
Minerals and Metals

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Change in 2004 from 2003:

U.S. trade deficit: Increased \$24.1 billion (52 percent) to \$70.3 billion
U.S. exports: Increased \$7.6 billion (18 percent) to \$50.6 billion
U.S. imports: Increased \$31.7 billion (36 percent) to \$120.9 billion

The substantial growth in the U.S. trade deficit for the minerals and metals sector in 2004, a third consecutive annual increase, reflects several developments. Strong domestic and world demand depleted inventories, causing large price increases for many mineral and metal commodities, and contributed to an increase in the value of U.S. imports. Further, U.S. economic growth was greater than that for many trading partners, contributing to a slower export growth rate.¹ The absolute increase in U.S. imports was more than four times greater than the increase in U.S. exports in 2004 (table MM-1).

Global prices rose sharply for many basic minerals and metals because of robust demand by China, which lacks sufficient domestic supply of most major metals and minerals and relies on imports to satisfy the demand of its continuously expanding economy.² The rise in global energy and raw material costs also exerted upward pressure on the prices of minerals and metals products, as did the weakening of the U.S. dollar, which also played a key role in the rising trade deficit in sector products. As product prices trended upward, market speculative activities further contributed to the increases in prices and the U.S. trade deficit.³ Together, these developments contributed to a nearly 50-fold jump in the deficit increase for this sector from 2003 to 2004.

Overall, prices of minerals and metals products have risen since their cyclical lows of 2000–2002, and prices in 2004 increased significantly. The price increase for iron and steel,⁴ averaging about 4 percent per year since its cyclical low in 2001, was 37 percent in 2004. The price of iron and steel waste and scrap, a vital raw material for electric-arