 268 | 212 | -56 | -21.0 |
| TX002C | Specialty fabrics | 489 | 579 | 545 | 506 | 459 | -46 | -9.1 |
| TX005J | Hosiery | 339 | 356 | 343 | 383 | 349 | -33 | -8.7 |
| TX005Q | Rubber, plastic, and coated-fabric apparel | 95 | 129 | 142 | 165 | 141 | -24 | -14.5 |
| TX004B | Pillowcases and sheets | 78 | 81 | 91 | 83 | 74 | -9 | -10.4 |
| TX005G | Women's and girls' suits, skirts, and coats | 136 | 146 | 155 | 148 | 139 | -8 | -5.7 |
| TX005B | Men's and boys' coats and jackets | 91 | 89 | 75 | 71 | 64 | -6 | -9.2 |
| TX005A | Men's and boys' suits and sports coats | 39 | 28 | 30 | 32 | 28 | -5 | -14.1 |
| TX004A | Blankets | 29 | 31 | 31 | 30 | 25 | -4 | -14.1 |
| TX005L | Neckwear, handkerchiefs, and scarves | 23 | 24 | 26 | 23 | 19 | -4 | -16.8 |
| TX004G | Tapestries and other wall hangings | 1 | 1 | 9 | 4 | 1 | -3 | -77.8 |
| TX004C | Table/kitchen linens and towels | 85 | 71 | 70 | 73 | 72 | -1 | -0.7 |
| U.S. IMPORTS | | | | | | | | |
| Increases | | | | | | | | |
| TX005 | Apparel | 68,274 | 72,404 | 76,503 | 79,299 | 81,366 | 2,067 | 2.6 |
| TX005H | Women's and girls' dresses | 1,550 | 1,524 | 1,465 | 1,841 | 2,900 | 1,060 | 57.6 |
| TX005E | Shirts and blouses | 21,285 | 22,474 | 23,664 | 25,073 | 26,035 | 962 | 3.8 |
| TX004 | Home furnishings | 5,021 | 6,107 | 7,448 | 8,249 | 8,724 | 475 | 5.8 |
| TX006 | Miscellaneous textile products | 3,754 | 4,319 | 4,651 | 5,104 | 5,502 | 398 | 7.8 |
| TX005B | Men's and boys' coats and jackets | 2,001 | 2,134 | 2,255 | 2,441 | 2,814 | 374 | 15.3 |
| TX004F | Pillows, cushions, and sleeping bags | 437 | 645 | 860 | 971 | 1,143 | 172 | 17.7 |
| TX005M | Gloves, including gloves for sports | 2,386 | 2,533 | 2,757 | 2,989 | 3,160 | 171 | 5.7 |
| TX004C | Table/kitchen linens and towels | 1,418 | 1,646 | 1,864 | 1,951 | 2,114 | 163 | 8.3 |
| TX004B | Pillowcases and sheets | 1,046 | 1,353 | 1,904 | 2,204 | 2,352 | 148 | 6.7 |

See footnote(s) at end of table.

TABLE TX.2 Textiles and apparel: Leading changes in U.S. exports and imports, 2003–07—*Continued*

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|---|------------------------|-------|-------|-------|-------|------------------------|---------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| TX005S Other wearing apparel | 3,628 | 3,825 | 4,204 | 4,479 | 4,623 | 144 | 3.2 | |
| TX002 Fabrics | 5,854 | 6,227 | 6,352 | 6,202 | 6,343 | 141 | 2.3 | |
| TX002F Other fabrics | 543 | 630 | 710 | 701 | 806 | 105 | 15.0 | |
| TX005F Sweaters | 2,729 | 2,632 | 2,809 | 2,658 | 2,733 | 74 | 2.8 | |
| TX005J Hosiery | 1,091 | 1,316 | 1,366 | 1,459 | 1,521 | 62 | 4.3 | |
| TX002D Coated and other fabrics | 743 | 891 | 967 | 1,021 | 1,078 | 58 | 5.7 | |
| TX001 Fibers and yarns, except raw cotton and raw wool | 2,676 | 3,160 | 3,538 | 3,582 | 3,632 | 49 | 1.4 | |
| TX002A Broadwoven fabrics | 3,036 | 3,154 | 2,989 | 2,833 | 2,870 | 38 | 1.3 | |
| TX002E Glass fiber fabrics | 96 | 108 | 119 | 133 | 160 | 26 | 19.6 | |
| TX005R Nonwoven apparel | 401 | 395 | 419 | 479 | 488 | 9 | 2.0 | |
| TX004A Blankets | 391 | 459 | 514 | 606 | 614 | 9 | 1.4 | |
| TX004D Curtains | 725 | 858 | 1,017 | 1,088 | 1,094 | 6 | 0.5 | |
| TX005Q Rubber, plastic, and coated-fabric apparel . . | 371 | 462 | 470 | 382 | 387 | 5 | 1.4 | |
| TX002C Specialty fabrics | 410 | 465 | 541 | 550 | 553 | 3 | 0.6 | |
| Decreases | | | | | | | | |
| TX005G Women's and girls' suits, skirts, and coats . . | 4,803 | 5,866 | 6,941 | 6,663 | 6,346 | -317 | -4.8 | |
| TX005O Leather apparel and accessories | 1,743 | 1,605 | 1,512 | 1,496 | 1,344 | -152 | -10.1 | |
| TX005I Robes, nightwear, and underwear | 5,044 | 5,246 | 5,418 | 5,478 | 5,380 | -98 | -1.8 | |
| TX002B Knit fabrics | 1,026 | 979 | 1,026 | 965 | 876 | -89 | -9.2 | |
| TX005C Men's and boys' trousers | 7,459 | 7,568 | 7,776 | 8,014 | 7,940 | -74 | -0.9 | |
| TX005K Body-supporting garments | 1,579 | 1,800 | 1,854 | 2,071 | 2,016 | -55 | -2.7 | |
| TX005P Fur apparel and other fur articles | 285 | 334 | 314 | 274 | 221 | -54 | -19.6 | |
| TX004E Bedspreads and other furnishing articles . . . | 1,001 | 1,144 | 1,284 | 1,424 | 1,403 | -21 | -1.5 | |
| TX005N Headwear | 1,358 | 1,526 | 1,509 | 1,621 | 1,602 | -19 | -1.2 | |
| TX005D Women's and girls' trousers | 8,925 | 9,327 | 9,664 | 9,889 | 9,872 | -17 | -0.2 | |
| TX003 Carpets and rugs | 1,662 | 1,829 | 1,993 | 2,127 | 2,111 | -16 | -0.8 | |
| TX005A Men's and boys' suits and sports coats | 1,143 | 1,139 | 1,359 | 1,336 | 1,331 | -6 | -0.4 | |
| TX005L Neckwear, handkerchiefs, and scarves | 494 | 698 | 748 | 656 | 651 | -4 | -0.6 | |
| TX004G Tapestries and other wall hangings | 4 | 3 | 6 | 5 | 4 | -1 | -16.7 | |

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

Note: Calculations based on unrounded data.

^aThis coding system is used by the U.S. International Trade Commission to identify major grouping and subgroupings of HTS import and export items for trade monitoring purposes.

^aLess than \$500,000.

largest U.S. regional export market in 2007, accounting for almost one-half (\$8.4 billion) of U.S. sector exports. Mexico and Canada are the largest individual country markets for U.S.-made textiles and apparel because of their relative proximity, which reduces shipping and transit time, and because of preferential treatment under NAFTA. The United States had a trade surplus in textiles and apparel with Canada and a deficit with Mexico in 2007.

Honduras, which benefits from preferential treatment under DR-CAFTA,¹⁷⁵ was the third largest U.S. export market for textiles and apparel in 2007. The United States' trade deficit with Honduras narrowed slightly, by 2 percent in 2007, as U.S. exports of textiles and apparel rose by \$101 million (7 percent). Most of the increase was attributable to an increase rise in U.S. exports of yarn and fabric to Honduras, which rose by 28 percent and 8 percent, respectively, in 2007.¹⁷⁶

U.S. Imports

U.S. imports of textiles and apparel increased by \$3.1 billion (3 percent) to \$107.7 billion in 2007 from \$104.6 billion in 2006 (table TX.1). Asian countries accounted for \$74.8 billion (70 percent) of U.S. sector imports in 2007, representing an increase of \$5.1 billion. U.S. imports from China rose by \$4.9 billion (16 percent) to \$36.2 billion in 2007, making China again the largest supplier by far with 34 percent of sector imports, up from 30 percent in 2006.

Much of the growth in imports from China was accounted for by cotton apparel, specifically, cotton knit shirts and blouses; cotton trousers and slacks; cotton sweaters; cotton underwear; and robes, dressing gowns, and nightwear. Significant growth also occurred in China's shipments to the United States of wool apparel, especially wool coats. 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.

U.S. imports of textiles and apparel from other Asian suppliers continued to grow in 2007, but varied substantially by country. U.S. imports from India totaled \$5.6 billion, up by less than 1 percent from 2006. India has been a preferred apparel supplier in recent years because of its raw material availability and spinning, weaving, and apparel production capacity. However, the rapid appreciation of the Indian rupee in 2007 weakened the country's export competitiveness.¹⁷⁷ This contributed to the slower growth in India's apparel exports to the

¹⁷⁵ The DR-CAFTA makes permanent the trade privileges that Honduras had under the Caribbean Basin Trade and Partnership Act (CBTPA).

¹⁷⁶ *Business Wire*, "New Report Profiles the Apparel Industry in Honduras," October 22, 2007.

¹⁷⁷ The Indian rupee appreciated from 44.2 to 39.4 to the dollar between January 2 and December 31, 2007. IMF, "Currency Exchange Rates," undated (accessed June 26, 2008); Just-style.com editorial team, "India: Gap to Reduce Imports from Indian Subcontinent?" November 23, 2007; and *Asian Textile Business*. "India: Strong Rupee Gives Textile and Apparel Exporters the Woes," 2008.

United States in 2007 and led to layoffs of apparel workers as Indian manufacturers' profit margins were squeezed.¹⁷⁸

U.S. imports of textiles and apparel from Vietnam rose by 35 percent to \$4.5 billion in 2007, the largest percentage increase for any apparel exporter to the United States in that year. The increase in U.S. imports from Vietnam is largely attributed to the lifting of quotas on Vietnamese textile and apparel articles¹⁷⁹ after Vietnam joined the WTO on January 11, 2007.¹⁸⁰ Vietnam's leading exports to the United States included cotton knit shirts and blouses, cotton trousers and slacks, and coats and dresses of manmade fibers.

U.S. imports from Mexico fell by 11 percent in 2007 from to \$6.7 billion in 2006. U.S. sector imports from Mexico have declined steadily since 2000, reflecting increased competition from the Caribbean Basin Economic Recovery Act (CBERA) countries benefitting from U.S. trade preferences and from lower-cost countries in Asia, particularly China, as noted above. The relocation of some apparel production facilities to CBERA-DR-CAFTA countries, rising production costs, competition from an influx of smuggled, low-cost apparel, and the contraction of its man-made fiber industry have weakened Mexico's apparel sector in recent years.¹⁸¹ Honduras has been the leading DR-CAFTA supplier of apparel to the United States in recent years as its apparel sector has gradually transformed from apparel assembly-only facilities to "full package" operations involving more value-added processing.¹⁸²

¹⁷⁸ Lakshmi "Rising Rupee Casts a Shadow," November 9, 2007; *Asian Textile Business*. "India: Strong Rupee Gives Textile and Apparel Exporters the Woes," 2008, 56.

¹⁷⁹ Phillips, "Country Profile: Vietnam," November/December 2007.

¹⁸⁰ WTO, "Vietnam Joins WTO with Director-General's Tribute for True Grit," January 11, 2007.

¹⁸¹ Just-Style.com editorial team, "Mexico Slow to Move from U.S. Suppliers to Global Player," April 18, 2007; *Emergingtextiles.com*, "Mexico's Apparel Industry Facing Grim Future," April 4, 2007.

¹⁸² *Business Wire*, "New Report Profiles the Apparel Industry in Honduras," October 22, 2007.

Change in 2007 from 2006:

U.S. trade deficit: Increased by \$227 million (1 percent) to \$18.7 billion

U.S. exports: Increased by \$6 million (1 percent) to \$578 million

U.S. imports: Increased by \$232 million (1 percent) to \$19.3 billion

The U.S. trade deficit in footwear increased slightly in 2007 as imports, which accounted for 98 percent of the U.S. footwear market, continued to grow, albeit at a slower pace than in previous years (table TX.3).¹⁸⁴ As the U.S. market is primarily served by imports, the domestic footwear industry is small and comprised primarily of niche manufacturers that compete on the basis of nonprice factors such as specialized types of footwear (e.g., nonstandard sizes/widths and hand-sewn items), quality, exclusive channels of distribution, new product introductions, and brand differentiation.

Consumer spending on footwear rose by an estimated 2 percent to \$59.2 billion in 2007,¹⁸⁵ a slower rate than previous years, which may be attributed to a decline in consumer confidence, which strongly influences consumer spending, particularly in the footwear and apparel industry.¹⁸⁶ The main sources of the increase in U.S. footwear consumption were the low performance athletic footwear and skateboard shoes categories, which posted growth of 11 percent and 34 percent, respectively.¹⁸⁷ Industry footwear saw double-digit growth in contrast to minimal to no growth overall for retail stores in 2007.¹⁸⁸

U.S. Exports

The value of U.S. exports of footwear increased by \$6 million (1 percent) to \$578 million in 2007. Most footwear produced in the United States is high-end, specialized niche

¹⁸³ The sector goods in this section are classified under NAICS number 3162 (Footwear Manufacturing - i.e., establishments primarily engaged in manufacturing footwear, except orthopedic extension footwear).

¹⁸⁴ According to the American Apparel and Footwear Association (AAFA), domestic shoe production has fallen to represent less than 2 percent of shoe purchases in the United States in recent years. Nate Herman (director of international trade, AAFA), e-mail message to Commission staff, April 16, 2008. The production of protective or safety footwear (most of which feature steel safety toes) accounts for most of the remaining U.S. shoe production. Standard & Poor's *Industry Surveys: Apparel and Footwear*, November 28, 2007, 10.

¹⁸⁵ USDOC, BEA, "Table 2.4.5U - Personal Consumption Expenditures," March 1, 2008.

¹⁸⁶ Industry sources stated that "rising prices, especially for gasoline, deteriorating home values, and the waning strength of the labor market led to the decline." Standard & Poor's, *Industry Surveys: Apparel and Footwear*, November 28, 2007, 8.

¹⁸⁷ NPD Group, "The NPD Group Finds Brights Spots," February 14, 2008.

¹⁸⁸ *Ibid.*

TABLE TX.3 Footwear: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|---------------|---------------|------------------|------------------|------------------------|------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | |
| China | 36 | 31 | 41 | 57 | 38 | -19 | -34.0 |
| Italy | 6 | 6 | 9 | 8 | 8 | (^b) | -0.2 |
| Vietnam | 23 | 24 | 31 | 34 | 25 | -10 | -27.8 |
| Brazil | 2 | 3 | 1 | 2 | 3 | 1 | 50.3 |
| Indonesia | 12 | 9 | 12 | 10 | 11 | 1 | 8.9 |
| Mexico | 90 | 60 | 46 | 47 | 44 | -3 | -7.2 |
| Thailand | 5 | 4 | 5 | 4 | 3 | (^b) | -7.9 |
| Spain | 6 | 2 | 1 | 2 | 1 | (^b) | -22.7 |
| India | 2 | 4 | 8 | 7 | 4 | -3 | -43.0 |
| Canada | 57 | 59 | 65 | 73 | 78 | 5 | 6.2 |
| All other | 256 | 248 | 288 | 329 | 364 | 35 | 10.7 |
| Total | 495 | 450 | 507 | 573 | 578 | 6 | 1.0 |
| EU-27 | 61 | 66 | 65 | 60 | 65 | 5 | 7.5 |
| OPEC | 31 | 26 | 33 | 42 | 43 | 1 | 2.2 |
| Latin America | 177 | 127 | 134 | 140 | 146 | 5 | 3.8 |
| CBERA | 28 | 18 | 17 | 27 | 29 | 2 | 6.6 |
| Asia | 158 | 157 | 196 | 238 | 214 | -24 | -10.1 |
| Sub-Saharan Africa | 15 | 13 | 17 | 21 | 28 | 7 | 32.2 |
| Central and Eastern Europe | 4 | 4 | 2 | 1 | 1 | (^b) | -0.1 |
| U.S. imports of merchandise for consumption | | | | | | | |
| China | 10,546 | 11,348 | 12,654 | 13,795 | 14,090 | 294 | 2.1 |
| Italy | 1,241 | 1,250 | 1,137 | 1,110 | 1,200 | 90 | 8.1 |
| Vietnam | 325 | 473 | 717 | 952 | 1,032 | 80 | 8.4 |
| Brazil | 1,040 | 1,081 | 1,019 | 896 | 758 | -138 | -15.4 |
| Indonesia | 570 | 493 | 510 | 471 | 383 | -89 | -18.8 |
| Mexico | 275 | 242 | 247 | 274 | 248 | -26 | -9.5 |
| Thailand | 285 | 287 | 292 | 293 | 257 | -36 | -12.4 |
| Spain | 235 | 225 | 192 | 198 | 210 | 12 | 5.8 |
| India | 110 | 125 | 139 | 155 | 164 | 9 | 5.6 |
| Canada | 64 | 77 | 94 | 79 | 76 | -4 | -4.6 |
| All other | 868 | 896 | 833 | 815 | 854 | 40 | 4.9 |
| Total | 15,560 | 16,498 | 17,834 | 19,038 | 19,270 | 232 | 1.2 |
| EU-27 | 1,918 | 1,904 | 1,738 | 1,700 | 1,776 | 75 | 4.4 |
| OPEC | 570 | 494 | 512 | 472 | 383 | -89 | -18.8 |
| Latin America | 1,475 | 1,484 | 1,432 | 1,317 | 1,148 | -168 | -12.8 |
| CBERA | (^b) | 2 | 1 | (^b) | (^b) | (^b) | -7.8 |
| Asia | 12,046 | 12,963 | 14,495 | 15,852 | 16,180 | 328 | 2.1 |
| Sub-Saharan Africa | 1 | 2 | 3 | 4 | 5 | 1 | 23.6 |
| Central and Eastern Europe | 159 | 192 | 198 | 214 | 181 | -33 | -15.3 |

See footnote(s) at end of table.

TABLE TX.3 Footwear: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—Continued

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--------------------------------|------------------------|---------|---------|---------|---------|------------------------|----------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. merchandise trade balance | | | | | | | | |
| China | -10,510 | -11,317 | -12,613 | -13,738 | -14,052 | -314 | -2.3 | |
| Italy | -1,235 | -1,244 | -1,128 | -1,102 | -1,192 | -90 | -8.2 | |
| Vietnam | -302 | -449 | -685 | -917 | -1,007 | -90 | -9.8 | |
| Brazil | -1,038 | -1,078 | -1,018 | -894 | -755 | 139 | 15.5 | |
| Indonesia | -558 | -484 | -498 | -461 | -371 | 90 | 19.5 | |
| Mexico | -185 | -183 | -201 | -227 | -204 | 23 | 9.9 | |
| Thailand | -280 | -283 | -287 | -289 | -253 | 36 | 12.4 | |
| Spain | -229 | -223 | -191 | -197 | -209 | -12 | -6.1 | |
| India | -107 | -122 | -131 | -148 | -160 | -12 | -7.8 | |
| Canada | -8 | -18 | -29 | -6 | 2 | 8 | ^(c) | |
| All other | -612 | -649 | -545 | -486 | -491 | -5 | -1.0 | |
| Total | -15,065 | -16,048 | -17,327 | -18,465 | -18,692 | -227 | -1.2 | |
| EU-27 | -1,857 | -1,838 | -1,673 | -1,640 | -1,711 | -71 | -4.3 | |
| OPEC | -539 | -468 | -479 | -430 | -340 | 90 | 20.9 | |
| Latin America | -1,298 | -1,357 | -1,299 | -1,176 | -1,002 | 174 | 14.8 | |
| CBERA | 28 | 16 | 17 | 27 | 29 | 2 | 6.7 | |
| Asia | -11,888 | -12,806 | -14,299 | -15,614 | -15,966 | -352 | -2.3 | |
| Sub-Saharan Africa | 14 | 11 | 15 | 17 | 23 | 6 | 34.4 | |
| Central and Eastern Europe | -155 | -187 | -196 | -212 | -179 | 33 | 15.4 | |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

^cNot meaningful for purposes of comparison.

products differentiated by quality, size, and brand. Industry sources reported that U.S. exports of footwear are limited and primarily consist of athletic and running shoes.¹⁸⁹ Data on U.S. footwear exports likely reflect not only exports of U.S.-manufactured products, but also footwear items imported into the United States, repackaged, and then re-exported to other markets.¹⁹⁰

U.S. Imports

China remained by far the leading supplier of footwear to the U.S. market, accounting for almost three-fourths of U.S. footwear imports by value in 2007. U.S. imports of footwear from China rose by \$294 million (2 percent), the smallest increase in recent years, to \$14.1 billion. Despite its dominance, China's footwear industry is facing growing competitive pressures as wages have been rising steadily, doubling since 2006 in some shoe factories.¹⁹¹ Numerous footwear manufacturers in Dongguan, the site of 1,000 footwear companies in China's southern Guangdong province, have closed or relocated.¹⁹²

Secondary suppliers of footwear to the United States include Italy (8 percent of imports), Vietnam (7 percent), Brazil (5 percent), and Indonesia (2 percent). Vietnam increased its footwear exports to the U.S. market by 8 percent to just over \$1.0 billion in 2007. Some international firms have been establishing footwear production facilities in Vietnam to take advantage of lower labor costs.¹⁹³ Vietnam's accession to the WTO at the beginning of 2007 prompted further interest on the part of investors seeking to take advantage of the country's low labor costs and WTO-member status.¹⁹⁴ Vietnam's footwear industry association has been encouraging foreign enterprises to invest more in leather manufacturing projects, accessories production, and raw material production by using cutting-edge technology.¹⁹⁵ The industry is also planning to develop more industrial zones specializing in leather and shoe production with modern manufacturing equipment that meets environmental standards.¹⁹⁶ Vietnam's footwear products compete favorably with other major manufacturing countries for quality, although investment in the purchase and production of raw materials and infrastructure improvements are still needed to boost competitiveness.¹⁹⁷

U.S. imports from Indonesia declined for the second consecutive year, falling by 19 percent to \$383 million in 2007. Recently, the competitiveness of Indonesia's footwear sector has waned because of footwear smuggled from China and Malaysia to Indonesia sold at prices against which domestic producers cannot compete, bureaucratic backlogs, insufficient highway and port facilities, a lack of raw materials, and stringent labor laws that have boosted operational costs.¹⁹⁸

¹⁸⁹ New Balance is one of the few remaining U.S. footwear companies that continues to produce some of its shoes domestically (25 percent) and that sells its products in 120 countries. Herb Spivak (executive vice president of operations, New Balance), telephone interview with Commission staff, April 30, 2008.

¹⁹⁰ Nate Herman (director of International Trade, American Apparel & Footwear Association), e-mail message to Commission staff, April 17, 2008; Peter Mangione (president, Footwear Retailers and Distributors Association), e-mail message to Commission staff, April 23, 2008.

¹⁹¹ Mitchell, "China's Shoe Industry Under Pressure," February 25, 2008.

¹⁹² *Ibid.*

¹⁹³ IBISWorld, "Global Footwear Manufacturing C1321," July 4, 2007, 13.

¹⁹⁴ Just-Style.com editorial team, "Vietnam the Up-coming Asian Tiger," April 30, 2007.

¹⁹⁵ *Vietnam News*, "Footwear Sector Hoofs It Toward \$6.2 Billion Target," August 14, 2007.

¹⁹⁶ *Ibid.*

¹⁹⁷ *Vietnam News*, "Shoemakers Target \$4.5 Billion in Exports," January 19, 2008.

¹⁹⁸ *Jakarta Post*, "Indonesia Footwear Industry Fails to Go the Extra Mile," January 28, 2008.

TABLE TX.4 Textiles, apparel, and footwear: U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|--|-------|-------|-------|-------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| TX001 | Fibers and yarns, except raw cotton and raw wool | | | | | | |
| | Exports | 3,192 | 3,328 | 3,780 | 4,041 | 261 | 6.9 |
| | Imports | 2,676 | 3,160 | 3,538 | 3,582 | 49 | 1.4 |
| | Trade balance | 196 | 32 | -211 | 198 | 211 | 106.7 |
| TX002 | Fabrics | | | | | | |
| | Exports | 6,641 | 7,228 | 7,285 | 7,015 | -349 | -5.0 |
| | Imports | 5,854 | 6,227 | 6,352 | 6,202 | 141 | 2.3 |
| | Trade balance | 786 | 1,001 | 934 | 813 | -490 | -60.3 |
| TX002A | Broadwoven fabrics | | | | | | |
| | Exports | 2,575 | 2,754 | 2,478 | 2,210 | -388 | -17.6 |
| | Imports | 3,036 | 3,154 | 2,989 | 2,833 | 38 | 1.3 |
| | Trade balance | -462 | -400 | -511 | -623 | -426 | -68.4 |
| TX002B | Knit fabrics | | | | | | |
| | Exports | 1,392 | 1,624 | 1,778 | 1,611 | 48 | 3.0 |
| | Imports | 1,026 | 979 | 1,026 | 965 | -89 | -9.2 |
| | Trade balance | 365 | 645 | 752 | 646 | 137 | 21.2 |
| TX002C | Specialty fabrics | | | | | | |
| | Exports | 489 | 579 | 545 | 506 | -46 | -9.1 |
| | Imports | 410 | 465 | 541 | 550 | 3 | 0.6 |
| | Trade balance | 79 | 114 | 5 | -44 | -50 | -112.0 |
| TX002D | Coated and other fabrics | | | | | | |
| | Exports | 1,154 | 1,098 | 1,097 | 1,119 | 93 | 8.3 |
| | Imports | 743 | 891 | 967 | 1,021 | 58 | 5.7 |
| | Trade balance | 411 | 207 | 130 | 99 | 35 | 35.8 |
| TX002E | Glass fiber fabrics | | | | | | |
| | Exports | 118 | 146 | 147 | 178 | 33 | 18.7 |
| | Imports | 96 | 108 | 119 | 133 | 26 | 19.6 |
| | Trade balance | 21 | 38 | 28 | 44 | 7 | 16.1 |
| TX002F | Other fabrics | | | | | | |
| | Exports | 914 | 1,027 | 1,240 | 1,392 | -89 | -6.4 |
| | Imports | 543 | 630 | 710 | 701 | 105 | 15.0 |
| | Trade balance | 371 | 397 | 530 | 691 | -194 | -28.1 |

See footnote(s) at end of table.

TABLE TX.4 Textiles, apparel, and footwear: U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| TX003 Carpets and rugs | | | | | | | |
| Exports | 681 | 763 | 881 | 960 | 983 | 23 | 2.4 |
| Imports | 1,662 | 1,829 | 1,993 | 2,127 | 2,111 | -16 | -0.8 |
| Trade balance | -981 | -1,066 | -1,112 | -1,167 | -1,128 | 39 | 3.4 |
| TX004 Home furnishings | | | | | | | |
| Exports | 339 | 365 | 417 | 442 | 465 | 23 | 5.2 |
| Imports | 5,021 | 6,107 | 7,448 | 8,249 | 8,724 | 475 | 5.8 |
| Trade balance | -4,682 | -5,742 | -7,031 | -7,808 | -8,260 | -452 | -5.8 |
| TX004A Blankets: | | | | | | | |
| Exports | 29 | 31 | 31 | 30 | 25 | -4 | -14.1 |
| Imports | 391 | 459 | 514 | 606 | 614 | 9 | 1.4 |
| Trade balance | -362 | -428 | -483 | -576 | -589 | -13 | -2.2 |
| TX004B Pillowcases and sheets | | | | | | | |
| Exports | 78 | 81 | 91 | 83 | 74 | -9 | -10.4 |
| Imports | 1,046 | 1,353 | 1,904 | 2,204 | 2,352 | 148 | 6.7 |
| Trade balance | -968 | -1,271 | -1,813 | -2,121 | -2,278 | -156 | -7.4 |
| TX004C Table/kitchen linens and towels | | | | | | | |
| Exports | 85 | 71 | 70 | 73 | 72 | -1 | -0.7 |
| Imports | 1,418 | 1,646 | 1,864 | 1,951 | 2,114 | 163 | 8.3 |
| Trade balance | -1,333 | -1,574 | -1,794 | -1,879 | -2,042 | -163 | -8.7 |
| TX004D Curtains | | | | | | | |
| Exports | 30 | 39 | 49 | 58 | 71 | 13 | 22.2 |
| Imports | 725 | 858 | 1,017 | 1,088 | 1,094 | 6 | 0.5 |
| Trade balance | -695 | -819 | -968 | -1,030 | -1,023 | 7 | 0.7 |
| TX004E Bedspreads and other furnishing articles | | | | | | | |
| Exports | 43 | 49 | 59 | 65 | 73 | 8 | 11.8 |
| Imports | 1,001 | 1,144 | 1,284 | 1,424 | 1,403 | -21 | -1.5 |
| Trade balance | -958 | -1,096 | -1,225 | -1,359 | -1,330 | 29 | 2.1 |
| TX004F Pillows, cushions, and sleeping bags | | | | | | | |
| Exports | 74 | 93 | 108 | 130 | 149 | 19 | 14.3 |
| Imports | 437 | 645 | 860 | 971 | 1,143 | 172 | 17.7 |
| Trade balance | -363 | -552 | -752 | -841 | -994 | -153 | -18.2 |

See footnote(s) at end of table.

TABLE TX.4 Textiles, apparel, and footwear: U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|---------|---------|---------|---------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| TX004G Tapestries and other wall hangings | | | | | | | |
| Exports | 1 | 1 | 9 | 4 | 1 | -3 | -77.8 |
| Imports | 4 | 3 | 6 | 5 | 4 | -1 | -16.7 |
| Trade balance | -2 | -2 | 3 | -1 | -3 | -2 | -241.0 |
| TX005 Apparel | | | | | | | |
| Exports | 4,965 | 4,414 | 4,129 | 3,854 | 3,206 | -648 | -16.8 |
| Imports | 68,274 | 72,404 | 76,503 | 79,299 | 81,366 | 2,067 | 2.6 |
| Trade balance | -63,308 | -67,989 | -72,374 | -75,445 | -78,159 | -2,715 | -3.6 |
| TX005A Men's and boys' suits and sports coats | | | | | | | |
| Exports | 39 | 28 | 30 | 32 | 28 | -5 | -14.1 |
| Imports | 1,143 | 1,139 | 1,359 | 1,336 | 1,331 | -6 | -0.4 |
| Trade balance | -1,104 | -1,111 | -1,329 | -1,304 | -1,303 | 1 | 0.1 |
| TX005B Men's and boys' coats and jackets | | | | | | | |
| Exports | 91 | 89 | 75 | 71 | 64 | -6 | -9.2 |
| Imports | 2,001 | 2,134 | 2,255 | 2,441 | 2,814 | 374 | 15.3 |
| Trade balance | -1,910 | -2,045 | -2,180 | -2,370 | -2,750 | -380 | -16.0 |
| TX005C Men's and boys' trousers | | | | | | | |
| Exports | 573 | 437 | 405 | 292 | 231 | -61 | -21.0 |
| Imports | 7,459 | 7,568 | 7,776 | 8,014 | 7,940 | -74 | -0.9 |
| Trade balance | -6,887 | -7,131 | -7,371 | -7,722 | -7,709 | 13 | 0.2 |
| TX005D Women's and girls' trousers | | | | | | | |
| Exports | 287 | 267 | 239 | 268 | 212 | -56 | -21.0 |
| Imports | 8,925 | 9,327 | 9,664 | 9,889 | 9,872 | -17 | -0.2 |
| Trade balance | -8,637 | -9,060 | -9,425 | -9,621 | -9,660 | -39 | -0.4 |
| TX005E Shirts and blouses | | | | | | | |
| Exports | 1,097 | 800 | 841 | 802 | 582 | -220 | -27.4 |
| Imports | 21,285 | 22,474 | 23,664 | 25,073 | 26,035 | 962 | 3.8 |
| Trade balance | -20,188 | -21,674 | -22,822 | -24,272 | -25,453 | -1,182 | -4.9 |
| TX005F Sweaters: | | | | | | | |
| Exports | 32 | 33 | 28 | 35 | 35 | (^c) | 0.7 |
| Imports | 2,729 | 2,632 | 2,809 | 2,658 | 2,733 | 74 | 2.8 |
| Trade balance | -2,697 | -2,599 | -2,781 | -2,623 | -2,698 | -74 | -2.8 |

See footnote(s) at end of table.

TABLE TX.4 Textiles, apparel, and footwear: U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| TX005G Women's and girls' suits, skirts, and coats | | | | | | | |
| Exports | 136 | 146 | 155 | 148 | 139 | -8 | -5.7 |
| Imports | 4,803 | 5,866 | 6,941 | 6,663 | 6,346 | -317 | -4.8 |
| Trade balance | -4,667 | -5,720 | -6,786 | -6,515 | -6,207 | 308 | 4.7 |
| TX005H Women's and girls' dresses: | | | | | | | |
| Exports | 59 | 61 | 61 | 87 | 121 | 34 | 38.5 |
| Imports | 1,550 | 1,524 | 1,465 | 1,841 | 2,900 | 1,060 | 57.6 |
| Trade balance | -1,491 | -1,463 | -1,404 | -1,753 | -2,780 | -1,026 | -58.5 |
| TX005I Robes, nightwear, and underwear | | | | | | | |
| Exports | 715 | 700 | 479 | 394 | 203 | -192 | -48.6 |
| Imports | 5,044 | 5,246 | 5,418 | 5,478 | 5,380 | -98 | -1.8 |
| Trade balance | -4,329 | -4,546 | -4,939 | -5,084 | -5,177 | -93 | -1.8 |
| TX005J Hosiery: | | | | | | | |
| Exports | 339 | 356 | 343 | 383 | 349 | -33 | -8.7 |
| Imports | 1,091 | 1,316 | 1,366 | 1,459 | 1,521 | 62 | 4.3 |
| Trade balance | -751 | -959 | -1,023 | -1,076 | -1,172 | -96 | -8.9 |
| TX005K Body-supporting garments: | | | | | | | |
| Exports | 289 | 310 | 275 | 166 | 57 | -109 | -65.8 |
| Imports | 1,579 | 1,800 | 1,854 | 2,071 | 2,016 | -55 | -2.7 |
| Trade balance | -1,290 | -1,490 | -1,579 | -1,905 | -1,959 | -54 | -2.8 |
| TX005L Neckwear, handkerchiefs, and scarves: | | | | | | | |
| Exports | 23 | 24 | 26 | 23 | 19 | -4 | -16.8 |
| Imports | 494 | 698 | 748 | 656 | 651 | -4 | -0.6 |
| Trade balance | -471 | -674 | -722 | -633 | -632 | (^o) | 0.1 |
| TX005M Gloves, including gloves for sports: | | | | | | | |
| Exports | 109 | 104 | 101 | 100 | 106 | 7 | 6.8 |
| Imports | 2,386 | 2,533 | 2,757 | 2,989 | 3,160 | 171 | 5.7 |
| Trade balance | -2,277 | -2,430 | -2,656 | -2,889 | -3,054 | -165 | -5.7 |
| TX005N Headwear: | | | | | | | |
| Exports | 89 | 102 | 111 | 114 | 126 | 12 | 10.2 |
| Imports | 1,358 | 1,526 | 1,509 | 1,621 | 1,602 | -19 | -1.2 |
| Trade balance | -1,269 | -1,424 | -1,398 | -1,506 | -1,476 | 30 | 2.0 |

See footnote(s) at end of table.

TABLE TX.4 Textiles, apparel, and footwear: U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|---|---------|---------|---------|---------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| TX005O | Leather apparel and accessories: | | | | | | |
| Exports | 92 | 108 | 175 | 165 | 220 | 55 | 33.4 |
| Imports | 1,743 | 1,605 | 1,512 | 1,496 | 1,344 | -152 | -10.1 |
| Trade balance | -1,651 | -1,497 | -1,337 | -1,331 | -1,124 | 207 | 15.5 |
| TX005P | Fur apparel and other fur articles: | | | | | | |
| Exports | 19 | 18 | 16 | 22 | 29 | 7 | 31.4 |
| Imports | 285 | 334 | 314 | 274 | 221 | -54 | -19.6 |
| Trade balance | -265 | -316 | -298 | -253 | -192 | 61 | 24.0 |
| TX005Q | Rubber, plastic, and coated-fabric apparel: | | | | | | |
| Exports | 95 | 129 | 142 | 165 | 141 | -24 | -14.5 |
| Imports | 371 | 462 | 470 | 382 | 387 | 5 | 1.4 |
| Trade balance | -276 | -334 | -328 | -217 | -247 | -29 | -13.5 |
| TX005R | Nonwoven apparel | | | | | | |
| Exports | 37 | 34 | 27 | 25 | 65 | 40 | 157.2 |
| Imports | 401 | 395 | 419 | 479 | 488 | 9 | 2.0 |
| Trade balance | -364 | -361 | -392 | -454 | -423 | 30 | 6.7 |
| TX005S | Other wearing apparel | | | | | | |
| Exports | 845 | 668 | 599 | 564 | 481 | -83 | -14.7 |
| Imports | 3,628 | 3,825 | 4,204 | 4,479 | 4,623 | 144 | 3.2 |
| Trade balance | -2,784 | -3,157 | -3,604 | -3,916 | -4,143 | -227 | -5.8 |
| TX006 | Miscellaneous textile products | | | | | | |
| Exports | 1,534 | 1,701 | 1,825 | 2,037 | 2,174 | 137 | 6.7 |
| Imports | 3,754 | 4,319 | 4,651 | 5,104 | 5,502 | 398 | 7.8 |
| Trade balance | -2,220 | -2,618 | -2,826 | -3,067 | -3,328 | -261 | -8.5 |
| FW001 | Footwear | | | | | | |
| Exports | 495 | 450 | 507 | 573 | 578 | 6 | 1.0 |
| Imports | 15,560 | 16,498 | 17,834 | 19,038 | 19,270 | 232 | 1.2 |
| Trade balance | -15,065 | -16,048 | -17,327 | -18,465 | -18,692 | -227 | -1.2 |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bThis 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

^cLess than \$500,000.

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Minerals and Metals

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Change in 2007 from 2006:

U.S. trade deficit: Decreased by \$12.6 billion (15 percent) to \$73.9 billion

U.S. exports: Increased by \$17.3 billion (21 percent) to \$100.3 billion

U.S. imports: Increased by \$4.7 billion (3 percent) to \$174.2 billion

The U.S. trade deficit in minerals and metals declined by \$12.6 billion (15 percent) to 73.9 billion in 2007, as U.S. exports increased significantly more than imports following several consecutive years of growing deficits (table MM.1). U.S. exports were aided by expanding world economies, higher commodity prices, and depreciation of the U.S. dollar against major currencies.

Among the leading U.S. trading partners for minerals and metals, Canada, China, Switzerland, the United Kingdom, and India registered the highest absolute value increases in bilateral trade in 2007 (table MM.1).¹⁹⁹ Most of this growth occurred in infrastructure development and industrial capital investment, which require the extensive utilization of metal equipment and structures. In addition, aided by their governments' export-oriented economic development policies, China and India have played an increasingly important role in U.S. imports.²⁰⁰

U.S. Exports

Although the NAFTA trading partners (Canada and Mexico) have traditionally been the leading markets for U.S. minerals and metals exports, India, the fifth leading market, recorded the highest percentage annual increase at 120 percent (\$1.1 billion) in 2007. India's fast growing economy and the appreciation of the rupee against the U.S. dollar benefitted U.S. exporters.²⁰¹ Switzerland was the market with the largest absolute increase in U.S. exports in 2007 (up by \$2.3 billion to \$6.9 billion). Switzerland is a key market for U.S. precious metals and non-numismatic coins, and the depreciation of the U.S. dollar helped increase U.S. exports of these products.²⁰² As an area that includes several emerging economies—notably India and China, which are among the largest and fastest growing economies in the world—Asia is the largest regional market for U.S. exports, followed by the EU.

¹⁹⁹ According to the IMF, in 2007, the world's output increased by 5 percent. Most of the world's economic growth came from China (nearly 12 percent) and India (over 9 percent) which are the two fastest growing export markets of the United States during the last several years. See International Monetary Fund, "World Economic Outlook Update, 2008," 7; and Council of Economic Advisers, *Economic Report of The President*, February 2008, 80.

²⁰⁰ Pui, "The Mineral Industry of China," 8.1; and "Economic Intelligence Unit," 1.

²⁰¹ IMF, "World Economic Outlook Update," July 17, 2008, 7.

²⁰² For more details, see Precious Metals and Non-numismatic Coins in this section.

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, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|----------------|----------------|----------------|----------------|------------------------|-------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| Canada | 13,820 | 16,835 | 19,110 | 22,687 | 24,689 | 2,001 | 8.8 | |
| China | 2,636 | 3,197 | 5,215 | 7,736 | 9,043 | 1,307 | 16.9 | |
| Mexico | 6,454 | 7,958 | 9,258 | 11,635 | 11,896 | 261 | 2.2 | |
| Israel | 231 | 457 | 1,359 | 2,026 | 2,746 | 720 | 35.5 | |
| United Kingdom | 3,112 | 2,788 | 3,429 | 6,587 | 8,379 | 1,792 | 27.2 | |
| Germany | 1,338 | 1,513 | 1,848 | 2,569 | 3,292 | 723 | 28.1 | |
| Japan | 1,654 | 1,955 | 2,385 | 3,221 | 4,094 | 873 | 27.1 | |
| India | 235 | 388 | 719 | 902 | 1,981 | 1,079 | 119.7 | |
| Switzerland | 3,007 | 2,644 | 3,202 | 4,612 | 6,905 | 2,293 | 49.7 | |
| Taiwan | 758 | 914 | 1,092 | 1,491 | 2,054 | 563 | 37.7 | |
| All other | 9,733 | 11,939 | 15,295 | 19,478 | 25,181 | 5,703 | 29.3 | |
| Total | 42,980 | 50,588 | 62,911 | 82,944 | 100,260 | 17,316 | 20.9 | |
| EU-27 | 7,747 | 8,101 | 11,040 | 16,389 | 20,757 | 4,368 | 26.7 | |
| OPEC | 780 | 1,088 | 1,656 | 2,052 | 2,712 | 661 | 32.2 | |
| Latin America | 8,233 | 10,073 | 11,745 | 14,716 | 15,728 | 1,012 | 6.9 | |
| CBERA | 481 | 544 | 705 | 881 | 989 | 109 | 12.3 | |
| Asia | 8,346 | 10,285 | 13,447 | 18,380 | 24,393 | 6,013 | 32.7 | |
| Sub-Saharan Africa | 269 | 344 | 405 | 655 | 610 | -45 | -6.8 | |
| Central and Eastern Europe | 115 | 205 | 278 | 278 | 373 | 95 | 34.2 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| Canada | 18,003 | 22,636 | 25,590 | 32,155 | 34,562 | 2,406 | 7.5 | |
| China | 10,054 | 13,890 | 17,553 | 23,462 | 25,749 | 2,287 | 9.7 | |
| Mexico | 7,116 | 9,623 | 11,366 | 13,266 | 13,877 | 611 | 4.6 | |
| Israel | 6,365 | 7,527 | 8,543 | 9,069 | 10,065 | 996 | 11.0 | |
| United Kingdom | 2,190 | 2,942 | 3,093 | 3,748 | 4,158 | 410 | 10.9 | |
| Germany | 3,654 | 4,637 | 5,495 | 6,611 | 7,175 | 564 | 8.5 | |
| Japan | 4,036 | 4,724 | 5,013 | 5,871 | 5,780 | -91 | -1.5 | |
| India | 3,730 | 4,748 | 5,091 | 5,816 | 6,424 | 608 | 10.5 | |
| Switzerland | 670 | 753 | 778 | 1,011 | 947 | -64 | -6.3 | |
| Taiwan | 3,058 | 4,190 | 4,282 | 5,243 | 4,970 | -273 | -5.2 | |
| All other | 30,329 | 45,227 | 50,563 | 63,258 | 60,499 | -2,759 | -4.4 | |
| Total | 89,204 | 120,897 | 137,367 | 169,510 | 174,207 | 4,696 | 2.8 | |
| EU-27 | 16,987 | 22,094 | 24,533 | 27,836 | 29,375 | 1,539 | 5.5 | |
| OPEC | 1,332 | 1,915 | 2,083 | 2,114 | 1,750 | -364 | -17.2 | |
| Latin America | 14,277 | 21,239 | 25,402 | 30,991 | 29,985 | -1,006 | -3.2 | |
| CBERA | 302 | 458 | 408 | 492 | 770 | 278 | 56.6 | |
| Asia | 24,657 | 32,610 | 37,898 | 47,885 | 49,892 | 2,007 | 4.2 | |
| Sub-Saharan Africa | 2,995 | 4,344 | 4,565 | 5,961 | 7,391 | 1,430 | 24.0 | |
| Central and Eastern Europe | 729 | 1,233 | 1,306 | 1,454 | 1,167 | -287 | -19.7 | |

See footnote(s) at end of table.

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, 2003–07^a—Continued

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--------------------------------|------------------------|---------|---------|---------|---------|------------------------|----------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. merchandise trade balance | | | | | | | |
| Canada | -4,183 | -5,801 | -6,480 | -9,468 | -9,873 | -405 | -4.3 |
| China | -7,418 | -10,692 | -12,339 | -15,726 | -16,707 | -980 | -6.2 |
| Mexico | -661 | -1,665 | -2,108 | -1,631 | -1,981 | -350 | -21.5 |
| Israel | -6,134 | -7,070 | -7,184 | -7,043 | -7,319 | -276 | -3.9 |
| United Kingdom | 922 | -153 | 335 | 2,839 | 4,221 | 1,382 | 48.7 |
| Germany | -2,317 | -3,124 | -3,646 | -4,041 | -3,882 | 159 | 3.9 |
| Japan | -2,382 | -2,770 | -2,628 | -2,650 | -1,687 | 963 | 36.3 |
| India | -3,494 | -4,360 | -4,372 | -4,915 | -4,443 | 471 | 9.6 |
| Switzerland | 2,338 | 1,891 | 2,424 | 3,601 | 5,959 | 2,357 | 65.5 |
| Taiwan | -2,300 | -3,276 | -3,191 | -3,752 | -2,916 | 836 | 22.3 |
| All other | -20,596 | -33,288 | -35,268 | -43,781 | -35,318 | 8,462 | 19.3 |
| Total | -46,224 | -70,309 | -74,456 | -86,567 | -73,947 | 12,620 | 14.6 |
| EU-27 | -9,239 | -13,993 | -13,493 | -11,446 | -8,618 | 2,829 | 24.7 |
| OPEC | -553 | -827 | -427 | -62 | 963 | 1,025 | ^(b) |
| Latin America | -6,044 | -11,166 | -13,657 | -16,274 | -14,256 | 2,018 | 12.4 |
| CBERA | 178 | 86 | 297 | 389 | 219 | -170 | -43.6 |
| Asia | -16,311 | -22,325 | -24,451 | -29,506 | -25,499 | 4,007 | 13.6 |
| Sub-Saharan Africa | -2,727 | -4,000 | -4,161 | -5,306 | -6,781 | -1,475 | -27.8 |
| Central and Eastern Europe | -614 | -1,029 | -1,028 | -1,176 | -794 | 382 | 32.5 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bNot meaningful for purposes of comparison.

Within this sector, precious metals and non-numismatic coins represented the largest export increase in absolute value terms, up by over \$5.9 billion or 44 percent to \$19.3 billion in 2007. This was followed by iron and steel waste and scrap (rising by \$2.7 billion or 62 percent to \$6.9 billion) and steel mill products (growing by \$2.1 billion or 20 percent to 12.5 billion).²⁰³ Again, depreciation of the U.S. dollar and moderate demand in the United States were central to the increase in U.S. exports (table MM.2).

U.S. Imports

During the last five years, Canada and China were the leading suppliers of minerals and metals to the United States, followed by Mexico. In particular, Chinese imports have shown strong growth in the U.S. market in recent years. However, as a result of recent efforts by the Chinese government to limit capacity expansion, investment, and exports in the steel sector coupled with flat U.S. demand, imports of minerals and metals from China increased by \$2.3 billion (10 percent) in 2007. This compares with an annual average import growth rate of 33 percent from 2003 through 2006 (table MM.1).

In regard to commodity groups, plates, sheets, and strips of carbon and alloy steels showed the largest value decrease of \$3.4 billion (32 percent) to \$7.1 billion. This was followed by steel mill products, which were down by \$2.3 billion (7 percent) to \$29.2 billion (table MM.2).

Several of India's line pipe producers won contracts to supply large natural gas line pipe projects in the southern region of the United States, contributing to the sharp \$608 million (11 percent) rise in imports of line pipe from India. These projects were spurred by a rapid rise in U.S. demand for interstate line pipe infrastructure due to the sharp increase in energy prices in 2007.

²⁰³ For more details, see Iron and Steel Waste in this section.

TABLE MM.2 Minerals and metals: Leading changes in U.S. exports and imports, 2003–07

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|---|-------|-------|-------|--------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| <i>Million dollars</i> | | | | | | | | |
| U.S. EXPORTS | | | | | | | | |
| Increases | | | | | | | | |
| MM020 | Precious metals and non-numismatic coins | 6,299 | 6,204 | 7,522 | 13,360 | 19,289 | 5,929 | 44.4 |
| MM020A | Unrefined and refined gold | 4,130 | 3,465 | 4,636 | 7,171 | 11,509 | 4,337 | 60.5 |
| MM023 | Iron and steel waste and scrap | 1,960 | 2,923 | 3,451 | 4,256 | 6,910 | 2,654 | 62.4 |
| MM025 | Steel mill products | 5,525 | 7,015 | 9,331 | 10,479 | 12,535 | 2,056 | 19.6 |
| MM019 | Natural and synthetic gemstones | 469 | 1,129 | 2,765 | 4,087 | 5,572 | 1,486 | 36.4 |
| MM036 | Copper and related articles | 2,086 | 3,006 | 3,405 | 6,052 | 6,684 | 632 | 10.4 |
| MM037 | Unwrought aluminum | 1,000 | 1,397 | 2,087 | 3,508 | 4,083 | 574 | 16.4 |
| MM031 | Miscellaneous products of base metal | 5,227 | 5,255 | 5,893 | 6,865 | 7,411 | 546 | 8.0 |
| MM025G | Plates, sheets, and strips of stainless steels | 575 | 632 | 853 | 919 | 1,292 | 373 | 40.6 |
| MM025B | Plates, sheets, and strips of carbon and alloy steels | 2,476 | 2,853 | 4,045 | 4,137 | 4,484 | 346 | 8.4 |
| MM041 | Certain base metals and chemical elements | 1,571 | 1,913 | 2,882 | 3,792 | 4,119 | 326 | 8.6 |
| MM042 | Nonpowered handtools | 2,109 | 2,361 | 2,508 | 2,880 | 3,165 | 285 | 9.9 |
| MM004 | Copper ores and concentrates | 73 | 134 | 363 | 770 | 1,041 | 270 | 35.1 |
| MM025L | Pipes and tubes of carbon and alloy steels . | 977 | 1,360 | 1,904 | 2,347 | 2,607 | 260 | 11.1 |
| MM025D | Angles, shapes, and sections of carbon and alloy steels | 217 | 372 | 467 | 603 | 862 | 259 | 43.0 |
| MM005A | Lead ores and concentrates | 144 | 207 | 224 | 347 | 606 | 259 | 74.6 |
| MM005 | Lead ores, concentrates, and residues | 197 | 215 | 230 | 362 | 619 | 257 | 71.0 |
| MM007 | Certain ores, concentrates, ash, and residues | 289 | 507 | 1,643 | 1,687 | 1,917 | 230 | 13.6 |
| MM014 | Flat glass | 1,747 | 1,882 | 1,987 | 2,204 | 2,413 | 209 | 9.5 |
| MM029 | Metallic containers | 616 | 716 | 904 | 1,088 | 1,291 | 202 | 18.6 |
| MM010 | Industrial ceramics | 600 | 625 | 702 | 784 | 981 | 197 | 25.1 |
| MM025A | Ingots, blooms, billets, and slabs of carbon and alloy steels | 121 | 169 | 171 | 163 | 359 | 196 | 119.9 |
| MM025N | Tool steels | 119 | 153 | 200 | 239 | 431 | 192 | 80.5 |
| MM038 | Aluminum mill products | 2,564 | 3,171 | 3,757 | 4,592 | 4,779 | 186 | 4.1 |
| MM007A | Molybdenum ores and concentrates | 194 | 358 | 1,447 | 1,457 | 1,637 | 180 | 12.4 |
| MM025C | Bars, rods, and light shapes of carbon and alloy steels | 479 | 697 | 837 | 999 | 1,162 | 163 | 16.3 |
| MM032 | Industrial fasteners of base metal | 1,520 | 1,672 | 1,894 | 2,218 | 2,358 | 140 | 6.3 |
| MM038C | Aluminum plate, sheet, and strip | 1,655 | 2,077 | 2,489 | 3,025 | 3,161 | 136 | 4.5 |
| MM006 | Zinc ores, concentrates, and residues | 349 | 426 | 490 | 1,076 | 1,204 | 129 | 12.0 |
| MM006A | Zinc ores and concentrates | 340 | 417 | 483 | 1,068 | 1,191 | 123 | 11.5 |
| Decreases | | | | | | | | |
| MM017 | Miscellaneous glass products | 748 | 812 | 702 | 866 | 813 | -52 | -6.0 |
| MM036A | Unrefined and refined copper | 214 | 339 | 157 | 255 | 216 | -39 | -15.3 |
| MM021 | Primary iron products | 11 | 10 | 12 | 12 | 8 | -4 | -34.8 |
| MM025E | Wire of carbon and alloy steels | 172 | 275 | 226 | 243 | 240 | -3 | -1.1 |

See footnote(s) at end of table.

TABLE MM.2 Minerals and metals: Leading changes in U.S. exports and imports, 2003–07—*Continued*

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|--|--------|--------|--------|--------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| <i>Million dollars</i> | | | | | | | | |
| U.S. IMPORTS | | | | | | | | |
| Increases | | | | | | | | |
| MM041 | Certain base metals and chemical elements | 2,248 | 3,825 | 4,417 | 5,924 | 7,959 | 2,035 | 34.4 |
| MM020 | Precious metals and non-numismatic coins | 6,759 | 9,055 | 10,029 | 14,232 | 16,022 | 1,790 | 12.6 |
| MM019 | Natural and synthetic gemstones | 13,854 | 15,690 | 17,352 | 18,452 | 20,239 | 1,787 | 9.7 |
| MM025L | Pipes and tubes of carbon and alloy steels | 2,098 | 3,483 | 5,259 | 6,953 | 8,194 | 1,241 | 17.8 |
| MM022 | Ferroalloys | 899 | 1,885 | 1,834 | 1,954 | 2,788 | 834 | 42.7 |
| MM025G | Plates, sheets, and strips of stainless steels | 624 | 1,139 | 1,206 | 1,768 | 2,380 | 612 | 34.6 |
| MM031 | Miscellaneous products of base metal | 8,403 | 10,163 | 11,619 | 12,852 | 13,433 | 581 | 4.5 |
| MM028 | Metal construction components | 1,212 | 1,501 | 1,692 | 2,074 | 2,613 | 539 | 26.0 |
| MM007 | Certain ores, concentrates, ash, and residues | 685 | 962 | 1,537 | 1,364 | 1,818 | 454 | 33.3 |
| MM027 | Fabricated structurals | 501 | 508 | 776 | 1,176 | 1,620 | 444 | 37.8 |
| MM025M | Pipes and tubes of stainless steels | 309 | 465 | 657 | 821 | 1,180 | 360 | 43.8 |
| MM026 | Steel pipe and tube fittings and certain cast products | 609 | 838 | 1,052 | 1,307 | 1,650 | 343 | 26.3 |
| MM040 | Zinc and related articles | 845 | 1,135 | 1,139 | 2,524 | 2,807 | 284 | 11.2 |
| MM039 | Lead and related articles | 113 | 203 | 335 | 451 | 734 | 282 | 62.6 |
| MM040A | Unwrought zinc | 676 | 947 | 920 | 2,181 | 2,402 | 221 | 10.1 |
| MM025F | Ingots, blooms, billets, and slabs of stainless steels | 242 | 388 | 407 | 411 | 628 | 217 | 52.9 |
| MM025H | Bars, rods, and light shapes of stainless steels | 215 | 378 | 572 | 588 | 793 | 205 | 35.0 |
| MM045 | Certain builders' hardware | 2,405 | 3,063 | 3,593 | 4,155 | 4,346 | 192 | 4.6 |
| MM007A | Molybdenum ores and concentrates | 51 | 268 | 746 | 395 | 553 | 158 | 40.1 |
| MM042 | Nonpowered handtools | 3,652 | 4,136 | 4,226 | 4,770 | 4,919 | 150 | 3.1 |
| MM029 | Metallic containers | 660 | 760 | 828 | 898 | 1,036 | 138 | 15.4 |
| MM043 | Certain cutlery, sewing implements, and related products | 1,053 | 1,133 | 1,243 | 1,358 | 1,470 | 112 | 8.3 |
| MM015 | Glass containers | 607 | 659 | 700 | 794 | 902 | 109 | 13.7 |
| MM032 | Industrial fasteners of base metal | 2,348 | 2,977 | 3,443 | 3,684 | 3,755 | 71 | 1.9 |
| MM039A | Refined lead | 65 | 128 | 242 | 322 | 391 | 69 | 21.5 |
| MM025J | Wire of stainless steels | 96 | 143 | 174 | 209 | 273 | 64 | 30.5 |
| MM034 | Metal and ceramic sanitary ware | 863 | 1,062 | 1,230 | 1,371 | 1,432 | 62 | 4.5 |
| MM017 | Miscellaneous glass products | 701 | 822 | 806 | 916 | 974 | 58 | 6.3 |
| MM044 | Table flatware and related products | 484 | 518 | 563 | 572 | 624 | 52 | 9.1 |
| MM033 | Cooking and kitchen ware | 2,070 | 2,170 | 2,431 | 2,581 | 2,621 | 40 | 1.6 |
| Decreases | | | | | | | | |
| MM025B | Plates, sheets, and strips of carbon and alloy steels | 3,028 | 7,406 | 6,962 | 10,510 | 7,133 | -3,377 | -32.1 |
| MM025 | Steel mill products | 10,499 | 21,559 | 23,534 | 31,500 | 29,204 | -2,295 | -7.3 |
| MM036 | Copper and related articles | 3,893 | 5,565 | 7,766 | 13,803 | 12,577 | -1,226 | -8.9 |
| MM020A | Unrefined and refined gold | 2,689 | 3,680 | 4,112 | 5,029 | 3,934 | -1,095 | -21.8 |

See footnote(s) at end of table.

TABLE MM.2 Minerals and metals: Leading changes in U.S. exports and imports, 2003–07—*Continued*

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|-------|-------|--------|-------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MM025C Bars, rods, and light shapes of carbon and alloy steels | 1,669 | 3,769 | 3,327 | 4,043 | 3,164 | -879 | -21.7 |
| MM037 Unwrought aluminum | 5,000 | 6,837 | 8,153 | 10,317 | 9,462 | -854 | -8.3 |
| MM037A Primary and secondary aluminum | 4,401 | 6,001 | 7,199 | 9,114 | 8,309 | -805 | -8.8 |
| MM025A Ingots, blooms, billets, and slabs of carbon and alloy steels | 1,078 | 2,700 | 2,944 | 3,836 | 3,050 | -786 | -20.5 |
| MM009A Cement | 940 | 1,139 | 1,563 | 1,842 | 1,324 | -518 | -28.1 |
| MM009 Cement, stone, and related products | 4,945 | 5,897 | 7,144 | 8,151 | 7,637 | -515 | -6.3 |
| MM036A Unrefined and refined copper | 1,854 | 2,411 | 3,659 | 7,093 | 6,770 | -323 | -4.6 |
| MM012 Ceramic floor and wall tiles | 1,430 | 1,631 | 1,800 | 1,919 | 1,638 | -280 | -14.6 |
| MM023 Iron and steel waste and scrap | 518 | 1,244 | 921 | 1,255 | 1,051 | -204 | -16.3 |
| MM038C Aluminum plate, sheet, and strip | 1,411 | 1,817 | 2,568 | 3,079 | 2,919 | -159 | -5.2 |
| MM038 Aluminum mill products | 2,768 | 3,512 | 4,696 | 5,768 | 5,609 | -158 | -2.7 |
| MM018 Fiberglass insulation products | 155 | 214 | 249 | 272 | 133 | -139 | -51.1 |
| MM003 Iron ores and concentrates | 328 | 370 | 532 | 610 | 543 | -68 | -11.1 |
| MM038A Aluminum bars, rods, and profiles | 435 | 581 | 774 | 1,049 | 985 | -64 | -6.1 |
| MM025E Wire of carbon and alloy steels | 463 | 731 | 743 | 782 | 721 | -61 | -7.8 |
| MM006 Zinc ores, concentrates, and residues | 68 | 109 | 129 | 229 | 203 | -27 | -11.6 |
| MM014 Flat glass | 1,699 | 1,959 | 2,041 | 2,143 | 2,120 | -23 | -1.1 |
| MM011 Ceramic bricks and similar articles | 38 | 50 | 67 | 94 | 72 | -21 | -22.7 |
| MM006A Zinc ores and concentrates | 60 | 99 | 117 | 183 | 170 | -13 | -7.0 |
| MM038D Aluminum foil | 500 | 565 | 715 | 822 | 810 | -12 | -1.4 |
| MM036B Copper alloy plate, sheet, and strip | 104 | 176 | 168 | 252 | 242 | -9 | -3.7 |
| MM025N Tool steels | 220 | 271 | 466 | 405 | 397 | -8 | -2.0 |
| MM041A Titanium ingot | 7 | 15 | 39 | 59 | 54 | -5 | -9.0 |
| MM002 Fluorspar and miscellaneous mineral substances | 147 | 167 | 192 | 202 | 198 | -5 | -2.3 |
| MM008A Gold ores and concentrates | 22 | 19 | 19 | 13 | 8 | -4 | -35.7 |
| MM008 Precious metal ores and concentrates | 23 | 21 | 20 | 14 | 10 | -4 | -30.8 |

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

Note: Calculations based on unrounded data.

^aThis 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.

Precious Metals and Non-numismatic Coins²⁰⁴

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Change in 2007 from 2006:

U.S. trade balance: Changed by \$4.1 billion, from \$872 million deficit to \$3.3 billion surplus

U.S. exports: Increased by \$5.9 billion (44 percent) to \$19.3 billion

U.S. imports: Increased by \$1.8 billion (13 percent) to \$16.0 billion

The U.S. trade balance for precious metals and non-numismatic coins changed from an \$872 million deficit in 2006 to a \$3.3 billion surplus in 2007 (table MM.3). During 2007, the United States continued the trend of the previous year of increasing exports of nonmonetary gold (\$5.4 billion net export gain) and precious-metal waste and scrap (\$1.4 billion net export gain), which together exceeded increased imports of platinum-group metals (\$2.0 billion net import gain). Global precious-metals prices continued to rise in 2007, with percentage gains in the double-digits, and the price for ruthenium more than tripling (table MM.4), attributable to lower global mine output, sustained fabrication demand, and continued speculative and investment interest.²⁰⁵ Another contributing factor to the price increases was the depreciation of the U.S. dollar against foreign currencies,²⁰⁶ since global trade in precious metals is predominantly in U.S. dollars. Such sharp price increases also magnified the values above the quantities of precious metals traded. For example, the value of U.S. gold exported in unwrought forms of refined bullion and unrefined doré²⁰⁷ rose by 60 percent in value, roughly double the 32 percent rise in quantity. Moreover, the value of U.S. silver imported in unwrought forms of refined bullion and unrefined doré rose by 22 percent, even though the quantity imported declined by 14 percent.

U.S. Exports

Gold accounted for the largest increase among U.S. exports of precious metals and non-numismatic coins, up by \$4.3 billion (58 percent) to \$11.8 billion in 2007 (table MM.5). Nearly all (99 percent) of this export increase was of refined bullion, for which exports

²⁰⁴ This industry/commodity group includes gold, silver, and platinum-group metals (platinum, palladium, rhodium, iridium, osmium, and ruthenium) 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.

²⁰⁵ For example, see Klapwijk, "Gold Survey 2008," April 9, 2008; Klapwijk, "World Silver Survey 2008," May 7, 2008; and Ryan and Walker, "Platinum & Palladium Survey 2008," April 24, 2008.

²⁰⁶ See the "Economic Overview" chapter of this report.

²⁰⁷ Doré gold, containing silver and various base metals, results from the initial smelting of gold ores and concentrates, and must be further refined to produce pure gold in the form of bullion, grains, or powder.

TABLE MM.3 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, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|------------------|------------------|------------------|------------------|------------------------|-------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| United Kingdom | 1,706 | 1,179 | 1,567 | 4,403 | 5,779 | 1,376 | 31.3 | |
| Switzerland | 2,827 | 2,401 | 2,894 | 4,205 | 6,467 | 2,262 | 53.8 | |
| Canada | 658 | 1,131 | 802 | 1,563 | 2,016 | 452 | 28.9 | |
| South Africa | 9 | 2 | 16 | 2 | 42 | 40 | 2,643.7 | |
| Mexico | 152 | 176 | 133 | 237 | 244 | 8 | 3.2 | |
| Germany | 193 | 217 | 359 | 685 | 1,081 | 395 | 57.7 | |
| Japan | 161 | 204 | 333 | 504 | 952 | 448 | 88.9 | |
| Russia | 1 | (^b) | (^b) | (^b) | 4 | 4 | 1,231.3 | |
| Peru | 24 | 3 | 4 | 3 | (^b) | -3 | -93.3 | |
| Belgium | 40 | 47 | 46 | 93 | 158 | 65 | 69.7 | |
| All other | 527 | 844 | 1,369 | 1,665 | 2,545 | 881 | 52.9 | |
| Total | 6,299 | 6,204 | 7,522 | 13,360 | 19,289 | 5,929 | 44.4 | |
| EU-27 | 2,085 | 1,580 | 2,198 | 5,581 | 7,395 | 1,814 | 32.5 | |
| OPEC | 54 | 138 | 353 | 262 | 506 | 244 | 93.2 | |
| Latin America | 264 | 300 | 227 | 350 | 334 | -16 | -4.6 | |
| CBERA | 14 | 15 | 18 | 21 | 28 | 7 | 31.9 | |
| Asia | 354 | 531 | 969 | 1,216 | 2,411 | 1,194 | 98.2 | |
| Sub-Saharan Africa | 9 | 7 | 17 | 2 | 42 | 40 | 2,405.5 | |
| Central and Eastern Europe | 1 | 2 | 1 | 1 | 3 | 2 | 232.9 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| United Kingdom | 459 | 690 | 917 | 1,284 | 1,638 | 354 | 27.6 | |
| Switzerland | 114 | 144 | 83 | 233 | 122 | -111 | -47.8 | |
| Canada | 1,778 | 2,080 | 1,960 | 2,660 | 2,922 | 262 | 9.9 | |
| South Africa | 1,314 | 1,764 | 1,845 | 2,711 | 3,801 | 1,090 | 40.2 | |
| Mexico | 530 | 732 | 927 | 2,023 | 1,993 | -30 | -1.5 | |
| Germany | 222 | 212 | 285 | 575 | 851 | 276 | 47.9 | |
| Japan | 51 | 80 | 68 | 138 | 250 | 112 | 80.8 | |
| Russia | 456 | 476 | 565 | 699 | 832 | 133 | 19.1 | |
| Peru | 431 | 1,195 | 1,739 | 1,635 | 826 | -810 | -49.5 | |
| Belgium | 100 | 138 | 93 | 224 | 423 | 199 | 88.8 | |
| All other | 1,302 | 1,544 | 1,546 | 2,050 | 2,365 | 316 | 15.4 | |
| Total | 6,759 | 9,055 | 10,029 | 14,232 | 16,022 | 1,790 | 12.6 | |
| EU-27 | 895 | 1,176 | 1,439 | 2,390 | 3,161 | 772 | 32.3 | |
| OPEC | 47 | 45 | 21 | 28 | 110 | 82 | 296.1 | |
| Latin America | 1,954 | 3,058 | 3,726 | 5,052 | 4,305 | -747 | -14.8 | |
| CBERA | 39 | 46 | 61 | 89 | 107 | 19 | 21.1 | |
| Asia | 134 | 182 | 203 | 298 | 518 | 220 | 73.6 | |
| Sub-Saharan Africa | 1,315 | 1,766 | 1,851 | 2,715 | 3,807 | 1,091 | 40.2 | |
| Central and Eastern Europe | 10 | 16 | 13 | 12 | 15 | 2 | 17.8 | |

TABLE MM.3 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, 2003–07^a—*Continued*

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--------------------------------|------------------------|--------|--------|--------|--------|------------------------|------------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. merchandise trade balance | | | | | | | | |
| United Kingdom | 1,247 | 489 | 650 | 3,120 | 4,141 | 1,022 | 32.7 | |
| Switzerland | 2,712 | 2,256 | 2,810 | 3,971 | 6,345 | 2,374 | 59.8 | |
| Canada | -1,120 | -948 | -1,158 | -1,096 | -906 | 190 | 17.4 | |
| South Africa | -1,304 | -1,762 | -1,829 | -2,710 | -3,759 | -1,049 | -38.7 | |
| Mexico | -378 | -556 | -794 | -1,787 | -1,748 | 38 | 2.1 | |
| Germany | -29 | 5 | 73 | 110 | 230 | 119 | 108.5 | |
| Japan | 110 | 124 | 265 | 366 | 703 | 337 | 92.0 | |
| Russia | -455 | -476 | -565 | -699 | -828 | -130 | -18.6 | |
| Peru | -407 | -1,192 | -1,736 | -1,632 | -825 | 807 | 49.4 | |
| Belgium | -60 | -91 | -48 | -131 | -265 | -134 | -102.4 | |
| All other | -776 | -699 | -177 | -385 | 180 | 565 | (^c) | |
| Total | -460 | -2,851 | -2,507 | -872 | 3,267 | 4,138 | (^c) | |
| EU-27 | 1,190 | 404 | 759 | 3,191 | 4,234 | 1,043 | 32.7 | |
| OPEC | 7 | 93 | 332 | 234 | 396 | 162 | 69.1 | |
| Latin America | -1,690 | -2,758 | -3,500 | -4,702 | -3,972 | 730 | 15.5 | |
| CBERA | -25 | -31 | -43 | -68 | -80 | -12 | -17.8 | |
| Asia | 220 | 349 | 765 | 918 | 1,892 | 974 | 106.2 | |
| Sub-Saharan Africa | -1,306 | -1,759 | -1,834 | -2,713 | -3,764 | -1,051 | -38.7 | |
| Central and Eastern Europe | -9 | -14 | -12 | -11 | -11 | (^b) | 1.0 | |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

^cNot meaningful for purposes of comparison.

TABLE MM.4 Average annual precious-metals prices, 2003–07 (dollars per troy ounce)

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|-------------------------------------|----------------|----------------|----------------|----------------|----------------|------------------------|----------------|
| | | | | | | Absolute | Percent |
| Gold ^a | 363.32 | 409.17 | 444.45 | 603.77 | 695.39 | 91.62 | 15 |
| Silver ^b | 4.88 | 6.65 | 7.31 | 11.55 | 13.38 | 1.83 | 16 |
| Platinum-group metals: ^c | | | | | | | |
| Platinum | 694.44 | 848.76 | 899.51 | 1,144.42 | 1,260.00 | 115.58 | 10 |
| Palladium | 203 | 232.93 | 203.54 | 322.93 | 360.00 | 37.07 | 11 |
| Rhodium | 530.28 | 983.24 | 2,059.73 | 4,561.06 | 6,060.00 | 1,498.94 | 33 |
| Iridium | 93.02 | 185.33 | 169.51 | 349.45 | 440.00 | 90.55 | 26 |
| Osmium | ^(d) | ^(d) | ^(d) | ^(d) | ^(d) | ^(e) | ^(e) |
| Ruthenium | 35 | 64.22 | 74.41 | 193.09 | 610.00 | 416.91 | 216 |

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

^aLondon final price.

^bLondon daily (noon) price.

^cEnglehard Industries price.

^dNot reported.

^eNot applicable.

TABLE MM.5 Changes in U.S. exports of precious metals and non-numismatic coins, 2003–07

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|-----------------------|------------------------|-------|-------|--------|--------|------------------------|---------|--|
| | | | | | | Absolute | Percent | |
| | <i>million dollars</i> | | | | | | | |
| Gold | 4,248 | 3,591 | 4,834 | 7,429 | 11,773 | 4,344 | 58 | |
| Waste and scrap | 1,360 | 1,763 | 1,749 | 3,065 | 4,933 | 1,868 | 61 | |
| Non-numismatic coins | 33 | 38 | 42 | 116 | 182 | 66 | 57 | |
| Platinum-group metals | 481 | 542 | 610 | 1,739 | 1,614 | -125 | -7 | |
| Silver | 177 | 271 | 286 | 1,011 | 786 | -225 | -22 | |
| Total | 6,299 | 6,204 | 7,522 | 13,360 | 19,288 | 5,928 | 44 | |

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

Note: Calculations based on unrounded data.

nearly doubled by \$4.3 billion (98 percent) to \$8.7 billion. Refined gold output by domestic refineries rose in 2007 from both primary (doré) and secondary (scrap) sources.²⁰⁸

The leading foreign markets for gold bullion also accounted for the largest increases in U.S. shipments. Switzerland (up by \$2.2 billion (218 percent) to \$3.2 billion) and the United Kingdom (up by \$1.4 billion (50 percent) to \$4.2 billion) are not only premiere global banking centers,²⁰⁹ but also centers for fabricating and trading precious metals. Less significant increases were recorded for gold bullion exports to India (up by \$373 million from less than \$500,000 in the previous year) and to the United Arab Emirates (up by \$230 million (116 percent) to \$428 million). Both countries are long-established regional centers for fabricating precious jewelry, with increased output in 2007.²¹⁰

²⁰⁸ In 2007, U.S. refinery output of primary gold rose by 9 metric tons (5 percent) over the previous year's level to reach 190 metric tons; likewise, output of secondary gold rose by 1 metric ton (1 percent) to reach 90 metric tons. George, "Gold," January 2008, 72.

²⁰⁹ U.S. Federal Reserve holdings of "earmarked" gold bullion, held for foreign and international accounts, declined from the year-end 2006 level by 189 metric tons (3 percent) to 6,417 metric tons at the end of 2007. Some releases of "earmarked" gold by the U.S. Federal Reserve Bank of New York are reflected as merchandise exports, as some client foreign central banks allow for private gold bullion accounts. Board of Governors of the Federal Reserve System, "Table 3.13," March 2008.

²¹⁰ In 2007, jewelry fabrication increased by some 40 metric tons in the Indian subcontinent and by some 60 metric tons in the Middle East compared to the previous year's levels. Klapwijk, "Gold Survey 2008," April 9, 2008, 14.

Likewise, U.S. exports of precious metals waste and scrap rose by \$1.9 billion (61 percent) to \$4.9 billion in 2007. Silver was the predominant type of waste and scrap, for which exports more than doubled (110 percent) to \$2.4 billion. Although refineries in both the United States and abroad consumed significantly less U.S.-generated silver scrap in 2007,²¹¹ higher silver prices in 2007 offset the reduced export quantities for refining, primarily to the United Kingdom (up by \$684 million (3,257 percent) to \$705 million) followed by Switzerland (up by \$339 million (413 percent) to \$421 million).²¹² Other destinations that accounted for less significant increases in U.S. export value included Japan, Canada, Belgium, Germany, and Italy (collectively up by \$199 million (25 percent) to \$1.0 billion). All seven of these top destinations have significant precious-metals recovery and refining facilities.

U.S. Imports

Platinum-group metals (PGMs) accounted for the largest increase among U.S. imports of precious metals and non-numismatic coins, up by \$1.9 billion (33 percent) to \$7.7 billion in 2007 (table MM.6). Three products accounted for nearly all (98 percent) of this increase: rhodium in unwrought or powder forms (up by \$836 million (48 percent) to almost \$2.6 billion), platinum sponge (up by \$558 million (27 percent) to \$2.6 billion), and ruthenium in unwrought or powder forms (up by \$468 million (250 percent) to \$655 million). Increased imports of these unwrought PGMs reflect continued U.S. demand for PGMs as catalysts in emissions control, petroleum refining, and chemical synthesis, for which there are few viable alternatives.²¹³ With domestic mine output unable to meet domestic demand, the United States is highly dependent upon foreign sources for PGMs.²¹⁴

South Africa, the premiere global producer of mined PGMs,²¹⁵ provided the largest increase (up by \$1.1 billion (47 percent) to \$3.4 billion) of these three PGMs, followed by trade partners that have major precious-metals trading firms, particularly the United Kingdom, Belgium, and Germany (that together were up by \$693 million (55 percent) to \$1.9 billion).²¹⁶

²¹¹ In 2007, U.S. refinery output of secondary silver declined by 300 metric tons (20 percent) over the previous year's level to 1,200 metric tons. Likewise, the United States exported 3,182 metric tons of silver waste and scrap, which was 1,705 metric tons (35 percent) less than the previous year's quantity. Brooks, "Silver," January 2008, 152; and compiled from official statistics of the U.S. Department of Commerce, respectively.

²¹² Trade patterns for shipments of precious metals to refineries vary from year to year depending on annual contractual arrangements. Further details about specific transactions are not readily available. U.S. mining industry representative, telephone interview by Commission staff, June 23, 2002.

²¹³ PGMs can be substituted with other PGMs in catalytic applications to a certain degree but with loss of efficiency. For example, automotive catalytic converter manufacturers have substituted some palladium for more costly platinum. Likewise, electronic components manufacturers have reduced the palladium content of conductive pastes that form the electrodes of multilayer ceramic capacitors by substituting base metals or silver-palladium pastes. George, "Platinum-group Metals," January 2008, 127.

²¹⁴ In 2007, U.S. net import reliance as a percentage of apparent domestic consumption was estimated at 94 percent for platinum and 73 percent for palladium. George, "Platinum-group Metals," January 2008, 126.

²¹⁵ In 2007, South African mines produced 183,000 metric tons (80 percent) of the 230,000 metric tons of global platinum output; and 93,000 metric tons (40 percent) of the 232,000 metric tons of global palladium output. George, "Platinum-group Metals," January 2008, 127.

²¹⁶ These western European countries have a long history of refining and marketing the mine output of the major precious-metals mining countries, although lacking their own domestic precious-metals mining operations.

TABLE MM.6 Changes in U.S. imports of precious metals and non-numismatic coins, 2003–07

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|---------------------------------|------------------------|-------|--------|--------|--------|------------------------|---------|--|
| | | | | | | Absolute | Percent | |
| | <i>million dollars</i> | | | | | | | |
| Platinum-group metals | 2,623 | 3,505 | 3,885 | 5,838 | 7,742 | 1,904 | 33 | |
| Silver | 801 | 1,013 | 1,178 | 1,900 | 2,375 | 475 | 25 | |
| Waste and scrap | 331 | 466 | 525 | 1,017 | 1,481 | 464 | 46 | |
| Non-numismatic coins | 207 | 244 | 237 | 305 | 289 | -16 | -5 | |
| Gold | 2,797 | 3,827 | 4,202 | 5,171 | 4,134 | -1,037 | -20 | |
| Total | 6,759 | 9,055 | 10,029 | 14,232 | 16,021 | 1,789 | 13 | |

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

Note: Calculations based on unrounded data.

By contrast, gold exhibited the largest decline among U.S. imports of precious metals and non-numismatic coins, down by \$1.0 billion (20 percent) to \$4.1 billion, as the price rise for gold was not sufficient to offset the lower quantity imported in 2007.²¹⁷ Most (87 percent) of this import decline was of unrefined doré, which dropped by \$953 million (48 percent) to \$1.0 billion. U.S. imports from Peru exhibited the largest decline, down by \$1.1 billion (78 percent) to \$305 million, as Peruvian mine output declined for a second consecutive year from the peak level in 2005.²¹⁸

²¹⁷ U.S. imports of gold in all forms declined by 94 metric tons (31 percent) from the previous year's level to 206 metric tons in 2007.

²¹⁸ In 2007, Peru's mined gold output declined by 33 metric tons (16 percent) from the previous year's level to 170 metric tons. The 2005 peak output was 208 metric tons. George, "Gold," January 2008, 73; and George, "Gold," April 2008, 31.4.

Iron and Steel Waste and Scrap

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Change in 2007 from 2006:

U.S. trade surplus: Increased by \$2.9 billion (95 percent) to \$5.9 billion

U.S. exports: Increased by \$2.7 billion (62 percent) to \$6.9 billion

U.S. imports: Decreased by \$0.2 billion (16 percent) to \$1.1 billion

In 2007, the U.S. trade surplus in iron and steel scrap almost doubled to \$5.9 billion, mostly as a result of a substantial increase in exports (table MM.7). Increased world steel production, particularly in Asia, resulted in increased demand for scrap in that region whereas scrap demand in the United States showed little growth. Prices of steel scrap increased strongly and rising unit values accounted for 70 percent of the increase in the value of U.S. scrap exports.

U.S. Exports

U.S. exports of iron and steel scrap increased by \$2.7 billion (62 percent) in 2007. Exports to Asian nations other than China increased in both quantity and value as steel production in Asia, outside China, increased by 5 percent. The quantities of scrap exports to Korea and Taiwan increased by 145 and 120 percent, respectively, and the value increased by 193 and 189 percent, respectively, due to increased unit values. Demand for stainless steel scrap in Asia was especially strong as production of stainless steel there increased by 7 percent whereas stainless steel production in the United States dropped by 12 percent.²¹⁹ Exports of high-value stainless steel scrap to Taiwan and Japan increased by 185 percent and 365 percent in quantity, respectively.

Exports of iron and steel scrap to Turkey increased by 32 percent in quantity and 60 percent in value. Steel production in Turkey, which increased by 11 percent in 2007, is largely dependent upon imported steel scrap. Turkey is a major supplier of steel products to support the booming Middle East construction market.

China was once again the largest destination for U.S. exports of iron and steel scrap. However, despite strong 12 percent growth in steel production in China, scrap exports to China declined by about 28 percent in quantity. Much of the growth in China occurred in the integrated steel industry, which is not heavily dependent on steel scrap as a raw material. The value of U.S. exports to China increased by 17 percent due to higher unit values overall for scrap during 2007, and because higher-valued stainless steel scrap accounted for an increased share of exports. The unit value of stainless steel scrap exported to China more

²¹⁹ International Stainless Steel Forum, *Stainless and Heat Resisting Steel Crude Steel Production Database*, undated (accessed August 26, 2008).

TABLE MM.7 Iron and steel waste and scrap (MM023): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|------------------|------------------|------------------|------------------|------------------------|--------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| China | 682 | 924 | 1,258 | 1,600 | 1,876 | 276 | 17.3 | |
| Canada | 156 | 237 | 264 | 285 | 351 | 66 | 23.1 | |
| Turkey | 71 | 136 | 299 | 566 | 906 | 340 | 60.0 | |
| Taiwan | 100 | 94 | 153 | 244 | 705 | 460 | 188.6 | |
| Korea | 352 | 490 | 317 | 191 | 560 | 368 | 192.5 | |
| Mexico | 172 | 305 | 287 | 247 | 221 | -26 | -10.5 | |
| Malaysia | 73 | 81 | 109 | 202 | 350 | 149 | 73.6 | |
| India | 21 | 91 | 221 | 168 | 337 | 168 | 99.9 | |
| Japan | 31 | 42 | 29 | 52 | 263 | 210 | 402.8 | |
| Thailand | 79 | 150 | 78 | 109 | 248 | 139 | 127.6 | |
| All other | 223 | 374 | 436 | 590 | 1,092 | 502 | 85.1 | |
| Total | 1,960 | 2,923 | 3,451 | 4,256 | 6,910 | 2,654 | 62.4 | |
| EU-27 | 172 | 217 | 219 | 271 | 532 | 261 | 96.1 | |
| OPEC | 5 | 14 | 63 | 41 | 91 | 50 | 119.7 | |
| Latin America | 190 | 358 | 317 | 289 | 276 | -12 | -4.3 | |
| CBERA | 1 | 2 | 2 | 5 | 12 | 7 | 142.6 | |
| Asia | 1,362 | 1,935 | 2,270 | 2,720 | 4,677 | 1,957 | 72.0 | |
| Sub-Saharan Africa | 6 | 25 | 13 | 16 | 3 | -13 | -80.1 | |
| Central and Eastern Europe | 1 | 5 | (^b) | 1 | 2 | 1 | 207.1 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| China | (^b) | 1 | 1 | 2 | 1 | -1 | -32.4 | |
| Canada | 312 | 599 | 579 | 772 | 760 | -12 | -1.6 | |
| Turkey | (^b) | (^b) | (^b) | (^b) | (^b) | (^b) | 28.8 | |
| Taiwan | (^b) | (^b) | (^b) | (^b) | (^b) | (^b) | -72.0 | |
| Korea | (^b) | (^b) | (^b) | (^b) | (^b) | (^b) | 231.8 | |
| Mexico | 43 | 58 | 61 | 95 | 138 | 43 | 45.7 | |
| Malaysia | 0 | 0 | (^b) | (^b) | (^b) | (^b) | 253.3 | |
| India | 0 | (^b) | 0 | (^b) | (^b) | (^b) | -36.7 | |
| Japan | 1 | 1 | 2 | 2 | 2 | (^b) | -20.3 | |
| Thailand | (^b) | (^b) | 0 | (^b) | 1 | 1 | 7,454.5 | |
| All other | 161 | 583 | 278 | 383 | 148 | -235 | -61.3 | |
| Total | 518 | 1,244 | 921 | 1,255 | 1,051 | -204 | -16.3 | |
| EU-27 | 127 | 511 | 253 | 367 | 131 | -235 | -64.2 | |
| OPEC | 1 | 9 | 2 | 1 | 1 | (^b) | 47.6 | |
| Latin America | 58 | 95 | 73 | 108 | 153 | 44 | 40.8 | |
| CBERA | 2 | 6 | 1 | 4 | 3 | -1 | -28.1 | |
| Asia | 2 | 3 | 4 | 5 | 5 | (^b) | 7.8 | |
| Sub-Saharan Africa | (^b) | 3 | 2 | 0 | 0 | 0 | 0.0 | |
| Central and Eastern Europe | 0 | 0 | 0 | (^b) | 0 | (^b) | -100.0 | |

See footnote(s) at end of table.

TABLE MM.7 Iron and steel waste and scrap (MM023): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—*Continued*

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--------------------------------|------------------------|-------|------------------|------------------|-------|------------------------|------------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. merchandise trade balance | | | | | | | | |
| China | 682 | 923 | 1,256 | 1,598 | 1,875 | 277 | 17.3 | |
| Canada | -157 | -362 | -314 | -487 | -408 | 78 | 16.1 | |
| Turkey | 71 | 136 | 299 | 566 | 906 | 340 | 60.0 | |
| Taiwan | 99 | 93 | 153 | 244 | 704 | 461 | 189.1 | |
| Korea | 352 | 490 | 316 | 191 | 559 | 368 | 192.5 | |
| Mexico | 129 | 248 | 226 | 152 | 83 | -69 | -45.5 | |
| Malaysia | 73 | 81 | 109 | 202 | 350 | 148 | 73.5 | |
| India | 21 | 91 | 221 | 168 | 336 | 168 | 100.3 | |
| Japan | 30 | 41 | 28 | 50 | 261 | 211 | 419.0 | |
| Thailand | 79 | 150 | 78 | 109 | 247 | 138 | 126.9 | |
| All other | 63 | -210 | 158 | 207 | 944 | 737 | 356.6 | |
| Total | 1,442 | 1,680 | 2,529 | 3,001 | 5,859 | 2,858 | 95.2 | |
| EU-27 | 44 | -294 | -34 | -95 | 401 | 496 | (^c) | |
| OPEC | 4 | 5 | 61 | 41 | 90 | 49 | 121.4 | |
| Latin America | 132 | 263 | 244 | 180 | 124 | -57 | -31.4 | |
| CBERA | -1 | -4 | 1 | 1 | 9 | 8 | 698.0 | |
| Asia | 1,360 | 1,932 | 2,266 | 2,715 | 4,672 | 1,957 | 72.1 | |
| Sub-Saharan Africa | 6 | 22 | 11 | 16 | 3 | -13 | -80.1 | |
| Central and Eastern Europe | 1 | 5 | (^b) | (^b) | 2 | 1 | 238.6 | |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

^cNot meaningful for purposes of comparison.

than doubled in 2007 compared to that in 2006, while the average unit value of other scrap increased by only 50 percent.

U.S. Imports

U.S. imports of iron and steel scrap declined by 22 percent in quantity, offset in part by an 8 percent increase in average unit value. Imports of stainless steel scrap from Canada and Mexico, the principal sources of imported scrap, declined by 33 percent in quantity from an unusually high level in 2006, whereas imports of scrap other than stainless declined by only 1 percent in 2007. Imports of scrap from European countries declined due to strong markets in Europe and Turkey.

Steel Mill Products

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Change in 2007 from 2006:

U.S. trade deficit: Decreased by \$4.4 billion (21 percent) to \$16.7 billion

U.S. exports: Increased by \$2.1 billion (20 percent) to \$12.5 billion

U.S. imports: Decreased by \$2.3 billion (7 percent) to \$29.2 billion

In 2007, the U.S. trade deficit in steel mill products fell by 21 percent as imports dropped from the record levels of 2006, due to the combined effects of reduced consumption of steel in the United States and reductions in inventory held by warehouses and steel consumers (table MM.8). Steel warehouses increased inventory to record levels in 2006, but cut back sharply on imports in 2007 to reduce inventory to average levels.²²⁰ World consumption remained strong, and steel prices continued an upward trend in 2007, particularly for stainless steel products.

U.S. Exports

U.S. exports of steel mill products rose by \$2.1 billion (20 percent) to \$12.5 billion in 2007. Although U.S. demand for steel was down in 2007, U.S. producers of steel mill products took advantage of available capacity, favorable pricing in world markets, and favorable currency exchange rates to increase exports. Exports of stainless steel flat-rolled products increased by 31 percent in quantity and 41 percent in value. The EU accounted for about 60 percent of this increase.

Exports of carbon and alloy steel flat-rolled products increased by 18 percent in quantity and 21 percent in value. Exports to Canada, the largest destination, increased by less than 1 percent in quantity, but accounted for almost one-quarter of the increase in value, due to higher unit values. Exports to the EU accounted for 38 percent of the increase in value.

U.S. Imports

U.S. imports of steel mill products fell by \$2.3 billion (7 percent) to \$29.2 billion in 2007. Reacting to lower demand for steel in the United States, U.S. steel producers reduced their imports of slabs and other semifinished products that are used as raw materials for the production of finished steel mill products. Imports of slabs from Russia and Ukraine were down 43 percent in quantity in 2007, though they were still much greater than in previous years. Imports of slabs from Mexico, the largest source, were down 20 percent by quantity to the lowest level in 5 years.

²²⁰ Metal Service Center Institute, *Metals Activity Report*, various monthly issues.

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, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|---------------|---------------|---------------|---------------|------------------------|-------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | |
| Canada | 2,567 | 3,887 | 5,009 | 5,600 | 6,085 | 485 | 8.7 |
| Mexico | 1,120 | 1,338 | 1,690 | 1,998 | 2,189 | 191 | 9.6 |
| China | 429 | 228 | 402 | 321 | 532 | 210 | 65.6 |
| Germany | 88 | 107 | 176 | 168 | 252 | 84 | 50.1 |
| Japan | 34 | 39 | 79 | 63 | 72 | 9 | 15.0 |
| Korea | 46 | 73 | 94 | 104 | 124 | 20 | 19.5 |
| Brazil | 28 | 47 | 61 | 75 | 173 | 98 | 130.6 |
| Taiwan | 60 | 67 | 77 | 68 | 71 | 3 | 4.8 |
| India | 42 | 71 | 170 | 152 | 203 | 51 | 33.9 |
| United Kingdom | 82 | 98 | 131 | 162 | 257 | 95 | 58.4 |
| All other | 1,028 | 1,060 | 1,443 | 1,769 | 2,577 | 808 | 45.6 |
| Total | 5,525 | 7,015 | 9,331 | 10,479 | 12,535 | 2,056 | 19.6 |
| EU-27 | 604 | 509 | 754 | 843 | 1,417 | 574 | 68.1 |
| OPEC | 124 | 200 | 293 | 392 | 556 | 165 | 42.0 |
| Latin America | 1,317 | 1,637 | 2,124 | 2,500 | 2,976 | 477 | 19.1 |
| CBERA | 59 | 92 | 95 | 137 | 149 | 12 | 8.6 |
| Asia | 805 | 721 | 1,014 | 909 | 1,346 | 437 | 48.0 |
| Sub-Saharan Africa | 72 | 65 | 106 | 202 | 167 | -35 | -17.4 |
| Central and Eastern Europe | 13 | 18 | 40 | 33 | 35 | 2 | 6.9 |
| U.S. imports of merchandise for consumption | | | | | | | |
| Canada | 2,693 | 3,700 | 4,334 | 4,702 | 5,275 | 573 | 12.2 |
| Mexico | 1,224 | 2,410 | 2,600 | 2,437 | 2,426 | -12 | -0.5 |
| China | 269 | 1,104 | 1,687 | 3,605 | 3,968 | 363 | 10.1 |
| Germany | 686 | 1,074 | 1,384 | 1,428 | 1,635 | 206 | 14.4 |
| Japan | 744 | 1,015 | 1,392 | 1,886 | 1,727 | -159 | -8.4 |
| Korea | 475 | 957 | 1,285 | 1,813 | 1,499 | -314 | -17.3 |
| Brazil | 573 | 1,382 | 1,374 | 1,629 | 1,411 | -218 | -13.4 |
| Taiwan | 185 | 754 | 673 | 1,511 | 1,227 | -284 | -18.8 |
| India | 232 | 713 | 608 | 909 | 1,043 | 134 | 14.7 |
| United Kingdom | 331 | 556 | 664 | 702 | 890 | 189 | 26.9 |
| All other | 3,088 | 7,893 | 7,534 | 10,878 | 8,104 | -2,775 | -25.5 |
| Total | 10,499 | 21,559 | 23,534 | 31,500 | 29,204 | -2,295 | -7.3 |
| EU-27 | 2,716 | 5,004 | 5,988 | 6,753 | 7,348 | 595 | 8.8 |
| OPEC | 122 | 297 | 283 | 195 | 138 | -57 | -29.2 |
| Latin America | 2,167 | 4,499 | 4,619 | 4,566 | 4,281 | -285 | -6.3 |
| CBERA | 42 | 123 | 51 | 64 | 48 | -16 | -24.9 |
| Asia | 2,030 | 4,884 | 5,983 | 10,410 | 9,960 | -451 | -4.3 |
| Sub-Saharan Africa | 133 | 244 | 222 | 344 | 164 | -180 | -52.3 |
| Central and Eastern Europe | 252 | 554 | 435 | 590 | 370 | -219 | -37.2 |

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, 2003–07^a—*Continued*

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--------------------------------|------------------------|---------|---------|---------|---------|------------------------|------------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. merchandise trade balance | | | | | | | |
| Canada | -125 | 187 | 675 | 898 | 809 | -88 | -9.8 |
| Mexico | -103 | -1,072 | -910 | -440 | -237 | 203 | 46.2 |
| China | 160 | -876 | -1,284 | -3,284 | -3,436 | -153 | -4.6 |
| Germany | -597 | -968 | -1,208 | -1,261 | -1,383 | -122 | -9.7 |
| Japan | -710 | -975 | -1,313 | -1,823 | -1,655 | 168 | 9.2 |
| Korea | -429 | -885 | -1,191 | -1,709 | -1,375 | 334 | 19.5 |
| Brazil | -545 | -1,335 | -1,313 | -1,554 | -1,238 | 316 | 20.3 |
| Taiwan | -125 | -687 | -596 | -1,443 | -1,156 | 287 | 19.9 |
| India | -190 | -642 | -438 | -757 | -840 | -83 | -10.9 |
| United Kingdom | -249 | -458 | -534 | -539 | -633 | -94 | -17.4 |
| All other | -2,060 | -6,833 | -6,091 | -9,109 | -5,527 | 3,582 | 39.3 |
| Total | -4,974 | -14,544 | -14,203 | -21,020 | -16,670 | 4,351 | 20.7 |
| EU-27 | -2,112 | -4,496 | -5,234 | -5,910 | -5,931 | -20 | -0.3 |
| OPEC | 1 | -98 | 10 | 196 | 418 | 222 | 112.7 |
| Latin America | -850 | -2,862 | -2,495 | -2,066 | -1,304 | 762 | 36.9 |
| CBERA | 17 | -31 | 44 | 73 | 101 | 28 | 38.1 |
| Asia | -1,225 | -4,163 | -4,968 | -9,501 | -8,614 | 887 | 9.3 |
| Sub-Saharan Africa | -61 | -179 | -116 | -142 | 3 | 144 | (^b) |
| Central and Eastern Europe | -239 | -536 | -396 | -557 | -336 | 222 | 39.8 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bNot meaningful for purposes of comparison.

The value of imports of bar and rod was down by 22 percent from an unusually high level during 2006, with much of the reduction due to lower shipments from China and Turkey. China imposed a 10 percent export tax on these products as of June 1, 2007. The market for bar and rod was very strong in the Middle East during 2007, which likely contributed to the reduced shipments from Turkey to the United States.

Imports of stainless steel flat-rolled products increased by 35 percent, however, the increase was entirely due to increases in unit values as the quantity of such imports fell by 9 percent. China was the largest source of these imports.

The energy development and production markets were strong and provided increased demand for carbon and alloy steel pipe and tube products. Imports increased by 18 percent, following comparable increases in the three previous years, and bucking the trend of reduced imports for most iron and steel mill products.

TABLE MM.9 Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|--|------------------|------------------|------------------|------------------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MM001 | Clays and related mineral products | | | | | | |
| | Exports | 1,069 | 1,127 | 1,236 | 1,263 | 27 | 2.2 |
| | Imports | 210 | 231 | 281 | 282 | (^c) | 0.1 |
| | Trade balance | 806 | 859 | 896 | 955 | 27 | 2.8 |
| MM002 | Fluorspar and miscellaneous mineral substances | | | | | | |
| | Exports | 36 | 40 | 37 | 43 | 6 | 15.6 |
| | Imports | 167 | 192 | 202 | 198 | -5 | -2.3 |
| | Trade balance | -117 | -131 | -151 | -165 | 11 | 6.4 |
| MM003 | Iron ores and concentrates | | | | | | |
| | Exports | 334 | 584 | 636 | 718 | 83 | 13.0 |
| | Imports | 370 | 532 | 610 | 543 | -68 | -11.1 |
| | Trade balance | -80 | -36 | 52 | 25 | 150 | 591.9 |
| MM004 | Copper ores and concentrates | | | | | | |
| | Exports | 134 | 363 | 770 | 1,041 | 270 | 35.1 |
| | Imports | 25 | (^c) | (^c) | (^c) | (^c) | -3.3 |
| | Trade balance | 109 | 362 | 770 | 1,040 | 270 | 35.1 |
| MM005 | Lead ores, concentrates, and residues | | | | | | |
| | Exports | 215 | 230 | 362 | 619 | 257 | 71.0 |
| | Imports | (^c) | (^c) | (^c) | (^c) | (^c) | 470.8 |
| | Trade balance | 197 | 230 | 362 | 619 | 257 | 71.0 |
| MM005A | Lead ores and concentrates | | | | | | |
| | Exports | 207 | 224 | 347 | 606 | 259 | 74.6 |
| | Imports | 0 | 0 | (^c) | (^c) | (^c) | -58.5 |
| | Trade balance | 144 | 224 | 347 | 606 | 259 | 74.6 |
| MM006 | Zinc ores, concentrates, and residues | | | | | | |
| | Exports | 426 | 490 | 1,076 | 1,204 | 129 | 12.0 |
| | Imports | 109 | 129 | 229 | 203 | -27 | -11.6 |
| | Trade balance | 317 | 361 | 846 | 1,002 | 155 | 18.3 |
| MM006A | Zinc ores and concentrates | | | | | | |
| | Exports | 417 | 483 | 1,068 | 1,191 | 123 | 11.5 |
| | Imports | 99 | 117 | 183 | 170 | -13 | -7.0 |
| | Trade balance | 319 | 366 | 885 | 1,021 | 136 | 15.3 |
| MM007 | Certain ores, concentrates, ash, and residues | | | | | | |
| | Exports | 507 | 1,643 | 1,687 | 1,917 | 230 | 13.6 |
| | Imports | 962 | 1,537 | 1,364 | 1,818 | 454 | 33.3 |
| | Trade balance | -396 | -454 | 107 | 324 | -224 | -69.2 |

See footnote(s) at end of table.

TABLE MM.9 Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|------------------|------------------|--------|------------------|------------------------|------------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MM007A Molybdenum ores and concentrates | | | | | | | |
| Exports | 194 | 358 | 1,447 | 1,457 | 1,637 | 180 | 12.4 |
| Imports | 51 | 268 | 746 | 395 | 553 | 158 | 40.1 |
| Trade balance | 143 | 90 | 701 | 1,062 | 1,084 | 22 | 2.1 |
| MM008 Precious metal ores and concentrates | | | | | | | |
| Exports | 32 | 40 | 27 | 49 | 66 | 16 | 33.6 |
| Imports | 23 | 21 | 20 | 14 | 10 | -4 | -30.8 |
| Trade balance | 8 | 19 | 7 | 35 | 56 | 21 | 59.3 |
| MM008A Gold ores and concentrates | | | | | | | |
| Exports | 13 | 16 | 16 | 40 | 49 | 10 | 24.3 |
| Imports | 22 | 19 | 19 | 13 | 8 | -4 | -35.7 |
| Trade balance | -9 | -3 | -3 | 27 | 41 | 14 | 52.1 |
| MM008B Silver ores and concentrates | | | | | | | |
| Exports | 16 | 2 | 2 | 4 | 9 | 5 | 116.5 |
| Imports | 1 | 2 | (^c) | 0 | (^c) | (^c) | (^d) |
| Trade balance | 15 | (^c) | 2 | 4 | 9 | 5 | 109.2 |
| MM009 Cement, stone, and related products | | | | | | | |
| Exports | 1,405 | 1,648 | 1,853 | 2,399 | 2,512 | 113 | 4.7 |
| Imports | 4,945 | 5,897 | 7,144 | 8,151 | 7,637 | -515 | -6.3 |
| Trade balance | -3,540 | -4,248 | -5,291 | -5,753 | -5,125 | 628 | 10.9 |
| MM009A Cement | | | | | | | |
| Exports | 62 | 63 | 68 | 114 | 126 | 12 | 10.5 |
| Imports | 940 | 1,139 | 1,563 | 1,842 | 1,324 | -518 | -28.1 |
| Trade balance | -879 | -1,076 | -1,494 | -1,728 | -1,198 | 530 | 30.7 |
| MM010 Industrial ceramics | | | | | | | |
| Exports | 600 | 625 | 702 | 784 | 981 | 197 | 25.1 |
| Imports | 551 | 672 | 749 | 880 | 919 | 39 | 4.4 |
| Trade balance | 49 | -48 | -47 | -96 | 62 | 158 | (^d) |
| MM011 Ceramic bricks and similar articles | | | | | | | |
| Exports | 26 | 46 | 39 | 43 | 52 | 9 | 21.1 |
| Imports | 38 | 50 | 67 | 94 | 72 | -21 | -22.7 |
| Trade balance | -12 | -4 | -27 | -51 | -21 | 30 | 59.5 |
| MM012 Ceramic floor and wall tiles | | | | | | | |
| Exports | 27 | 27 | 31 | 37 | 42 | 5 | 12.1 |
| Imports | 1,430 | 1,631 | 1,800 | 1,919 | 1,638 | -280 | -14.6 |
| Trade balance | -1,403 | -1,604 | -1,768 | -1,881 | -1,597 | 285 | 15.1 |

See footnote(s) at end of table.

TABLE MM.9 Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|---------|---------|---------|---------|------------------------|------------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MM013 Ceramic household articles | | | | | | | |
| Exports | 88 | 107 | 104 | 99 | 118 | 19 | 19.1 |
| Imports | 1,757 | 1,683 | 1,687 | 1,737 | 1,734 | -3 | -0.2 |
| Trade balance | -1,669 | -1,577 | -1,583 | -1,638 | -1,616 | 22 | 1.4 |
| MM014 Flat glass | | | | | | | |
| Exports | 1,747 | 1,882 | 1,987 | 2,204 | 2,413 | 209 | 9.5 |
| Imports | 1,699 | 1,959 | 2,041 | 2,143 | 2,120 | -23 | -1.1 |
| Trade balance | 49 | -77 | -53 | 61 | 294 | 232 | 379.4 |
| MM015 Glass containers | | | | | | | |
| Exports | 161 | 185 | 180 | 180 | 237 | 57 | 31.7 |
| Imports | 607 | 659 | 700 | 794 | 902 | 109 | 13.7 |
| Trade balance | -446 | -474 | -520 | -614 | -666 | -52 | -8.5 |
| MM016 Household glassware | | | | | | | |
| Exports | 165 | 183 | 183 | 205 | 220 | 15 | 7.4 |
| Imports | 919 | 947 | 908 | 895 | 919 | 24 | 2.7 |
| Trade balance | -753 | -764 | -725 | -689 | -698 | -9 | -1.3 |
| MM017 Miscellaneous glass products | | | | | | | |
| Exports | 748 | 812 | 702 | 866 | 813 | -52 | -6.0 |
| Imports | 701 | 822 | 806 | 916 | 974 | 58 | 6.3 |
| Trade balance | 46 | -10 | -104 | -51 | -161 | -110 | -216.8 |
| MM018 Fiberglass insulation products | | | | | | | |
| Exports | 88 | 92 | 93 | 73 | 98 | 25 | 33.6 |
| Imports | 155 | 214 | 249 | 272 | 133 | -139 | -51.1 |
| Trade balance | -67 | -122 | -156 | -198 | -35 | 163 | 82.3 |
| MM019 Natural and synthetic gemstones | | | | | | | |
| Exports | 469 | 1,129 | 2,765 | 4,087 | 5,572 | 1,486 | 36.4 |
| Imports | 13,854 | 15,690 | 17,352 | 18,452 | 20,239 | 1,787 | 9.7 |
| Trade balance | -13,386 | -14,562 | -14,587 | -14,366 | -14,667 | -301 | -2.1 |
| MM020 Precious metals and non-numismatic coins | | | | | | | |
| Exports | 6,299 | 6,204 | 7,522 | 13,360 | 19,289 | 5,929 | 44.4 |
| Imports | 6,759 | 9,055 | 10,029 | 14,232 | 16,022 | 1,790 | 12.6 |
| Trade balance | -460 | -2,851 | -2,507 | -872 | 3,267 | 4,138 | (^d) |
| MM020A Unrefined and refined gold | | | | | | | |
| Exports | 4,130 | 3,465 | 4,636 | 7,171 | 11,509 | 4,337 | 60.5 |
| Imports | 2,689 | 3,680 | 4,112 | 5,029 | 3,934 | -1,095 | -21.8 |
| Trade balance | 1,441 | -215 | 524 | 2,142 | 7,575 | 5,433 | 253.6 |

See footnote(s) at end of table.

TABLE MM.9 Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|---------|---------|---------|---------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MM021 Primary iron products | | | | | | | |
| Exports | 11 | 10 | 12 | 12 | 8 | -4 | -34.8 |
| Imports | 815 | 1,898 | 2,033 | 2,227 | 2,236 | 9 | 0.4 |
| Trade balance | -804 | -1,887 | -2,021 | -2,215 | -2,229 | -14 | -0.6 |
| MM022 Ferro alloys | | | | | | | |
| Exports | 51 | 81 | 162 | 146 | 206 | 60 | 40.9 |
| Imports | 899 | 1,885 | 1,834 | 1,954 | 2,788 | 834 | 42.7 |
| Trade balance | -848 | -1,805 | -1,673 | -1,807 | -2,582 | -775 | -42.9 |
| MM023 Iron and steel waste and scrap | | | | | | | |
| Exports | 1,960 | 2,923 | 3,451 | 4,256 | 6,910 | 2,654 | 62.4 |
| Imports | 518 | 1,244 | 921 | 1,255 | 1,051 | -204 | -16.3 |
| Trade balance | 1,442 | 1,680 | 2,529 | 3,001 | 5,859 | 2,858 | 95.2 |
| MM024 Abrasive and ferrous products | | | | | | | |
| Exports | 466 | 543 | 597 | 621 | 684 | 63 | 10.2 |
| Imports | 769 | 889 | 984 | 1,048 | 1,083 | 36 | 3.4 |
| Trade balance | -304 | -346 | -387 | -427 | -399 | 27 | 6.4 |
| MM024A Abrasive products | | | | | | | |
| Exports | 310 | 345 | 390 | 417 | 436 | 19 | 4.5 |
| Imports | 540 | 631 | 658 | 712 | 736 | 24 | 3.4 |
| Trade balance | -230 | -286 | -268 | -295 | -300 | -5 | -1.8 |
| MM025 Steel mill products | | | | | | | |
| Exports | 5,525 | 7,015 | 9,331 | 10,479 | 12,535 | 2,056 | 19.6 |
| Imports | 10,499 | 21,559 | 23,534 | 31,500 | 29,204 | -2,295 | -7.3 |
| Trade balance | -4,974 | -14,544 | -14,203 | -21,020 | -16,670 | 4,351 | 20.7 |
| MM025A Ingots, blooms, billets, and slabs of carbon and alloy steels | | | | | | | |
| Exports | 121 | 169 | 171 | 163 | 359 | 196 | 119.9 |
| Imports | 1,078 | 2,700 | 2,944 | 3,836 | 3,050 | -786 | -20.5 |
| Trade balance | -957 | -2,531 | -2,774 | -3,673 | -2,691 | 982 | 26.7 |
| MM025B Plates, sheets, and strips of carbon and alloy steels | | | | | | | |
| Exports | 2,476 | 2,853 | 4,045 | 4,137 | 4,484 | 346 | 8.4 |
| Imports | 3,028 | 7,406 | 6,962 | 10,510 | 7,133 | -3,377 | -32.1 |
| Trade balance | -552 | -4,554 | -2,917 | -6,373 | -2,650 | 3,723 | 58.4 |

See footnote(s) at end of table.

TABLE MM.9 Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|--------|--------|--------|--------|------------------------|------------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MM025C Bars, rods, and light shapes of carbon and alloy steels | | | | | | | |
| Exports | 479 | 697 | 837 | 999 | 1,162 | 163 | 16.3 |
| Imports | 1,669 | 3,769 | 3,327 | 4,043 | 3,164 | -879 | -21.7 |
| Trade balance | -1,190 | -3,072 | -2,490 | -3,044 | -2,002 | 1,042 | 34.2 |
| MM025D Angles, shapes, and sections of carbon and alloy steels | | | | | | | |
| Exports | 217 | 372 | 467 | 603 | 862 | 259 | 43.0 |
| Imports | 286 | 448 | 512 | 769 | 781 | 12 | 1.5 |
| Trade balance | -69 | -76 | -45 | -166 | 81 | 248 | (^d) |
| MM025E Wire of carbon and alloy steels | | | | | | | |
| Exports | 172 | 275 | 226 | 243 | 240 | -3 | -1.1 |
| Imports | 463 | 731 | 743 | 782 | 721 | -61 | -7.8 |
| Trade balance | -291 | -456 | -517 | -540 | -481 | 58 | 10.8 |
| MM025F Ingots, blooms, billets, and slabs of stainless steels | | | | | | | |
| Exports | 27 | 46 | 41 | 60 | 98 | 39 | 65.1 |
| Imports | 242 | 388 | 407 | 411 | 628 | 217 | 52.9 |
| Trade balance | -214 | -342 | -366 | -351 | -530 | -178 | -50.8 |
| MM025G Plates, sheets, and strips of stainless steels | | | | | | | |
| Exports | 575 | 632 | 853 | 919 | 1,292 | 373 | 40.6 |
| Imports | 624 | 1,139 | 1,206 | 1,768 | 2,380 | 612 | 34.6 |
| Trade balance | -49 | -507 | -354 | -849 | -1,088 | -239 | -28.1 |
| MM025H Bars, rods, and light shapes of stainless steels | | | | | | | |
| Exports | 89 | 131 | 165 | 252 | 297 | 45 | 17.7 |
| Imports | 215 | 378 | 572 | 588 | 793 | 205 | 35.0 |
| Trade balance | -126 | -247 | -407 | -336 | -497 | -161 | -47.9 |
| MM025I Angles, shapes, and sections of stainless steels | | | | | | | |
| Exports | 5 | 7 | 12 | 15 | 20 | 5 | 33.7 |
| Imports | 9 | 16 | 18 | 31 | 37 | 6 | 20.3 |
| Trade balance | -3 | -9 | -6 | -16 | -17 | -1 | -7.9 |
| MM025J Wire of stainless steels | | | | | | | |
| Exports | 52 | 56 | 44 | 52 | 62 | 10 | 19.6 |
| Imports | 96 | 143 | 174 | 209 | 273 | 64 | 30.5 |
| Trade balance | -44 | -87 | -130 | -157 | -211 | -54 | -34.0 |

See footnote(s) at end of table.

TABLE MM.9 Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|--------|--------|--------|--------|------------------------|------------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MM025K Rails and accessories of carbon and alloy steels | | | | | | | |
| Exports | 67 | 104 | 134 | 169 | 222 | 53 | 31.3 |
| Imports | 163 | 221 | 286 | 374 | 397 | 23 | 6.1 |
| Trade balance | -96 | -117 | -152 | -205 | -175 | 30 | 14.7 |
| MM025L Pipes and tubes of carbon and alloy steels | | | | | | | |
| Exports | 977 | 1,360 | 1,904 | 2,347 | 2,607 | 260 | 11.1 |
| Imports | 2,098 | 3,483 | 5,259 | 6,953 | 8,194 | 1,241 | 17.8 |
| Trade balance | -1,120 | -2,123 | -3,354 | -4,605 | -5,587 | -981 | -21.3 |
| MM025M Pipes and tubes of stainless steels | | | | | | | |
| Exports | 148 | 160 | 232 | 282 | 367 | 85 | 30.1 |
| Imports | 309 | 465 | 657 | 821 | 1,180 | 360 | 43.8 |
| Trade balance | -161 | -305 | -425 | -538 | -813 | -274 | -51.0 |
| MM025N Tool steels | | | | | | | |
| Exports | 119 | 153 | 200 | 239 | 431 | 192 | 80.5 |
| Imports | 220 | 271 | 466 | 405 | 397 | -8 | -2.0 |
| Trade balance | -101 | -118 | -266 | -166 | 34 | 200 | (^d) |
| MM026 Steel pipe and tube fittings and certain cast products | | | | | | | |
| Exports | 705 | 900 | 1,017 | 1,277 | 1,393 | 116 | 9.1 |
| Imports | 609 | 838 | 1,052 | 1,307 | 1,650 | 343 | 26.3 |
| Trade balance | 95 | 62 | -35 | -30 | -257 | -227 | -759.7 |
| MM027 Fabricated structurals | | | | | | | |
| Exports | 160 | 203 | 278 | 376 | 379 | 3 | 0.7 |
| Imports | 501 | 508 | 776 | 1,176 | 1,620 | 444 | 37.8 |
| Trade balance | -341 | -305 | -498 | -800 | -1,241 | -441 | -55.2 |
| MM028 Metal construction components | | | | | | | |
| Exports | 561 | 675 | 773 | 970 | 1,087 | 118 | 12.1 |
| Imports | 1,212 | 1,501 | 1,692 | 2,074 | 2,613 | 539 | 26.0 |
| Trade balance | -652 | -826 | -918 | -1,104 | -1,526 | -421 | -38.1 |
| MM029 Metallic containers | | | | | | | |
| Exports | 616 | 716 | 904 | 1,088 | 1,291 | 202 | 18.6 |
| Imports | 660 | 760 | 828 | 898 | 1,036 | 138 | 15.4 |
| Trade balance | -45 | -44 | 76 | 190 | 254 | 64 | 33.8 |

See footnote(s) at end of table.

TABLE MM.9 Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|---|--|--------|--------|--------|--------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| MM030 | Wire products of base metal | | | | | | | |
| | Exports | 760 | 853 | 966 | 1,104 | 1,144 | 39 | 3.6 |
| | Imports | 1,591 | 2,191 | 2,473 | 2,538 | 2,571 | 33 | 1.3 |
| | Trade balance | -831 | -1,338 | -1,507 | -1,434 | -1,427 | 7 | 0.5 |
| MM031 | Miscellaneous products of base metal | | | | | | | |
| | Exports | 5,227 | 5,255 | 5,893 | 6,865 | 7,411 | 546 | 8.0 |
| | Imports | 8,403 | 10,163 | 11,619 | 12,852 | 13,433 | 581 | 4.5 |
| | Trade balance | -3,176 | -4,908 | -5,726 | -5,987 | -6,021 | -34 | -0.6 |
| MM032 | Industrial fasteners of base metal | | | | | | | |
| | Exports | 1,520 | 1,672 | 1,894 | 2,218 | 2,358 | 140 | 6.3 |
| | Imports | 2,348 | 2,977 | 3,443 | 3,684 | 3,755 | 71 | 1.9 |
| | Trade balance | -828 | -1,305 | -1,548 | -1,466 | -1,398 | 68 | 4.7 |
| MM033 | Cooking and kitchen ware | | | | | | | |
| | Exports | 199 | 198 | 204 | 225 | 290 | 65 | 28.9 |
| | Imports | 2,070 | 2,170 | 2,431 | 2,581 | 2,621 | 40 | 1.6 |
| | Trade balance | -1,871 | -1,972 | -2,227 | -2,355 | -2,331 | 25 | 1.0 |
| MM034 | Metal and ceramic sanitary ware | | | | | | | |
| | Exports | 142 | 159 | 162 | 180 | 210 | 30 | 16.4 |
| | Imports | 863 | 1,062 | 1,230 | 1,371 | 1,432 | 62 | 4.5 |
| | Trade balance | -721 | -903 | -1,069 | -1,190 | -1,222 | -32 | -2.7 |
| MM035 | Construction castings and other cast-iron articles | | | | | | | |
| | Exports | 23 | 30 | 39 | 48 | 49 | 1 | 2.9 |
| | Imports | 124 | 180 | 217 | 223 | 241 | 18 | 8.2 |
| | Trade balance | -101 | -151 | -177 | -175 | -192 | -17 | -9.6 |
| MM036 | Copper and related articles | | | | | | | |
| | Exports | 2,086 | 3,006 | 3,405 | 6,052 | 6,684 | 632 | 10.4 |
| | Imports | 3,893 | 5,565 | 7,766 | 13,803 | 12,577 | -1,226 | -8.9 |
| | Trade balance | -1,807 | -2,559 | -4,360 | -7,751 | -5,893 | 1,858 | 24.0 |
| MM036A | Unrefined and refined copper | | | | | | | |
| | Exports | 214 | 339 | 157 | 255 | 216 | -39 | -15.3 |
| | Imports | 1,854 | 2,411 | 3,659 | 7,093 | 6,770 | -323 | -4.6 |
| | Trade balance | -1,640 | -2,071 | -3,501 | -6,838 | -6,553 | 284 | 4.2 |
| MM036B | Copper alloy plate, sheet, and strip | | | | | | | |
| | Exports | 144 | 198 | 275 | 284 | 309 | 26 | 9.1 |
| | Imports | 104 | 176 | 168 | 252 | 242 | -9 | -3.7 |
| | Trade balance | 40 | 22 | 107 | 32 | 67 | 35 | 110.5 |

See footnote(s) at end of table.

TABLE MM.9 Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|--------|--------|--------|--------|------------------------|------------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MM037 Unwrought aluminum | | | | | | | |
| Exports | 1,000 | 1,397 | 2,087 | 3,508 | 4,083 | 574 | 16.4 |
| Imports | 5,000 | 6,837 | 8,153 | 10,317 | 9,462 | -854 | -8.3 |
| Trade balance | -3,999 | -5,440 | -6,067 | -6,809 | -5,380 | 1,429 | 21.0 |
| MM037A Primary and secondary aluminum | | | | | | | |
| Exports | 376 | 608 | 716 | 1,004 | 1,011 | 7 | 0.7 |
| Imports | 4,401 | 6,001 | 7,199 | 9,114 | 8,309 | -805 | -8.8 |
| Trade balance | -4,025 | -5,393 | -6,483 | -8,110 | -7,298 | 812 | 10.0 |
| MM038 Aluminum mill products | | | | | | | |
| Exports | 2,564 | 3,171 | 3,757 | 4,592 | 4,779 | 186 | 4.1 |
| Imports | 2,768 | 3,512 | 4,696 | 5,768 | 5,609 | -158 | -2.7 |
| Trade balance | -203 | -342 | -938 | -1,176 | -831 | 345 | 29.3 |
| MM038A Aluminum bars, rods, and profiles | | | | | | | |
| Exports | 243 | 304 | 417 | 553 | 568 | 15 | 2.7 |
| Imports | 435 | 581 | 774 | 1,049 | 985 | -64 | -6.1 |
| Trade balance | -192 | -277 | -357 | -496 | -417 | 78 | 15.8 |
| MM038B Aluminum wire | | | | | | | |
| Exports | 80 | 97 | 115 | 148 | 179 | 31 | 21.0 |
| Imports | 269 | 359 | 432 | 571 | 598 | 27 | 4.8 |
| Trade balance | -189 | -263 | -316 | -423 | -419 | 4 | 0.9 |
| MM038C Aluminum plate, sheet, and strip | | | | | | | |
| Exports | 1,655 | 2,077 | 2,489 | 3,025 | 3,161 | 136 | 4.5 |
| Imports | 1,411 | 1,817 | 2,568 | 3,079 | 2,919 | -159 | -5.2 |
| Trade balance | 244 | 260 | -79 | -54 | 241 | 295 | (^d) |
| MM038D Aluminum foil | | | | | | | |
| Exports | 338 | 403 | 442 | 538 | 547 | 9 | 1.8 |
| Imports | 500 | 565 | 715 | 822 | 810 | -12 | -1.4 |
| Trade balance | -162 | -163 | -273 | -284 | -263 | 21 | 7.4 |
| MM038E Aluminum tubes, pipes, and fittings | | | | | | | |
| Exports | 198 | 237 | 247 | 287 | 287 | (^e) | 0.1 |
| Imports | 134 | 171 | 181 | 216 | 254 | 38 | 17.4 |
| Trade balance | 64 | 66 | 66 | 71 | 34 | -37 | -52.6 |
| MM039 Lead and related articles | | | | | | | |
| Exports | 117 | 108 | 110 | 137 | 246 | 109 | 80.0 |
| Imports | 113 | 203 | 335 | 451 | 734 | 282 | 62.6 |
| Trade balance | 5 | -95 | -226 | -315 | -488 | -173 | -55.0 |

See footnote(s) at end of table.

TABLE MM.9 Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|------------------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MM039A Refined lead | | | | | | | |
| Exports | 48 | 38 | 35 | 52 | 68 | 16 | 30.6 |
| Imports | 65 | 128 | 242 | 322 | 391 | 69 | 21.5 |
| Trade balance | -18 | -90 | -207 | -270 | -323 | -53 | -19.7 |
| MM040 Zinc and related articles | | | | | | | |
| Exports | 94 | 139 | 148 | 246 | 315 | 69 | 28.0 |
| Imports | 845 | 1,135 | 1,139 | 2,524 | 2,807 | 284 | 11.2 |
| Trade balance | -750 | -996 | -991 | -2,278 | -2,492 | -215 | -9.4 |
| MM040A Unwrought zinc | | | | | | | |
| Exports | 2 | 5 | 1 | 4 | 6 | 3 | 69.1 |
| Imports | 676 | 947 | 920 | 2,181 | 2,402 | 221 | 10.1 |
| Trade balance | -674 | -941 | -918 | -2,177 | -2,395 | -218 | -10.0 |
| MM041 Certain base metals and chemical elements | | | | | | | |
| Exports | 1,571 | 1,913 | 2,882 | 3,792 | 4,119 | 326 | 8.6 |
| Imports | 2,248 | 3,825 | 4,417 | 5,924 | 7,959 | 2,035 | 34.4 |
| Trade balance | -676 | -1,912 | -1,535 | -2,131 | -3,840 | -1,709 | -80.2 |
| MM041A Titanium ingot | | | | | | | |
| Exports | 11 | 14 | 33 | 41 | 44 | 3 | 7.1 |
| Imports | 7 | 15 | 39 | 59 | 54 | -5 | -9.0 |
| Trade balance | 4 | (^c) | -6 | -18 | -9 | 8 | 47.0 |
| MM042 Nonpowered handtools | | | | | | | |
| Exports | 2,109 | 2,361 | 2,508 | 2,880 | 3,165 | 285 | 9.9 |
| Imports | 3,652 | 4,136 | 4,226 | 4,770 | 4,919 | 150 | 3.1 |
| Trade balance | -1,543 | -1,776 | -1,717 | -1,889 | -1,754 | 135 | 7.1 |
| MM043 Certain cutlery, sewing implements, and related products | | | | | | | |
| Exports | 550 | 553 | 592 | 592 | 597 | 4 | 0.7 |
| Imports | 1,053 | 1,133 | 1,243 | 1,358 | 1,470 | 112 | 8.3 |
| Trade balance | -503 | -580 | -651 | -765 | -873 | -108 | -14.1 |
| MM044 Table flatware and related products | | | | | | | |
| Exports | 22 | 24 | 37 | 35 | 37 | 2 | 4.6 |
| Imports | 484 | 518 | 563 | 572 | 624 | 52 | 9.1 |
| Trade balance | -462 | -494 | -526 | -536 | -587 | -50 | -9.4 |

See footnote(s) at end of table.

TABLE MM.9 Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MM045 Certain builders' hardware: | | | | | | | |
| Exports | 911 | 982 | 1,035 | 1,052 | 1,063 | 11 | 1.0 |
| Imports | 2,405 | 3,063 | 3,593 | 4,155 | 4,346 | 192 | 4.6 |
| Trade balance | -1,494 | -2,080 | -2,558 | -3,103 | -3,284 | -181 | -5.8 |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bThis 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

^cLess than \$500,000.

^dNot meaningful for purposes of comparison.

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Machinery

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Change in 2007 from 2006:

U.S. trade deficit: Decreased by \$364 million (1 percent) to \$37.8 billion

U.S. exports: Increased by \$8.4 billion (9 percent) to \$101.3 billion

U.S. imports: Increased by \$8.0 billion (6 percent) to \$139.1 billion

In 2007, the U.S. merchandise trade deficit in machinery increased by \$364 million (1 percent) to \$37.8 billion (table MT.1). Sustained global economic expansion and the depreciation of the U.S. dollar vis-à-vis major trading partner currencies contributed to a record level of U.S. exports of machinery.²²¹ In contrast, U.S. imports of all machinery continued to increase at a slower rate than in recent years, reflecting reduced U.S. consumption.

U.S. Exports

In 2007, U.S. exports of machinery increased by \$8.4 billion (9 percent) to \$101.3 billion. The rise in exports of these products was driven by a number of factors, including a depreciation of the U.S. dollar, strong demand for business machinery replacement demand, and continued expanding domestic economies.²²²

The three foreign markets that registered the largest percentage increases in U.S. machinery exports in 2007 were China (up by 16 percent), Canada (up by 16 percent), and Taiwan (up by 10 percent). Collectively, these three major trading partners accounted for 28 percent of total sector exports in 2007 (table MT.1).

U.S. exports of semiconductor manufacturing equipment (SME) decreased by \$1.3 billion (9 percent) in 2007 to \$12.9 billion (table MT.2). Exports to Asia, the largest regional market (84 percent), declined slightly as small decreases in exports to Japan, Korea, Singapore, and Malaysia offset a significant increase in exports to Taiwan.

U.S. exports of farm and garden machinery rose by \$1.7 billion (23 percent) to \$9.2 billion with Canada and Mexico continuing as primary markets. Record high commodity prices for major crops such as corn, wheat, and soybeans were major factors contributing to an increase in capital investments in farm and garden machinery. Major farm and garden machinery exports included tractors, harvesting machinery such as cotton combines, sugarcane harvesters, soil preparation machinery, sprayers, and corn head machinery.²²³

²²¹ EIU, *Country Report: United States*, September 2007, 12.

²²² NAM, "Facing Up To the Challenge: Trade, Energy and The Economy," 2008, 1.

²²³ USDA, ERS, "Outlook for U.S. Agricultural Trade," April 18, 2008, 19.

TABLE MT.1 Machinery: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|---------------|----------------|----------------|----------------|----------------|------------------------|------------|
| | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | |
| China | 3,075 | 4,699 | 4,244 | 5,275 | 6,098 | 822 | 15.6 |
| Canada | 14,517 | 15,550 | 17,333 | 19,418 | 20,182 | 764 | 3.9 |
| Mexico | 8,813 | 9,754 | 11,132 | 12,121 | 11,627 | -494 | -4.1 |
| Japan | 3,447 | 4,575 | 4,526 | 5,151 | 4,877 | -274 | -5.3 |
| Germany | 2,536 | 2,865 | 3,337 | 3,788 | 4,178 | 390 | 10.3 |
| Korea | 2,704 | 3,284 | 3,799 | 4,703 | 5,067 | 364 | 7.7 |
| Taiwan | 2,378 | 4,858 | 4,255 | 4,696 | 5,429 | 732 | 15.6 |
| United Kingdom | 2,447 | 2,589 | 2,705 | 2,975 | 3,194 | 219 | 7.3 |
| Italy | 939 | 896 | 913 | 1,069 | 1,077 | 8 | 0.8 |
| France | 1,481 | 1,704 | 1,745 | 1,949 | 1,848 | -101 | -5.2 |
| All other | 19,568 | 24,321 | 26,417 | 31,741 | 37,714 | 5,973 | 18.8 |
| Total | 61,905 | 75,096 | 80,405 | 92,886 | 101,289 | 8,403 | 9.0 |
| EU-27 | 11,918 | 13,209 | 14,607 | 16,439 | 17,594 | 1,154 | 7.0 |
| OPEC | 2,511 | 3,384 | 3,777 | 4,786 | 6,517 | 1,731 | 36.2 |
| Latin America | 13,089 | 14,728 | 17,269 | 19,342 | 20,263 | 921 | 4.8 |
| CBERA | 771 | 804 | 1,109 | 1,181 | 1,336 | 155 | 13.2 |
| Asia | 16,500 | 24,365 | 23,135 | 27,906 | 30,127 | 2,221 | 8.0 |
| Sub-Saharan Africa | 711 | 878 | 891 | 1,126 | 1,454 | 329 | 29.2 |
| Central and Eastern Europe | 428 | 506 | 642 | 755 | 934 | 179 | 23.6 |
| U.S. imports of merchandise for consumption | | | | | | | |
| China | 13,780 | 17,391 | 21,056 | 25,585 | 28,415 | 2,830 | 11.1 |
| Canada | 9,827 | 10,986 | 11,866 | 13,124 | 13,740 | 615 | 4.7 |
| Mexico | 12,092 | 13,562 | 15,500 | 18,305 | 20,045 | 1,740 | 9.5 |
| Japan | 13,816 | 16,810 | 18,333 | 19,455 | 17,146 | -2,310 | -11.9 |
| Germany | 9,826 | 11,816 | 13,477 | 14,401 | 15,131 | 730 | 5.1 |
| Korea | 2,482 | 2,747 | 3,691 | 3,974 | 4,673 | 699 | 17.6 |
| Taiwan | 2,788 | 3,177 | 3,214 | 3,398 | 3,447 | 49 | 1.4 |
| United Kingdom | 2,887 | 3,241 | 3,485 | 3,745 | 3,876 | 131 | 3.5 |
| Italy | 3,927 | 4,526 | 4,976 | 5,263 | 5,628 | 365 | 6.9 |
| France | 1,948 | 2,273 | 2,629 | 2,596 | 2,827 | 231 | 8.9 |
| All other | 13,502 | 15,430 | 17,962 | 21,245 | 24,203 | 2,959 | 13.9 |
| Total | 86,875 | 101,958 | 116,187 | 131,091 | 139,131 | 8,040 | 6.1 |
| EU-27 | 25,569 | 29,316 | 33,464 | 36,544 | 39,950 | 3,407 | 9.3 |
| OPEC | 165 | 239 | 264 | 344 | 356 | 12 | 3.3 |
| Latin America | 13,349 | 15,038 | 17,337 | 20,227 | 22,245 | 2,018 | 10.0 |
| CBERA | 112 | 101 | 108 | 115 | 85 | -30 | -25.9 |
| Asia | 35,256 | 43,273 | 49,837 | 57,007 | 58,749 | 1,742 | 3.1 |
| Sub-Saharan Africa | 182 | 195 | 273 | 315 | 423 | 109 | 34.5 |
| Central and Eastern Europe | 829 | 1,023 | 1,223 | 1,358 | 1,585 | 227 | 16.7 |

TABLE MT.1 Machinery: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–2007^a—Continued

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--------------------------------|------------------------|---------|---------|---------|---------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. merchandise trade balance | | | | | | | |
| China | -10,705 | -12,692 | -16,812 | -20,310 | -22,318 | -2,008 | -9.9 |
| Canada | 4,690 | 4,563 | 5,467 | 6,293 | 6,442 | 148 | 2.4 |
| Mexico | -3,280 | -3,808 | -4,368 | -6,185 | -8,418 | -2,234 | -36.1 |
| Japan | -10,369 | -12,234 | -13,807 | -14,304 | -12,269 | 2,035 | 14.2 |
| Germany | -7,290 | -8,951 | -10,140 | -10,613 | -10,953 | -340 | -3.2 |
| Korea | 222 | 538 | 109 | 729 | 394 | -335 | -45.9 |
| Taiwan | -409 | 1,681 | 1,041 | 1,298 | 1,981 | 683 | 52.6 |
| United Kingdom | -439 | -652 | -780 | -770 | -683 | 87 | 11.3 |
| Italy | -2,988 | -3,630 | -4,063 | -4,194 | -4,551 | -357 | -8.5 |
| France | -467 | -569 | -884 | -647 | -979 | -332 | -51.3 |
| All other | 6,066 | 8,891 | 8,455 | 10,496 | 13,511 | 3,014 | 28.7 |
| Total | -24,970 | -26,863 | -35,783 | -38,205 | -37,842 | 364 | 1.0 |
| EU-27 | -13,651 | -16,107 | -18,857 | -20,105 | -22,357 | -2,252 | -11.2 |
| OPEC | 2,347 | 3,146 | 3,513 | 4,442 | 6,161 | 1,719 | 38.7 |
| Latin America | -261 | -311 | -68 | -886 | -1,983 | -1,097 | -123.8 |
| CBERA | 659 | 703 | 1,002 | 1,066 | 1,251 | 185 | 17.4 |
| Asia | -18,755 | -18,908 | -26,702 | -29,101 | -28,622 | 479 | 1.6 |
| Sub-Saharan Africa | 529 | 683 | 618 | 811 | 1,031 | 220 | 27.1 |
| Central and Eastern Europe | -401 | -517 | -581 | -603 | -651 | -49 | -8.1 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

TABLE MT.2 Machinery: Leading changes in U.S. exports and imports, 2003–07

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|--|-------|--------|--------|--------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| <i>Million dollars</i> | | | | | | | | |
| U.S. EXPORTS | | | | | | | | |
| Increases | | | | | | | | |
| MT009 | Farm and garden machinery and equipment | 5,109 | 6,098 | 6,885 | 7,533 | 9,245 | 1,712 | 22.7 |
| MT020 | Taps, cocks, valves, and similar devices . . . | 3,329 | 3,685 | 4,235 | 5,010 | 5,757 | 748 | 14.9 |
| MT005 | Centrifuges and filtering and purifying equipment | 3,022 | 3,277 | 3,505 | 4,060 | 4,788 | 728 | 17.9 |
| MT023 | Electric motors, generators, and related equipment | 4,031 | 4,673 | 5,114 | 5,997 | 6,685 | 688 | 11.5 |
| MT001 | Pumps for liquids | 2,412 | 2,725 | 2,963 | 3,565 | 4,174 | 609 | 17.1 |
| MT029 | Nonautomotive insulated electrical wire and related products | 2,660 | 2,936 | 3,202 | 4,110 | 4,586 | 475 | 11.6 |
| MT004 | Household appliances, including commercial applications | 4,810 | 5,193 | 5,733 | 6,515 | 6,915 | 400 | 6.1 |
| MT024 | Electrical transformers, static converters, and inductors | 1,767 | 1,805 | 1,895 | 2,380 | 2,743 | 363 | 15.2 |
| MT021 | Mechanical power transmission equipment . | 1,054 | 1,197 | 1,398 | 1,639 | 1,847 | 207 | 12.6 |
| MT002 | Air-conditioning equipment and parts | 5,334 | 5,794 | 6,340 | 6,861 | 7,061 | 199 | 2.9 |
| MT003 | Industrial thermal-processing equipment and furnaces | 2,099 | 2,789 | 3,220 | 3,540 | 3,731 | 190 | 5.4 |
| MT008 | Mineral processing machinery | 545 | 669 | 811 | 1,064 | 1,220 | 156 | 14.7 |
| MT010 | Industrial food-processing and related machinery | 558 | 601 | 710 | 644 | 797 | 153 | 23.8 |
| MT022 | Boilers, turbines, and related machinery . . . | 875 | 909 | 1,124 | 1,130 | 1,235 | 105 | 9.3 |
| MT004A | Major household appliances and parts | 1,655 | 1,773 | 1,991 | 2,309 | 2,409 | 99 | 4.3 |
| MT016 | Machine tool accessories | 280 | 275 | 305 | 304 | 403 | 98 | 32.3 |
| MT017 | Metal forming machine tools | 691 | 733 | 851 | 957 | 1,015 | 58 | 6.1 |
| MT011 | Pulp, paper, and paperboard machinery | 648 | 662 | 660 | 712 | 769 | 57 | 8.1 |
| MT014 | Metal rolling mills | 182 | 243 | 314 | 351 | 394 | 43 | 12.3 |
| MT007 | Scales and weighing machinery | 155 | 155 | 148 | 155 | 174 | 20 | 12.6 |
| MT006 | Wrapping, packaging, and can-sealing machinery | 637 | 707 | 727 | 777 | 787 | 10 | 1.3 |
| MT013 | Textile machinery | 810 | 897 | 991 | 1,009 | 1,018 | 8 | 0.8 |
| Decreases | | | | | | | | |
| MT019A | Semiconductor manufacturing equipment . . | 7,242 | 12,790 | 10,971 | 14,232 | 12,892 | -1,340 | -9.43 |
| MT019 | Semiconductor manufacturing equipment and robotics | 7,599 | 13,257 | 11,435 | 14,733 | 13,394 | -1,339 | -9.1 |
| MT030 | Miscellaneous machinery | 6,409 | 7,434 | 8,299 | 9,509 | 8,982 | -528 | -5.6 |
| MT028 | Welding and soldering equipment | 618 | 818 | 872 | 1,165 | 932 | -233 | -20.0 |
| MT015 | Metal cutting machine tools | 1,305 | 1,475 | 1,732 | 2,205 | 2,026 | -179 | -8.1 |
| MT031 | Molds and molding machinery | 1,550 | 1,833 | 2,074 | 2,136 | 1,965 | -171 | -8.0 |
| MT018 | Non-metalworking machine tools | 711 | 1,083 | 1,110 | 1,159 | 1,011 | -148 | -12.7 |
| MT026 | Nonelectrically powered handtools | 578 | 907 | 1,264 | 1,148 | 1,085 | -63 | -5.5 |
| MT012 | Printing and related machinery | 1,215 | 1,300 | 1,443 | 1,526 | 1,505 | -21 | -1.4 |

See footnote(s) at end of table.

TABLE MT.2 Machinery: Leading changes in U.S. exports and imports, 2003–07—*Continued*

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|--------|--------|------------------------|--------|--------|------------------------|---------|--|
| | | | | | | Absolute | Percent | |
| | | | <i>Million dollars</i> | | | | | |
| MT025 Portable electric handtools | 191 | 180 | 185 | 165 | 153 | -12 | -7.5 | |
| MT027 Electric lamps (bulbs) and portable electric lights | 721 | 786 | 859 | 823 | 812 | -12 | -1.4 | |
| U.S. IMPORTS | | | | | | | | |
| Increases | | | | | | | | |
| MT023 Electric motors, generators, and related equipment | 6,811 | 7,020 | 8,533 | 10,305 | 12,358 | 2,053 | 19.9 | |
| MT004 Household appliances, including commercial applications | 10,782 | 12,489 | 14,464 | 16,574 | 17,904 | 1,330 | 8.0 | |
| MT024 Electrical transformers, static converters, and inductors | 4,680 | 5,496 | 5,973 | 6,989 | 8,179 | 1,191 | 17.0 | |
| MT005 Centrifuges and filtering and purifying equipment | 2,663 | 3,088 | 3,192 | 3,871 | 4,755 | 884 | 22.8 | |
| MT019A Semiconductor manufacturing equipment | 2,750 | 3,586 | 3,857 | 4,902 | 5,629 | 727 | 14.8 | |
| MT004A Major household appliances and parts | 2,868 | 3,440 | 4,360 | 5,684 | 6,383 | 699 | 12.3 | |
| MT020 Taps, cocks, valves, and similar devices | 5,500 | 6,738 | 7,589 | 8,942 | 9,628 | 686 | 7.7 | |
| MT019 Semiconductor manufacturing equipment and robotics | 3,152 | 4,151 | 4,515 | 5,612 | 6,222 | 610 | 10.9 | |
| MT029 Nonautomotive insulated electrical wire and related products | 3,208 | 3,903 | 4,693 | 6,071 | 6,640 | 569 | 9.4 | |
| MT022 Boilers, turbines, and related machinery | 881 | 839 | 1,098 | 1,001 | 1,542 | 540 | 54.0 | |
| MT002 Air-conditioning equipment and parts | 7,403 | 8,533 | 9,531 | 10,748 | 11,266 | 518 | 4.8 | |
| MT027 Electric lamps (bulbs) and portable electric lights | 1,748 | 2,094 | 2,202 | 2,375 | 2,879 | 504 | 21.2 | |
| MT003 Industrial thermal-processing equipment and furnaces | 1,660 | 1,880 | 2,350 | 2,853 | 3,356 | 502 | 17.6 | |
| MT001 Pumps for liquids | 2,180 | 2,673 | 3,302 | 3,952 | 4,452 | 500 | 12.7 | |
| MT021 Mechanical power transmission equipment | 2,222 | 2,638 | 3,252 | 3,439 | 3,850 | 411 | 11.9 | |
| MT006 Wrapping, packaging, and can-sealing machinery | 1,505 | 1,725 | 1,811 | 1,966 | 2,206 | 241 | 12.2 | |
| MT011 Pulp, paper, and paperboard machinery | 867 | 938 | 948 | 1,086 | 1,271 | 185 | 17.0 | |
| MT008 Mineral processing machinery | 627 | 797 | 1,034 | 1,164 | 1,277 | 113 | 9.7 | |
| MT010 Industrial food-processing and related machinery | 684 | 758 | 839 | 853 | 949 | 96 | 11.2 | |
| MT018 Non-metalworking machine tools | 1,330 | 1,626 | 1,694 | 1,776 | 1,861 | 85 | 4.8 | |
| MT016 Machine tool accessories | 344 | 447 | 515 | 514 | 588 | 74 | 14.3 | |
| MT007 Scales and weighing machinery | 375 | 525 | 577 | 604 | 639 | 35 | 5.7 | |
| MT013 Textile machinery | 1,316 | 1,410 | 1,561 | 1,264 | 1,290 | 26 | 2.1 | |
| Decreases | | | | | | | | |
| MT012 Printing and related machinery | 4,844 | 5,802 | 6,340 | 6,554 | 3,376 | -3,178 | -48.5 | |
| MT030 Miscellaneous machinery | 6,917 | 8,058 | 9,343 | 10,527 | 9,474 | -1,053 | -10.0 | |
| MT031 Molds and molding machinery | 3,262 | 3,525 | 4,035 | 4,290 | 3,280 | -1,010 | -23.5 | |
| MT028 Welding and soldering equipment | 996 | 1,088 | 1,054 | 1,353 | 950 | -403 | -29.8 | |

TABLE MT.2 Machinery: Leading changes in U.S. exports and imports, 2003–07—*Continued*

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------------|-------|-------|-------|-------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MT015 Metal cutting machine tools | 2,360 | 2,977 | 3,618 | 4,092 | 4,009 | -83 | -2.0 |
| MT026 Nonelectrically powered handtools | 992 | 1,235 | 1,396 | 1,513 | 1,433 | -80 | -5.3 |
| MT014 Metal rolling mills | 210 | 150 | 207 | 352 | 322 | -30 | -8.6 |
| MT017 Metal forming machine tools | 933 | 1,019 | 1,196 | 1,335 | 1,315 | -20 | -1.5 |
| MT009 Farm and garden machinery and equipment | 4,645 | 6,216 | 6,900 | 6,638 | 6,621 | -17 | -0.3 |
| MT025 Portable electric handtools | 1,777 | 2,122 | 2,424 | 2,478 | 2,473 | -5 | -0.2 |

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

Note: Calculations based on unrounded data.

^aThis coding system is used by the U.S. International Trade Commission to identify major grouping and subgroupings of HTS import and export items for trade monitoring purposes.

In 2007, U.S. exports of taps, cocks, valves, and similar devices increased by \$748 million (15 percent) to \$5.8 billion. A steep increase in demand for U.S. exports of all types of valves in 2007 largely can be attributed to the worldwide demand for energy. U.S. shipments of high-technology quarter-turn and multi-turn industrial valves and parts for petroleum production, chemical and petrochemical processing, and pipeline transmission led exports to foreign markets in Canada, Mexico, and China.²²⁴

U.S. Imports

In 2007, U.S. imports of machinery rose by \$8.0 billion (6 percent) to \$139.1 billion. The increase in imports of all types of machinery was driven by a number of factors, including an annual U.S. GDP growth rate of 2 percent in 2007 and companies investing in new machinery and equipment to boost production.²²⁵ The top two foreign suppliers were China (\$28.4 billion) and Mexico (\$20.0 billion), which together accounted for 35 percent of the value of all U.S. machinery imports during 2007.

U.S. imports of SME such as wire-bonding machinery, assembly and packaging equipment (used to test and assemble chips), and parts increased by \$727 million (15 percent) to approximately \$5.6 billion in 2007. Japan continued to be the largest foreign SME supplier to the U.S. market in 2007, accounting for \$2.5 billion (45 percent) of total U.S. imports. The Netherlands was the second-largest supplier of SME to the U.S. market, accounting for \$1.3 billion (24 percent) of the total. Producers in these two countries accounted for over two-thirds of all U.S. SME imports. These sources are reportedly the only suppliers in the world of an essential and highly expensive semiconductor wafer processing tool known as photolithography equipment,²²⁶ and U.S. based semiconductor producers are dependent on imports of this equipment.

Imports of electric motors, generators, and related equipment rose by \$2.1 billion (20 percent) to \$12.4 billion in 2007. The four primary product groups in this industry sector—fractional horsepower motors, integral horsepower motors and generators, land prime mover generator sets, and parts and supplies for motors and generators—are used in numerous industrial and commercial markets. Fractional horsepower motors are used in various household appliances, including refrigerators, freezers, air conditioners, automatic dishwashers, and microwave ovens, as well as other products requiring a small horsepower motor, such as computer disk drives.²²⁷

Continued U.S. economic growth was the primary factor leading to a rise in household appliance imports in 2007.²²⁸ Imports of household appliances, including commercial applications, increased by \$1.3 billion (8 percent) to \$17.9 billion in 2007. The major foreign suppliers of imported household appliances were Mexico (cooking stoves, combined refrigerators-freezers, refrigerators, freezers, and washing machines), China (chest-type freezers, microwave ovens, and electric cooking stoves), Korea (refrigerators, microwave

²²⁴ *Valve Magazine*, “Fall 2007—2008 Market Outlook: Another Good Year,” Fall 2008, 1.

²²⁵ EIU, *Country Report: United States*, 2007, 4.

²²⁶ Three companies are responsible for virtually all global production of photolithography equipment, Nikon Corp. and Canon Inc. based in Japan and ASML Holding based in the Netherlands. In 2006, photolithography equipment was the leading type of semiconductor equipment sold, accounting for 17 percent of total SME sales. U.S. industry representative, e-mail message to Commission staff, June 5, 2008.

²²⁷ *Encyclopedia of American Industries*, “Motors and Generators: SIC 3621,” 2007, 1.

²²⁸ IBISWorld, “Major Household Appliance Manufacturing,” May 28, 2008, 7 and 13.

ovens, and air conditioners), and Canada (cooking stoves, freezers, drying machines), Sweden (dishwashing, washing, and laundry machines) and New Zealand (dishwashing machines and laundry machines). The most significant import in 2007 was refrigerators in terms of the total value of imports.²²⁹

²²⁹ USDOC, Bureau of Census, "2007 Major Household Appliances," April 2008.

Semiconductor Manufacturing Equipment

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Change in 2007 from 2006:²³⁰

U.S. trade surplus: Decreased by \$2.1 billion (22 percent) to \$7.3 billion

U.S. exports: Decreased by \$1.3 billion (9 percent) to \$12.9 billion

U.S. imports: Increased by \$727 million (15 percent) to \$5.6 billion

Though the United States maintained its 10-year trade surplus in semiconductor manufacturing equipment (SME),²³¹ the overall surplus in 2007 decreased by \$2.1 billion to \$7.3 billion as a reduction in U.S. exports combined with an increase in U.S. imports (table MT.3). The overall volume in U.S. trade in SME decreased with U.S. exports decreasing almost twice as much as the increase in U.S. imports. This decrease in trade activity was due to a decrease in the rate of SME capital spending by many semiconductor firms, which sought to scale back after greatly expanding capacity in 2006.²³² All major semiconductor producing regions had lower SME spending growth rates in 2007 compared to 2006, with firms in three areas—the EU, Japan, and the United States—actually reducing expenditures in 2007.²³³

U.S. Exports

U.S. SME exports decreased by \$1.3 billion (9 percent) to \$12.9 billion in 2007. Exports to Asia, the largest regional market for U.S. exports by far (84 percent), declined by 3 percent as decreases in exports to Japan, Korea, Singapore, and Malaysia balanced a significant increase (\$1.0 billion, or 36 percent) in exports to Taiwan. Contributing to the decrease in U.S. exports to Asia was a trend by semiconductor firms to cut back capital spending and therefore capacity in order to counter a significant decline in average semiconductor selling prices that has occurred over the past few years.²³⁴ The significant increase in U.S. exports

²³⁰ In 2007 major changes to the Harmonized Tariff Schedule (HTS) were adopted based on recommendations to the President from the U.S. International Trade Commission. Proclamation No. 8097, 72 Fed. Reg 453-58 (December 29, 2006). These changes significantly affected those HTS subheadings that constitute the semiconductor manufacturing equipment (SME) category used in this report; the descriptions and numbers of the HTS subheadings for SME in 2007 changed. To mitigate trade shifts due to this change, staff have attempted to construct a grouping of new HTS subheadings for SME in 2007 that most accurately reflects the same SME grouping in 2006.

²³¹ The United States has run a consistently high annual trade surplus in SME, because the majority of SME suppliers are based in North America while the majority of SME consumers are based in Asia. In 2007, North American-based SME firms supplied 44.9 percent of the SME market, and 81.5 percent of their sales were to firms abroad. U.S. industry representative, e-mail message to Commission staff, June 5, 2008.

²³² The rate of capital spending decreased from 18 percent from 2005 to 2006 to 4 percent from 2006 to 2007. McClean, Matas, and Yancey, *The McClean Report*, 2008, 4-1-4-5.

²³³ Firms in these three parts of the world decreased capital spending in 2007 by 8, 10, and 11 percent, respectively. While firms in Taiwan and Korea increased spending in 2007, the rate of increased spending in 2007 was less than that in 2006. McClean, Matas, and Yancey, *The McClean Report*, 2008, 4-5.

²³⁴ McClean, Matas, and Yancey, *The McClean Report*, 4-18.

TABLE MT.3 Semiconductor manufacturing equipment (MT019A): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–2007^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|------------------|------------------|------------------|------------------|------------------|------------------------|---------|
| | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise: | | | | | | | |
| Japan | 1,292,020 | 1,922 | 2,248 | 2,056 | -192 | -8.5 | |
| Taiwan | 1,177 | 2,979 | 2,206 | 2,763 | 3,768 | 1,005 | 36.4 |
| Korea | 928 | 1,618 | 1,999 | 2,638 | 2,299 | -339 | -12.8 |
| China | 529 | 1,261 | 662 | 1,143 | 1,369 | 226 | 19.7 |
| Netherlands | 77 | 185 | 154 | 248 | 278 | 30 | 12.1 |
| Germany | 420 | 544 | 658 | 703 | 734 | 30 | 4.3 |
| Singapore | 560 | 1,476 | 764 | 1,376 | 828 | -548 | -39.8 |
| Israel | 93 | 136 | 89 | 148 | 322 | 174 | 118.0 |
| Malaysia | 228 | 362 | 298 | 523 | 203 | -320 | -61.2 |
| United Kingdom | 141 | 208 | 174 | 180 | 78 | -101 | -56.3 |
| All other | 1,795 | 1,998 | 2,044 | 2,261 | 955 | -1,305 | -57.7 |
| Total | 7,242 | 12,790 | 10,971 | 14,232 | 12,892 | -1,340 | -9.4 |
| EU-27 | 1,381 | 1,641 | 1,723 | 1,877 | 1,419 | -457 | -24.4 |
| OPEC | 36 | 34 | 50 | 63 | 18 | -45 | -71.8 |
| Latin America | 287 | 408 | 451 | 435 | 120 | -315 | -72.5 |
| CBERA | 25 | 21 | 59 | 31 | 25 | -6 | -18.8 |
| Asia | 5,012 | 10,159 | 8,222 | 11,114 | 10,837 | -277 | -2.5 |
| Sub-Saharan Africa | 14 | 14 | 14 | 21 | 8 | -13 | -61.7 |
| Central and Eastern Europe | 19 | 19 | 29 | 37 | 19 | -18 | -48.8 |
| U.S. imports of merchandise for consumption: | | | | | | | |
| Japan | 1,292,811 | 1,972 | 2,375 | 2,532 | 157 | 6.6 | |
| Taiwan | 17 | 37 | 39 | 50 | 113 | 63 | 124.1 |
| Korea | 38 | 48 | 61 | 89 | 192 | 103 | 116.8 |
| China | 25 | 31 | 34 | 85 | 290 | 205 | 241.6 |
| Netherlands | 665 | 636 | 761 | 1,108 | 1,332 | 224 | 20.2 |
| Germany | 193 | 284 | 291 | 321 | 315 | -5 | -1.7 |
| Singapore | 28 | 84 | 85 | 135 | 209 | 74 | 54.7 |
| Israel | 100 | 178 | 147 | 204 | 185 | -19 | -9.2 |
| Malaysia | 34 | 77 | 49 | 59 | 69 | 10 | 16.9 |
| United Kingdom | 133 | 147 | 165 | 169 | 129 | -40 | -23.8 |
| All other | 223 | 254 | 254 | 308 | 263 | -45 | -14.7 |
| Total | 2,750 | 3,586 | 3,857 | 4,902 | 5,629 | 727 | 14.8 |
| EU-27 | 1,098 | 1,202 | 1,348 | 1,757 | 1,914 | 157 | 9.0 |
| OPEC | (^b) | 1 | 1 | 2 | 1 | -1 | -45.5 |
| Latin America | 28 | 8 | 10 | 23 | 12 | -11 | -46.6 |
| CBERA | 18 | 1 | 1 | 10 | 5 | -6 | -55.0 |
| Asia | 1,443 | 2,100 | 2,259 | 2,817 | 3,433 | 615 | 21.8 |
| Sub-Saharan Africa | (^b) | (^b) | (^b) | (^b) | (^b) | (^b) | -45.6 |
| Central and Eastern Europe | 1 | 2 | 2 | 9 | 4 | -5 | -58.1 |

TABLE MT.3 Semiconductor manufacturing equipment (MT019A): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–2007¹—*Continued*

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------------|--------------------|-------|-------|-------|--------|------------------------|----------------|
| | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | |
| U.S. merchandise trade balance: | | | | | | | |
| Japan | ^(b) 209 | -50 | -126 | -476 | -349 | -276.2 | |
| Taiwan | 1,159 | 2,943 | 2,167 | 2,713 | 3,655 | 943 | 34.7 |
| Korea | 890 | 1,571 | 1,938 | 2,549 | 2,107 | -442 | -17.3 |
| China | 504 | 1,231 | 628 | 1,058 | 1,079 | 20 | 1.9 |
| Netherlands | -587 | -451 | -607 | -859 | -1,053 | -194 | -22.5 |
| Germany | 227 | 260 | 367 | 383 | 418 | 36 | 9.3 |
| Singapore | 531 | 1,392 | 679 | 1,241 | 619 | -622 | -50.1 |
| Israel | -7 | -41 | -58 | -56 | 137 | 193 | ^(c) |
| Malaysia | 194 | 286 | 249 | 464 | 134 | -330 | -71.1 |
| United Kingdom | 8 | 61 | 9 | 11 | -50 | -61 | ^(c) |
| All other | 1,572 | 1,744 | 1,790 | 1,953 | 693 | -1,260 | -64.5 |
| Total | 4,492 | 9,204 | 7,113 | 9,330 | 7,263 | -2,067 | -22.2 |
| EU-27 | 282 | 440 | 375 | 120 | -495 | -615 | ^(c) |
| OPEC | 35 | 33 | 49 | 61 | 17 | -44 | -72.8 |
| Latin America | 259 | 400 | 441 | 412 | 107 | -305 | -73.9 |
| CBERA | 7 | 20 | 58 | 20 | 20 | ^(b) | -0.4 |
| Asia | 3,570 | 8,059 | 5,964 | 8,297 | 7,404 | -892 | -10.8 |
| Sub-Saharan Africa | 14 | 14 | 14 | 21 | 8 | -13 | -61.9 |
| Central and Eastern Europe | 18 | 17 | 27 | 28 | 15 | -13 | -45.7 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

^cNot meaningful for purposes of comparison.

to Taiwan, on the other hand, was due to continued aggressive capital spending by several Taiwan dynamic random access memory (DRAM) manufacturers, which continued to invest significantly in the latest 300 mm SME in an attempt to gain market share in this segment of the market.²³⁵ Also, increases in U.S. SME exports to China, which experienced the second largest positive shift in U.S. SME exports in absolute terms behind Taiwan, were due in part to provincial governments' funding of equipment purchases for two facilities in which they established partnerships with the China-based firm Semiconductor Manufacturing International Corp. (SMIC).²³⁶ Finally, a 24 percent decrease in U.S. exports to the EU, the second largest regional market for U.S. exports (11 percent) in 2007 behind Asia, was caused by an 11 percent decrease in overall capital spending, the most for any regional SME market.²³⁷

U.S. Imports

U.S. SME imports increased by \$727 million (15 percent) to \$5.6 billion in 2007. Japan continued to be the largest foreign SME supplier to the U.S. market in 2007, accounting for \$2.5 billion (45 percent) of total U.S. imports. The Netherlands was the second-largest supplier of SME to the U.S. market, accounting for \$1.3 billion (24 percent) of the total. Producers in these two countries accounted for over two-thirds of all U.S. SME imports. U.S.-based semiconductor producers are dependent on imports of this equipment from Japan and the Netherlands because the two countries are reportedly the only suppliers in the world of an essential and highly expensive semiconductor wafer processing tool known as photolithography equipment.²³⁸

²³⁵ Two Taiwan-based DRAM (dynamic random access memory) producers, Nanya and ProMOS, made substantial investments in SME in 2007, increasing their capital investments over 2006 by 172 and 97 percent, respectively. *The McClean Report*, 4–5.

²³⁶ McClean, Matas, and Yancey, *The McClean Report*, 3-36.

²³⁷ *Ibid.*, 4–5.

²³⁸ Three companies are responsible for virtually all global production of photolithography equipment: Nikon Corp. and Canon Inc. based in Japan and ASML Holding based in the Netherlands. In 2006, photolithography equipment was the leading type of semiconductor equipment sold, accounting for 17 percent of total SME sales. U.S. industry representative, e-mail message to Commission staff, June 5, 2008.

Electric Motors, Generators, and Related Equipment²³⁹

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Change in 2007 from 2006:

U.S. trade deficit: Increased by \$1.4 billion (32 percent) to \$5.7 billion

U.S. exports: Increased by \$688 million (11 percent) to \$6.7 billion

U.S. imports: Increased by \$2.1 billion (20 percent) to \$12.4 billion

In 2007, the U.S. trade deficit in electric motors, generators, and related equipment increased markedly for the third consecutive year, as the \$688 million (11 percent) increase in exports was outstripped by a \$2.1 billion (20 percent) increase in imports (table MT.4). Growing domestic demand for wind turbines was the most important reason for the increase in imports. A \$1.2 billion (97 percent) increase in imports of wind-powered electric generating sets in 2007 accounted for over one-half of the import growth in the sector. Imports from Germany, Denmark, and Spain, home to major wind turbine manufacturing facilities, are growing as European turbine manufacturers seek to meet rising U.S. demand. The increase in U.S. exports was primarily a result in a \$603 million (32 percent) increase in the export of electric generating sets. There was, however, a shift in the direction of exports, with exports to Canada and Mexico, the United States' two largest trading partners in 2006, decreasing and exports to countries in most other regions of the world growing significantly.

U.S. Exports

U.S. exports of electric motors, generators, and related equipment increased by \$688 million (11 percent) to \$6.7 billion in 2007 (table MT.4). The increase in U.S. exports was primarily a result of a \$603 million (32 percent) increase in the export of electric generating sets. However, there was a shift in the direction of exports, with exports to Canada and Mexico, the United States' two largest trading partners in 2006, decreasing by \$114 million (27 percent) and \$85 million (56 percent), respectively. At the same time exports increased by \$183 million (668 percent) to Russia, by \$113 million (708 percent) to Kuwait, by \$104 million (89 percent) to China, and by \$79 million (5,396 percent) to Norway.

Part of the decrease in exports to Canada was due to the fact that there were \$83 million in exports of wind-powered generating sets to Canada in 2006 but none in 2005 or 2007. Exports of electric generating sets to Eastern Europe, Asia, and the Middle East may be related to the fast growing construction sectors in some of these countries in 2007.²⁴⁰ In addition, exports of wind-powered generating sets to China increased from zero in 2006 to \$13 million in 2007.

²³⁹ This industry/commodity group includes AC and DC motors, electric generating sets, and other related equipment.

²⁴⁰ Laryea, "Commercial Sector Shows Promise for Gensets," May 2008.

TABLE MT.4 Electric motors, generators, and related equipment (MT023): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|--------------|--------------|---------------|---------------|------------------------|-------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| Mexico | 1,056 | 1,061 | 1,234 | 1,303 | 1,022 | -281 | -21.6 | |
| Canada | 822 | 951 | 1,048 | 1,488 | 1,388 | -100 | -6.7 | |
| China | 108 | 204 | 239 | 298 | 388 | 90 | 30.3 | |
| Japan | 126 | 105 | 116 | 124 | 97 | -26 | -21.3 | |
| Germany | 103 | 99 | 137 | 152 | 174 | 22 | 14.4 | |
| Denmark | 7 | 4 | 6 | 9 | 12 | 4 | 43.9 | |
| Spain | 33 | 55 | 61 | 87 | 66 | -21 | -24.2 | |
| United Kingdom | 128 | 150 | 174 | 223 | 215 | -8 | -3.5 | |
| Brazil | 43 | 21 | 61 | 41 | 58 | 17 | 40.9 | |
| India | 23 | 16 | 45 | 38 | 38 | (¹) | 0.6 | |
| All other | 1,582 | 2,008 | 1,993 | 2,233 | 3,225 | 992 | 44.4 | |
| Total | 4,031 | 4,673 | 5,114 | 5,997 | 6,685 | 688 | 11.5 | |
| EU-27 | 617 | 738 | 782 | 950 | 1,030 | 80 | 8.4 | |
| OPEC | 370 | 422 | 358 | 379 | 707 | 328 | 86.6 | |
| Latin America | 1,358 | 1,404 | 1,628 | 1,735 | 1,587 | -147 | -8.5 | |
| CBERA | 61 | 82 | 67 | 77 | 82 | 4 | 5.7 | |
| Asia | 666 | 909 | 1,023 | 1,208 | 1,368 | 160 | 13.2 | |
| Sub-Saharan Africa | 27 | 73 | 64 | 85 | 101 | 16 | 18.8 | |
| Central and Eastern Europe | 13 | 21 | 17 | 25 | 21 | -3 | -12.7 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| Mexico | 2,161 | 2,175 | 2,282 | 2,424 | 2,631 | 207 | 8.5 | |
| Canada | 464 | 500 | 576 | 698 | 779 | 81 | 11.6 | |
| China | 687 | 850 | 1,140 | 1,535 | 1,769 | 234 | 15.2 | |
| Japan | 959 | 1,113 | 1,279 | 1,341 | 1,425 | 84 | 6.3 | |
| Germany | 499 | 480 | 612 | 640 | 1,047 | 407 | 63.5 | |
| Denmark | 285 | 95 | 397 | 718 | 1,099 | 382 | 53.2 | |
| Spain | 58 | 21 | 90 | 343 | 753 | 410 | 119.7 | |
| United Kingdom | 241 | 288 | 300 | 407 | 404 | -3 | -0.8 | |
| Brazil | 186 | 141 | 302 | 370 | 526 | 156 | 42.2 | |
| India | 80 | 80 | 115 | 351 | 388 | 37 | 10.6 | |
| All other | 1,192 | 1,277 | 1,440 | 1,479 | 1,538 | 59 | 4.0 | |
| Total | 6,811 | 7,020 | 8,533 | 10,305 | 12,358 | 2,053 | 19.9 | |
| EU-27 | 1,650 | 1,423 | 2,097 | 2,785 | 3,981 | 1,196 | 42.9 | |
| OPEC | 14 | 28 | 34 | 32 | 38 | 6 | 18.4 | |
| Latin America | 2,368 | 2,348 | 2,612 | 2,814 | 3,171 | 357 | 12.7 | |
| CBERA | 6 | 9 | 11 | 12 | 11 | -1 | -10.1 | |
| Asia | 2,208 | 2,612 | 3,105 | 3,837 | 4,216 | 379 | 9.9 | |
| Sub-Saharan Africa | 4 | 8 | 8 | 13 | 19 | 6 | 44.6 | |
| Central and Eastern Europe | 116 | 82 | 106 | 115 | 138 | 23 | 19.9 | |

See footnote(s) at end of table.

TABLE MT.4 Electric motors, generators, and related equipment (MT023): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—*Continued*

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--------------------------------------|------------------------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. merchandise trade balance | | | | | | | |
| Mexico | -1,105 | -1,114 | -1,048 | -1,120 | -1,609 | -488 | -43.6 |
| Canada | 358 | 451 | 472 | 790 | 610 | -181 | -22.9 |
| China | -579 | -646 | -901 | -1,238 | -1,381 | -143 | -11.6 |
| Japan | -833 | -1,008 | -1,164 | -1,217 | -1,327 | -110 | -9.1 |
| Germany | -396 | -381 | -475 | -488 | -873 | -385 | -78.9 |
| Denmark | -278 | -91 | -391 | -709 | -1,087 | -378 | -53.3 |
| Spain | -25 | 34 | -29 | -256 | -687 | -431 | -168.8 |
| United Kingdom | -113 | -138 | -126 | -184 | -188 | -5 | -2.5 |
| Brazil | -143 | -120 | -241 | -329 | -468 | -139 | -42.4 |
| India | -57 | -64 | -70 | -313 | -350 | -37 | -11.7 |
| All other | 390 | 731 | 553 | 754 | 1,687 | 933 | 123.7 |
| Total | -2,780 | -2,346 | -3,420 | -4,309 | -5,673 | -1,365 | -31.7 |
| EU-27 | -1,033 | -685 | -1,315 | -1,835 | -2,951 | -1,116 | -60.8 |
| OPEC | 356 | 394 | 324 | 347 | 669 | 322 | 92.9 |
| Latin America | -1,010 | -943 | -985 | -1,080 | -1,584 | -504 | -46.7 |
| CBERA | 54 | 74 | 56 | 65 | 71 | 6 | 8.6 |
| Asia | -1,542 | -1,703 | -2,082 | -2,629 | -2,848 | -220 | -8.4 |
| Sub-Saharan Africa | 23 | 65 | 55 | 72 | 82 | 10 | 14.1 |
| Central and Eastern Europe | -102 | -60 | -90 | -91 | -117 | -26 | -28.7 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

Despite the shift in exports of electric generating sets, the largest destinations for exports of electric motors, generators, and related equipment overall remained Mexico and Canada. Combined, the two countries accounted for \$2.4 billion (36 percent) of exports in 2007, although exports to Canada decreased by 7 percent and exports to Mexico decreased by 22 percent. Asia and the EU were also significant trading partners, with Asia accounting for \$1.4 billion in exports and the EU \$1.0 billion in exports.

U.S. Imports

U.S. imports of electric motors, generators, and related equipment increased by \$2.1 billion (20 percent) to \$12.4 billion in 2007 (table MT.4). Germany, Denmark, and Spain became major sources of U.S. sector imports in 2007, as imports grew by \$407 million (64 percent), \$382 million (53 percent), and \$410 million (120 percent), respectively, with much of the growth owing to increases in imports of wind-powered electrical generating sets (table MT.5). However, Mexico, China, and Japan remained the leading sources of imports with growth of \$207 million (8 percent), \$234 million (15 percent), and \$84 million (6 percent), respectively.

Wind-powered electrical generating sets, parts for electric motors, generators, and generating sets, and alternating current (AC) generators led import growth in the sector. In 2007, U.S. imports of wind-powered electrical generating sets increased by 97 percent to \$2.4 billion, imports of parts for electric motors, generators, and generating sets increased by 22 percent to \$2 billion, and imports of AC generators increased by 70 percent to \$800 million.

AC and direct current (DC) motors continued to be among the largest imports in this category, accounting for \$2.7 billion and \$1.5 billion in imports in 2007, respectively. There was also significant growth in imports of AC and DC motors, which increased by \$142 million (9 percent) and \$123 million (6 percent), respectively. Mexico and China remained the leading sources of U.S. imports for both types of motors, accounting for 43 and 17 percent of U.S. imports, respectively.

The United States was the world's largest market for wind-powered electric generating sets in 2007, and total annual wind capacity installations in 2007 increased by 117 percent. GE was the largest domestic producer of wind turbines, and GE wind turbine installations increased by 104 percent in 2007.²⁴¹ European and Asian producers increased U.S. market penetration, and there was a rise in imports from Denmark (41 percent of 2007 imports), Spain (18 percent), Japan (13 percent), India (11 percent), and Germany (9 percent). The sources of imports closely correlate with the locations of major European and Asian wind turbine manufacturing facilities.

²⁴¹ Wisner and Bolinger, *Annual Report on U.S. Wind Power*, May 2008, 5, 10.

TABLE MT.5 Machinery: U.S. trade for industry/commodity groups and subgroups, 2003—07^a

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|---|---|--------|--------|--------|---------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| MT001 | Pumps for liquids | | | | | | | |
| | Exports | 2,412 | 2,725 | 2,963 | 3,565 | 4,174 | 609 | 17.1 |
| | Imports | 2,180 | 2,673 | 3,302 | 3,952 | 4,452 | 500 | 12.7 |
| | Trade balance | 232 | 51 | -339 | -386 | -277 | 109 | 28.2 |
| MT002 | Air-conditioning equipment and parts | | | | | | | |
| | Exports | 5,334 | 5,794 | 6,340 | 6,861 | 7,061 | 199 | 2.9 |
| | Imports | 7,403 | 8,533 | 9,531 | 10,748 | 11,266 | 518 | 4.8 |
| | Trade balance | -2,070 | -2,739 | -3,192 | -3,886 | -4,205 | -319 | -8.2 |
| MT003 | Industrial thermal-processing equipment and furnaces | | | | | | | |
| | Exports | 2,099 | 2,789 | 3,220 | 3,540 | 3,731 | 190 | 5.4 |
| | Imports | 1,660 | 1,880 | 2,350 | 2,853 | 3,356 | 502 | 17.6 |
| | Trade balance | 439 | 910 | 870 | 687 | 375 | -312 | -45.4 |
| MT004 | Household appliances, including commercial applications | | | | | | | |
| | Exports | 4,810 | 5,193 | 5,733 | 6,515 | 6,915 | 400 | 6.1 |
| | Imports | 10,782 | 12,489 | 14,464 | 16,574 | 17,904 | 1,330 | 8.0 |
| | Trade balance | -5,971 | -7,296 | -8,731 | -10,059 | -10,989 | -930 | -9.2 |
| MT004A | Major household appliances and parts | | | | | | | |
| | Exports | 1,655 | 1,773 | 1,991 | 2,309 | 2,409 | 99 | 4.3 |
| | Imports | 2,868 | 3,440 | 4,360 | 5,684 | 6,383 | 699 | 12.3 |
| | Trade balance | -1,212 | -1,667 | -2,369 | -3,375 | -3,975 | -600 | -17.8 |
| MT005 | Centrifuges and filtering and purifying equipment | | | | | | | |
| | Exports | 3,022 | 3,277 | 3,505 | 4,060 | 4,788 | 728 | 17.9 |
| | Imports | 2,663 | 3,088 | 3,192 | 3,871 | 4,755 | 884 | 22.8 |
| | Trade balance | 358 | 189 | 313 | 189 | 33 | -156 | -82.5 |
| MT006 | Wrapping, packaging, and can-sealing machinery | | | | | | | |
| | Exports | 637 | 707 | 727 | 777 | 787 | 10 | 1.3 |
| | Imports | 1,505 | 1,725 | 1,811 | 1,966 | 2,206 | 241 | 12.2 |
| | Trade balance | -868 | -1,018 | -1,084 | -1,188 | -1,419 | -230 | -19.4 |
| MT007 | Scales and weighing machinery | | | | | | | |
| | Exports | 155 | 155 | 148 | 155 | 174 | 20 | 12.6 |
| | Imports | 375 | 525 | 577 | 604 | 639 | 35 | 5.7 |
| | Trade balance | -220 | -370 | -429 | -450 | -465 | -15 | -3.3 |

See footnote(s) at end of table.

TABLE MT.5 Machinery: U.S. trade for industry/commodity groups and subgroups, 2003—07^a—Continued

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|---|--|--------|--------|--------|--------|------------------------|---------|------------------|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| MT008 | Mineral processing machinery | | | | | | | |
| | Exports | 545 | 669 | 811 | 1,064 | 1,220 | 156 | 14.7 |
| | Imports | 627 | 797 | 1,034 | 1,164 | 1,277 | 113 | 9.7 |
| | Trade balance | -82 | -128 | -223 | -100 | -57 | 43 | 42.6 |
| MT009 | Farm and garden machinery and equipment | | | | | | | |
| | Exports | 5,109 | 6,098 | 6,885 | 7,533 | 9,245 | 1,712 | 22.7 |
| | Imports | 4,645 | 6,216 | 6,900 | 6,638 | 6,621 | -17 | -0.3 |
| | Trade balance | 464 | -117 | -15 | 895 | 2,624 | 1,729 | 193.1 |
| MT010 | Industrial food-processing and related machinery | | | | | | | |
| | Exports | 558 | 601 | 710 | 644 | 797 | 153 | 23.8 |
| | Imports | 684 | 758 | 839 | 853 | 949 | 96 | 11.2 |
| | Trade balance | -126 | -157 | -129 | -209 | -151 | 58 | 27.7 |
| MT011 | Pulp, paper, and paperboard machinery | | | | | | | |
| | Exports | 648 | 662 | 660 | 712 | 769 | 57 | 8.1 |
| | Imports | 867 | 938 | 948 | 1,086 | 1,271 | 185 | 17.0 |
| | Trade balance | -219 | -276 | -289 | -374 | -501 | -127 | -34.0 |
| MT012 | Printing and related machinery | | | | | | | |
| | Exports | 1,215 | 1,300 | 1,443 | 1,526 | 1,505 | -21 | -1.4 |
| | Imports | 4,844 | 5,802 | 6,340 | 6,554 | 3,376 | -3,178 | -48.5 |
| | Trade balance | -3,628 | -4,502 | -4,897 | -5,029 | -1,871 | 3,157 | 62.8 |
| MT013 | Textile machinery | | | | | | | |
| | Exports | 810 | 897 | 991 | 1,009 | 1,018 | 8 | 0.8 |
| | Imports | 1,316 | 1,410 | 1,561 | 1,264 | 1,290 | 26 | 2.1 |
| | Trade balance | -506 | -513 | -569 | -255 | -272 | -18 | -7.0 |
| MT014 | Metal rolling mills | | | | | | | |
| | Exports | 182 | 243 | 314 | 351 | 394 | 43 | 12.3 |
| | Imports | 210 | 150 | 207 | 352 | 322 | -30 | -8.6 |
| | Trade balance | -27 | 93 | 107 | -1 | 72 | 74 | (^c) |
| MT015 | Metal cutting machine tools | | | | | | | |
| | Exports | 1,305 | 1,475 | 1,732 | 2,205 | 2,026 | -179 | -8.1 |
| | Imports | 2,360 | 2,977 | 3,618 | 4,092 | 4,009 | -83 | -2.0 |
| | Trade balance | -1,055 | -1,502 | -1,886 | -1,887 | -1,983 | -96 | -5.1 |
| MT016 | Machine tool accessories | | | | | | | |
| | Exports | 280 | 275 | 305 | 304 | 403 | 98 | 32.3 |
| | Imports | 344 | 447 | 515 | 514 | 588 | 74 | 14.3 |
| | Trade balance | -64 | -172 | -210 | -210 | -185 | 25 | 11.8 |

See footnote(s) at end of table.

TABLE MT.5 Machinery: U.S. trade for industry/commodity groups and subgroups, 2003—07^a—Continued

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|--|--------|--------|--------|--------|------------------------|------------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MT017 | Metal forming machine tools | | | | | | |
| | Exports | 733 | 851 | 957 | 1,015 | 58 | 6.1 |
| | Imports | 1,019 | 1,196 | 1,335 | 1,315 | -20 | -1.5 |
| | Trade balance | -242 | -286 | -345 | -378 | 78 | 20.7 |
| MT018 | Non-metalworking machine tools | | | | | | |
| | Exports | 1,083 | 1,110 | 1,159 | 1,011 | -148 | -12.7 |
| | Imports | 1,330 | 1,626 | 1,694 | 1,776 | 85 | 4.8 |
| | Trade balance | -619 | -543 | -584 | -617 | -233 | -37.8 |
| MT019 | Semiconductor manufacturing equipment and robotics | | | | | | |
| | Exports | 13,257 | 11,435 | 14,733 | 13,394 | -1,339 | -9.1 |
| | Imports | 4,151 | 4,515 | 5,612 | 6,222 | 610 | 10.9 |
| | Trade balance | 4,446 | 9,107 | 6,919 | 9,121 | -1,949 | -21.4 |
| MT019A | Semiconductor manufacturing equipment | | | | | | |
| | Exports | 12,790 | 10,971 | 14,232 | 12,892 | -1,340 | -9.4 |
| | Imports | 2,750 | 3,586 | 4,902 | 5,629 | 727 | 14.8 |
| | Trade balance | 4,492 | 9,204 | 7,113 | 9,330 | -2,067 | -22.2 |
| MT020 | Taps, cocks, valves, and similar devices | | | | | | |
| | Exports | 3,685 | 4,235 | 5,010 | 5,757 | 748 | 14.9 |
| | Imports | 5,500 | 7,589 | 8,942 | 9,628 | 686 | 7.7 |
| | Trade balance | -2,171 | -3,054 | -3,354 | -3,932 | 61 | 1.6 |
| MT021 | Mechanical power transmission equipment | | | | | | |
| | Exports | 1,197 | 1,398 | 1,639 | 1,847 | 207 | 12.6 |
| | Imports | 2,222 | 3,252 | 3,439 | 3,850 | 411 | 11.9 |
| | Trade balance | -1,168 | -1,441 | -1,854 | -1,800 | -203 | -11.3 |
| MT022 | Boilers, turbines, and related machinery | | | | | | |
| | Exports | 909 | 1,124 | 1,130 | 1,235 | 105 | 9.3 |
| | Imports | 881 | 1,098 | 1,001 | 1,542 | 540 | 54.0 |
| | Trade balance | -6 | 26 | 129 | -306 | -435 | (^c) |
| MT023 | Electric motors, generators, and related equipment | | | | | | |
| | Exports | 4,673 | 5,114 | 5,997 | 6,685 | 688 | 11.5 |
| | Imports | 6,811 | 7,020 | 8,533 | 10,305 | 2,053 | 19.9 |
| | Trade balance | -2,780 | -2,346 | -3,420 | -4,309 | -1,365 | -31.7 |

See footnote(s) at end of table.

TABLE MT.5 Machinery: U.S. trade for industry/commodity groups and subgroups, 2003—07^a—Continued

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|---|--|--------|--------|--------|--------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| MT024 | Electrical transformers, static converters, and inductors | | | | | | | |
| | Exports | 1,767 | 1,805 | 1,895 | 2,380 | 2,743 | 363 | 15.2 |
| | Imports | 4,680 | 5,496 | 5,973 | 6,989 | 8,179 | 1,191 | 17.0 |
| | Trade balance | -2,912 | -3,692 | -4,078 | -4,608 | -5,436 | -828 | -18.0 |
| MT025 | Portable electric handtools | | | | | | | |
| | Exports | 191 | 180 | 185 | 165 | 153 | -12 | -7.5 |
| | Imports | 1,777 | 2,122 | 2,424 | 2,478 | 2,473 | -5 | -0.2 |
| | Trade balance | -1,586 | -1,942 | -2,239 | -2,313 | -2,320 | -7 | -0.3 |
| MT026 | Nonelectrically powered handtools | | | | | | | |
| | Exports | 578 | 907 | 1,264 | 1,148 | 1,085 | -63 | -5.5 |
| | Imports | 992 | 1,235 | 1,396 | 1,513 | 1,433 | -80 | -5.3 |
| | Trade balance | -414 | -328 | -132 | -365 | -347 | 17 | 4.7 |
| MT027 | Electric lamps (bulbs) and portable electric lights | | | | | | | |
| | Exports | 721 | 786 | 859 | 823 | 812 | -12 | -1.4 |
| | Imports | 1,748 | 2,094 | 2,202 | 2,375 | 2,879 | 504 | 21.2 |
| | Trade balance | -1,028 | -1,309 | -1,342 | -1,552 | -2,068 | -516 | -33.3 |
| MT028 | Welding and soldering equipment | | | | | | | |
| | Exports | 618 | 818 | 872 | 1,165 | 932 | -233 | -20.0 |
| | Imports | 996 | 1,088 | 1,054 | 1,353 | 950 | -403 | -29.8 |
| | Trade balance | -378 | -270 | -182 | -189 | -19 | 170 | 90.0 |
| MT029 | Nonautomotive insulated electrical wire and related products | | | | | | | |
| | Exports | 2,660 | 2,936 | 3,202 | 4,110 | 4,586 | 475 | 11.6 |
| | Imports | 3,208 | 3,903 | 4,693 | 6,071 | 6,640 | 569 | 9.4 |
| | Trade balance | -548 | -966 | -1,491 | -1,961 | -2,054 | -93 | -4.8 |
| MT030 | Miscellaneous machinery | | | | | | | |
| | Exports | 6,409 | 7,434 | 8,299 | 9,509 | 8,982 | -528 | -5.6 |
| | Imports | 6,917 | 8,058 | 9,343 | 10,527 | 9,474 | -1,053 | -10.0 |
| | Trade balance | -508 | -624 | -1,044 | -1,017 | -492 | 525 | 51.6 |

See footnote(s) at end of table.

TABLE MT.5 Machinery: U.S. trade for industry/commodity groups and subgroups, 2003—07^a—Continued

| USITC code ^b and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MT031 Molds and molding machinery | | | | | | | |
| Exports | 1,550 | 1,833 | 2,074 | 2,136 | 1,965 | -171 | -8.0 |
| Imports | 3,262 | 3,525 | 4,035 | 4,290 | 3,280 | -1,010 | -23.5 |
| Trade balance | -1,712 | -1,691 | -1,960 | -2,153 | -1,315 | 839 | 38.9 |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bThis 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.

^cNot meaningful for purposes of comparison.

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Transportation Equipment

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Change in 2007 from 2006:

U.S. trade deficit: Decreased by \$25.2 billion (29 percent) to \$60.5 billion

U.S. exports: Increased by \$31.1 billion (14 percent) to \$249.4 billion

U.S. imports: Increased by \$5.9 billion (2 percent) to \$309.9 billion

Increases in U.S. exports far exceeded increases in U.S. imports of transportation equipment in 2007, resulting in a \$25.2 billion (29 percent) decline in the U.S. trade deficit in the sector (table TE.1). U.S. exports of transportation equipment rose by \$31.1 billion (14 percent), and U.S. imports rose by \$5.9 billion (2 percent). All product groups within the transportation equipment sector registered increased exports. The industries with the largest absolute increases included aircraft, spacecraft, and related equipment (14 percent), motor vehicles (19 percent), construction and mining equipment (26 percent), and aircraft engines and gas turbines (19 percent) (table TE.2). Imports were mixed, with leading absolute increases in aircraft, spacecraft, and related equipment (24 percent), certain motor-vehicle parts (4 percent), and aircraft engines and gas turbines (16 percent). Decreased imports were registered in several industry groups, with construction and mining equipment accounting for the largest absolute decline.

Canada and Japan together accounted for over 25 percent of the decrease in the U.S. trade deficit in transportation equipment. U.S. imports from Canada rose slightly, but U.S. exports rose by nearly \$5 billion. However, U.S. imports from Japan fell by \$1.6 billion, while U.S. exports rose by \$945 million.

U.S. Exports

U.S. exports of transportation equipment rose by \$31.1 billion (14 percent) to \$249.4 billion in 2007. The four leading markets for U.S. transportation equipment exports in 2007 were Canada, Mexico, Germany, and China. Together, these countries accounted for 46 percent of total sector exports. The countries that registered the largest absolute increases in U.S. exports in 2007 were Canada (\$4.9 billion), India (\$4.8 billion), Germany (\$2.1 billion), and China (\$2.1 billion).

The largest absolute export shift among transportation equipment products in 2007 was the \$9.0 billion (14 percent) increase in U.S. exports of aircraft, spacecraft, and related equipment. This increase was largely due to increased exports of large civil aircraft (LCA) and parts for civil aircraft. The largest absolute dollar increase in U.S. exports of these products was accounted for by increased exports to Asia and the EU. Airline route and frequency expansion as well as fleet renewal were the prime motivators of LCA purchases, while parts were used both by airlines for maintenance and by foreign aircraft manufacturers in producing their products.

TABLE TE.1 Transportation equipment: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|----------------|----------------|----------------|----------------|------------------------|-------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| Canada | 49,874 | 53,694 | 59,821 | 64,407 | 69,291 | 4,884 | 7.6 | |
| Japan | 8,631 | 8,120 | 8,630 | 9,611 | 10,556 | 945 | 9.8 | |
| Mexico | 14,248 | 16,368 | 17,370 | 19,936 | 21,143 | 1,206 | 6.1 | |
| Germany | 7,987 | 6,576 | 6,902 | 11,162 | 13,289 | 2,127 | 19.1 | |
| United Kingdom | 7,558 | 6,774 | 7,379 | 8,447 | 10,363 | 1,915 | 22.7 | |
| China | 3,805 | 3,893 | 6,508 | 9,015 | 11,065 | 2,050 | 22.7 | |
| France | 4,353 | 6,760 | 6,947 | 7,689 | 9,221 | 1,533 | 19.9 | |
| Korea | 2,743 | 3,066 | 3,567 | 5,030 | 5,198 | 167 | 3.3 | |
| Brazil | 2,478 | 3,792 | 3,980 | 5,637 | 7,209 | 1,572 | 27.9 | |
| India | 603 | 671 | 1,027 | 2,114 | 6,881 | 4,766 | 225.4 | |
| All other | 42,765 | 48,420 | 60,599 | 75,277 | 85,207 | 9,929 | 13.2 | |
| Total | 145,045 | 158,135 | 182,731 | 218,326 | 249,421 | 31,095 | 14.2 | |
| EU-27 | 33,481 | 35,812 | 37,320 | 45,091 | 55,438 | 10,348 | 22.9 | |
| OPEC | 5,263 | 6,362 | 12,459 | 17,985 | 19,338 | 1,353 | 7.5 | |
| Latin America | 20,871 | 25,221 | 28,282 | 34,819 | 39,262 | 4,443 | 12.8 | |
| CBERA | 1,198 | 1,015 | 1,207 | 1,618 | 1,827 | 209 | 12.9 | |
| Asia | 24,873 | 25,666 | 31,135 | 39,527 | 48,327 | 8,799 | 22.3 | |
| Sub-Saharan Africa | 2,288 | 2,896 | 4,040 | 4,587 | 5,356 | 769 | 16.8 | |
| Central and Eastern Europe | 755 | 993 | 860 | 1,570 | 2,642 | 1,072 | 68.3 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| Canada | 67,517 | 74,189 | 78,374 | 76,768 | 77,758 | 990 | 1.3 | |
| Japan | 53,581 | 57,126 | 62,745 | 71,493 | 69,851 | -1,642 | -2.3 | |
| Mexico | 38,255 | 40,496 | 42,032 | 49,028 | 50,954 | 1,926 | 3.9 | |
| Germany | 27,566 | 29,313 | 32,191 | 31,273 | 32,899 | 1,626 | 5.2 | |
| United Kingdom | 10,601 | 10,662 | 12,506 | 12,402 | 11,364 | -1,038 | -8.4 | |
| China | 3,274 | 4,865 | 6,476 | 8,640 | 10,155 | 1,515 | 17.5 | |
| France | 8,008 | 8,079 | 7,451 | 9,462 | 11,254 | 1,793 | 18.9 | |
| Korea | 9,850 | 12,271 | 12,533 | 13,258 | 12,558 | -700 | -5.3 | |
| Brazil | 3,919 | 4,860 | 4,751 | 4,460 | 4,110 | -350 | -7.8 | |
| India | 278 | 400 | 588 | 748 | 883 | 135 | 18.0 | |
| All other | 19,437 | 22,360 | 23,234 | 26,448 | 28,136 | 1,688 | 6.4 | |
| Total | 242,287 | 264,620 | 282,881 | 303,979 | 309,924 | 5,944 | 2.0 | |
| EU-27 | 58,449 | 62,448 | 66,934 | 69,998 | 73,105 | 3,107 | 4.4 | |
| OPEC | 565 | 439 | 471 | 567 | 518 | -50 | -8.7 | |
| Latin America | 42,730 | 46,056 | 47,667 | 54,522 | 56,131 | 1,608 | 3.0 | |
| CBERA | 27 | 42 | 34 | 39 | 53 | 14 | 35.8 | |
| Asia | 70,402 | 78,609 | 86,622 | 98,847 | 98,682 | -165 | -0.2 | |
| Sub-Saharan Africa | 823 | 651 | 391 | 588 | 669 | 81 | 13.7 | |
| Central and Eastern Europe | 1,858 | 1,963 | 1,708 | 2,283 | 2,685 | 402 | 17.6 | |

See footnote(s) at end of table.

TABLE TE.1 Transportation equipment: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—Continued

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--------------------------------|------------------------|----------|----------|---------|---------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. merchandise trade balance | | | | | | | |
| Canada | -17,643 | -20,496 | -18,553 | -12,361 | -8,468 | 3,894 | 31.5 |
| Japan | -44,951 | -49,006 | -54,115 | -61,882 | -59,296 | 2,586 | 4.2 |
| Mexico | -24,007 | -24,128 | -24,661 | -29,091 | -29,811 | -720 | -2.5 |
| Germany | -19,580 | -22,737 | -25,288 | -20,112 | -19,610 | 502 | 2.5 |
| United Kingdom | -3,043 | -3,888 | -5,127 | -3,954 | -1,001 | 2,953 | 74.7 |
| China | 531 | -972 | 32 | 375 | 910 | 535 | 142.8 |
| France | -3,655 | -1,320 | -504 | -1,773 | -2,033 | -260 | -14.7 |
| Korea | -7,107 | -9,204 | -8,965 | -8,228 | -7,361 | 867 | 10.5 |
| Brazil | -1,441 | -1,068 | -771 | 1,177 | 3,099 | 1,921 | 163.2 |
| India | 325 | 272 | 439 | 1,366 | 5,998 | 4,631 | 339.0 |
| All other | 23,328 | 26,061 | 37,365 | 48,829 | 57,071 | 8,241 | 16.9 |
| Total | -97,242 | -106,485 | -100,150 | -85,654 | -60,503 | 25,151 | 29.4 |
| EU-27 | -24,968 | -26,636 | -29,614 | -24,908 | -17,667 | 7,241 | 29.1 |
| OPEC | 4,699 | 5,923 | 11,988 | 17,417 | 18,820 | 1,403 | 8.1 |
| Latin America | -21,859 | -20,835 | -19,385 | -19,703 | -16,868 | 2,835 | 14.4 |
| CBERA | 1,171 | 973 | 1,173 | 1,579 | 1,774 | 195 | 12.3 |
| Asia | -45,528 | -52,943 | -55,487 | -59,319 | -50,355 | 8,964 | 15.1 |
| Sub-Saharan Africa | 1,466 | 2,245 | 3,649 | 3,999 | 4,687 | 688 | 17.2 |
| Central and Eastern Europe | -1,103 | -970 | -848 | -713 | -43 | 670 | 94.0 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

TABLE TE.2 Transportation equipment: Leading changes in U.S. exports and imports, 2003–07

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|---------|---------|---------|---------|---------|------------------------|---------|
| | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | |
| U.S. EXPORTS | | | | | | | |
| Increases | | | | | | | |
| TE013 Aircraft, spacecraft, and related equipment | 37,835 | 40,076 | 47,981 | 64,374 | 73,406 | 9,032 | 14.0 |
| TE009 Motor vehicles | 29,883 | 30,473 | 35,312 | 44,437 | 52,739 | 8,303 | 18.7 |
| TE004 Construction and mining equipment | 9,546 | 11,794 | 15,584 | 18,590 | 23,371 | 4,781 | 25.7 |
| TE001 Aircraft engines and gas turbines | 14,742 | 17,706 | 20,771 | 21,631 | 25,780 | 4,149 | 19.2 |
| TE002 Internal combustion piston engines, other than for aircraft | 12,741 | 13,444 | 14,969 | 15,930 | 17,039 | 1,109 | 7.0 |
| TE011 Powersport vehicles | 1,734 | 1,848 | 2,221 | 2,535 | 3,375 | 840 | 33.1 |
| TE003 Forklift trucks and similar industrial vehicles | 1,028 | 1,324 | 1,760 | 2,172 | 2,939 | 767 | 35.3 |
| TE010 Certain motor-vehicle parts | 28,442 | 30,785 | 31,524 | 33,346 | 34,052 | 705 | 2.1 |
| TE014 Ships, tugs, pleasure boats, and similar vessels | 1,195 | 1,659 | 1,950 | 2,601 | 3,096 | 496 | 19.1 |
| TE011A Motorcycles and mopeds | 864 | 917 | 983 | 1,252 | 1,589 | 337 | 26.9 |
| TE012 Trailers, semi-trailers, and parts | 1,008 | 1,462 | 1,945 | 2,464 | 2,781 | 317 | 12.9 |
| TE007 Ignition, starting, lighting, and other electrical equipment | 1,822 | 1,773 | 1,844 | 1,880 | 2,040 | 160 | 8.5 |
| TE005 Ball and rollers bearings | 1,320 | 1,494 | 1,638 | 1,841 | 1,992 | 152 | 8.3 |
| TE006 Primary cells and batteries and electric storage batteries | 1,786 | 1,977 | 2,272 | 2,801 | 2,948 | 146 | 5.2 |
| TE015 Motors and engines, except internal combustion, aircraft, or electric | 578 | 668 | 837 | 1,124 | 1,198 | 74 | 6.6 |
| TE008 Rail locomotive and rolling stock | 1,386 | 1,649 | 2,124 | 2,600 | 2,663 | 63 | 2.4 |
| U.S. IMPORTS | | | | | | | |
| Increases | | | | | | | |
| TE013 Aircraft, spacecraft, and related equipment | 16,910 | 16,485 | 16,475 | 17,557 | 21,835 | 4,278 | 24.4 |
| TE010 Certain motor-vehicle parts | 41,649 | 46,493 | 50,998 | 53,307 | 55,619 | 2,312 | 4.3 |
| TE001 Aircraft engines and gas turbines | 8,834 | 9,642 | 11,243 | 12,816 | 14,898 | 2,082 | 16.2 |
| TE015 Motors and engines, except internal combustion, aircraft, or electric | 834 | 1,066 | 1,360 | 1,594 | 2,195 | 601 | 37.7 |
| TE007 Ignition, starting, lighting, and other electrical equipment | 3,858 | 4,371 | 4,813 | 5,122 | 5,546 | 424 | 8.3 |
| TE006 Primary cells and batteries and electric storage batteries | 2,175 | 2,620 | 2,841 | 3,075 | 3,255 | 180 | 5.9 |
| TE005 Ball and rollers bearings | 1,680 | 2,052 | 2,351 | 2,429 | 2,492 | 63 | 2.6 |
| Decreases | | | | | | | |
| TE004 Construction and mining equipment | 6,004 | 8,959 | 11,780 | 13,670 | 12,069 | -1,601 | -11.7 |
| TE002 Internal combustion piston engines, other than for aircraft | 16,250 | 18,682 | 21,035 | 20,617 | 19,930 | -688 | -3.3 |
| TE011 Powersport vehicles | 4,375 | 5,140 | 5,781 | 5,870 | 5,208 | -662 | -11.3 |
| TE009 Motor vehicles | 134,369 | 142,861 | 146,308 | 159,537 | 158,895 | -642 | -0.4 |

TABLE TE.2 Transportation equipment: Leading changes in U.S. exports and imports, 2003–07—*Continued*

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|-------|-------|-------|-------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| TE011A Motorcycles and mopeds | 3,213 | 3,809 | 4,277 | 4,449 | 3,903 | -546 | -12.3 |
| TE003 Forklift trucks and similar industrial vehicles . | 1,408 | 1,853 | 2,435 | 2,717 | 2,581 | -136 | -5.0 |
| TE012 Trailers, semi-trailers, and parts | 904 | 1,226 | 1,595 | 1,778 | 1,648 | -130 | -7.3 |
| TE008 Rail locomotive and rolling stock | 1,105 | 1,282 | 1,516 | 1,742 | 1,668 | -74 | -4.3 |
| TE014 Ships, tugs, pleasure boats, and similar vessels | 1,932 | 1,888 | 2,350 | 2,146 | 2,084 | -62 | -2.9 |

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

Note: Calculations based on unrounded data.

^aThis 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.

Motor vehicles accounted for the second largest absolute export shift in 2007; such exports rose by \$8.3 billion (19 percent) to \$52.7 billion in 2007. Exports to the three leading U.S. motor vehicle export markets—Canada, Germany, and Mexico—increased by \$3.7 billion. U.S. motor vehicle exports to Canada increased by 10 percent to \$25.1 billion; exports to Germany increased by 19 percent to \$5.9 billion; and exports to Mexico increased by 13 percent to \$4.5 billion. The value of the U.S. dollar vis-a-vis the Canadian dollar and the euro contributed to the increase in U.S. motor vehicle exports to Canada and Germany in 2007.

U.S. Imports

U.S. imports of transportation equipment rose by \$5.9 billion (2 percent) to \$309.9 billion in 2007. The leading sources of U.S. imports continued to be Canada, Japan, Mexico, and Germany. Imports from Canada, Mexico, and Germany increased by \$990 million (1 percent), \$1.9 billion (4 percent), and \$1.6 billion (5 percent), respectively, while imports from Japan fell by \$1.6 billion (2 percent).

In 2007, U.S. imports of aircraft, spacecraft, and related equipment, the second largest product grouping among all transportation equipment imports, increased by \$4.3 billion (24 percent). A majority of this product grouping is accounted for by LCA and parts for civilian aircraft, imports of which were valued at \$6.5 billion and \$5.8 billion, respectively, in 2007. Imports of LCA rose by 31 percent, and imports of civil aircraft parts rose by 25 percent. The growth in imports of LCA reflects purchases by U.S. airlines to replace older aircraft with newer, more efficient ones to improve profitability. The growth in imports of parts was due to the increase in the U.S. manufacture of civil aircraft, which increased the demand for internationally sourced parts.

Certain motor-vehicle parts—which account for the largest portion of U.S. transportation equipment imports—and aircraft engines and turbines registered the second and third leading increases in U.S. imports in 2007. Imports of certain motor-vehicle parts rose by \$2.3 billion (4 percent) to \$55.6 billion; imports from lower cost producers, principally Mexico and China, accounted for most of this increase. Imports of aircraft engines and gas turbines rose by \$2.1 billion (16 percent) to \$14.9 billion; such imports rose because of increased U.S. production of aircraft and increased domestic airline fleet utilization. In 2007, principal sources of U.S. imports of aircraft engines, other gas turbines, and parts thereof were the EU and Asia. Taken together, these areas accounted for \$11.2 billion (75 percent) of such imports.

Aircraft Engines, Other Gas Turbines, and Parts Thereof

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Change in 2007 from 2006:

U.S. trade surplus: Increased by \$2.1 billion (24 percent) to \$10.9 billion

U.S. exports: Increased by \$4.1 billion (19 percent) to \$25.8 billion

U.S. imports: Increased by \$2.1 billion (16 percent) to \$14.9 billion

In 2007, the rise in the U.S. trade surplus in aircraft engines, other gas turbines, and parts (table TE.3) was driven by a \$4.1 billion (19 percent) rise in U.S. exports to \$25.8 billion, with 12 of the top 15 export products in this grouping exceeding 2006 levels. The \$2.1 billion increase in U.S. imports of aircraft engines and parts thereof was driven by record deliveries of U.S. manufactured aircraft in 2007 and the higher utilization of the U.S. domestic fleet remaining in 2007.

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 manufacturers.²⁴² This demand also drove increased exports of completed engines of a thrust over 25 kilonewtons (kN), typically used in large civil aircraft (LCA). The leading U.S. export category in this grouping was certain parts for civil aircraft gas turbine engines, which grew by \$1.5 billion (18 percent) to \$9.8 billion. U.S. exports of turbofan engines over 25kN also rose, from \$3.7 billion to \$4.1 billion (11 percent) in 2007.

The top two U.S. export markets were the EU, with an increase of \$922 million (9 percent) to \$11.6 billion, and Asia, with an increase of \$937 million (19 percent) to \$5.8 billion. Exports to the EU, which accounted for 45 percent of total U.S. exports of aircraft engines, other gas turbines and parts thereof, were comprised principally of parts for civil turbojet and turbopropeller engines (\$5.4 billion, an increase of \$997 million (23 percent) over 2006), civil aircraft engines of a thrust over 25kN (\$2.4 billion, an increase of \$67 million (3 percent)), and parts of nonaircraft gas turbines (\$1 billion, an increase of \$64 million (7 percent)).

²⁴² Airbus Industrie SAS, *O & D 1974–2007*, January 2008.

TABLE TE.3 Aircraft engines and gas turbines (TE001): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|----------------|----------------|----------------|----------------|------------------------|-------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| France | 2,230 | 2,938 | 3,515 | 3,407 | 4,230 | 823 | 24.1 | |
| United Kingdom | 1,711 | 1,606 | 2,314 | 2,566 | 2,618 | 52 | 2.0 | |
| Canada | 1,646 | 1,671 | 1,854 | 1,792 | 1,888 | 96 | 5.4 | |
| Germany | 1,427 | 1,506 | 1,811 | 2,097 | 2,397 | 301 | 14.3 | |
| Japan | 1,043 | 1,237 | 1,224 | 1,439 | 1,674 | 235 | 16.3 | |
| Singapore | 757 | 1,094 | 1,243 | 1,567 | 1,754 | 187 | 11.9 | |
| Brazil | 739 | 1,012 | 1,140 | 1,131 | 1,563 | 432 | 38.2 | |
| Mexico | 419 | 486 | 627 | 784 | 787 | 4 | 0.5 | |
| Saudi Arabia | 193 | 335 | 344 | 277 | 1,353 | 1,075 | 387.7 | |
| Italy | 604 | 508 | 638 | 623 | 604 | -19 | -3.0 | |
| All other | 3,973 | 5,313 | 6,061 | 5,948 | 6,912 | 963 | 16.2 | |
| Total | 14,742 | 17,706 | 20,771 | 21,631 | 25,780 | 4,149 | 19.2 | |
| EU-27 | 7,157 | 8,165 | 10,184 | 10,658 | 11,580 | 922 | 8.6 | |
| OPEC | 533 | 885 | 1,055 | 1,054 | 2,346 | 1,293 | 122.7 | |
| Latin America | 1,522 | 1,831 | 2,170 | 2,465 | 2,996 | 531 | 21.5 | |
| CBERA | 87 | 36 | 63 | 102 | 72 | -31 | -29.9 | |
| Asia | 2,959 | 3,987 | 4,388 | 4,852 | 5,789 | 937 | 19.3 | |
| Sub-Saharan Africa | 53 | 76 | 119 | 291 | 121 | -170 | -58.5 | |
| Central and Eastern Europe | 43 | 102 | 181 | 265 | 287 | 22 | 8.2 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| France | 2,096 | 2,281 | 2,842 | 3,150 | 3,788 | 638 | 20.3 | |
| United Kingdom | 2,100 | 2,050 | 2,247 | 2,638 | 2,413 | -225 | -8.5 | |
| Canada | 1,594 | 1,677 | 1,801 | 1,847 | 2,313 | 465 | 25.2 | |
| Germany | 800 | 1,006 | 1,216 | 1,284 | 1,516 | 232 | 18.1 | |
| Japan | 567 | 667 | 745 | 955 | 1,131 | 176 | 18.4 | |
| Singapore | 59 | 77 | 105 | 116 | 170 | 54 | 46.7 | |
| Brazil | 9 | 14 | 6 | 12 | 18 | 6 | 54.3 | |
| Mexico | 217 | 275 | 337 | 394 | 629 | 235 | 59.7 | |
| Saudi Arabia | 2 | 2 | 4 | 1 | ^(b) | -1 | -84.1 | |
| Italy | 234 | 257 | 326 | 392 | 498 | 106 | 27.1 | |
| All other | 1,156 | 1,337 | 1,614 | 2,028 | 2,422 | 394 | 19.5 | |
| Total | 8,834 | 9,642 | 11,243 | 12,816 | 14,898 | 2,082 | 16.2 | |
| EU-27 | 5,666 | 6,120 | 7,302 | 8,390 | 9,238 | 848 | 10.1 | |
| OPEC | 4 | 4 | 6 | 3 | 3 | ^(b) | 14.8 | |
| Latin America | 228 | 295 | 349 | 415 | 665 | 249 | 60.1 | |
| CBERA | ^(b) | ^(b) | ^(b) | ^(b) | 3 | 3 | 1,298.3 | |
| Asia | 890 | 1,109 | 1,279 | 1,602 | 1,941 | 339 | 21.1 | |
| Sub-Saharan Africa | 2 | 2 | 2 | 2 | 1 | -1 | -42.3 | |
| Central and Eastern Europe | 113 | 153 | 165 | 393 | 363 | -30 | -7.6 | |

See footnote(s) at end of table.

TABLE TE.3 Aircraft engines and gas turbines (TE001): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—*Continued*

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--------------------------------|------------------------|-------|-------|-------|--------|------------------------|----------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. merchandise trade balance | | | | | | | | |
| France | 133 | 658 | 673 | 257 | 442 | 185 | 71.9 | |
| United Kingdom | -388 | -444 | 67 | -72 | 205 | 277 | ^(c) | |
| Canada | 52 | -6 | 54 | -56 | -425 | -369 | -659.0 | |
| Germany | 627 | 501 | 595 | 813 | 881 | 68 | 8.4 | |
| Japan | 476 | 570 | 479 | 484 | 543 | 59 | 12.2 | |
| Singapore | 698 | 1,016 | 1,138 | 1,451 | 1,584 | 133 | 9.2 | |
| Brazil | 730 | 999 | 1,134 | 1,119 | 1,545 | 426 | 38.0 | |
| Mexico | 201 | 212 | 290 | 390 | 158 | -232 | -59.4 | |
| Saudi Arabia | 191 | 333 | 339 | 277 | 1,353 | 1,076 | 388.7 | |
| Italy | 370 | 250 | 313 | 231 | 106 | -125 | -54.1 | |
| All other | 2,817 | 3,976 | 4,447 | 3,921 | 4,490 | 569 | 14.5 | |
| Total | 5,907 | 8,064 | 9,528 | 8,815 | 10,882 | 2,067 | 23.5 | |
| EU-27 | 1,491 | 2,044 | 2,882 | 2,268 | 2,342 | 74 | 3.3 | |
| OPEC | 529 | 881 | 1,048 | 1,051 | 2,343 | 1,292 | 122.9 | |
| Latin America | 1,294 | 1,536 | 1,821 | 2,050 | 2,331 | 281 | 13.7 | |
| CBERA | 87 | 36 | 62 | 102 | 69 | -33 | -32.6 | |
| Asia | 2,069 | 2,878 | 3,109 | 3,250 | 3,848 | 598 | 18.4 | |
| Sub-Saharan Africa | 51 | 74 | 116 | 289 | 119 | -169 | -58.7 | |
| Central and Eastern Europe | -70 | -51 | 17 | -128 | -76 | 52 | 40.4 | |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

^cNot meaningful for purposes of comparison.

U.S. exports to Asia accounted for 22 percent of total U.S. exports in this product grouping. As with the EU, parts for civil turbojet and turbopropeller aircraft engines led the grouping's exports to Asia, growing \$152 million (6 percent) to \$2.6 billion. Civil turbojet or turbopropeller engines were the second-highest product exported to Asia, growing by \$333 million (58 percent) to \$910 million. Parts for nonaircraft gas turbines completed the third group of U.S. exports, rising by \$177 million (34 percent) to \$702 million.

U.S. Imports

U.S. imports of aircraft engines, other gas turbines, and parts thereof rose because of increased U.S. production of aircraft and increased domestic airline fleet utilization. Certain parts of aircraft gas turbine engines was the largest import category in this sector during 2007, rising \$1.4 billion (20 percent) to \$8.1 billion. This group was followed by imports of turbojet engines over 25kN, which rose \$27 million (1 percent) to \$2.7 billion.

In 2007, principal sources of U.S. imports of aircraft engines, other gas turbines, and parts thereof were the EU and Asia. Taken together, these areas accounted for \$11.2 billion (75 percent) of such imports. The principal U.S. imports from each of these areas were parts of aircraft turbojet or turbopropeller engines and civil aircraft turbojet engines, which accounted for 55 percent of sector imports. Imports from the EU rose by \$848 million (10 percent) to \$9.2 billion, while those from Asia rose by \$339 million (21 percent) to \$1.9 billion.

All aircraft turbine engines are manufactured with parts from around the world. In 2007, principal sources of U.S. imports of parts for turbojet or turbopropeller engines were France (\$2.3 billion, an increase of 19 percent), the United Kingdom (\$1.5 billion, an increase of less than 1 percent), and Japan (\$886 million, an increase of 25 percent). Reasons for the increased demand for these parts include the rise in U.S. engine shipments, from \$7.4 billion to \$9.5 billion (29 percent) in 2007,²⁴³ and the increased usage of existing aircraft engines during the period by U.S. operators.²⁴⁴ U.S. airlines added 63 aircraft, each with over 90 seats to their fleet, which caused the entire U.S. fleet to grow by less than 2 percent.²⁴⁵ U.S. airlines also removed some of their aircraft from service to optimize the efficient use of their fleet.²⁴⁶ This led to more fully utilizing the remaining fleet, which may have led to increased maintenance and parts demand.

²⁴³ USDOC, Census Bureau, "Civil Aircraft and Aircraft Engines," January 2008.

²⁴⁴ The number of passengers enplaned grew by 3.4 percent, while actual miles flown increased by 2.4 percent. ATA, *2008 Economic Report*, 2008, 6.

²⁴⁵ USDOT, FAA, FAA Aerospace Forecast, 2007, 19.

²⁴⁶ Seany, "Legacy Airlines Downsizing the U.S. Domestic Airplane Fleet," September 24, 2007.

Construction and Mining Equipment

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Change in 2007 from 2006:

U.S. trade surplus: Increased by \$6.4 billion (130 percent) to \$11.3 billion

U.S. exports: Increased by \$4.8 billion (26 percent) to \$23.4 billion

U.S. imports: Decreased by \$1.6 billion (12 percent) to \$12.1 billion

The U.S. trade surplus in construction and mining equipment expanded for the fourth consecutive year to \$11.3 billion (by \$6.4 billion or 130 percent) in 2007, as the absolute growth in exports was nearly twice the decline in imports (table TE.4). 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 2007 resulted from increased construction and mining activity at the global level; global mining industry investment increased by 50 percent in 2007, with a 30 percent increase in the value of projects under construction.²⁴⁷

U.S. Exports

In 2007, Canada, Singapore, and China accounted for 27 percent of the \$4.8 billion increase in sector exports. Canada, the leading market for U.S. exports of construction and mining equipment, accounted for \$4.0 billion (17 percent) of total exports in 2007. Total exports of construction and mining equipment to Canada, the second leading country in the world for mining project investment in 2007,²⁴⁸ grew by \$495 million (14 percent). The largest absolute increases in U.S. exports were of off-highway dump trucks (up \$220 million) and wheel-type, self-propelled front-end shovel loaders (up \$122 million).

U.S. exports to Singapore, the fifth leading market for U.S. exports of construction and mining equipment, increased by \$363 million (49 percent) and accounted for \$1.1 billion (5 percent) of total exports in 2007. Parts for construction and mining equipment, including parts for boring or sinking machinery, drove this increase. Singapore's strong economic growth has led to increased construction spending, and there is strong demand for U.S. exports because there is limited domestic production of construction equipment and minimal local assembly. Ongoing multi-billion dollar public sector projects include the two-phase deep tunnel sewerage system, the Changi Water Reclamation Plant, the Kallang/Paya Lebar Expressway, Changi Airport Terminal 3, and the 1,848 unit, 50-story Pinnacle@Duxton

²⁴⁷ Ericsson and Larsson, "E&MJ's Annual Survey of Global Mining Investment," January/February 2008, 31.

²⁴⁸ Ibid., 32.

TABLE TE.4 Construction and mining equipment (TE004): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | |
| Canada | 1,540 | 1,957 | 2,692 | 3,511 | 4,005 | 495 | 14.1 |
| Japan | 102 | 110 | 182 | 115 | 132 | 17 | 14.6 |
| Mexico | 577 | 583 | 665 | 1,035 | 1,201 | 166 | 16.0 |
| Germany | 228 | 262 | 276 | 284 | 450 | 166 | 58.3 |
| China | 296 | 425 | 416 | 545 | 978 | 434 | 79.6 |
| Australia | 446 | 755 | 1,081 | 1,416 | 1,665 | 249 | 17.6 |
| Brazil | 439 | 487 | 828 | 1,246 | 1,231 | -15 | -1.2 |
| United Kingdom | 366 | 385 | 466 | 503 | 706 | 203 | 40.5 |
| Singapore | 446 | 521 | 835 | 742 | 1,105 | 363 | 48.9 |
| Italy | 115 | 149 | 161 | 151 | 181 | 29 | 19.5 |
| All other | 4,990 | 6,160 | 7,981 | 9,043 | 11,717 | 2,674 | 29.6 |
| Total | 9,546 | 11,794 | 15,584 | 18,590 | 23,371 | 4,781 | 25.7 |
| EU-27 | 1,520 | 1,678 | 2,119 | 1,944 | 2,859 | 915 | 47.1 |
| OPEC | 1,315 | 2,105 | 2,616 | 2,883 | 3,762 | 878 | 30.5 |
| Latin America | 2,285 | 2,760 | 3,487 | 4,850 | 5,705 | 855 | 17.6 |
| CBERA | 248 | 238 | 269 | 362 | 500 | 138 | 38.0 |
| Asia | 1,434 | 1,734 | 2,177 | 2,175 | 3,182 | 1,007 | 46.3 |
| Sub-Saharan Africa | 855 | 1,173 | 1,527 | 1,753 | 2,115 | 362 | 20.6 |
| Central and Eastern Europe | 32 | 28 | 43 | 66 | 109 | 43 | 64.7 |
| U.S. imports of merchandise for consumption | | | | | | | |
| Canada | 589 | 760 | 990 | 1,083 | 1,278 | 196 | 18.1 |
| Japan | 1,530 | 2,513 | 3,165 | 3,615 | 2,592 | -1,023 | -28.3 |
| Mexico | 353 | 501 | 766 | 795 | 805 | 11 | 1.4 |
| Germany | 673 | 854 | 1,286 | 1,318 | 1,492 | 175 | 13.3 |
| China | 132 | 182 | 358 | 904 | 954 | 51 | 5.6 |
| Australia | 31 | 28 | 40 | 49 | 84 | 35 | 72.0 |
| Brazil | 187 | 442 | 570 | 664 | 517 | -147 | -22.1 |
| United Kingdom | 611 | 810 | 1,070 | 1,268 | 938 | -330 | -26.1 |
| Singapore | 7 | 6 | 13 | 18 | 15 | -4 | -20.1 |
| Italy | 391 | 545 | 727 | 890 | 800 | -91 | -10.2 |
| All other | 1,502 | 2,318 | 2,795 | 3,068 | 2,594 | -473 | -15.4 |
| Total | 6,004 | 8,959 | 11,780 | 13,670 | 12,069 | -1,601 | -11.7 |
| EU-27 | 2,767 | 3,820 | 5,030 | 5,539 | 5,062 | -477 | -8.6 |
| OPEC | 52 | 17 | 26 | 27 | 24 | -3 | -9.6 |
| Latin America | 555 | 959 | 1,365 | 1,495 | 1,369 | -126 | -8.4 |
| CBERA | (^b) | 1 | 2 | 2 | 5 | 4 | 219.0 |
| Asia | 1,946 | 3,283 | 4,236 | 5,343 | 4,178 | -1,165 | -21.8 |
| Sub-Saharan Africa | 42 | 55 | 43 | 16 | 10 | -7 | -40.5 |
| Central and Eastern Europe | 60 | 70 | 86 | 98 | 112 | 14 | 14.6 |

See footnote(s) at end of table.

TABLE TE.4 Construction and mining equipment (TE004): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—*Continued*

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------------|------------------------|--------|--------|--------|--------|------------------------|------------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. merchandise trade balance | | | | | | | |
| Canada | 951 | 1,197 | 1,702 | 2,428 | 2,727 | 299 | 12.3 |
| Japan | -1,428 | -2,403 | -2,983 | -3,499 | -2,460 | 1,040 | 29.7 |
| Mexico | 224 | 81 | -101 | 240 | 395 | 155 | 64.5 |
| Germany | -445 | -592 | -1,011 | -1,033 | -1,043 | -9 | -0.9 |
| China | 164 | 243 | 58 | -359 | 24 | 383 | (^c) |
| Australia | 416 | 727 | 1,042 | 1,367 | 1,581 | 214 | 15.7 |
| Brazil | 252 | 45 | 258 | 582 | 714 | 132 | 22.7 |
| United Kingdom | -244 | -425 | -604 | -765 | -231 | 534 | 69.8 |
| Singapore | 439 | 515 | 823 | 724 | 1,091 | 367 | 50.7 |
| Italy | -276 | -395 | -566 | -739 | -619 | 120 | 16.3 |
| All other | 3,488 | 3,842 | 5,186 | 5,975 | 9,122 | 3,147 | 52.7 |
| Total | 3,541 | 2,835 | 3,804 | 4,920 | 11,302 | 6,382 | 129.7 |
| EU-27 | -1,247 | -2,142 | -2,911 | -3,595 | -2,203 | 1,392 | 38.7 |
| OPEC | 1,264 | 2,088 | 2,590 | 2,856 | 3,737 | 881 | 30.8 |
| Latin America | 1,730 | 1,801 | 2,123 | 3,355 | 4,336 | 981 | 29.3 |
| CBERA | 247 | 237 | 267 | 360 | 494 | 134 | 37.2 |
| Asia | -512 | -1,549 | -2,059 | -3,168 | -996 | 2,172 | 68.6 |
| Sub-Saharan Africa | 813 | 1,118 | 1,484 | 1,737 | 2,106 | 368 | 21.2 |
| Central and Eastern Europe | -28 | -42 | -43 | -32 | -3 | 29 | 90.5 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

^cNot meaningful for purposes of comparison.

residential complex. Major private sector projects include a giant oil storage terminal on Jurong Island, and two multi-billion dollar petrochemical plants being constructed by Shell and ExxonMobil.²⁴⁹

U.S. exports to China, the sixth leading market for U.S. exports of construction and mining equipment, increased by \$434 million (80 percent) and accounted for \$978 million (4 percent) of total exports in 2007. The products that registered the largest increases were off-highway dump trucks (up \$209 million) and parts for construction and mining equipment (up by \$144 million). According to the 11th Five-Year Plan, the Chinese government is investing in the construction of railways, highways, and airports; there were also significant investments in local transportation infrastructure to support the 2008 Olympics and 2010 World Expo.²⁵⁰

U.S. Imports

In 2007, the largest shifts in U.S. imports were registered by Japan (down by \$1 billion, or 28 percent), the United Kingdom (down by \$330 million, or 26 percent), and Brazil (down \$147 million, or 22 percent). The decline in U.S. imports was principally led by self-propelled excavation equipment²⁵¹ with a 360-degree revolving superstructure (declined by 40 percent to \$1.8 billion), and to a lesser extent by off-highway dump trucks (declined by 40 percent to \$733 million). Contrary to the overall trend, parts for construction and mining equipment, one of the leading import categories, increased by 9 percent to \$4.5 billion in 2007.

Most construction and mining activity indicators in the United States in 2007 were positive; the exception to these positive indicators was new residential construction, which likely contributed to the decline in construction equipment imports. Housing starts declined by 26 percent in 2007, from 2 million starts in 2006 to 1 million starts in 2007.²⁵² In contrast, the value of private nonresidential construction put in place was up by 7 percent, and the value of public construction put in place was up by 10 percent.²⁵³ Domestic demand for surface mining and quarrying equipment was also positive due to rising prices for most commodities and the relatively weak dollar; capital expenditures for mining activities increased in 2007.²⁵⁴

Japan remained the leading supplier of U.S. imports of construction and mining equipment; however, U.S. imports from Japan declined by 28 percent to \$2.6 billion in 2007. Japan's share of total U.S. imports of construction and mining equipment declined from 26 percent in 2006 to 21 percent in 2007. The largest absolute declines in U.S. construction and mining equipment imports from Japan were registered in self-propelled excavation equipment with a 360-degree revolving superstructure (decreased by \$745 million) and wheel-type, self-propelled, front-end shovel loaders (down by \$107 million).

²⁴⁹ USDOC, U.S. Commercial Service, "Construction Equipment: Singapore," undated (accessed September 26, 2008).

²⁵⁰ Ibid.

²⁵¹ In this context, excavation equipment covers backhoes, mechanical shovels, clamshells, and draglines.

²⁵² IBISWorld, *Construction Machinery Manufacturing in the US: 33312*, June 6, 2008, 42.

²⁵³ Public construction refers to highway and street projects. IBISWorld, *Construction Machinery Manufacturing in the US: 33312*, June 6, 2008, 43–44.

²⁵⁴ IBISWorld, *Construction Machinery Manufacturing in the US: 33312*, June 6, 2008, 45.

Construction and mining equipment from Brazil (down by 22 percent to \$517 million) registered the second largest decline in U.S. imports. The third largest shift was in imports from the United Kingdom (down by 26 percent to \$938 million). The largest absolute decline in imports from the United Kingdom was in off-highway dump trucks (down by \$294 million), and the largest absolute declines in imports from Brazil were in wheel-type, self-propelled, front-end shovel loaders (down by \$69 million) and self-propelled excavation equipment with a 360-degree revolving superstructure (down by \$41 million).

Change in 2007 from 2006:

U.S. trade deficit: Decreased by \$8.9 billion (8 percent) to \$106.2 billion

U.S. exports: Increased by \$8.3 billion (19 percent) to \$52.7 billion

U.S. imports: Decreased by \$642 million (0.4 percent) to \$158.9 billion

The \$8.9 billion decline in the U.S. trade deficit in motor vehicles is overwhelmingly attributable to the increase in U.S. exports, which rose by \$8.3 billion, (19 percent) in 2007 (table TE.5). Imports registered a very slight decrease of less than 1 percent. Trade with Canada, the leading source of U.S. imports and the leading market for U.S. exports, had a major impact on the overall trend for 2007, as the increase in U.S. exports to Canada and the decline in U.S. imports from Canada were the largest in absolute terms. The changing relationship with Canada was due not only to the rising value of the Canadian dollar relative to the U.S. dollar, but also to a variety of industry developments, including U.S. labor agreements and shifts in consumer demand.

U.S. Exports

U.S. motor vehicle exports rose by 19 percent to \$52.7 billion in 2007. Exports increased to the three leading U.S. motor vehicle export markets—Canada, Germany, and Mexico. U.S. motor vehicle exports to Canada increased by 10 percent to \$25.1 billion; to Germany by 19 percent to \$5.9 billion; and to Mexico by 13 percent to \$4.5 billion.

In 2007, the rise in the value of the Canadian dollar relative to the U.S. dollar contributed significantly to increased demand for U.S. vehicles and hence, U.S. exports.²⁵⁶ Among the new vehicle categories that registered the largest increase in U.S. exports were pickup trucks (a net increase of 53,515 vehicles) and new four cylinder cars with engines between 1.5 and 3.0 liters (an increase of 26,431 vehicles). Official U.S. export statistics also reflect a rise in used car exports. Canada's light vehicle sales were up by 2 percent in 2007.²⁵⁷

²⁵⁵ This industry group includes passenger vehicles, trucks, and buses.

²⁵⁶ Although automakers prohibit U.S. dealers from selling vehicles to customers for export outside the United States, there was a significant rise in gray market exports to Canada in 2007. Such exports may not be reflected in official U.S. export data. One group estimated that two-thirds of the approximately 60,000 U.S. gray market exports in 2007 went to Canada. Harris, "Factories Punish Rogue Exporters," May 12, 2008, 1 and 37. U.S. vehicles made their way to Canada via brokers buying cars in the United States to send to the Canadian market, Canadian dealers buying used cars in the United States at auction, and individual customers crossing the border to purchase vehicles. Wernle and Wilson, "Leapin' Loonie!" November 12, 2007.

²⁵⁷ Beene, "Canada Sales Up 2.4% in '07," January 21, 2008.

TABLE TE.5 Motor vehicles (TE009): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|----------------|----------------|----------------|----------------|------------------------|-------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| Canada | 17,344 | 18,104 | 20,639 | 22,936 | 25,135 | 2,199 | 9.6 | |
| Japan | 440 | 325 | 341 | 433 | 463 | 30 | 6.9 | |
| Germany | 3,902 | 2,454 | 1,774 | 4,881 | 5,853 | 971 | 19.9 | |
| Mexico | 3,224 | 4,015 | 4,350 | 3,990 | 4,504 | 514 | 12.9 | |
| Korea | 79 | 51 | 100 | 151 | 337 | 186 | 123.6 | |
| United Kingdom | 911 | 578 | 334 | 997 | 1,098 | 101 | 10.1 | |
| Sweden | 29 | 76 | 164 | 68 | 121 | 53 | 77.6 | |
| Saudi Arabia | 500 | 657 | 1,034 | 1,887 | 1,850 | -38 | -2.0 | |
| Italy | 138 | 64 | 106 | 160 | 514 | 354 | 221.5 | |
| United Arab Em | 253 | 331 | 773 | 1,089 | 1,300 | 211 | 19.4 | |
| All other | 3,062 | 3,818 | 5,697 | 7,844 | 11,565 | 3,721 | 47.4 | |
| Total | 29,883 | 30,473 | 35,312 | 44,437 | 52,739 | 8,303 | 18.7 | |
| EU-27 | 5,518 | 3,929 | 3,334 | 7,594 | 10,322 | 2,728 | 35.9 | |
| OPEC | 1,272 | 1,629 | 2,868 | 4,899 | 5,416 | 517 | 10.6 | |
| Latin America | 3,827 | 4,670 | 5,545 | 5,634 | 6,674 | 1,039 | 18.4 | |
| CBERA | 215 | 207 | 243 | 294 | 351 | 57 | 19.3 | |
| Asia | 870 | 764 | 1,072 | 1,489 | 2,128 | 639 | 42.9 | |
| Sub-Saharan Africa | 354 | 418 | 777 | 721 | 1,265 | 544 | 75.3 | |
| Central and Eastern Europe | 34 | 62 | 103 | 115 | 224 | 109 | 95.1 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| Canada | 41,095 | 46,744 | 48,581 | 48,623 | 47,606 | -1,017 | -2.1 | |
| Japan | 33,062 | 33,171 | 35,947 | 44,609 | 44,965 | 356 | 0.8 | |
| Germany | 20,316 | 21,153 | 21,824 | 20,953 | 22,353 | 1,399 | 6.7 | |
| Mexico | 19,327 | 19,116 | 18,521 | 23,548 | 23,300 | -248 | -1.1 | |
| Korea | 7,913 | 10,033 | 8,970 | 9,104 | 8,792 | -312 | -3.4 | |
| United Kingdom | 5,149 | 4,841 | 5,898 | 5,031 | 4,209 | -823 | -16.4 | |
| Sweden | 2,876 | 2,441 | 2,357 | 1,970 | 2,361 | 391 | 19.9 | |
| Saudi Arabia | ^(b) | ^(b) | 0 | 0 | 0 | 0 | 0.0 | |
| Italy | 370 | 471 | 614 | 672 | 813 | 141 | 21.0 | |
| United Arab Em | ⁽²⁾ | ^(b) | 0 | ^(b) | 0 | ^(b) | -100.0 | |
| All other | 4,261 | 4,889 | 3,596 | 5,027 | 4,497 | -530 | -10.5 | |
| Total | 134,369 | 142,861 | 146,308 | 159,537 | 158,895 | -642 | -0.4 | |
| EU-27 | 31,645 | 32,737 | 33,637 | 32,883 | 33,701 | 817 | 2.5 | |
| OPEC | ⁽²⁾ | ^(b) | ^(b) | ^(b) | ^(b) | ^(b) | 90.0 | |
| Latin America | 19,874 | 19,343 | 18,744 | 23,716 | 23,340 | -376 | -1.6 | |
| CBERA | ^(b) | ^(b) | ^(b) | ^(b) | ^(b) | ^(b) | 67.0 | |
| Asia | 40,978 | 43,211 | 44,924 | 53,725 | 53,781 | 55 | 0.1 | |
| Sub-Saharan Africa | 634 | 418 | 139 | 341 | 453 | 112 | 32.9 | |
| Central and Eastern Europe | 979 | 1,057 | 628 | 895 | 1,207 | 313 | 34.9 | |

See footnote(s) at end of table.

TABLE TE.5 Motor vehicles (TE009): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—Continued

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--------------------------------|------------------------|----------|----------|----------|----------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. merchandise trade balance | | | | | | | |
| Canada | -23,750 | -28,640 | -27,942 | -25,687 | -22,471 | 3,216 | 12.5 |
| Japan | -32,622 | -32,846 | -35,606 | -44,175 | -44,502 | -326 | -0.7 |
| Germany | -16,414 | -18,699 | -20,050 | -16,072 | -16,500 | -428 | -2.7 |
| Mexico | -16,103 | -15,101 | -14,171 | -19,557 | -18,796 | 762 | 3.9 |
| Korea | -7,834 | -9,982 | -8,870 | -8,954 | -8,456 | 498 | 5.6 |
| United Kingdom | -4,238 | -4,263 | -5,564 | -4,034 | -3,111 | 924 | 22.9 |
| Sweden | -2,847 | -2,365 | -2,193 | -1,902 | -2,240 | -339 | -17.8 |
| Saudi Arabia | 500 | 657 | 1,034 | 1,887 | 1,850 | -38 | -2.0 |
| Italy | -233 | -407 | -508 | -512 | -298 | 213 | 41.7 |
| United Arab Em | 253 | 331 | 773 | 1,089 | 1,300 | 211 | 19.4 |
| All other | -1,199 | -1,071 | 2,101 | 2,817 | 7,068 | 4,251 | 150.9 |
| Total | -104,486 | -112,388 | -110,996 | -115,100 | -106,155 | 8,945 | 7.8 |
| EU-27 | -26,127 | -28,808 | -30,303 | -25,289 | -23,378 | 1,911 | 7.6 |
| OPEC | 1,272 | 1,628 | 2,868 | 4,899 | 5,416 | 517 | 10.6 |
| Latin America | -16,047 | -14,674 | -13,199 | -18,082 | -16,666 | 1,415 | 7.8 |
| CBERA | 215 | 207 | 243 | 294 | 351 | 57 | 19.3 |
| Asia | -40,108 | -42,448 | -43,852 | -52,236 | -51,653 | 583 | 1.1 |
| Sub-Saharan Africa | -280 | -1 | 638 | 380 | 812 | 432 | 113.5 |
| Central and Eastern Europe | -945 | -995 | -525 | -780 | -984 | -204 | -26.1 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

U.S. exports to Germany increased despite a higher VAT rate in 2007 and an overall decline in light vehicle sales in Germany. However, the popularity of U.S.-produced German-brand vehicles and the dollar's weak value relative to the euro, which makes it cheaper for European automakers to build vehicles in the United States, combined to spur U.S. exports to Germany.²⁵⁸

Despite a 4 percent drop in Mexico's new passenger vehicle sales in 2007, U.S. exports to Mexico rose substantially, from \$4.0 billion to \$4.5 billion, or by 13 percent. Although not reported separately in official U.S. export statistics, industry sources reported that U.S. exports of used vehicles to Mexico were significant and particularly affected the Mexican market for new low-priced cars and minivans. Industry sources estimated that used vehicle imports outpaced new car sales in Mexico in 2007.²⁵⁹ Official statistics show that the largest increase in U.S. exports to Mexico was in pickup trucks, with a net increase of 10,824 units in 2007; the second largest increase was in 4-cylinder passenger vehicles with engines between 1.5 and 3.0 liters.

U.S. Imports

Total U.S. motor vehicle imports changed little in 2007; however, individual sources of such imports showed a variety of trends. Increased imports came principally from Germany (increasing by \$1.4 billion), and to a lesser extent from Sweden (increasing by \$391 million) and Japan (increasing by \$356 million). Conversely, imports from Canada declined by \$1.0 billion, and imports from the United Kingdom declined by \$823 million.

Despite the weaker dollar, which makes imports more expensive and reduces the revenue converted from U.S. dollars into euros, imports from Germany increased due to strong demand for German brand vehicles. Sales of such vehicles in 2007 were 35 percent higher than the amount of vehicles German transplants produced in the United States.²⁶⁰

U.S. imports from Japan rose slightly in 2007. The depressed Japanese market has forced Japanese automakers to rely on exports to maintain production levels.²⁶¹ Reportedly, in the second quarter of 2007, the ratio of exports to Japanese production rose above 50 percent for the first time since 1988, and Toyota was unable to add capacity in the United States fast enough to satisfy demand, thereby needing to supplement U.S. production with imports from Japan.²⁶²

Factors that have affected U.S.-Canadian bilateral trade and reduced the amount of vehicles sourced from Canada include U.S. labor agreements that substantially reduced U.S. manufacturing costs and eliminated Canada's labor cost advantage,²⁶³ a reluctance to source vehicles from Canada because of border crossing security issues,²⁶⁴ and increased investments in small-car manufacturing in Mexico to respond to consumer demand for fuel efficient vehicles and fuel economy requirements in the United States.²⁶⁵ Big Three North

²⁵⁸ Just-auto.com editorial team, "VDA Revises Full Year Forecast Downwards, Again," July 3, 2007; Just-auto.com editorial team, "U.S. May Become Low Cost Production Location," March 25, 2008.

²⁵⁹ Downer, "Mexican Auto Sales Drop 3.6% in 2007," January 28, 2008.

²⁶⁰ Just-auto.com editorial team, "U.S. May Become Low Cost Production Location," March 25, 2008.

²⁶¹ Treece, "Japan Plants Humming During Export Surge," May 14, 2007.

²⁶² Ibid.

²⁶³ Just-auto.com editorial team, "Canadian Auto Sector Gets Mexican Warning," April 30, 2008.

²⁶⁴ Ibid., "Canadian Automotive Industry May Become Unviable," May 7, 2008.

²⁶⁵ Ibid., "Canadian Auto Sector Gets Mexican Warning," April 30, 2008.

American production is somewhat rationalized, with larger vehicles produced in Canada and small cars produced in Mexico. The rise in gasoline prices and subsequent demand for small, fuel efficient cars had a negative effect on U.S. imports from Canada.

U.S. imports from most U.K.-based auto plants declined in 2007, including imports of the Honda CR-V sport utility vehicle. Production of the CR-V for the United States, originally in the United Kingdom, was switched to East Liberty, OH, in 2007, so that the Swindon, U.K., plant could focus on the European market for the Civic hatchback.²⁶⁶

²⁶⁶ Ibid., “EXCLUSIVE: UK: Official Positions Vary on US Honda CR-V Sourcing,” October 2, 2006.

Aircraft, Spacecraft, and Related Equipment²⁶⁷

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Change in 2007 from 2006:

U.S. trade surplus: Increased by \$4.8 billion (10 percent) to \$51.6 billion

U.S. exports: Increased by \$9.0 billion (14 percent) to \$73.4 billion

U.S. imports: Increased by \$4.3 billion (24 percent) to \$21.8 billion

The U.S. trade surplus for aircraft, spacecraft, and related equipment grew \$4.8 billion (10 percent), primarily because of increased exports of large civil aircraft (LCA) and parts for civil aircraft. Taken together, these products accounted for \$50.7 billion (69 percent) of sectoral exports. The continued surplus reflects the demand by foreign airlines to meet the rising passenger and freight demand for air transportation service. The U.S. trade balance has risen for the past six years.

U.S. Exports

The strong growth of \$9.0 billion in U.S. exports of aircraft, spacecraft, and related equipment in 2007 resulted from international demand for U.S. manufactured aircraft, particularly LCA and business jet aircraft, and parts for these aircraft. International airline route and frequency expansion as well as fleet renewal were the prime motivators of LCA purchases,²⁶⁸ while parts were used both by airlines for maintenance and foreign aircraft manufacturers in producing their products. The growth in exports of mid-weight aircraft occurred because of corporate interest in business jet transportation.²⁶⁹

The largest absolute dollar increase in U.S. exports was accounted for by increased exports to Asia and the EU. These exports were partially driven by each area's strong economic growth, which led to increased demand for air transportation service.²⁷⁰ In 2007, U.S. exports of aircraft, spacecraft, and related equipment to Asia increased by \$5.6 billion (22 percent) to \$30.8 billion, while such exports to the EU increased by \$4.9 billion (31 percent) to \$20.8 billion (table TE.6). Together, U.S. exports to these regions accounted for 70 percent of total U.S. exports in this sector. Asia was the top market for sectoral exports in 2007, accounting for 42 percent of total U.S. exports of aircraft, spacecraft, and related equipment.

²⁶⁷ This industry/commodity group includes aircraft, spacecraft, and parts thereof. It does not include aircraft engines or avionics.

²⁶⁸ Passenger demand in 2007 rose by 7 percent, eclipsing 2006's growth rate of 6 percent. Manufacturers' shipments, at 1,122 during 2007, were the third highest since 1952. IATA, "Article 1: Strong 2007 Traffic Growth Set to Slow," February 2008.

²⁶⁹ Shipments of general aviation aircraft, predominantly business jets by value, set another record in 2007 because of the strength of the economy in certain sectors. GAMA, 2007 General Aviation Statistical Databook & Industry Outlook, 2008, 1.

²⁷⁰ IATA, 10.

TABLE TE.6 Aircraft, spacecraft, and related equipment (TE013): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|----------------|----------------|----------------|---------------|------------------------|-------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| Canada | 1,520 | 1,762 | 2,381 | 2,488 | 3,806 | 1,319 | 53.0 | |
| France | 1,359 | 2,943 | 2,438 | 3,111 | 3,468 | 356 | 11.4 | |
| Japan | 4,757 | 4,750 | 5,182 | 5,721 | 6,528 | 807 | 14.1 | |
| China | 2,447 | 1,948 | 4,338 | 6,047 | 7,159 | 1,112 | 18.4 | |
| India | 270 | 286 | 595 | 1,510 | 5,955 | 4,445 | 294.4 | |
| United Kingdom | 2,925 | 2,486 | 2,641 | 2,627 | 3,957 | 1,329 | 50.6 | |
| Brazil | 649 | 1,243 | 1,031 | 2,323 | 3,149 | 826 | 35.6 | |
| Germany | 1,336 | 1,200 | 1,619 | 2,311 | 2,961 | 650 | 28.1 | |
| Korea | 1,803 | 1,744 | 1,890 | 3,463 | 3,267 | -196 | -5.7 | |
| United Arab Em | 728 | 173 | 3,283 | 5,060 | 3,256 | -1,804 | -35.7 | |
| All other | 20,041 | 21,541 | 22,583 | 29,713 | 29,902 | 189 | 0.6 | |
| Total | 37,835 | 40,076 | 47,981 | 64,374 | 73,406 | 9,032 | 14.0 | |
| EU-27 | 12,605 | 15,029 | 13,594 | 15,916 | 20,798 | 4,883 | 30.7 | |
| OPEC | 1,377 | 698 | 4,549 | 7,053 | 5,893 | -1,160 | -16.4 | |
| Latin America | 1,909 | 2,862 | 3,067 | 5,813 | 5,657 | -156 | -2.7 | |
| CBERA | 312 | 284 | 283 | 377 | 340 | -36 | -9.6 | |
| Asia | 15,053 | 14,613 | 18,401 | 25,131 | 30,771 | 5,641 | 22.4 | |
| Sub-Saharan Africa | 814 | 975 | 1,262 | 1,329 | 900 | -428 | -32.2 | |
| Central and Eastern Europe | 510 | 645 | 344 | 868 | 1,685 | 818 | 94.2 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| Canada | 6,345 | 5,347 | 6,006 | 5,082 | 6,421 | 1,339 | 26.3 | |
| France | 4,128 | 3,688 | 2,441 | 4,322 | 5,615 | 1,293 | 29.9 | |
| Japan | 848 | 872 | 1,058 | 1,443 | 1,850 | 407 | 28.2 | |
| China | 62 | 80 | 84 | 134 | 192 | 58 | 43.6 | |
| India | 3 | 5 | 7 | 11 | 15 | 4 | 38.0 | |
| United Kingdom | 936 | 874 | 988 | 1,215 | 1,566 | 351 | 28.9 | |
| Brazil | 1,845 | 2,508 | 1,806 | 1,202 | 1,712 | 510 | 42.4 | |
| Germany | 1,091 | 1,217 | 1,837 | 1,352 | 1,021 | -331 | -24.5 | |
| Korea | 87 | 113 | 186 | 226 | 259 | 33 | 14.7 | |
| United Arab Em | ^(b) | ^(b) | ^(b) | 1 | 1 | ^(b) | -35.2 | |
| All other | 1,565 | 1,780 | 2,062 | 2,570 | 3,185 | 615 | 23.9 | |
| Total | 16,910 | 16,485 | 16,475 | 17,557 | 21,835 | 4,278 | 24.4 | |
| EU-27 | 6,756 | 6,581 | 6,214 | 7,992 | 9,532 | 1,540 | 19.3 | |
| OPEC | 3 | 3 | 5 | 7 | 11 | 4 | 55.6 | |
| Latin America | 1,915 | 2,543 | 1,852 | 1,260 | 1,834 | 574 | 45.6 | |
| CBERA | ^(b) | ^(b) | ^(b) | ^(b) | 1 | 1 | 365.5 | |
| Asia | 1,133 | 1,236 | 1,511 | 1,991 | 2,538 | 547 | 27.5 | |
| Sub-Saharan Africa | 3 | 5 | 4 | 3 | 5 | 2 | 95.0 | |
| Central and Eastern Europe | 70 | 100 | 91 | 149 | 196 | 47 | 31.8 | |

See footnote(s) at end of table.

TABLE TE.6 Aircraft, spacecraft, and related equipment (TE013): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—*Continued*

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--------------------------------|------------------------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. merchandise trade balance | | | | | | | |
| Canada | -4,826 | -3,585 | -3,625 | -2,595 | -2,615 | -20 | -0.8 |
| France | -2,770 | -745 | -3 | -1,211 | -2,147 | -937 | -77.4 |
| Japan | 3,910 | 3,878 | 4,123 | 4,279 | 4,679 | 400 | 9.4 |
| China | 2,384 | 1,868 | 4,254 | 5,913 | 6,967 | 1,053 | 17.8 |
| India | 267 | 281 | 588 | 1,499 | 5,940 | 4,441 | 296.2 |
| United Kingdom | 1,989 | 1,612 | 1,653 | 1,412 | 2,390 | 978 | 69.3 |
| Brazil | -1,195 | -1,265 | -775 | 1,121 | 1,437 | 316 | 28.2 |
| Germany | 245 | -17 | -218 | 959 | 1,940 | 981 | 102.3 |
| Korea | 1,716 | 1,630 | 1,704 | 3,237 | 3,008 | -229 | -7.1 |
| United Arab Em | 728 | 173 | 3,283 | 5,059 | 3,255 | -1,804 | -35.7 |
| All other | 18,476 | 19,761 | 20,521 | 27,143 | 26,717 | -426 | -1.6 |
| Total | 20,924 | 23,592 | 31,506 | 46,817 | 51,571 | 4,754 | 10.2 |
| EU-27 | 5,849 | 8,447 | 7,380 | 7,924 | 11,267 | 3,343 | 42.2 |
| OPEC | 1,374 | 695 | 4,544 | 7,046 | 5,882 | -1,164 | -16.5 |
| Latin America | -6 | 319 | 1,215 | 4,553 | 3,824 | -730 | -16.0 |
| CBERA | 312 | 284 | 282 | 376 | 340 | -37 | -9.8 |
| Asia | 13,921 | 13,377 | 16,890 | 23,140 | 28,234 | 5,094 | 22.0 |
| Sub-Saharan Africa | 811 | 970 | 1,259 | 1,326 | 895 | -431 | -32.5 |
| Central and Eastern Europe | 440 | 545 | 254 | 719 | 1,489 | 770 | 107.1 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

In 2007, the top three products exported in this sector were new civil passenger transports of an unladen weight exceeding 15,000 kg (typically LCA) and two parts categories. U.S. exports of LCA rose \$8.7 billion (30 percent) to \$37.3 billion, while exports of civil aircraft parts grew by \$723 million (6 percent) to \$13.4 billion. Conversely, exports of noncivil aircraft parts declined by \$102 million (2 percent) to \$4.9 billion.

The principal products exported to Asia were passenger and cargo LCA and parts for civil aircraft. U.S. exports to Asia of these three goods increased by \$6.2 billion (31 percent) to \$26.3 billion in 2007. U.S. exports to the EU principally consisted of LCA, parts for aircraft, and aircraft other than LCA. In 2007, the top three U.S. exports to the EU were LCA valued at \$8.1 billion (a \$2.9 billion or 56 percent increase), \$5.2 billion in parts for civil airplanes or helicopters (\$131 million, or 3 percent increase), and \$1.7 billion in new turbofan aircraft weighing between 4,536 kg but not exceeding 15,000 kg (a decrease of \$10 million or 1 percent).

U.S. Imports

The growth in imports (\$4.3 billion, or 24 percent) reflects U.S. airlines' fleet replacement of older aircraft with newer, more efficient ones to improve profitability. During 2007, the leading product imported in this grouping was new LCA, which were valued at \$6.5 billion, a 31 percent increase over 2006. In 2007, imports of these aircraft from the EU continued to rise, totaling \$3.0 billion (14 percent increase), while imports from Canada and Brazil, the other major producers of these aircraft, grew by \$1.2 billion (51 percent) to \$3.4 billion.

U.S. imports of parts for civil aircraft, the second largest product, grew by \$1.2 billion (25 percent) to \$5.8 billion. The top three suppliers of these imports included Japan, the United Kingdom, and Canada. Together, these three countries supplied \$3.3 billion (57 percent) of total imports in this category. All U.S. manufacturers of civil aircraft increased their production of aircraft, which in turn required more parts sourced internationally to be imported for these aircraft.²⁷¹

²⁷¹ IATA. 10. The Boeing Company. Boeing delivered 441 large civil aircraft in 2007, an increase over 398 large civil aircraft delivered in 2006.

TABLE TE.7 Transportation equipment : U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b | Industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|---|--------|--------|--------|--------|--------|------------------------|------------------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| TE001 | Aircraft engines and gas turbines | | | | | | | |
| | Exports | 14,742 | 17,706 | 20,771 | 21,631 | 25,780 | 4,149 | 19.2 |
| | Imports | 8,834 | 9,642 | 11,243 | 12,816 | 14,898 | 2,082 | 16.2 |
| | Trade balance | 5,907 | 8,064 | 9,528 | 8,815 | 10,882 | 2,067 | 23.5 |
| TE002 | Internal combustion piston engines, other than for aircraft | | | | | | | |
| | Exports | 12,741 | 13,444 | 14,969 | 15,930 | 17,039 | 1,109 | 7.0 |
| | Imports | 16,250 | 18,682 | 21,035 | 20,617 | 19,930 | -688 | -3.3 |
| | Trade balance | -3,509 | -5,238 | -6,065 | -4,688 | -2,891 | 1,797 | 38.3 |
| TE003 | Forklift trucks and similar industrial vehicles | | | | | | | |
| | Exports | 1,028 | 1,324 | 1,760 | 2,172 | 2,939 | 767 | 35.3 |
| | Imports | 1,408 | 1,853 | 2,435 | 2,717 | 2,581 | -136 | -5.0 |
| | Trade balance | -381 | -528 | -675 | -545 | 358 | 903 | (^c) |
| TE004 | Construction and mining equipment | | | | | | | |
| | Exports | 9,546 | 11,794 | 15,584 | 18,590 | 23,371 | 4,781 | 25.7 |
| | Imports | 6,004 | 8,959 | 11,780 | 13,670 | 12,069 | -1,601 | -11.7 |
| | Trade balance | 3,541 | 2,835 | 3,804 | 4,920 | 11,302 | 6,382 | 129.7 |
| TE005 | Ball and rollers bearings | | | | | | | |
| | Exports | 1,320 | 1,494 | 1,638 | 1,841 | 1,992 | 152 | 8.3 |
| | Imports | 1,680 | 2,052 | 2,351 | 2,429 | 2,492 | 63 | 2.6 |
| | Trade balance | -360 | -558 | -712 | -589 | -500 | 89 | 15.1 |
| TE006 | Primary cells and batteries and electric storage batteries | | | | | | | |
| | Exports | 1,786 | 1,977 | 2,272 | 2,801 | 2,948 | 146 | 5.2 |
| | Imports | 2,175 | 2,620 | 2,841 | 3,075 | 3,255 | 180 | 5.9 |
| | Trade balance | -389 | -642 | -570 | -274 | -308 | -34 | -12.4 |
| TE007 | Ignition, starting, lighting, and other electrical equipment | | | | | | | |
| | Exports | 1,822 | 1,773 | 1,844 | 1,880 | 2,040 | 160 | 8.5 |
| | Imports | 3,858 | 4,371 | 4,813 | 5,122 | 5,546 | 424 | 8.3 |
| | Trade balance | -2,036 | -2,598 | -2,969 | -3,242 | -3,506 | -264 | -8.1 |
| TE008 | Rail locomotive and rolling stock | | | | | | | |
| | Exports | 1,386 | 1,649 | 2,124 | 2,600 | 2,663 | 63 | 2.4 |
| | Imports | 1,105 | 1,282 | 1,516 | 1,742 | 1,668 | -74 | -4.3 |
| | Trade balance | 282 | 368 | 607 | 858 | 995 | 137 | 16.0 |

See footnote(s) at end of table.

TABLE TE.7 Transportation equipment: U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b | Industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|---|----------|----------|----------|----------|----------|------------------------|---------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| TE009 | Motor vehicles | | | | | | | |
| | Exports | 29,883 | 30,473 | 35,312 | 44,437 | 52,739 | 8,303 | 18.7 |
| | Imports | 134,369 | 142,861 | 146,308 | 159,537 | 158,895 | -642 | -0.4 |
| | Trade balance | -104,486 | -112,388 | -110,996 | -115,100 | -106,155 | 8,945 | 7.8 |
| TE010 | Certain motor-vehicle parts | | | | | | | |
| | Exports | 28,442 | 30,785 | 31,524 | 33,346 | 34,052 | 705 | 2.1 |
| | Imports | 41,649 | 46,493 | 50,998 | 53,307 | 55,619 | 2,312 | 4.3 |
| | Trade balance | -13,207 | -15,707 | -19,474 | -19,961 | -21,567 | -1,607 | -8.0 |
| TE011 | Powersport vehicles | | | | | | | |
| | Exports | 1,734 | 1,848 | 2,221 | 2,535 | 3,375 | 840 | 33.1 |
| | Imports | 4,375 | 5,140 | 5,781 | 5,870 | 5,208 | -662 | -11.3 |
| | Trade balance | -2,640 | -3,292 | -3,560 | -3,335 | -1,833 | 1,502 | 45.0 |
| TE011A | Motorcycles and mopeds | | | | | | | |
| | Exports | 864 | 917 | 983 | 1,252 | 1,589 | 337 | 26.9 |
| | Imports | 3,213 | 3,809 | 4,277 | 4,449 | 3,903 | -546 | -12.3 |
| | Trade balance | -2,349 | -2,891 | -3,293 | -3,197 | -2,314 | 883 | 27.6 |
| TE012 | Trailers, semi-trailers, and parts: | | | | | | | |
| | Exports | 1,008 | 1,462 | 1,945 | 2,464 | 2,781 | 317 | 12.9 |
| | Imports | 904 | 1,226 | 1,595 | 1,778 | 1,648 | -130 | -7.3 |
| | Trade balance | 104 | 236 | 350 | 686 | 1,133 | 448 | 65.3 |
| TE013 | Aircraft, spacecraft, and related equipment: | | | | | | | |
| | Exports | 37,835 | 40,076 | 47,981 | 64,374 | 73,406 | 9,032 | 14.0 |
| | Imports | 16,910 | 16,485 | 16,475 | 17,557 | 21,835 | 4,278 | 24.4 |
| | Trade balance | 20,924 | 23,592 | 31,506 | 46,817 | 51,571 | 4,754 | 10.2 |
| TE014 | Ships, tugs, pleasure boats, and similar vessels: | | | | | | | |
| | Exports | 1,195 | 1,659 | 1,950 | 2,601 | 3,096 | 496 | 19.1 |
| | Imports | 1,932 | 1,888 | 2,350 | 2,146 | 2,084 | -62 | -2.9 |
| | Trade balance | -736 | -229 | -400 | 454 | 1,013 | 558 | 122.9 |

See footnote(s) at end of table.

TABLE TE.7 Transportation equipment: U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b | Industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|---|------|-------|-------|-------|-------|------------------------|---------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| TE015 | Motors and engines, except internal combustion, aircraft, or electric: | | | | | | | |
| | Exports | 578 | 668 | 837 | 1,124 | 1,198 | 74 | 6.6 |
| | Imports | 834 | 1,066 | 1,360 | 1,594 | 2,195 | 601 | 37.7 |
| | Trade balance | -256 | -399 | -523 | -470 | -997 | -526 | -111.9 |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bThis 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

^cNot meaningful for purposes of comparison.

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Electronic Products

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Change in 2007 from 2006:

U.S. trade deficit: Increased by \$17.4 billion (11 percent) to \$180.5 billion

U.S. exports: Increased by \$3.1 billion (2 percent) to \$172.5 billion

U.S. imports: Increased by \$20.5 billion (6 percent) to \$353.0 billion

The U.S. merchandise trade deficit in electronic products increased for the sixth consecutive year in 2007 (table EL.1). The trade deficit rose by \$17.4 billion (11 percent) as U.S. exports of electronic goods to major Asian markets declined, while U.S. imports of Asian goods rose by 5 percent. Product sectors principally responsible for the increase in electronics imports were telecommunications equipment (\$7.4 billion), television receivers (\$4.6 billion), and computer equipment (\$4.3 billion) (table EL.2). The trade balance was also affected by continued foreign outsourcing of electronics production by U.S. companies.

U.S. Exports

U.S. exports of electronic products increased only marginally (2 percent) to \$172.5 billion in 2007 (table EL.1), as electronics production continued to move offshore.²⁷² Countries exhibiting significant declines as markets for U.S. exports of electronic goods included Malaysia (declined 16 percent), Korea (declined 14 percent), and Japan (declined 6 percent). Other major markets for electronic goods, such as China, Mexico, and Germany, registered relatively flat growth. Products contributing to the sluggish growth in U.S. exports included computer equipment, with a \$1.9 billion (6 percent) decline; and semiconductors and integrated circuits, which fell by \$1.7 billion (4.7 percent) in 2007, as much of the production of these products continued to move to Mexico, China, and other Asian countries.²⁷³

²⁷² U.S. industry officials, telephone interviews by Commission staff, August 20–22, 2008.

²⁷³ Ibid.

TABLE EL.1 Electronic products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|----------------|----------------|----------------|----------------|------------------------|------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. exports of domestic merchandise: | | | | | | | |
| China | 5,935 | 6,903 | 7,952 | 11,113 | 11,433 | 320 | 2.9 |
| Mexico | 16,429 | 17,403 | 16,649 | 18,357 | 18,394 | 37 | 0.2 |
| Japan | 11,355 | 11,236 | 10,967 | 11,538 | 10,794 | -744 | -6.4 |
| Malaysia | 7,290 | 6,546 | 6,314 | 6,960 | 5,832 | -1,128 | -16.2 |
| Canada | 16,688 | 17,608 | 18,941 | 18,378 | 18,183 | -195 | -1.1 |
| Taiwan | 5,556 | 5,625 | 5,464 | 5,911 | 6,296 | 385 | 6.5 |
| Korea | 7,086 | 7,390 | 7,898 | 8,423 | 7,264 | -1,159 | -13.8 |
| Germany | 7,635 | 7,529 | 7,947 | 9,114 | 9,345 | 232 | 2.5 |
| Singapore | 4,992 | 6,004 | 6,039 | 6,035 | 6,658 | 623 | 10.3 |
| United Kingdom | 7,078 | 8,126 | 7,527 | 7,513 | 6,907 | -606 | -8.1 |
| All other | 50,904 | 55,196 | 59,854 | 66,038 | 71,395 | 5,357 | 8.1 |
| Total | 140,947 | 149,564 | 155,552 | 169,381 | 172,502 | 3,122 | 1.8 |
| EU-27 | 35,762 | 37,797 | 39,009 | 41,767 | 43,632 | 1,865 | 4.5 |
| OPEC | 2,124 | 3,216 | 4,092 | 5,034 | 5,613 | 578 | 11.5 |
| Latin America | 24,665 | 26,820 | 27,591 | 31,773 | 33,877 | 2,104 | 6.6 |
| CBERA | 2,083 | 1,852 | 2,066 | 2,697 | 2,686 | -10 | -0.4 |
| Asia | 55,649 | 57,841 | 59,420 | 65,108 | 63,345 | -1,763 | -2.7 |
| Sub-Saharan Africa | 778 | 879 | 1,009 | 1,232 | 1,275 | 43 | 3.5 |
| Central and Eastern Europe | 942 | 996 | 1,192 | 1,424 | 1,534 | 109 | 7.7 |
| U.S. imports of merchandise for consumption: | | | | | | | |
| China | 47,265 | 69,252 | 86,858 | 103,289 | 116,467 | 13,178 | 12.8 |
| Mexico | 34,599 | 38,991 | 40,221 | 47,107 | 53,999 | 6,892 | 14.6 |
| Japan | 29,179 | 32,023 | 31,512 | 30,838 | 31,542 | 704 | 2.3 |
| Malaysia | 20,695 | 22,273 | 27,554 | 29,401 | 25,265 | -4,135 | -14.1 |
| Canada | 9,793 | 10,982 | 12,480 | 11,958 | 12,141 | 183 | 1.5 |
| Taiwan | 15,828 | 16,506 | 16,333 | 18,431 | 18,034 | -398 | -2.2 |
| Korea | 15,976 | 19,706 | 15,382 | 14,332 | 15,076 | 744 | 5.2 |
| Germany | 7,987 | 9,043 | 9,969 | 10,926 | 11,960 | 1,034 | 9.5 |
| Singapore | 10,066 | 10,477 | 9,853 | 10,296 | 10,852 | 557 | 5.4 |
| United Kingdom | 4,800 | 5,319 | 5,413 | 5,532 | 5,701 | 169 | 3.1 |
| All other | 43,075 | 45,891 | 50,092 | 50,376 | 51,973 | 1,597 | 3.2 |
| Total | 239,265 | 280,463 | 305,667 | 332,485 | 353,009 | 20,524 | 6.2 |
| EU-27 | 30,778 | 34,145 | 36,184 | 36,405 | 38,114 | 1,708 | 4.7 |
| OPEC | 1,767 | 2,071 | 2,241 | 1,774 | 1,882 | 108 | 6.1 |
| Latin America | 38,145 | 41,788 | 43,590 | 50,280 | 57,046 | 6,766 | 13.5 |
| CBERA | 1,389 | 1,305 | 1,316 | 1,410 | 1,496 | 85 | 6.0 |
| Asia | 153,813 | 186,101 | 205,380 | 224,948 | 236,023 | 11,075 | 4.9 |
| Sub-Saharan Africa | 66 | 71 | 76 | 85 | 94 | 8 | 9.9 |
| Central and Eastern Europe | 1,425 | 1,783 | 2,136 | 2,057 | 2,243 | 187 | 9.1 |
| U.S. merchandise trade balance: | | | | | | | |
| China | -41,330 | -62,350 | -78,906 | -92,176 | -105,034 | -12,858 | -13.9 |
| Mexico | -18,170 | -21,588 | -23,572 | -28,750 | -35,605 | -6,855 | -23.8 |
| Japan | -17,824 | -20,787 | -20,545 | -19,300 | -20,748 | -1,448 | -7.5 |
| Malaysia | -13,406 | -15,728 | -21,240 | -22,441 | -19,433 | 3,008 | 13.4 |
| Canada | 6,895 | 6,626 | 6,461 | 6,419 | 6,041 | -378 | -5.9 |
| Taiwan | -10,273 | -10,881 | -10,870 | -12,520 | -11,737 | 783 | 6.3 |
| Korea | -8,890 | -12,316 | -7,485 | -5,908 | -7,812 | -1,903 | -32.2 |
| Germany | -353 | -1,514 | -2,022 | -1,813 | -2,614 | -802 | -44.2 |

TABLE EL.1 Electronic products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—Continued

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------------|------------------------|-----------------|-----------------|-----------------|-----------------|------------------------|--------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| Singapore | -5,075 | -4,473 | -3,813 | -4,260 | -4,194 | 66 | 1.6 |
| United Kingdom | 2,278 | 2,807 | 2,114 | 1,981 | 1,207 | -775 | -39.1 |
| All other | 7,830 | 9,306 | 9,763 | 15,662 | 19,423 | 3,760 | 24.0 |
| Total | -98,318 | -130,899 | -150,115 | -163,105 | -180,507 | -17,403 | -10.7 |
| EU-27 | 4,984 | 3,652 | 2,825 | 5,362 | 5,519 | 157 | 2.9 |
| OPEC | 357 | 1,145 | 1,851 | 3,261 | 3,731 | 470 | 14.4 |
| Latin America | -13,480 | -14,968 | -15,999 | -18,508 | -23,169 | -4,662 | -25.2 |
| CBERA | 694 | 547 | 751 | 1,286 | 1,191 | -96 | -7.4 |
| Asia | -98,164 | -128,260 | -145,961 | -159,840 | -172,678 | -12,838 | -8.0 |
| Sub-Saharan Africa | 711 | 807 | 933 | 1,147 | 1,181 | 35 | 3.0 |
| Central and Eastern Europe | -482 | -788 | -944 | -632 | -710 | -77 | -12.2 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

Nonetheless, exports in several U.S. sectors continued to expand 2007. For example, U.S. exports of telecommunications equipment grew by 14 percent to \$16.9 billion, as China and India continued to expand their investments in their communications networks and infrastructure to meet the demands of their rapidly growing economies.²⁷⁴ U.S. exports of medical goods increased by 9 percent to \$25.4 billion, making the medical goods industry the leading U.S. exporter of electronic products. U.S. manufacturers benefitted from increased exports of medical equipment to China, which grew by 25 percent to \$793 million in 2007, as that country became the second largest market²⁷⁵ for medical goods in Asia, after Japan, and among the fastest growing market worldwide.²⁷⁶ U.S. exports of measuring and testing equipment also continued to grow in 2007, increasing by 7 percent to \$21.0 billion.

U.S. Imports

The increase in telecommunications equipment imports was primarily driven by unabated U.S. consumer demand for the latest advances in cellular telephones.²⁷⁷ Meanwhile, the rise in television imports largely resulted from an increase in purchases of digital TVs, as U.S. consumers prepared for the transition from analog to digital TV in February 2009.²⁷⁸ Finally, continued demand for laptop computers contributed to the rise in U.S. imports of computer equipment.²⁷⁹ China and Mexico were responsible for the largest portion of the growth (98 percent) in U.S. imports of electronic products in 2007; other important suppliers of electronic products in that year included Germany and Korea.

²⁷⁴ Eltek, "Companies in the Global Telecom Equipment Market Supply Infrastructure and Services to Telecom Operators," 1; Popkins, "China's ICT Industry: Current State and Future Direction," 1; and Payne, "The Asia-Pacific Telecommunications Marketplace," 1.

²⁷⁵ Rubin, "The Red Hot Market for Medical Devices in China," 1; Espicom Business Intelligence Ltd, *The Medical Device Market: China*, 1-112; and Gold, *Healthcare: Products and Supplies*, 16.

²⁷⁶ "China Medical Device Market Research and Forecast," 1.

²⁷⁷ Moorman, "Telecommunications: Wireless," 1.

²⁷⁸ FCC, "The Digital TV Transition," 1.

²⁷⁹ Smith, "Computers: Hardware," 1.

TABLE EL.2 Electronic products: Leading changes in U.S. exports and imports, 2003–07

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|---|--------|--------|--------|--------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. EXPORTS: | | | | | | | | |
| Increases: | | | | | | | | |
| EL002 | Telecommunications equipment | 10,946 | 13,958 | 14,183 | 14,779 | 16,882 | 2,103 | 14.2 |
| EL022 | Medical goods | 16,936 | 18,548 | 21,114 | 23,443 | 25,446 | 2,003 | 8.5 |
| EL025 | Measuring, testing, and controlling instruments | 14,683 | 16,603 | 17,399 | 19,669 | 20,963 | 1,294 | 6.6 |
| EL005 | Navigational instruments and remote control apparatus | 2,866 | 3,082 | 3,217 | 3,786 | 4,437 | 651 | 17.2 |
| EL003 | Consumer electronics | 3,200 | 3,391 | 3,536 | 4,231 | 4,626 | 395 | 9.3 |
| EL011 | Circuit apparatus not exceeding 1000V | 4,431 | 5,138 | 5,327 | 6,124 | 6,517 | 393 | 6.4 |
| EL001 | Office machines | 725 | 682 | 751 | 911 | 1,295 | 384 | 42.2 |
| EL021 | Photographic cameras and equipment | 954 | 1,197 | 1,175 | 1,177 | 1,423 | 246 | 20.9 |
| EL012 | Circuit apparatus assemblies | 1,150 | 1,193 | 1,447 | 2,250 | 2,458 | 208 | 9.2 |
| EL003A | Television receivers and video monitors | 809 | 874 | 857 | 1,101 | 1,268 | 167 | 15.2 |
| EL024 | Drawing, drafting, and calculating instruments | 364 | 397 | 485 | 619 | 766 | 147 | 23.7 |
| EL020 | Optical goods, including ophthalmic goods | 3,309 | 3,992 | 4,664 | 5,041 | 5,166 | 125 | 2.5 |
| EL007 | Electric sound and visual signaling apparatus | 937 | 1,098 | 1,092 | 1,205 | 1,320 | 115 | 9.5 |
| EL013 | Parts of circuit apparatus | 1,807 | 2,201 | 2,348 | 2,530 | 2,630 | 100 | 3.9 |
| EL023 | Watches and clocks | 242 | 271 | 255 | 304 | 391 | 87 | 28.8 |
| EL019 | Optical fibers, optical fiber bundles and cables | 437 | 383 | 459 | 568 | 634 | 66 | 11.7 |
| EL010 | Circuit apparatus exceeding 1000V | 487 | 507 | 509 | 539 | 597 | 58 | 10.8 |
| EL018 | Photographic film and paper | 2,233 | 2,182 | 2,091 | 2,336 | 2,353 | 17 | 0.7 |
| Decreases: | | | | | | | | |
| EL017 | Computers, peripherals, and parts | 28,038 | 27,350 | 28,862 | 29,969 | 28,051 | -1,917 | -6.4 |
| EL015 | Semiconductors and integrated circuits | 35,712 | 35,130 | 34,195 | 37,227 | 35,487 | -1,740 | -4.7 |
| EL009 | Printed circuits | 1,742 | 1,836 | 1,781 | 1,864 | 1,531 | -333 | -17.9 |
| EL006 | Radio and television broadcasting equipment | 1,241 | 1,335 | 1,544 | 1,535 | 1,204 | -331 | -21.5 |
| EL004 | Blank and prerecorded media | 4,092 | 4,282 | 4,618 | 4,449 | 4,139 | -310 | -7.0 |
| EL008 | Electrical capacitors and resistors | 1,623 | 1,664 | 1,286 | 1,825 | 1,548 | -277 | -15.2 |
| EL016 | Miscellaneous electrical equipment | 1,426 | 1,968 | 2,419 | 2,537 | 2,341 | -195 | -7.7 |
| EL014 | Electron tubes | 1,366 | 1,173 | 791 | 465 | 297 | -167 | -36.0 |

See footnote(s) at end of table.

TABLE EL.2 Electronic products: Leading changes in U.S. exports and imports, 2003–07—*Continued*

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|---|--------|--------|--------|---------|------------------------|---------|-------|
| | | | | | | Absolute | Percent | |
| <i>Million dollars</i> | | | | | | | | |
| U.S. IMPORTS: | | | | | | | | |
| Increases: | | | | | | | | |
| EL002 | Telecommunications equipment | 30,982 | 39,341 | 49,220 | 53,318 | 60,699 | 7,381 | 13.8 |
| EL003A | Television receivers and video monitors | 12,654 | 17,509 | 22,712 | 28,628 | 33,267 | 4,639 | 16.2 |
| EL017 | Computers, peripherals, and parts | 76,940 | 89,264 | 93,950 | 102,468 | 106,789 | 4,321 | 4.2 |
| EL003 | Consumer electronics | 34,124 | 41,938 | 48,577 | 54,831 | 57,581 | 2,750 | 5.0 |
| EL022 | Medical goods | 16,576 | 19,324 | 20,947 | 22,573 | 24,878 | 2,305 | 10.2 |
| EL025 | Measuring, testing, and controlling instruments | 12,638 | 14,367 | 15,359 | 16,573 | 18,678 | 2,105 | 12.7 |
| EL005 | Navigational instruments and remote control apparatus | 2,286 | 2,761 | 3,241 | 3,996 | 5,590 | 1,595 | 39.9 |
| EL020 | Optical goods, including ophthalmic goods | 4,495 | 5,386 | 5,626 | 6,294 | 7,137 | 843 | 13.4 |
| EL012 | Circuit apparatus assemblies | 2,920 | 3,341 | 3,941 | 4,496 | 5,026 | 530 | 11.8 |
| EL011 | Circuit apparatus not exceeding 1000V | 5,127 | 6,259 | 6,818 | 7,369 | 7,777 | 408 | 5.5 |
| EL001 | Office machines | 1,544 | 1,732 | 1,793 | 1,877 | 2,145 | 269 | 14.3 |
| EL023 | Watches and clocks | 3,291 | 3,634 | 3,795 | 3,964 | 4,168 | 204 | 5.1 |
| EL013 | Parts of circuit apparatus | 1,206 | 1,526 | 1,730 | 1,992 | 2,145 | 153 | 7.7 |
| EL007 | Electric sound and visual signaling apparatus | 1,845 | 2,145 | 2,409 | 2,647 | 2,776 | 129 | 4.9 |
| EL010 | Circuit apparatus exceeding 1000V | 272 | 309 | 401 | 442 | 460 | 17 | 3.9 |
| EL009 | Printed circuits | 1,785 | 2,113 | 2,123 | 2,215 | 2,228 | 13 | 0.6 |
| EL021 | Photographic cameras and equipment | 2,715 | 2,382 | 1,880 | 1,612 | 1,614 | 2 | 0.1 |
| Decreases: | | | | | | | | |
| EL006 | Radio and television broadcasting equipment | 4,120 | 4,309 | 3,830 | 3,527 | 2,684 | -843 | -23.9 |
| EL015 | Semiconductors and integrated circuits | 24,190 | 26,256 | 25,425 | 27,022 | 26,259 | -762 | -2.8 |
| EL008 | Electrical capacitors and resistors | 1,964 | 2,035 | 2,177 | 2,721 | 2,453 | -268 | -9.8 |
| EL004 | Blank and prerecorded media | 4,563 | 5,333 | 5,747 | 5,748 | 5,550 | -199 | -3.5 |
| EL014 | Electron tubes | 780 | 869 | 759 | 560 | 374 | -186 | -33.2 |
| EL018 | Photographic film and paper | 1,820 | 1,951 | 1,845 | 1,657 | 1,541 | -116 | -7.0 |
| EL016 | Miscellaneous electrical equipment | 2,649 | 3,313 | 3,333 | 3,738 | 3,653 | -85 | -2.3 |
| EL024 | Drawing, drafting, and calculating instruments | 223 | 264 | 335 | 293 | 263 | -30 | -10.2 |
| EL019 | Optical fibers, optical fiber bundles and cables | 210 | 310 | 408 | 554 | 543 | -12 | -2.1 |

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

Note: Calculations based on unrounded data.

^aThis 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.

Telecommunications Equipment²⁸⁰

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Change in 2007 from 2006:

U.S. trade deficit: Increased by \$5.3 billion (14 percent) to \$43.8 billion

U.S. exports: Increased by \$2.1 billion (14 percent) to \$16.9 billion

U.S. imports: Increased by \$7.4 billion (14 percent) to \$60.7 billion

The U.S. trade deficit in telecommunications equipment increased markedly for the sixth consecutive year, as the \$2.1 billion increase in exports was surpassed by a \$7.4 billion increase in imports in 2007 (table EL.3). Imports continued to increase mainly owing to strong domestic demand for wireless devices and growing manufacturing capacity of telecommunications equipment in Asia. Demand for fiber optic networks in the Netherlands spurred U.S. exports, while deteriorating relations with Venezuela resulted in a sharp decrease in U.S. exports of cellular phones.²⁸¹

In particular, the introduction of more advanced applications for cellular phones has fueled demand for devices that can accommodate those applications, especially smartphones, which are able to combine wireless functions with computing capabilities.²⁸² Imports of smartphones grew by 48 percent in 2007 to 20.7 million devices. Increased imports are reflected in sales by American telecom providers of WiMAX and Wi-Fi²⁸³ equipment, which rose by 586 percent and 17 percent, respectively.²⁸⁴

The erosion of landline subscribers in the United States over the past decade continued in 2007, ranging from a 5 percent decline in subscribers for small rural carriers to an 8 percent decline for larger former Baby Bell companies (including AT&T and Verizon).²⁸⁵ The resulting decrease in demand for wireline services led to declines of 13 percent and 21 percent in U.S. imports of parts of telephone sets and line telephone sets with cordless handsets, respectively.

²⁸⁰ This industry/commodity group includes both wireless and wired telecommunications equipment such as cellular telephones, facsimile machines, switches, and modems.

²⁸¹ EIU, *Industry Forecast: Telecoms and Technology, Venezuela*, November 2007, 8.

²⁸² Standard & Poor's, *Industry Surveys, Telecommunications: Wireless*, October 4, 2007, 6.

²⁸³ WiMAX stands for the Worldwide Interoperability for Microwave Access. WiMAX is a telecommunications technology that facilitates movements of wireless data over long distances. Wi-Fi is the name of a wireless technology used in home networks, mobile phones, and other applications.

²⁸⁴ Telecommunications Industry Association, *TIA 2008*, 2008, 174.

²⁸⁵ Standard & Poor's, *Industry Surveys: Telecommunications; Wireline*, February 7, 2008, 9.

TABLE EL.3 Telecommunications equipment (EL002): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|---------------|---------------|---------------|---------------|------------------------|-------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. exports of domestic merchandise: | | | | | | | |
| China | 545 | 616 | 645 | 747 | 727 | -20 | -2.6 |
| Mexico | 1,229 | 1,573 | 1,459 | 1,949 | 2,081 | 133 | 6.8 |
| Korea | 373 | 460 | 397 | 324 | 387 | 63 | 19.6 |
| Malaysia | 138 | 151 | 119 | 230 | 159 | -71 | -30.9 |
| Canada | 1,416 | 1,506 | 1,440 | 1,309 | 1,516 | 207 | 15.8 |
| Japan | 858 | 1,135 | 895 | 770 | 888 | 118 | 15.3 |
| Taiwan | 211 | 338 | 205 | 153 | 196 | 43 | 28.2 |
| Thailand | 78 | 102 | 248 | 120 | 107 | -13 | -10.9 |
| Singapore | 165 | 284 | 297 | 274 | 323 | 49 | 17.7 |
| Netherlands | 710 | 1,256 | 1,734 | 1,430 | 2,043 | 613 | 42.9 |
| All other | 5,222 | 6,537 | 6,744 | 7,474 | 8,455 | 981 | 13.1 |
| Total | 10,946 | 13,958 | 14,183 | 14,779 | 16,882 | 2,103 | 14.2 |
| EU-27 | 2,761 | 3,563 | 4,066 | 3,918 | 5,121 | 1,202 | 30.7 |
| OPEC | 459 | 839 | 1,035 | 1,322 | 1,362 | 40 | 3.0 |
| Latin America | 2,770 | 3,652 | 3,477 | 4,305 | 4,574 | 269 | 6.3 |
| CBERA | 321 | 262 | 299 | 390 | 345 | -44 | -11.4 |
| Asia | 3,027 | 3,966 | 3,788 | 3,583 | 3,844 | 261 | 7.3 |
| Sub-Saharan Africa | 169 | 213 | 245 | 328 | 285 | -43 | -13.1 |
| Central and Eastern Europe | 128 | 162 | 206 | 184 | 173 | -11 | -5.9 |
| U.S. imports of merchandise for consumption: | | | | | | | |
| China | 5,932 | 9,556 | 14,410 | 18,083 | 23,814 | 5,731 | 31.7 |
| Mexico | 4,664 | 5,913 | 5,645 | 7,123 | 8,961 | 1,838 | 25.8 |
| Korea | 5,936 | 8,668 | 6,435 | 5,742 | 7,144 | 1,401 | 24.4 |
| Malaysia | 3,495 | 3,778 | 7,512 | 7,871 | 5,149 | -2,722 | -34.6 |
| Canada | 2,470 | 2,713 | 3,275 | 3,335 | 3,084 | -251 | -7.5 |
| Japan | 1,477 | 1,588 | 1,851 | 1,719 | 1,835 | 116 | 6.8 |
| Taiwan | 810 | 833 | 1,282 | 2,322 | 2,219 | -102 | -4.4 |
| Thailand | 711 | 1,450 | 2,657 | 2,042 | 2,117 | 74 | 3.6 |
| Singapore | 356 | 648 | 551 | 629 | 1,769 | 1,140 | 181.2 |
| Netherlands | 30 | 32 | 14 | 16 | 17 | (^b) | 2.0 |
| All other | 5,101 | 4,161 | 5,588 | 4,435 | 4,589 | 154 | 3.5 |
| Total | 30,982 | 39,341 | 49,220 | 53,318 | 60,699 | 7,381 | 13.8 |
| EU-27 | 2,954 | 2,551 | 3,338 | 2,370 | 2,560 | 190 | 8.0 |
| OPEC | 31 | 44 | 96 | 90 | 57 | -33 | -36.8 |
| Latin America | 5,704 | 6,392 | 6,505 | 7,739 | 9,327 | 1,588 | 20.5 |
| CBERA | 37 | 52 | 43 | 23 | 28 | 5 | 19.6 |
| Asia | 19,195 | 26,978 | 35,290 | 39,013 | 44,751 | 5,738 | 14.7 |
| Sub-Saharan Africa | 10 | 6 | 5 | 8 | 10 | 2 | 19.1 |
| Central and Eastern Europe | 52 | 180 | 363 | 230 | 264 | 34 | 14.7 |
| U.S. merchandise trade balance: | | | | | | | |
| China | -5,387 | -8,940 | -13,765 | -17,336 | -23,087 | -5,751 | -33.2 |
| Mexico | -3,436 | -4,339 | -4,186 | -5,174 | -6,880 | -1,705 | -33.0 |
| Korea | -5,563 | -8,208 | -6,039 | -5,419 | -6,757 | -1,338 | -24.7 |
| Malaysia | -3,357 | -3,628 | -7,393 | -7,641 | -4,991 | 2,651 | 34.7 |
| Canada | -1,054 | -1,208 | -1,835 | -2,026 | -1,568 | 458 | 22.6 |

See footnote(s) at end of table.

TABLE EL.3 Telecommunications equipment (EL002): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–2007^a—*Continued*

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------------|------------------------|----------------|----------------|----------------|----------------|------------------------|--------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| Japan | -619 | -453 | -956 | -949 | -947 | 2 | 0.2 |
| Taiwan | -599 | -495 | -1,077 | -2,169 | -2,023 | 146 | 6.7 |
| Thailand | -633 | -1,348 | -2,409 | -1,922 | -2,010 | -88 | -4.6 |
| Singapore | -191 | -364 | -254 | -355 | -1,446 | -1,091 | -307.6 |
| Netherlands | 680 | 1,224 | 1,720 | 1,414 | 2,027 | 613 | 43.3 |
| All other | 121 | 2,375 | 1,156 | 3,040 | 3,866 | 826 | 27.2 |
| Total | -20,037 | -25,382 | -35,038 | -38,539 | -43,817 | -5,278 | -13.7 |
| EU-27 | -193 | 1,012 | 729 | 1,548 | 2,560 | 1,012 | 65.4 |
| OPEC | 428 | 795 | 939 | 1,231 | 1,305 | 73 | 6.0 |
| Latin America | -2,934 | -2,740 | -3,028 | -3,434 | -4,753 | -1,319 | -38.4 |
| CBERA | 285 | 210 | 256 | 366 | 317 | -49 | -13.3 |
| Asia | -16,168 | -23,011 | -31,502 | -35,431 | -40,907 | -5,476 | -15.5 |
| Sub-Saharan Africa | 160 | 208 | 241 | 320 | 276 | -44 | -13.9 |
| Central and Eastern Europe | 76 | -17 | -157 | -46 | -91 | -45 | -97.4 |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

U.S. Exports

U.S. exports of telecommunications equipment increased by \$2.1 billion (14 percent) to \$16.9 billion in 2007. The largest markets for U.S. sector exports were Mexico, the Netherlands, and Canada, which collectively accounted for slightly more than one-third of the total in 2007. Export markets experiencing shifts in 2007 were the Netherlands (increased by 43 percent), Taiwan (increased by 29 percent), and Malaysia (decreased by 31 percent).

The construction of fiber optic networks drove the increase in U.S. exports to the Netherlands. Exports of transmission and reception apparatus for telecommunications networks grew by \$856 million (35 percent) in 2007, in part because the Telecommunication Act, passed by the Netherlands legislature in 2006, allows municipalities to join with private companies to build fiber-optic networks, including the approximately \$204 million (€300 million) fiber-optic network under construction in Amsterdam.²⁸⁶

The trend for multinational companies to relocate manufacturing centers to lower-cost China from other Asian countries in response to downward pressure on commodity prices has affected U.S. trade relations with Taiwan. While production of commoditized products has fallen, Taiwan retains leadership in research and development of higher-end IT products, specifically liquid-crystal display (LCD) panels and modems.²⁸⁷ Accordingly, the increase in exports to Taiwan includes parts for high-value added products, including modems, production of which has continued to grow there over the past several years.²⁸⁸

Exports to Malaysia varied only slightly between 2003 and 2007, with the exception of a sharp increase of approximately \$100 million in 2006. This irregularity reflects a one-time payment by a Malaysian satellite operator for a commercial communications satellite manufactured by Boeing in the United States. The 30 percent decline in exports this year is a return to earlier levels, reflecting the lack of further sales of satellite equipment.²⁸⁹

China's telecommunications industry is booming, especially owing to continued development of third-generation mobile systems in preparation for the 2008 Beijing Olympics. In 2007, its broadband market overtook the United States to become the largest in the world.²⁹⁰ U.S. exports of transmission and reception apparatus for telecommunications networks to China increased by \$154 million (38 percent) in 2007.

Strained relations between the United States and Venezuela and nationalization of the Venezuelan telecommunications sector in early 2007 led to lower investment in new technologies needed for further cellular telephone penetration by both Venezuelan and foreign sources.²⁹¹ As a result, U.S. exports of cellular telephones to Venezuela fell by \$121 million (43 percent) in 2007, contributing most to the overall decrease in U.S. cellular telephone exports of \$149 million (10 percent).

²⁸⁶ Telecommunications Industry Association, *TIA 2008*, 2008, 266.

²⁸⁷ Economist Intelligence Unit (EIU), *Industry Briefing: Telecoms and Technology, Taiwan*, December 2007, 1.

²⁸⁸ *Ibid.*, 2.

²⁸⁹ Boeing Web site, "Boeing Receives First Signals from New MEASAT-3 Satellite," *News Release*, December 12, 2006.

²⁹⁰ EIU, *Country Profile 2008: China*, 2008, 32.

²⁹¹ EIU, *Industry Forecast: Telecoms and Technology, Venezuela*, November 2007, 8.

U.S. Imports

U.S. imports of telecommunications equipment increased by \$7.4 billion (14 percent) to \$60.7 billion in 2007. The largest import sources were China, Mexico, Korea, and Malaysia, the same four countries as in 2006. Imports increased significantly from Singapore (181 percent), China (32 percent), Mexico (26 percent), and Korea (24 percent). Imports from Malaysia fell by 35 percent.

The acquisition of Solectron, a U.S. electronics manufacturer, by Singapore-based competitor Flextronics in June 2007 helps to explain both the increase in U.S. imports from Singapore and the decline in imports from Malaysia.²⁹² Solectron operates in 20 countries worldwide, but primarily in the United States and Malaysia.²⁹³ Flextronics management cited Solectron's strength in telecom manufacturing operations as a particular benefit to Flextronics' existing capabilities.²⁹⁴ Telephone handsets, likely manufactured by Solectron and exported to the United States by Flextronics, accounted for most of the sharp increase in imports from Singapore. The decrease in imports of line telephone sets with cordless handsets (by 52 percent) from Malaysia can thus be partially attributed to Solectron's absorption by Flextronics.

U.S. sector imports from China reached \$23.8 billion in 2007, continuing the trend of telecommunications equipment imports from China increasing by an annual average rate of 35 percent since 2003. Specifically, imports of cellular telephones and transmission and reception apparatus for telecommunications networks experienced double-digit growth in 2007 (26 percent and 63 percent, respectively). This increase may be partially due to regulatory changes in China that allowed Chinese telecom companies to enter international markets (primarily in the lower-tier product segments).²⁹⁵

²⁹² *Associated Press*, "Flextronics Buying Solectron for \$3.6 Billion," June 4, 2007.

²⁹³ Datamonitor, *Company Profile: Solectron*, May 18, 2007, 4.

²⁹⁴ Flextronics and Solectron, Flextronics to Acquire Solectron," June 4, 2007.

²⁹⁵ For example, see Motorola, Inc., *Form 10-K*, 2007.

Change in 2007 from 2006:

U.S. trade surplus: Declined by \$302 million (35 percent) to \$569 million

U.S. exports: Increased by \$2.0 billion (9 percent) to \$25.4 billion

U.S. imports: Increased by \$2.3 billion (10 percent) to \$24.9 billion

The U.S. trade surplus in medical goods declined after expanding for two consecutive years, falling by 35 percent to \$569 million in 2007 (table EL.4). Continued growth in demand in the United States, which spent over 16 percent of its GDP on healthcare in 2007, led to double digit increases in imports from China, Mexico, France, the United Kingdom, and Germany. At the same time, U.S. export growth in cardiovascular and orthopedic products slowed as major safety concerns surfaced concerning implantable cardiac defibrillators²⁹⁷ and drug eluting stents.²⁹⁸ These concerns led to recalls of the devices,²⁹⁹ while pricing problems and a lag in new product introductions slowed growth in U.S. exports of hip and knee implants.³⁰⁰ Regulatory approval delays in selected overseas markets also had a negative impact on U.S. exports of new products.

U.S. Exports

U.S. exports of medical goods increased by 9 percent to \$25.4 billion in 2007. China and Switzerland represented the most robust markets for U.S. exports in that year. U.S. exports to China increased by 25 percent to \$793 million, as China became the second largest

²⁹⁶ This industry/commodity group includes surgical and medical instruments, orthopedic and prosthetic appliances, and electromedical equipment.

²⁹⁷ Implantable cardiac defibrillators are small pacemaker-like devices implanted beneath the skin that monitor heart rhythm and correct abnormal and potentially fatal heart rhythms by sending an electrical shock to the heart.

²⁹⁸ Drug eluting stents are tiny, hollow metal or plastic tubes inserted into an artery or blood vessel to restore blood flow. They are coated with a drug that prevents scarring of the arterial tissue.

²⁹⁹ In 2007, major product recalls and safety concerns involving cardiac defibrillators and stents slowed sales momentum for U.S. firms in both domestic and foreign markets. In early 2007, recalls of defibrillators mandated in the United States, the EU, and Japan affected the market leader, Boston Scientific, and Medtronic, which announced a worldwide recall of its Sprint Fidelis defibrillator leads due to a higher-than-expected rate of fracture, which may have been connected with the deaths of five patients. Although St. Jude Medical Inc., the third largest manufacturer of defibrillators and other cardiovascular devices, did not face recalls, it was also affected due to concerns in U.S. and foreign markets regarding defibrillators. Gold, "Healthcare: Products and Supplies," March 13, 2008, 5–20; U.S. industry and government officials, telephone interviews by Commission staff, September 23 and 25, 2008.

³⁰⁰ Gold, "Healthcare: Products and Supplies," March 13, 2007, 5–20; and U.S. industry and government officials, telephone interviews by Commission staff, September 23 and 25, 2008.

TABLE EL.4 Medical goods (EL022): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|---|------------------------|---------------|---------------|---------------|---------------|------------------------|------------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise: | | | | | | | | |
| Germany | 1,681 | 1,605 | 1,717 | 2,060 | 2,235 | 175 | 8.5 | |
| Mexico | 999 | 1,049 | 1,203 | 1,379 | 1,341 | -37 | -2.7 | |
| Ireland | 1,294 | 1,362 | 1,344 | 980 | 1,126 | 146 | 14.9 | |
| Japan | 2,314 | 2,413 | 2,628 | 2,731 | 2,834 | 103 | 3.8 | |
| Netherlands | 1,619 | 1,941 | 2,284 | 2,693 | 2,599 | -95 | -3.5 | |
| Canada | 1,388 | 1,558 | 1,748 | 1,906 | 2,069 | 163 | 8.6 | |
| China | 454 | 494 | 594 | 633 | 793 | 160 | 25.3 | |
| United Kingdom | 852 | 993 | 1,175 | 1,184 | 1,183 | (^c) | (^c) | |
| France | 860 | 881 | 986 | 1,077 | 1,143 | 66 | 6.1 | |
| Switzerland | 477 | 462 | 534 | 651 | 791 | 140 | 21.6 | |
| All other | 4,998 | 5,790 | 6,901 | 8,150 | 9,332 | 1,182 | 14.5 | |
| Total | 16,936 | 18,548 | 21,114 | 23,443 | 25,446 | 2,003 | 8.5 | |
| EU-27 | 8,194 | 9,009 | 10,033 | 11,114 | 11,887 | 773 | 7.0 | |
| OPEC | 209 | 262 | 361 | 451 | 552 | 100 | 22.2 | |
| Latin America | 1,740 | 1,928 | 2,294 | 2,666 | 2,952 | 285 | 10.7 | |
| CBERA | 113 | 116 | 145 | 193 | 216 | 24 | 12.3 | |
| Asia | 3,984 | 4,251 | 4,862 | 5,175 | 5,647 | 471 | 9.1 | |
| Sub-Saharan Africa | 93 | 113 | 155 | 165 | 171 | 6 | 3.5 | |
| Central and Eastern Europe | 103 | 119 | 161 | 151 | 199 | 48 | 32.0 | |
| U.S. imports of merchandise for consumption: | | | | | | | | |
| Germany | 2,347 | 2,888 | 3,314 | 3,641 | 4,030 | 389 | 10.7 | |
| Mexico | 2,355 | 2,621 | 3,077 | 3,515 | 4,101 | 586 | 16.7 | |
| Ireland | 2,854 | 4,056 | 3,707 | 3,471 | 3,480 | 9 | 0.3 | |
| Japan | 1,329 | 1,504 | 1,696 | 1,695 | 1,708 | 13 | 0.8 | |
| Netherlands | 471 | 530 | 608 | 610 | 657 | 46 | 7.6 | |
| Canada | 492 | 542 | 574 | 647 | 595 | -52 | -8.0 | |
| China | 709 | 809 | 1,006 | 1,356 | 1,622 | 267 | 19.7 | |
| United Kingdom | 444 | 529 | 648 | 860 | 982 | 122 | 14.2 | |
| France | 511 | 605 | 639 | 695 | 810 | 115 | 16.5 | |
| Switzerland | 1,205 | 1,144 | 1,071 | 1,074 | 1,158 | 84 | 7.8 | |
| All other | 3,859 | 4,095 | 4,607 | 5,008 | 5,733 | 725 | 14.5 | |
| Total | 16,576 | 19,324 | 20,947 | 22,573 | 24,878 | 2,305 | 10.2 | |
| EU-27 | 7,632 | 9,763 | 10,250 | 10,662 | 11,499 | 837 | 7.9 | |
| OPEC | 11 | 12 | 13 | 10 | 11 | 1 | 10.0 | |
| Latin America | 3,300 | 3,538 | 4,058 | 4,557 | 5,213 | 656 | 14.4 | |
| CBERA | 471 | 480 | 525 | 578 | 640 | 61 | 10.6 | |
| Asia | 3,258 | 3,525 | 4,055 | 4,440 | 5,061 | 621 | 14.0 | |
| Sub-Saharan Africa | 6 | 8 | 15 | 17 | 15 | -1 | -6.8 | |
| Central and Eastern Europe | 62 | 83 | 59 | 80 | 110 | 30 | 38.2 | |

See footnote(s) at end of table.

TABLE EL.4 Medical goods (EL022): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—Continued

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|---------------------------------|------------------------|--------|--------|--------|--------|------------------------|---------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. merchandise trade balance: | | | | | | | | |
| Germany | -666 | -1,283 | -1,597 | -1,582 | -1,796 | -214 | -13.5 | |
| Mexico | -1,356 | -1,571 | -1,874 | -2,137 | -2,760 | -623 | -29.2 | |
| Ireland | -1,560 | -2,695 | -2,364 | -2,491 | -2,354 | 136 | 5.5 | |
| Japan | 985 | 909 | 932 | 1,036 | 1,127 | 90 | 8.7 | |
| Netherlands | 1,149 | 1,410 | 1,676 | 2,083 | 1,942 | -141 | -6.8 | |
| Canada | 896 | 1,016 | 1,174 | 1,259 | 1,474 | 215 | 17.0 | |
| China | -255 | -316 | -412 | -723 | -830 | -107 | -14.7 | |
| United Kingdom | 408 | 463 | 527 | 323 | 201 | -123 | -37.9 | |
| France | 349 | 276 | 347 | 382 | 333 | -49 | -12.8 | |
| Switzerland | -728 | -682 | -537 | -423 | -366 | 56 | 13.3 | |
| All other | 1,139 | 1,695 | 2,294 | 3,142 | 3,599 | 457 | 14.5 | |
| Total | 360 | -776 | 166 | 871 | 569 | -302 | -34.7 | |
| EU-27 | 562 | -754 | -217 | 452 | 387 | -65 | -14.3 | |
| OPEC | 198 | 250 | 348 | 441 | 541 | 99 | 22.5 | |
| Latin America | -1,560 | -1,610 | -1,764 | -1,891 | -2,261 | -370 | -19.6 | |
| CBERA | -358 | -364 | -380 | -386 | -423 | -38 | -9.7 | |
| Asia | 726 | 725 | 807 | 735 | 586 | -149 | -20.3 | |
| Sub-Saharan Africa | 87 | 105 | 140 | 148 | 155 | 7 | 4.7 | |
| Central and Eastern Europe | 41 | 36 | 102 | 71 | 89 | 18 | 25.1 | |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

^cLess than 0.05 percent.

market³⁰¹ for medical goods in Asia and one of the fastest growing.³⁰² China accounted for the greatest increase in U.S. exports of advanced and high technology products, such as advanced diagnostic imaging equipment, in 2007. China's aging population, rising standard of living, and government commitment to improve access to basic healthcare contributed to the growth of that market.³⁰³

In 2007, U.S. exports of medical equipment to Switzerland, which expended 11 percent of its GDP on healthcare, the highest rate in Europe and third highest rate in the world, grew by \$140 million (22 percent).³⁰⁴ Many Swiss doctors are trained in the United States, leading to a significant exchange in procedures and techniques, creating strong demand for U.S. equipment and supplies.³⁰⁵ Further, Switzerland has attracted investment in manufacturing facilities by a number of major U.S.-based medical device companies, which export parts and components to their Swiss facilities.³⁰⁶

After double-digit growth in U.S. exports of medical equipment to the EU in 2006, sales to the region rose by just 7 percent in 2007. This slower growth was the result of declining sales of U.S.-made cardiovascular products due to safety concerns and continued pressure by EU member governments to contain escalating healthcare costs.³⁰⁷ For example, Germany, the largest market for U.S. exports, initiated a "sweeping-and highly controversial-reform of [its] national healthcare system" to cut costs.³⁰⁸ Meanwhile, U.S. exports to Japan, the largest single country market for U.S.-made medical devices, continued to be sluggish, growing by less than 4 percent to \$2.8 billion, as regulatory hurdles made it difficult for U.S. manufacturers to gain approval in that market for sales of their newest cardiovascular products.³⁰⁹

U.S. Imports

In 2007, U.S. imports of medical goods increased by 10 percent to \$24.9 billion, with significant increases from the EU, Mexico, and China. The EU, led by Germany, Ireland, and the United Kingdom, accounted for \$11.5 billion of such imports, an increase of \$837 million (8 percent) from 2006. U.S. imports from Germany rose by 11 percent to \$4.0 billion, resulting in part from increased U.S. hospital demand for premium German-made surgical instruments and diagnostic imaging equipment from major electromedical producers such as Siemens. Imports from the United Kingdom increased significantly as several British orthopedic manufacturers were the first companies to gain U.S. Food and Drug Administration (FDA) approval for sales of hip resurfacing systems in the United

³⁰¹ Rubin, "The Red Hot Market for Medical Devices in China," September 8, 2006, 1; Espicom Business Intelligence Ltd, *The Medical Device Market: China*, July 2007, 1-112; and Gold, "Healthcare: Products and Supplies," March 13, 2008, 16.

³⁰² Some experts predict that China will surpass Japan and become the second leading market for medical devices in the world. *Research and Markets*, "China Medical Device Market Research and Forecast," January 2008, 1.

³⁰³ BCC Research, "China Increasingly a Target Market for High-technology Medical Equipment," October 30, 2007, 1.

³⁰⁴ High Beam Research, "Switzerland: A Leading Technology Base," March 2005, 1-10.

³⁰⁵ "Switzerland 2007 Country Commercial Guide: Medical Equipment," 1.

³⁰⁶ Alch, *The U.S. Market for Medical Devices*, 2004, 8.

³⁰⁷ Diller, "Healthcare: Products and Supplies; Europe," September 2007, 6.

³⁰⁸ *Ibid.*

³⁰⁹ For more information on Japanese regulatory policies affecting medical devices, see USITC, *Medical Devices and Equipment*, March 2007, 6-1-6-34.

States.³¹⁰ One manufacturer also introduced a biocompatible knee implant to the United States in mid-2007, allowing patients to undergo less invasive operations.³¹¹ Meanwhile, U.S. imports from France, the second leading EU manufacturer of medical equipment after Germany, increased by 17 percent to \$810 million.³¹²

Mexico surpassed Germany as the largest single-country supplier of medical goods to the United States, accounting for \$4.1 billion of U.S. imports in 2007, an increase of \$586 million (17 percent) from the previous year. A number of U.S. and other foreign companies have expanded their manufacturing centers in Mexico because it offers lower operational costs, inexpensive but well-trained labor, reduced freight costs due to its proximity to the United States,³¹³ a favorable trade environment, few intellectual property concerns, and a stable pro-business government.³¹⁴ In recent years Mexico has also advanced technologically, and has begun producing advanced cardiovascular devices such as stents.³¹⁵

In 2007, U.S. imports from China rose by \$267 million (20 percent) to \$1.6 billion, and were largely accounted for by lower-technology products, such as personal massage devices. However, China's medical products industry has advanced technologically in recent years as a result of increased U.S., Japanese, and European investment in diagnostic imaging assembly and production.³¹⁶ For example, China has become a growing manufacturer and exporter of ultrasound imaging and patient monitoring equipment, with a broad range of its electromedical goods receiving regulatory approval by the FDA in the past several years.³¹⁷

³¹⁰ Such systems eliminate the need to remove the whole hip joint in hip surgery, thereby improving mobility of patients. Diller, "Healthcare: Products and Supplies; Europe," September 2007, 7–8.

³¹¹ Smith and Nephew, News Release, 2007, 1.

³¹² Canon Communications, "Canon Communications to Launch MEDTEC France in 2009," *News Release*, March 11, 2008, 1.

³¹³ Whitney, "South of the Border and Beyond," March 2006, 1.

³¹⁴ Delporte, "Manufacturing Without Borders," March 2007, 1.

³¹⁵ *Mexico Watch*, "Cordis de Mexico VPO Victor Chance," October 1, 2006, 1.

³¹⁶ In 2007, China's health industry recorded the highest investment rate among that country's industries, accounting for just under 17 percent of total investment, with medical devices as one of two areas in which institutional investors had the greatest interest (pharmaceuticals was the other). Almost all leading global diagnostic imaging industry players have formed joint ventures in the Chinese medical equipment industry, including General Electric (United States), Siemens (Germany), Philips (Netherlands), Hitachi (Japan), and Toshiba (Japan). BCC Research, "The Medical Equipment Market in China," June 2007, 1; Research and Markets, "China Medical Device Market Research and Forecast," January 2008, 2; and U.S. industry officials, telephone interviews by Commission staff, April 28, 2008.

³¹⁷ *FDANews*, "Mindray Receives Multiple Approvals," April 1, 2008.

Measuring, Testing, and Controlling Instruments

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Change in 2007 from 2006:

U.S. trade surplus: Decreased by \$811 million (26 percent) to \$2.3 billion

U.S. exports: Increased by \$1.3 billion (7 percent) to \$21.0 billion

U.S. imports: Increased by \$2.1 billion (13 percent) to \$18.7 billion

The decrease in the U.S. trade surplus for measuring, testing, and controlling instruments occurred because the growth rate in U.S. exports (\$1.3 billion, or 7 percent) was approximately one-half that for U.S. imports (\$2.1 billion, or 13 percent) (table EL.5). 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 factors contributed to the increased value in U.S. trade in these products in 2007, including ongoing scientific and technological advances among a wide variety of end-use industries that require advances in instrument precision to meet the growing demand for higher quality, safety, and environmental control standards.³¹⁸ Commensurate with the growth in the value of trade for these instruments was continued economic growth in the United States and its major trading partners—Canada, China, Germany, Japan, Mexico, and the United Kingdom.

U.S. Exports

Canada remained the leading market for U.S. exports of measuring, testing, and controlling instruments in 2007, accounting for nearly \$3.1 billion (15 percent) of total sector exports in 2007. Other major markets for U.S. exports in 2007 were China, Germany, Japan, and Mexico, which together accounted for \$6.2 billion (30 percent) of total U.S. exports. The 2007 growth in U.S. exports to these and other countries was dominated by instruments for physical and chemical analysis (increased by 14 percent to \$4.3 billion);³¹⁹ instruments for measuring flow; level, and pressure of liquids and gases (increased by 22 percent to \$1.7 billion);³²⁰ and parts for measuring, testing, and controlling instruments (an increase of 4 percent to \$6.3 billion).

³¹⁸ Examples of end-use industries and developments include: wireless communications and high-speed internet; the automotive industry and the move to more fuel efficient and alternative fuel vehicles; manufacturing and the need for continuous control readings to schedule maintenance before equipment failure; and fuel pipelines (gas and petroleum) and the need for continuous flow readings for early maintenance detection. Electronic Manufacturing, “Electronic Test and Measurement Instruments Market,” 2007.

³¹⁹ Examples include instruments using optical radiations for measuring light wave lengths, spectrometers for measuring light properties over a specified portion of the electromagnetic spectrum, instruments for analyzing gas and smoke, and chromatograph and electrophoresis instruments for separating and isolating molecules to be measured from other molecules of a mixture.

³²⁰ Examples include flow meters, level gauges, manometers, and heat meters.

TABLE EL.5 Measuring, testing, and controlling instruments (EL025): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|---------------|---------------|---------------|---------------|------------------------|-------------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| U.S. exports of domestic merchandise: | | | | | | | |
| Canada | 2,759 | 2,897 | 2,877 | 3,035 | 3,072 | 38 | 1.2 |
| Mexico | 1,346 | 1,597 | 1,490 | 1,438 | 1,585 | 147 | 10.2 |
| Germany | 1,013 | 1,218 | 1,345 | 1,535 | 1,627 | 92 | 6.0 |
| Japan | 1,391 | 1,508 | 1,405 | 1,685 | 1,457 | -228 | -13.6 |
| China | 782 | 996 | 1,109 | 1,349 | 1,533 | 185 | 13.7 |
| United Kingdom | 845 | 825 | 830 | 909 | 957 | 48 | 5.2 |
| France | 498 | 596 | 685 | 833 | 794 | -39 | -4.7 |
| Singapore | 511 | 582 | 577 | 692 | 779 | 87 | 12.6 |
| Malaysia | 242 | 265 | 261 | 353 | 303 | -50 | -14.2 |
| Korea | 548 | 637 | 782 | 754 | 810 | 56 | 7.4 |
| All other | 4,749 | 5,480 | 6,037 | 7,087 | 8,047 | 960 | 13.5 |
| Total | 14,683 | 16,603 | 17,399 | 19,669 | 20,963 | 1,294 | 6.6 |
| EU-27 | 4,044 | 4,491 | 4,867 | 5,470 | 5,756 | 286 | 5.2 |
| OPEC | 367 | 386 | 546 | 753 | 913 | 160 | 21.3 |
| Latin America | 1,930 | 2,264 | 2,325 | 2,468 | 2,869 | 402 | 16.3 |
| CBERA | 150 | 136 | 156 | 196 | 209 | 13 | 6.5 |
| Asia | 4,716 | 5,576 | 5,755 | 6,672 | 6,823 | 151 | 2.3 |
| Sub-Saharan Africa | 105 | 136 | 148 | 195 | 270 | 75 | 38.3 |
| Central and Eastern Europe | 103 | 120 | 148 | 195 | 250 | 55 | 28.0 |
| U.S. imports of merchandise for consumption: | | | | | | | |
| Canada | 1,037 | 1,152 | 1,320 | 1,496 | 1,652 | 155 | 10.4 |
| Mexico | 3,106 | 2,872 | 2,850 | 2,800 | 3,066 | 267 | 9.5 |
| Germany | 1,528 | 1,889 | 2,093 | 2,299 | 2,548 | 249 | 10.8 |
| Japan | 2,017 | 2,359 | 2,356 | 2,447 | 2,578 | 131 | 5.4 |
| China | 835 | 1,162 | 1,333 | 1,471 | 1,746 | 275 | 18.7 |
| United Kingdom | 1,099 | 1,201 | 1,244 | 1,279 | 1,513 | 233 | 18.2 |
| France | 340 | 406 | 515 | 624 | 742 | 118 | 19.0 |
| Singapore | 241 | 277 | 277 | 302 | 377 | 75 | 24.7 |
| Malaysia | 252 | 385 | 464 | 565 | 706 | 141 | 25.0 |
| Korea | 62 | 67 | 81 | 134 | 151 | 16 | 12.2 |
| All other | 2,121 | 2,597 | 2,825 | 3,155 | 3,598 | 443 | 14.1 |
| Total | 12,638 | 14,367 | 15,359 | 16,573 | 18,678 | 2,105 | 12.7 |
| EU-27 | 4,050 | 4,887 | 5,283 | 5,677 | 6,457 | 781 | 13.8 |
| OPEC | 7 | 14 | 18 | 30 | 40 | 10 | 33.8 |
| Latin America | 3,167 | 2,930 | 2,910 | 2,898 | 3,161 | 262 | 9.1 |
| CBERA | 13 | 6 | 8 | 15 | 21 | 6 | 44.0 |
| Asia | 3,776 | 4,651 | 4,994 | 5,517 | 6,290 | 774 | 14.0 |
| Sub-Saharan Africa | 7 | 9 | 10 | 10 | 13 | 3 | 34.1 |
| Central and Eastern Europe | 125 | 181 | 200 | 215 | 211 | -4 | -1.9 |
| U.S. merchandise trade balance: | | | | | | | |
| Canada | 1,722 | 1,746 | 1,557 | 1,538 | 1,420 | -118 | -7.7 |
| Mexico | -1,760 | -1,276 | -1,359 | -1,362 | -1,481 | -120 | -8.8 |
| Germany | -515 | -671 | -748 | -764 | -921 | -157 | -20.6 |
| Japan | -626 | -851 | -951 | -762 | -1,122 | -359 | -47.1 |
| China | -53 | -166 | -224 | -123 | -213 | -90 | -73.7 |

See footnote(s) at end of table.

TABLE EL.5 Measuring, testing, and controlling instruments (EL025): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—*Continued*

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|----------------------------------|------------------------|--------------|--------------|--------------|--------------|------------------------|----------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| United Kingdom | -254 | -376 | -414 | -370 | -556 | -186 | -50.2 | |
| France | 158 | 191 | 171 | 210 | 52 | -157 | -75.0 | |
| Singapore | 270 | 305 | 300 | 390 | 402 | 12 | 3.2 | |
| Malaysia | -9 | -120 | -204 | -212 | -403 | -191 | -90.1 | |
| Korea | 486 | 571 | 701 | 620 | 659 | 40 | 6.4 | |
| All other | 2,628 | 2,883 | 3,212 | 3,932 | 4,448 | 516 | 13.1 | |
| Total | 2,046 | 2,237 | 2,040 | 3,096 | 2,286 | -811 | -26.2 | |
| EU-27 | -6 | -395 | -416 | -207 | -702 | -495 | -239.0 | |
| OPEC | 360 | 373 | 528 | 723 | 873 | 150 | 20.8 | |
| Latin America | -1,236 | -666 | -585 | -430 | -291 | 139 | 32.3 | |
| CBERA | 137 | 129 | 148 | 181 | 188 | 6 | 3.5 | |
| Asia | 939 | 924 | 761 | 1,155 | 533 | -622 | -53.9 | |
| Sub-Saharan Africa | 98 | 126 | 138 | 186 | 257 | 72 | 38.5 | |
| Central and Eastern Europe | -22 | -61 | -52 | -19 | 39 | 59 | ^(b) | |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bNot meaningful for purposes of comparison.

U.S. Imports

Mexico maintained its position as the leading supplier of measuring, testing, and controlling instruments to the U.S. market in 2007, accounting for nearly \$3.1 billion (16 percent) of total sector imports. The value of imports from Mexico increased for the first time in three years, by \$267 million (10 percent), due in part to an increase in the average unit value of imported instruments.³²¹ The value of imports of measuring, testing, and controlling instruments from other major suppliers also increased. Japan and Germany continued as the second and third largest suppliers, together accounting for \$5.1 billion (27 percent) of total imports in 2007. The 2007 growth in U.S. imports from Japan, Germany, and other major suppliers was dominated by parts for sector products (increased by 12 percent to \$4.5 billion) due in large part to the globalization of instrument supply chains. The largest increase in parts was for those for physical and chemical analysis instruments.³²² In conjunction with their corresponding parts, imports of physical and chemical analysis instruments also increased in 2007, by 20 percent to \$2.8 billion, followed by instruments for measuring flow, level, and pressure of liquids and gases, which increased by 21 percent to \$1.6 billion.

³²¹ For HTS instrument classifications under which quantity data are collected, the number of instruments imported from Mexico in 2007 decreased by 5 percent to 149.9 million instruments compared with 2006. At the same time, the unit value of instruments from Mexico increased by 13 percent to \$9.51.

³²² Parts for physical and chemical analysis instruments increased by 13 percent to \$1.2 billion in 2007. The majority of these parts were sourced from Japan, Germany, United Kingdom, and Switzerland, which together accounted for nearly \$733 million or 62 percent of total imports.

TABLE EL.6 Electronic products : U.S. trade for industry/commodity groups and subgroups, 2003–2007^a

| USITC code ^b | and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|---|---------|---------|---------|---------|---------|------------------------|---------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| EL001 | Office machines: | | | | | | | |
| | Exports | 725 | 682 | 751 | 911 | 1,295 | 384 | 42.2 |
| | Imports | 1,544 | 1,732 | 1,793 | 1,877 | 2,145 | 269 | 14.3 |
| | Trade balance | -819 | -1,050 | -1,041 | -966 | -851 | 115 | 11.9 |
| EL002 | Telecommunications equipment: | | | | | | | |
| | Exports | 10,946 | 13,958 | 14,183 | 14,779 | 16,882 | 2,103 | 14.2 |
| | Imports | 30,982 | 39,341 | 49,220 | 53,318 | 60,699 | 7,381 | 13.8 |
| | Trade balance | -20,037 | -25,382 | -35,038 | -38,539 | -43,817 | -5,278 | -13.7 |
| EL003 | Consumer electronics: | | | | | | | |
| | Exports | 3,200 | 3,391 | 3,536 | 4,231 | 4,626 | 395 | 9.3 |
| | Imports | 34,124 | 41,938 | 48,577 | 54,831 | 57,581 | 2,750 | 5.0 |
| | Trade balance | -30,924 | -38,546 | -45,041 | -50,600 | -52,956 | -2,356 | -4.7 |
| EL003A | Television receivers and video monitors: | | | | | | | |
| | Exports | 809 | 874 | 857 | 1,101 | 1,268 | 167 | 15.2 |
| | Imports | 12,654 | 17,509 | 22,712 | 28,628 | 33,267 | 4,639 | 16.2 |
| | Trade balance | -11,845 | -16,636 | -21,854 | -27,527 | -31,999 | -4,472 | -16.2 |
| EL004 | Blank and prerecorded media: | | | | | | | |
| | Exports | 4,092 | 4,282 | 4,618 | 4,449 | 4,139 | -310 | -7.0 |
| | Imports | 4,563 | 5,333 | 5,747 | 5,748 | 5,550 | -199 | -3.5 |
| | Trade balance | -471 | -1,051 | -1,129 | -1,300 | -1,411 | -111 | -8.5 |
| EL005 | Navigational instruments and remote control apparatus: | | | | | | | |
| | Exports | 2,866 | 3,082 | 3,217 | 3,786 | 4,437 | 651 | 17.2 |
| | Imports | 2,286 | 2,761 | 3,241 | 3,996 | 5,590 | 1,595 | 39.9 |
| | Trade balance | 580 | 321 | -23 | -210 | -1,153 | -943 | -449.4 |
| EL006 | Radio and television broadcasting equipment: | | | | | | | |
| | Exports | 1,241 | 1,335 | 1,544 | 1,535 | 1,204 | -331 | -21.5 |
| | Imports | 4,120 | 4,309 | 3,830 | 3,527 | 2,684 | -843 | -23.9 |
| | Trade balance | -2,879 | -2,974 | -2,286 | -1,991 | -1,479 | 512 | 25.7 |
| EL007 | Electric sound and visual signaling apparatus: | | | | | | | |
| | Exports | 937 | 1,098 | 1,092 | 1,205 | 1,320 | 115 | 9.5 |
| | Imports | 1,845 | 2,145 | 2,409 | 2,647 | 2,776 | 129 | 4.9 |
| | Trade balance | -908 | -1,047 | -1,317 | -1,443 | -1,456 | -14 | -1.0 |

See footnote(s) at end of table.

TABLE EL.6 Electronic products : U.S. trade for industry/commodity groups and subgroups, 2003–2007^a—Continued

| USITC code ^b | and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|---|--------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| EL008 | Electrical capacitors and resistors: | | | | | | | |
| | Exports | 1,623 | 1,664 | 1,286 | 1,825 | 1,548 | -277 | -15.2 |
| | Imports | 1,964 | 2,035 | 2,177 | 2,721 | 2,453 | -268 | -9.8 |
| | Trade balance | -341 | -371 | -891 | -896 | -905 | -9 | -1.0 |
| EL009 | Printed circuits: | | | | | | | |
| | Exports | 1,742 | 1,836 | 1,781 | 1,864 | 1,531 | -333 | -17.9 |
| | Imports | 1,785 | 2,113 | 2,123 | 2,215 | 2,228 | 13 | 0.6 |
| | Trade balance | -44 | -277 | -342 | -351 | -697 | -346 | -98.6 |
| EL010 | Circuit apparatus exceeding 1000V: | | | | | | | |
| | Exports | 487 | 507 | 509 | 539 | 597 | 58 | 10.8 |
| | Imports | 272 | 309 | 401 | 442 | 460 | 17 | 3.9 |
| | Trade balance | 215 | 197 | 109 | 97 | 137 | 41 | 42.1 |
| EL011 | Circuit apparatus not exceeding 1000V: | | | | | | | |
| | Exports | 4,431 | 5,138 | 5,327 | 6,124 | 6,517 | 393 | 6.4 |
| | Imports | 5,127 | 6,259 | 6,818 | 7,369 | 7,777 | 408 | 5.5 |
| | Trade balance | -696 | -1,120 | -1,491 | -1,245 | -1,261 | -15 | -1.2 |
| EL012 | Circuit apparatus assemblies: | | | | | | | |
| | Exports | 1,150 | 1,193 | 1,447 | 2,250 | 2,458 | 208 | 9.2 |
| | Imports | 2,920 | 3,341 | 3,941 | 4,496 | 5,026 | 530 | 11.8 |
| | Trade balance | -1,771 | -2,148 | -2,493 | -2,246 | -2,568 | -322 | -14.3 |
| EL013 | Parts of circuit apparatus: | | | | | | | |
| | Exports | 1,807 | 2,201 | 2,348 | 2,530 | 2,630 | 100 | 3.9 |
| | Imports | 1,206 | 1,526 | 1,730 | 1,992 | 2,145 | 153 | 7.7 |
| | Trade balance | 601 | 675 | 619 | 538 | 485 | -53 | -9.9 |
| EL014 | Electron tubes: | | | | | | | |
| | Exports | 1,366 | 1,173 | 791 | 465 | 297 | -167 | -36.0 |
| | Imports | 780 | 869 | 759 | 560 | 374 | -186 | -33.2 |
| | Trade balance | 587 | 304 | 32 | -96 | -77 | 19 | 19.6 |
| EL015 | Semiconductors and integrated circuits: | | | | | | | |
| | Exports | 35,712 | 35,130 | 34,195 | 37,227 | 35,487 | -1,740 | -4.7 |
| | Imports | 24,190 | 26,256 | 25,425 | 27,022 | 26,259 | -762 | -2.8 |
| | Trade balance | 11,522 | 8,874 | 8,770 | 10,205 | 9,227 | -978 | -9.6 |
| EL016 | Miscellaneous electrical equipment: | | | | | | | |
| | Exports | 1,426 | 1,968 | 2,419 | 2,537 | 2,341 | -195 | -7.7 |
| | Imports | 2,649 | 3,313 | 3,333 | 3,738 | 3,653 | -85 | -2.3 |
| | Trade balance | -1,223 | -1,345 | -914 | -1,201 | -1,311 | -110 | -9.2 |

See footnote(s) at end of table.

TABLE EL.6 Electronic products : U.S. trade for industry/commodity groups and subgroups, 2003–2007^a—*Continued*

| USITC code ^b | and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|---|---------|---------|---------|---------|---------|------------------------|---------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| EL017 | Computers, peripherals, and parts: | | | | | | | |
| | Exports | 28,038 | 27,350 | 28,862 | 29,969 | 28,051 | -1,917 | -6.4 |
| | Imports | 76,940 | 89,264 | 93,950 | 102,468 | 106,789 | 4,321 | 4.2 |
| | Trade balance | -48,902 | -61,914 | -65,087 | -72,499 | -78,738 | -6,239 | -8.6 |
| EL018 | Photographic film and paper: | | | | | | | |
| | Exports | 2,233 | 2,182 | 2,091 | 2,336 | 2,353 | 17 | 0.7 |
| | Imports | 1,820 | 1,951 | 1,845 | 1,657 | 1,541 | -116 | -7.0 |
| | Trade balance | 413 | 231 | 246 | 679 | 812 | 133 | 19.6 |
| EL019 | Optical fibers, optical fiber bundles and cables: | | | | | | | |
| | Exports | 437 | 383 | 459 | 568 | 634 | 66 | 11.7 |
| | Imports | 210 | 310 | 408 | 554 | 543 | -12 | -2.1 |
| | Trade balance | 227 | 74 | 51 | 14 | 92 | 78 | 570.0 |
| EL020 | Optical goods, including ophthalmic goods: | | | | | | | |
| | Exports | 3,309 | 3,992 | 4,664 | 5,041 | 5,166 | 125 | 2.5 |
| | Imports | 4,495 | 5,386 | 5,626 | 6,294 | 7,137 | 843 | 13.4 |
| | Trade balance | -1,186 | -1,395 | -962 | -1,253 | -1,971 | -718 | -57.3 |
| EL021 | Photographic cameras and equipment: | | | | | | | |
| | Exports | 954 | 1,197 | 1,175 | 1,177 | 1,423 | 246 | 20.9 |
| | Imports | 2,715 | 2,382 | 1,880 | 1,612 | 1,614 | 2 | 0.1 |
| | Trade balance | -1,761 | -1,185 | -704 | -435 | -191 | 244 | 56.1 |
| EL022 | Medical goods: | | | | | | | |
| | Exports | 16,936 | 18,548 | 21,114 | 23,443 | 25,446 | 2,003 | 8.5 |
| | Imports | 16,576 | 19,324 | 20,947 | 22,573 | 24,878 | 2,305 | 10.2 |
| | Trade balance | 360 | -776 | 166 | 871 | 569 | -302 | -34.7 |
| EL023 | Watches and clocks: | | | | | | | |
| | Exports | 242 | 271 | 255 | 304 | 391 | 87 | 28.8 |
| | Imports | 3,291 | 3,634 | 3,795 | 3,964 | 4,168 | 204 | 5.1 |
| | Trade balance | -3,049 | -3,363 | -3,539 | -3,660 | -3,777 | -116 | -3.2 |
| EL024 | Drawing, drafting, and calculating instruments: | | | | | | | |
| | Exports | 364 | 397 | 485 | 619 | 766 | 147 | 23.7 |
| | Imports | 223 | 264 | 335 | 293 | 263 | -30 | -10.2 |
| | Trade balance | 141 | 133 | 151 | 326 | 503 | 177 | 54.2 |

See footnote(s) at end of table.

TABLE EL.6 Electronic products : U.S. trade for industry/commodity groups and subgroups, 2003–2007^a—*Continued*

| USITC code ^b | and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|--|--------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| EL025 | Measuring, testing, and controlling instruments: | | | | | | | |
| | Exports | 14,683 | 16,603 | 17,399 | 19,669 | 20,963 | 1,294 | 6.6 |
| | Imports | 12,638 | 14,367 | 15,359 | 16,573 | 18,678 | 2,105 | 12.7 |
| | Trade balance | 2,046 | 2,237 | 2,040 | 3,096 | 2,286 | -811 | -26.2 |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bThis 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

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Miscellaneous Manufactures³²³

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Change in 2007 from 2006:

U.S. trade deficit: Increased by \$6.3 billion (9 percent) to \$78.0 billion

U.S. exports: Increased by \$3.5 billion (16 percent) to \$26.0 billion

U.S. imports: Increased by \$9.8 billion (10 percent) to \$103.9 billion

The U.S. trade deficit in miscellaneous manufactures expanded by \$6.3 billion (9 percent) to \$78 billion in 2007, largely reflecting rising imports of home video games³²⁴ (\$3.7 billion), toys (\$2.2 billion), and paintings (\$1.5 billion). China remained the dominant supplier (56 percent of total imports in 2007) of virtually all of the products covered in this broad industry sector, except works of art (table MS.1). The increase in imports of miscellaneous manufactures was partially offset by rising exports of paintings (\$1 billion), parts of home video games (\$719 million), and jewelry of precious or semiprecious stones (\$641 million).

U.S. Exports

In 2007, the leading increases in sector exports were in works of art and miscellaneous manufactured goods; toys and games; precious jewelry and related articles; and arms, ammunition, and armored vehicles, which collectively accounted for \$2.9 billion (83 percent) of the total increase in sector exports (tables MS.1 and MS.2). The principal export destinations for miscellaneous manufactures were Canada, the United Kingdom, Mexico, and Japan, which collectively accounted for 46 percent of the sector exports. Canada, the United Kingdom, and Mexico collectively accounted for 43 percent of the growth in sector exports in 2007, while exports to Japan declined by 6 percent (table MS.1). Leading the growth in exports to these markets in 2007 were parts of home video games to Mexico (\$539 million) and Canada (\$100 million); paintings and parts of military weapons (such as grenade launchers and torpedo tubes) to the United Kingdom (\$419 million and \$106 million, respectively); jewelry of precious or semiprecious stones to Japan (\$106 million); and prefabricated buildings to Canada (\$72 million).

³²³ 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.

³²⁴ There are four types of video games. "Home video games" consist of game consoles, with leads that connect the game consoles to television receivers to display the games. Components and accessories for home video games include game controllers and video game cartridges. Home video games, parts, and accessories are classified in HTS subheading 9504.10. Arcade video games, classified in HTS subheading 9504.30.00.10, are coin- or token-operated and appear in a wide variety of commercial establishments. Hand-held video games are classified with miscellaneous game machines in HTS subheading 9504.90.40. The fourth type, computer games, are games that employ a PC and monitor instead of a game console and television receiver. Computer games are software only, and are not included in toys and games, but rather are in the Electronic Products chapter, in the blank and Prerecorded Media digest.

TABLE MS.1 Miscellaneous manufactures: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|--|---------------|---------------|---------------|---------------|----------------|------------------------|-------------|
| | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | |
| China | 110 | 156 | 185 | 207 | 307 | 100 | 48.3 |
| Canada | 3,133 | 3,446 | 3,918 | 4,425 | 5,067 | 642 | 14.5 |
| United Kingdom | 1,297 | 1,515 | 1,703 | 2,458 | 2,949 | 491 | 20.0 |
| Mexico | 1,246 | 1,344 | 1,358 | 1,665 | 2,031 | 365 | 21.9 |
| France | 290 | 347 | 458 | 687 | 775 | 89 | 12.9 |
| Italy | 249 | 265 | 305 | 249 | 327 | 78 | 31.5 |
| Japan | 1,415 | 1,501 | 1,728 | 2,034 | 1,915 | -119 | -5.8 |
| India | 69 | 90 | 167 | 191 | 191 | -1 | -0.3 |
| Taiwan | 332 | 408 | 430 | 380 | 385 | 5 | 1.3 |
| Germany | 438 | 520 | 604 | 675 | 685 | 10 | 1.5 |
| All other | 5,631 | 6,631 | 7,581 | 9,467 | 11,322 | 1,854 | 19.6 |
| Total | 14,210 | 16,223 | 18,435 | 22,438 | 25,954 | 3,516 | 15.7 |
| EU-27 | 3,409 | 3,891 | 4,461 | 5,684 | 6,639 | 955 | 16.8 |
| OPEC | 503 | 529 | 650 | 741 | 936 | 195 | 26.3 |
| Latin America | 2,491 | 2,618 | 2,951 | 3,630 | 4,278 | 648 | 17.8 |
| CBERA | 530 | 551 | 777 | 859 | 924 | 65 | 7.5 |
| Asia | 3,035 | 3,651 | 4,030 | 4,887 | 5,293 | 406 | 8.3 |
| Sub-Saharan Africa | 88 | 132 | 145 | 156 | 192 | 36 | 23.3 |
| Central and Eastern Europe | 46 | 69 | 77 | 129 | 254 | 125 | 96.8 |
| U.S. imports of merchandise for consumption | | | | | | | |
| China | 35,636 | 40,490 | 46,122 | 51,068 | 58,306 | 7,238 | 14.2 |
| Canada | 5,566 | 5,889 | 5,903 | 6,013 | 5,825 | -188 | -3.1 |
| United Kingdom | 1,443 | 1,844 | 1,961 | 2,274 | 2,895 | 621 | 27.3 |
| Mexico | 3,125 | 3,506 | 3,845 | 3,953 | 3,800 | -153 | -3.9 |
| France | 2,182 | 2,609 | 2,618 | 3,037 | 3,937 | 900 | 29.6 |
| Italy | 3,839 | 3,575 | 3,520 | 3,464 | 3,804 | 340 | 9.8 |
| Japan | 1,879 | 1,906 | 2,474 | 2,026 | 1,969 | -57 | -2.8 |
| India | 1,618 | 1,958 | 2,310 | 3,021 | 2,915 | -106 | -3.5 |
| Taiwan | 2,272 | 2,324 | 2,337 | 2,256 | 2,297 | 41 | 1.8 |
| Germany | 1,343 | 1,501 | 1,536 | 1,713 | 1,816 | 103 | 6.0 |
| All other | 11,617 | 13,066 | 13,933 | 15,274 | 16,342 | 1,068 | 7.0 |
| Total | 70,521 | 78,669 | 86,559 | 94,099 | 103,905 | 9,807 | 10.4 |
| EU-27 | 11,164 | 12,250 | 12,473 | 13,602 | 15,931 | 2,329 | 17.1 |
| OPEC | 1,066 | 1,086 | 1,219 | 1,282 | 1,311 | 28 | 2.2 |
| Latin America | 4,410 | 5,024 | 5,434 | 5,496 | 5,295 | -201 | -3.6 |
| CBERA | 87 | 109 | 104 | 127 | 116 | -11 | -9.0 |
| Asia | 47,500 | 53,240 | 60,228 | 65,901 | 73,454 | 7,554 | 11.5 |
| Sub-Saharan Africa | 124 | 127 | 132 | 185 | 183 | -2 | -1.3 |
| Central and Eastern Europe | 536 | 695 | 822 | 792 | 783 | -10 | -1.2 |

TABLE MS.1 Miscellaneous manufactures: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—*Continued*

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--------------------------------|------------------------|---------|---------|---------|---------|------------------------|----------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. merchandise trade balance | | | | | | | | |
| China | -35,526 | -40,334 | -45,938 | -50,861 | -57,999 | -7,138 | -14.0 | |
| Canada | -2,433 | -2,443 | -1,985 | -1,588 | -758 | 830 | 52.3 | |
| United Kingdom | -146 | -329 | -259 | 184 | 53 | -130 | -71.0 | |
| Mexico | -1,879 | -2,162 | -2,488 | -2,288 | -1,769 | 519 | 22.7 | |
| France | -1,892 | -2,262 | -2,160 | -2,350 | -3,162 | -811 | -34.5 | |
| Italy | -3,590 | -3,310 | -3,216 | -3,215 | -3,476 | -262 | -8.1 | |
| Japan | -464 | -404 | -746 | 8 | -54 | -62 | ^(b) | |
| India | -1,549 | -1,868 | -2,144 | -2,830 | -2,724 | 106 | 3.7 | |
| Taiwan | -1,940 | -1,916 | -1,906 | -1,875 | -1,912 | -36 | -1.9 | |
| Germany | -905 | -981 | -932 | -1,038 | -1,131 | -93 | -8.9 | |
| All other | -5,987 | -6,435 | -6,352 | -5,807 | -5,021 | 786 | 13.5 | |
| Total | -56,311 | -62,445 | -68,124 | -71,661 | -77,951 | -6,291 | -8.8 | |
| EU-27 | -7,755 | -8,359 | -8,012 | -7,918 | -9,292 | -1,374 | -17.4 | |
| OPEC | -563 | -556 | -569 | -541 | -374 | 167 | 30.8 | |
| Latin America | -1,919 | -2,406 | -2,484 | -1,866 | -1,017 | 848 | 45.5 | |
| CBERA | 443 | 442 | 673 | 732 | 808 | 76 | 10.4 | |
| Asia | -44,465 | -49,589 | -56,198 | -61,014 | -68,161 | -7,147 | -11.7 | |
| Sub-Saharan Africa | -36 | 5 | 12 | -29 | 10 | 39 | ^(b) | |
| Central and Eastern Europe | -491 | -626 | -745 | -663 | -529 | 134 | 20.3 | |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bNot meaningful for purposes of comparison.

TABLE MS.2 Miscellaneous manufactures: Leading changes in U.S. exports and imports, 2003–07

| USITC code ^a and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|---|--------|--------|--------|--------|------------------------|------------------|-------|
| | | | | | | Absolute | Percent | |
| <i>Million dollars</i> | | | | | | | | |
| U.S. EXPORTS | | | | | | | | |
| Increases | | | | | | | | |
| MS017 | Works of art and miscellaneous manufactured goods | 1,561 | 1,806 | 2,423 | 3,837 | 5,011 | 1,174 | 30.6 |
| MS013 | Toys and games | 1,482 | 1,523 | 1,834 | 2,172 | 2,948 | 776 | 35.7 |
| MS006 | Precious jewelry and related articles | 1,770 | 2,270 | 2,721 | 3,694 | 4,193 | 498 | 13.5 |
| MS019 | Arms, ammunition, and armored vehicles | 2,348 | 2,936 | 3,060 | 3,616 | 4,097 | 481 | 13.3 |
| MS009 | Furniture | 2,595 | 2,787 | 3,020 | 3,354 | 3,691 | 336 | 10.0 |
| MS019A | Small arms and ammunition | 551 | 777 | 823 | 905 | 1,204 | 299 | 33.0 |
| MS011 | Lamps and lighting fittings | 628 | 677 | 742 | 825 | 945 | 120 | 14.6 |
| MS012 | Prefabricated buildings | 309 | 353 | 447 | 476 | 561 | 85 | 17.9 |
| MS014 | Sporting goods | 1,534 | 1,670 | 1,735 | 1,813 | 1,882 | 68 | 3.8 |
| MS008 | Bicycles and certain parts | 240 | 266 | 288 | 300 | 361 | 61 | 20.3 |
| MS003 | Musical instruments and accessories | 381 | 456 | 516 | 561 | 590 | 29 | 5.1 |
| MS005 | Silverware and related articles of precious metal | 161 | 180 | 184 | 167 | 180 | 13 | 7.8 |
| MS001A | Luggage | 187 | 195 | 204 | 268 | 279 | 12 | 4.4 |
| MS015 | Smokers' articles | 93 | 99 | 96 | 96 | 100 | 3 | 3.2 |
| MS016B | Hair grooming articles, non-electric (except brushes) | 17 | 19 | 18 | 18 | 19 | 2 | 9.1 |
| MS004 | Umbrellas, whips, riding crops, and canes | 7 | 8 | 10 | 12 | 13 | 1 | 8.4 |
| MS001C | Flat goods | 23 | 26 | 23 | 29 | 29 | (^b) | 0.1 |
| Decreases | | | | | | | | |
| MS002 | Certain other leather goods | 87 | 124 | 221 | 235 | 156 | -79 | -33.6 |
| MS001B | Handbags | 76 | 87 | 149 | 161 | 116 | -45 | -28.0 |
| MS001 | Luggage, handbags, and flat goods | 298 | 315 | 384 | 466 | 434 | -33 | -7.0 |
| MS018 | Apparel fasteners | 148 | 158 | 145 | 154 | 147 | -7 | -4.2 |
| MS010 | Writing instruments and related articles | 241 | 228 | 210 | 209 | 203 | -6 | -3.1 |
| MS007 | Costume jewelry and related articles | 100 | 109 | 126 | 166 | 161 | -5 | -2.9 |
| MS016A | Brooms and brushes | 211 | 239 | 253 | 265 | 263 | -2 | -0.9 |
| MS016 | Brooms, brushes, and hair grooming articles | 228 | 258 | 272 | 283 | 282 | -1 | -0.2 |
| U.S. IMPORTS | | | | | | | | |
| Increases | | | | | | | | |
| MS013 | Toys and games | 14,662 | 15,052 | 17,069 | 17,840 | 22,778 | 4,937 | 27.7 |
| MS017 | Works of art and miscellaneous manufactured goods | 8,556 | 9,662 | 9,943 | 11,228 | 13,359 | 2,130 | 19.0 |
| MS019 | Arms, ammunition, and armored vehicles | 1,335 | 1,641 | 1,718 | 2,240 | 2,976 | 736 | 32.9 |
| MS001 | Luggage, handbags, and flat goods | 4,734 | 5,585 | 6,151 | 6,834 | 7,535 | 701 | 10.3 |
| MS009 | Furniture | 19,035 | 21,819 | 24,296 | 26,078 | 26,731 | 653 | 2.5 |
| MS019A | Small arms and ammunition | 873 | 1,059 | 1,071 | 1,389 | 1,776 | 387 | 27.9 |
| MS001B | Handbags | 1,503 | 1,926 | 2,220 | 2,366 | 2,676 | 311 | 13.1 |
| MS001A | Luggage | 2,622 | 3,044 | 3,259 | 3,758 | 4,062 | 304 | 8.1 |
| MS014 | Sporting goods | 4,149 | 4,581 | 4,978 | 5,600 | 5,847 | 246 | 4.4 |
| MS010 | Writing instruments and related articles | 1,100 | 1,215 | 1,225 | 1,335 | 1,455 | 121 | 9.0 |
| MS008 | Bicycles and certain parts | 1,106 | 1,260 | 1,434 | 1,342 | 1,454 | 113 | 8.4 |
| MS001C | Flat goods | 473 | 532 | 580 | 616 | 712 | 96 | 15.6 |
| MS007 | Costume jewelry and related articles | 816 | 947 | 1,214 | 1,317 | 1,410 | 94 | 7.1 |
| MS016 | Brooms, brushes, and hair grooming articles | 1,011 | 1,112 | 1,236 | 1,275 | 1,363 | 89 | 7.0 |

See footnote(s) at end of table.

TABLE MS.2 Miscellaneous manufactures: Leading changes in U.S. exports and imports, 2003–07—*Continued*

| USITC code and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|---|------------------------|-------|-------|-------|-------|------------------------|---------|
| | | | | | | Absolute | Percent |
| | <i>Million dollars</i> | | | | | | |
| MS016A Brooms and brushes | 847 | 945 | 1,049 | 1,070 | 1,137 | 67 | 6.3 |
| MS002 Certain other leather goods | 348 | 384 | 408 | 464 | 502 | 38 | 8.3 |
| MS004 Umbrellas, whips, riding crops, and canes . . | 310 | 341 | 371 | 386 | 420 | 34 | 8.8 |
| MS011 Lamps and lighting fittings | 4,781 | 5,319 | 5,831 | 6,180 | 6,211 | 31 | 0.5 |
| MS016B Hair grooming articles, non-electric (except brushes) | 164 | 166 | 187 | 205 | 226 | 21 | 10.5 |
| MS015 Smokers' articles | 170 | 191 | 204 | 211 | 225 | 14 | 6.5 |
| MS018 Apparel fasteners | 69 | 81 | 80 | 83 | 90 | 7 | 8.3 |
| Decreases | | | | | | | |
| MS006 Precious jewelry and related articles | 6,559 | 7,492 | 8,359 | 9,553 | 9,463 | -90 | -0.9 |
| MS003 Musical instruments and accessories | 1,363 | 1,503 | 1,531 | 1,413 | 1,383 | -30 | -2.1 |
| MS012 Prefabricated buildings | 347 | 403 | 427 | 417 | 408 | -9 | -2.2 |
| MS005 Silverware and related articles of precious metal | 68 | 81 | 85 | 302 | 294 | -9 | -2.8 |

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

Note: Calculations based on unrounded data.

^aThis 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.

^bLess than \$500,000.

Divergent factors were responsible for growth in each of the four leading categories of sector exports in 2007. U.S. exports of works of art and miscellaneous manufactured goods increased by \$1.2 billion (31 percent) to \$5.0 billion (table MS.2). Paintings and sculptures accounted for nearly all (97 percent) of the expansion, with exports rising by \$1.1 billion (42 percent) to \$3.9 billion. The entry and departure of touring works of art and, to a lesser extent, auctions³²⁵ and other sales to private collectors, accounted for the bulk of international trade in these articles. In 2007, U.S. exports of paintings and sculptures to the United Kingdom rose by \$497 million (81 percent) to \$1.1 billion, and exports to Switzerland increased by \$188 million (24 percent) to \$969 million.

U.S. exports of toys and games increased by \$776 million (36 percent) to \$2.9 billion in 2007. Exports consisted chiefly of video game software for use with home video game consoles and related accessories, such as controllers linked to the consoles.

U.S. exports of precious jewelry and related articles expanded by \$498 million (14 percent) to \$4.2 billion in 2007, driven largely by the rising price of diamonds. Jewelry of precious or semiprecious stones accounted for all of the increase, growing by \$641 million (89 percent) to \$1.4 billion. The largest increases in U.S. exports of this type of jewelry in 2007 were to Switzerland (\$199 million), Japan (\$106 million), Hong Kong (\$105 million), and France (\$97 million).

U.S. private sector exports of arms and ammunition in 2007 increased by \$481 million (13 percent) to \$4.1 billion.³²⁶ Private sector exports of parts and accessories for military weapons, such as grenade launchers, flame throwers, and torpedo tubes, more than doubled in 2007, rising by \$349 million to \$634 million. Markets with the largest increases in purchases of parts of military weapons were Korea (\$200 million) and the United Kingdom (\$106 million), reflecting strategic partnerships between those countries and the United States.

U.S. Imports

Similar to the gains in U.S. exports, the commodities responsible for \$7.8 billion (80 percent) of the rise in sector imports in 2007 were toys and games; works of art and miscellaneous manufactured goods; and arms, ammunition, and armored vehicles. China supplied over one-half (56 percent) of U.S. imports of miscellaneous manufactures in 2007, followed by the EU (15 percent) and Canada (6 percent). China also accounted for nearly three-quarters of the total increase in U.S. imports of sector articles. While sector imports from China rose by \$7.2 billion (14 percent) to \$58.3 billion, and imports from the EU increased by \$2.3 billion (17 percent) to \$15.9 billion, imports from all other sources collectively modestly increased by \$239 million (1 percent) to \$29.7 billion.

Within the toys and games group, imports of home video games and parts nearly doubled, rising by \$3.8 billion to \$7.6 billion; imports of toys, dolls, and puzzles increased by \$2.2 billion (27 percent) to \$10.5 billion; and imports of other game machines, which include hand-held video games, expanded by \$315 million (14 percent) to \$2.6 billion.

In 2007, U.S. imports of works of art and miscellaneous manufactured goods increased by \$2.1 billion (19 percent) to \$13.4 billion (table MS.2). Virtually all of the growth was

³²⁵ For information about art auctions, see Sotheby's Web site, <http://www.sothebys.com>.

³²⁶ Transfers by the U.S. Department of Defense dwarfed private sector sales but are not reported in official trade statistics.

accounted for by a \$2.1 billion (31 percent) expansion in imports of works of art and antiques to \$8.7 billion. Touring exhibits from European collections and transfers between auction houses in London and New York accounted for much of this increase.

U.S. private sector imports of arms and ammunition increased by \$736 million (33 percent) to \$3.0 billion in 2007.³²⁷ Private sector imports of cartridges and parts more than doubled in 2007, climbing by \$153 million to \$287 million, while imports of parts and accessories for military weapons, such as grenade launchers, flame throwers, and torpedo tubes, rose by \$129 million (57 percent) to \$355 million. A significant portion of the increase in private sector imports of arms and ammunition resulted from inter-company transfers by Department of Defense contractors of parts of weapons for aircraft and related munitions.

³²⁷ Transfers by the U.S. Department of Defense dwarfed private sector sales but are not reported in official trade statistics.

Change in 2007 from 2006:

U.S. trade deficit: Increased by \$4.2 billion (27 percent) to \$19.8 billion

U.S. exports: Increased by \$0.8 billion (36 percent) to \$2.9 billion

U.S. imports: Increased by \$4.9 billion (28 percent) to \$22.8 billion

Introduction of the seventh generation of home video game consoles by each of the three leading video game companies (Nintendo, Sony, and Microsoft) in November 2006 led to a surge in the U.S. trade deficit in toys and games, which grew by 27 percent in 2007, compared with just 3 percent in 2006 (table MS.3). Although the leading video game companies are based in Japan and the United States, most video game consoles are produced in China. Video games (software) and related accessories are produced in high technology centers throughout the world, including the United States. The 33 percent increase in the U.S. bilateral trade deficit with China in toys and games in 2007 (\$5.0 billion) exceeded the increase in the total U.S. trade deficit in this category in part because video games and parts accounted for 36 percent (\$7.3 billion) of all U.S. imports of toys and games from China, but only 10 percent (\$261 million) of U.S. imports of toys and games from all other suppliers.

U.S. Exports

Most (93 percent) of the \$776 million (36 percent) increase in U.S. exports of toys and games in 2007 was accounted for by exports of parts and accessories for video games, which more than doubled, rising by \$719 million to \$1.3 billion. Exports consisted chiefly of video games for use with home video game consoles and related accessories, such as controllers. Exports of video game parts and accessories to Mexico more than quadrupled in 2007, rising by \$539 million to \$695 million, while exports of such articles to Canada increased by \$100 million (45 percent) to \$321 million.

U.S. exports of coin- or token-operated games, such as arcade video games, pinball machines, and casino games and parts increased by \$73 million (11 percent) in 2007 to \$747 million, while exports of all other toys and games declined by \$17 million (2 percent) in 2007 to \$870 million. U.S.-made arcade and casino games are distributed throughout the world, with the largest increases in U.S. exports in 2007 going to France (\$17 million), Germany (\$15 million), China (\$14 million), Hong Kong (\$14 million), and Argentina (\$11 million).

³²⁸ This industry/commodity group includes toys, dolls, puzzles, model trains and other models, and games, including video games, pinball machines and other arcade games, slot machines and other casino games, equipment for bowling and billiards, board games, and hand-held electronic games.

TABLE MS.3 Toys and games (MS013): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--|------------------------|---------------|---------------|---------------|---------------|------------------------|-------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. exports of domestic merchandise | | | | | | | | |
| China | 8 | 13 | 12 | 13 | 32 | 19 | 142.8 | |
| Mexico | 84 | 92 | 117 | 302 | 809 | 507 | 167.9 | |
| Japan | 82 | 79 | 88 | 71 | 69 | -2 | -2.6 | |
| Canada | 515 | 507 | 619 | 635 | 764 | 129 | 20.3 | |
| Hong Kong | 71 | 75 | 90 | 89 | 137 | 48 | 54.1 | |
| Taiwan | 9 | 7 | 14 | 5 | 6 | 1 | 22.4 | |
| United Kingdom | 97 | 107 | 113 | 110 | 126 | 16 | 14.9 | |
| Denmark | 1 | 2 | 2 | 5 | 5 | (^b) | 4.4 | |
| Korea | 24 | 16 | 15 | 21 | 21 | (^b) | 1.7 | |
| Australia | 40 | 64 | 86 | 97 | 83 | -15 | -14.9 | |
| All other | 551 | 561 | 678 | 826 | 896 | 71 | 8.5 | |
| Total | 1,482 | 1,523 | 1,834 | 2,172 | 2,948 | 776 | 35.7 | |
| EU-27 | 331 | 349 | 362 | 385 | 416 | 31 | 8.0 | |
| OPEC | 31 | 39 | 42 | 54 | 57 | 4 | 6.8 | |
| Latin America | 272 | 263 | 370 | 657 | 1,193 | 536 | 81.6 | |
| CBERA | 33 | 28 | 46 | 54 | 75 | 21 | 38.8 | |
| Asia | 234 | 236 | 281 | 280 | 376 | 96 | 34.2 | |
| Sub-Saharan Africa | 18 | 19 | 24 | 39 | 34 | -4 | -10.9 | |
| Central and Eastern Europe | 9 | 11 | 10 | 6 | 11 | 5 | 90.8 | |
| U.S. imports of merchandise for consumption | | | | | | | | |
| China | 11,955 | 12,549 | 13,910 | 15,082 | 20,051 | 4,969 | 32.9 | |
| Mexico | 384 | 335 | 347 | 349 | 367 | 18 | 5.1 | |
| Japan | 757 | 661 | 1,303 | 914 | 876 | -38 | -4.1 | |
| Canada | 167 | 183 | 162 | 155 | 130 | -25 | -16.2 | |
| Hong Kong | 163 | 169 | 144 | 162 | 139 | -23 | -14.0 | |
| Taiwan | 220 | 216 | 204 | 213 | 239 | 26 | 12.3 | |
| United Kingdom | 79 | 76 | 80 | 76 | 80 | 4 | 5.5 | |
| Denmark | 91 | 99 | 116 | 133 | 168 | 35 | 26.3 | |
| Korea | 104 | 109 | 108 | 117 | 98 | -18 | -15.8 | |
| Australia | 51 | 71 | 113 | 55 | 31 | -24 | -43.1 | |
| All other | 691 | 586 | 581 | 586 | 599 | 12 | 2.1 | |
| Total | 14,662 | 15,052 | 17,069 | 17,840 | 22,778 | 4,937 | 27.7 | |
| EU-27 | 438 | 389 | 419 | 432 | 479 | 47 | 10.9 | |
| OPEC | 112 | 96 | 94 | 84 | 100 | 17 | 20.3 | |
| Latin America | 411 | 363 | 371 | 375 | 391 | 17 | 4.4 | |
| CBERA | 1 | 1 | 1 | 1 | 1 | -1 | -57.5 | |
| Asia | 13,545 | 14,009 | 15,968 | 16,782 | 21,720 | 4,938 | 29.4 | |
| Sub-Saharan Africa | 2 | 3 | 3 | 8 | 6 | -2 | -25.9 | |
| Central and Eastern Europe | 17 | 26 | 32 | 38 | 45 | 7 | 17.4 | |

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See footnote(s) at end of table.

TABLE MS.3 Toys and games (MS013): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2003–07^a—Continued

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | | |
|--------------------------------|------------------------|---------|---------|---------|---------|------------------------|------------------|--|
| | | | | | | Absolute | Percent | |
| | <i>Million dollars</i> | | | | | | | |
| U.S. merchandise trade balance | | | | | | | | |
| China | -11,947 | -12,535 | -13,898 | -15,068 | -20,018 | -4,950 | -32.9 | |
| Mexico | -301 | -243 | -231 | -47 | 443 | 490 | (^c) | |
| Japan | -675 | -582 | -1,216 | -843 | -807 | 36 | 4.3 | |
| Canada | 349 | 324 | 456 | 480 | 634 | 154 | 32.2 | |
| Hong Kong | -93 | -94 | -54 | -73 | -2 | 71 | 97.1 | |
| Taiwan | -211 | -209 | -190 | -208 | -233 | -25 | -12.1 | |
| United Kingdom | 19 | 31 | 33 | 34 | 46 | 12 | 35.9 | |
| Denmark | -90 | -96 | -114 | -128 | -163 | -35 | -27.1 | |
| Korea | -80 | -93 | -92 | -96 | -77 | 19 | 19.5 | |
| Australia | -12 | -6 | -28 | 43 | 52 | 9 | 21.0 | |
| All other | -140 | -25 | 97 | 239 | 297 | 58 | 24.3 | |
| Total | -13,180 | -13,529 | -15,235 | -15,668 | -19,830 | -4,162 | -26.6 | |
| EU-27 | -107 | -40 | -57 | -47 | -63 | -16 | -34.3 | |
| OPEC | -81 | -56 | -52 | -30 | -43 | -13 | -44.4 | |
| Latin America | -139 | -100 | -1 | 283 | 802 | 520 | 183.8 | |
| CBERA | 32 | 27 | 46 | 53 | 75 | 22 | 41.1 | |
| Asia | -13,311 | -13,773 | -15,686 | -16,502 | -21,344 | -4,842 | -29.3 | |
| Sub-Saharan Africa | 15 | 16 | 21 | 31 | 29 | -2 | -6.9 | |
| Central and Eastern Europe | -8 | -16 | -23 | -32 | -34 | -1 | -4.5 | |

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

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 2007.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bLess than \$500,000.

^cNot meaningful for purposes of comparison.

U.S. Imports

Increased availability and sustained consumer demand for the seventh generation of home video game consoles were chiefly responsible for the \$4.9 billion (28 percent) growth in U.S. imports of toys and games in 2007 to \$22.8 billion (table MS.3). Within the toys and games group, imports of home video games and parts nearly doubled, rising by \$3.8 billion to \$7.6 billion; imports of toys, dolls, and puzzles increased by \$2.2 billion (27 percent) to \$10.5 billion; and imports of other game machines, which includes hand-held video games, expanded by \$315 million (14 percent) to \$2.6 billion.

China led the import growth in each category of toys and games, with imports from China of home video games and parts more than doubling, increasing by \$3.7 billion to \$7.3 billion; toys, dolls, and puzzles rising by \$1.9 billion (26 percent) to \$9.2 billion; and hand-held video games and other game machines increasing by \$417 million (26 percent) to \$2 billion. Concern about the safety of toys from China led some toy companies to seek alternative suppliers in 2007, contributing to the \$150 million (133 percent) increase in imports of toys, dolls, and puzzles from Mexico to \$263 million.³²⁹ Rising labor and raw material costs in China's southeast coastal region led some toy companies to shift production to other low labor cost countries with better access to raw materials, leading to a \$71 million (353 percent) increase in imports of toys, dolls, and puzzles from Indonesia to \$92 million. Imports of toys, dolls, and puzzles from Taiwan grew by \$35 million (28 percent) to \$160 million in 2007, and from Denmark by \$33 million (26 percent) to \$162 million.

China remained the leading supplier of all types of toys and games to the U.S. market in 2007, with imports from China growing by \$5.0 billion (33 percent) and accounting for 88 percent of total U.S. imports of toys and games that year. Although U.S. imports from Japan fell by \$38 million (4 percent) to \$876 million, Japan remained the second leading foreign supplier of toys and games to the U.S. market, accounting for 4 percent of total imports in the category in 2007.

³²⁹ Following a four-month investigation, the provincial government of Guangdong in China revoked the export licenses of 764 of the province's 5,000 toy manufacturers in October 2007 over product safety concerns. Another 690 firms were required to renovate their plants and improve product "quality." The province's toy industry reportedly employed 1.5 million people in 2006 and produced toys valued at \$16.1 billion. Associated Press, "China Cracks Down on Toy Factories," November 1, 2007. Previously, in August 2007, Chinese officials had revoked the export licenses of companies found to have supplied toys to Mattel and RC2 with unacceptably high lead levels in the paint. Cody, "Chinese Toy Executive Found Hanged After Export Ban," August 14, 2007, D1. See also, *The Economist*, "China's Toxic Toymaker," August 18, 2007.

TABLE MS.4 Miscellaneous manufactures: U.S. trade for industry/commodity groups and subgroups, 2003–07^a

| USITC code ^b | and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|---|--------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| MS001 | Luggage, handbags, and flat goods | | | | | | | |
| | Exports | 298 | 315 | 384 | 466 | 434 | -33 | -7.0 |
| | Imports | 4,734 | 5,585 | 6,151 | 6,834 | 7,535 | 701 | 10.3 |
| | Trade balance | -4,437 | -5,270 | -5,767 | -6,368 | -7,101 | -733 | -11.5 |
| MS001A | Luggage | | | | | | | |
| | Exports | 187 | 195 | 204 | 268 | 279 | 12 | 4.4 |
| | Imports | 2,622 | 3,044 | 3,259 | 3,758 | 4,062 | 304 | 8.1 |
| | Trade balance | -2,435 | -2,849 | -3,056 | -3,490 | -3,782 | -292 | -8.4 |
| MS001B | Handbags | | | | | | | |
| | Exports | 76 | 87 | 149 | 161 | 116 | -45 | -28.0 |
| | Imports | 1,503 | 1,926 | 2,220 | 2,366 | 2,676 | 311 | 13.1 |
| | Trade balance | -1,426 | -1,839 | -2,071 | -2,204 | -2,560 | -356 | -16.1 |
| MS001C | Flat goods | | | | | | | |
| | Exports | 23 | 26 | 23 | 29 | 29 | (^c) | 0.1 |
| | Imports | 473 | 532 | 580 | 616 | 712 | 96 | 15.6 |
| | Trade balance | -451 | -506 | -557 | -588 | -684 | -96 | -16.4 |
| MS002 | Certain other leather goods | | | | | | | |
| | Exports | 87 | 124 | 221 | 235 | 156 | -79 | -33.6 |
| | Imports | 348 | 384 | 408 | 464 | 502 | 38 | 8.3 |
| | Trade balance | -262 | -260 | -186 | -229 | -346 | -117 | -51.3 |
| MS003 | Musical instruments and accessories | | | | | | | |
| | Exports | 381 | 456 | 516 | 561 | 590 | 29 | 5.1 |
| | Imports | 1,363 | 1,503 | 1,531 | 1,413 | 1,383 | -30 | -2.1 |
| | Trade balance | -982 | -1,047 | -1,014 | -852 | -793 | 59 | 6.9 |
| MS004 | Umbrellas, whips, riding crops, and canes | | | | | | | |
| | Exports | 7 | 8 | 10 | 12 | 13 | 1 | 8.4 |
| | Imports | 310 | 341 | 371 | 386 | 420 | 34 | 8.8 |
| | Trade balance | -303 | -333 | -361 | -374 | -407 | -33 | -8.9 |
| MS005 | Silverware and related articles of precious metal | | | | | | | |
| | Exports | 161 | 180 | 184 | 167 | 180 | 13 | 7.8 |
| | Imports | 68 | 81 | 85 | 302 | 294 | -9 | -2.8 |
| | Trade balance | 92 | 99 | 98 | -136 | -114 | 22 | 15.9 |
| MS006 | Precious jewelry and related articles | | | | | | | |
| | Exports | 1,770 | 2,270 | 2,721 | 3,694 | 4,193 | 498 | 13.5 |
| | Imports | 6,559 | 7,492 | 8,359 | 9,553 | 9,463 | -90 | -0.9 |
| | Trade balance | -4,789 | -5,222 | -5,638 | -5,858 | -5,271 | 588 | 10.0 |

See footnote(s) at end of table.

TABLE MS.4 Miscellaneous manufactures : U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b | and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|--|---------|---------|---------|---------|---------|------------------------|---------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| MS007 | Costume jewelry and related articles | | | | | | | |
| | Exports | 100 | 109 | 126 | 166 | 161 | -5 | -2.9 |
| | Imports | 816 | 947 | 1,214 | 1,317 | 1,410 | 94 | 7.1 |
| | Trade balance | -716 | -838 | -1,088 | -1,151 | -1,249 | -98 | -8.6 |
| MS008 | Bicycles and certain parts | | | | | | | |
| | Exports | 240 | 266 | 288 | 300 | 361 | 61 | 20.3 |
| | Imports | 1,106 | 1,260 | 1,434 | 1,342 | 1,454 | 113 | 8.4 |
| | Trade balance | -867 | -994 | -1,146 | -1,041 | -1,093 | -52 | -5.0 |
| MS009 | Furniture | | | | | | | |
| | Exports | 2,595 | 2,787 | 3,020 | 3,354 | 3,691 | 336 | 10.0 |
| | Imports | 19,035 | 21,819 | 24,296 | 26,078 | 26,731 | 653 | 2.5 |
| | Trade balance | -16,440 | -19,031 | -21,276 | -22,724 | -23,041 | -317 | -1.4 |
| MS010 | Writing instruments and related articles | | | | | | | |
| | Exports | 241 | 228 | 210 | 209 | 203 | -6 | -3.1 |
| | Imports | 1,100 | 1,215 | 1,225 | 1,335 | 1,455 | 121 | 9.0 |
| | Trade balance | -859 | -986 | -1,015 | -1,125 | -1,252 | -127 | -11.3 |
| MS011 | Lamps and lighting fittings | | | | | | | |
| | Exports | 628 | 677 | 742 | 825 | 945 | 120 | 14.6 |
| | Imports | 4,781 | 5,319 | 5,831 | 6,180 | 6,211 | 31 | 0.5 |
| | Trade balance | -4,153 | -4,641 | -5,089 | -5,356 | -5,266 | 89 | 1.7 |
| MS012 | Prefabricated buildings | | | | | | | |
| | Exports | 309 | 353 | 447 | 476 | 561 | 85 | 17.9 |
| | Imports | 347 | 403 | 427 | 417 | 408 | -9 | -2.2 |
| | Trade balance | -39 | -50 | 21 | 59 | 153 | 94 | 160.4 |
| MS013 | Toys and games | | | | | | | |
| | Exports | 1,482 | 1,523 | 1,834 | 2,172 | 2,948 | 776 | 35.7 |
| | Imports | 14,662 | 15,052 | 17,069 | 17,840 | 22,778 | 4,937 | 27.7 |
| | Trade balance | -13,180 | -13,529 | -15,235 | -15,668 | -19,830 | -4,162 | -26.6 |
| MS014 | Sporting goods | | | | | | | |
| | Exports | 1,534 | 1,670 | 1,735 | 1,813 | 1,882 | 68 | 3.8 |
| | Imports | 4,149 | 4,581 | 4,978 | 5,600 | 5,847 | 246 | 4.4 |
| | Trade balance | -2,615 | -2,911 | -3,243 | -3,787 | -3,965 | -178 | -4.7 |
| MS015 | Smokers' articles | | | | | | | |
| | Exports | 93 | 99 | 96 | 96 | 100 | 3 | 3.2 |
| | Imports | 170 | 191 | 204 | 211 | 225 | 14 | 6.5 |
| | Trade balance | -77 | -93 | -107 | -115 | -126 | -11 | -9.3 |

See footnote(s) at end of table.

TABLE MS.4 Miscellaneous manufactures : U.S. trade for industry/commodity groups and subgroups, 2003–07^a—Continued

| USITC code ^b | and industry/commodity group | 2003 | 2004 | 2005 | 2006 | 2007 | Change, 2007 from 2006 | |
|----------------------------|---|--------|--------|--------|--------|--------|------------------------|---------|
| | | | | | | | Absolute | Percent |
| <i>Million dollars</i> | | | | | | | | |
| MS016 | Brooms, brushes, and hair grooming articles | | | | | | | |
| | Exports | 228 | 258 | 272 | 283 | 282 | -1 | -0.2 |
| | Imports | 1,011 | 1,112 | 1,236 | 1,275 | 1,363 | 89 | 7.0 |
| | Trade balance | -783 | -854 | -964 | -992 | -1,081 | -89 | -9.0 |
| MS016A | Brooms and brushes | | | | | | | |
| | Exports | 211 | 239 | 253 | 265 | 263 | -2 | -0.9 |
| | Imports | 847 | 945 | 1,049 | 1,070 | 1,137 | 67 | 6.3 |
| | Trade balance | -635 | -707 | -796 | -804 | -874 | -70 | -8.7 |
| MS016B | Hair grooming articles, non-electric (except brushes) | | | | | | | |
| | Exports | 17 | 19 | 18 | 18 | 19 | 2 | 9.1 |
| | Imports | 164 | 166 | 187 | 205 | 226 | 21 | 10.5 |
| | Trade balance | -147 | -147 | -168 | -187 | -207 | -20 | -10.6 |
| MS017 | Works of art and miscellaneous manufactured goods | | | | | | | |
| | Exports | 1,561 | 1,806 | 2,423 | 3,837 | 5,011 | 1,174 | 30.6 |
| | Imports | 8,556 | 9,662 | 9,943 | 11,228 | 13,359 | 2,130 | 19.0 |
| | Trade balance | -6,995 | -7,857 | -7,520 | -7,392 | -8,347 | -956 | -12.9 |
| MS018 | Apparel fasteners: | | | | | | | |
| | Exports | 148 | 158 | 145 | 154 | 147 | -7 | -4.2 |
| | Imports | 69 | 81 | 80 | 83 | 90 | 7 | 8.3 |
| | Trade balance | 79 | 77 | 65 | 71 | 57 | -13 | -19.1 |
| MS019 | Arms, ammunition, and armored vehicles | | | | | | | |
| | Exports | 2,348 | 2,936 | 3,060 | 3,616 | 4,097 | 481 | 13.3 |
| | Imports | 1,335 | 1,641 | 1,718 | 2,240 | 2,976 | 736 | 32.9 |
| | Trade balance | 1,012 | 1,295 | 1,342 | 1,376 | 1,121 | -256 | -18.6 |
| MS019A | Small arms and ammunition: | | | | | | | |
| | Exports | 551 | 777 | 823 | 905 | 1,204 | 299 | 33.0 |
| | Imports | 873 | 1,059 | 1,071 | 1,389 | 1,776 | 387 | 27.9 |
| | Trade balance | -321 | -281 | -249 | -484 | -572 | -88 | -18.3 |

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

Note: Calculations based on unrounded data.

^aImport values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

^bThis 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

^cLess than \$500,000.

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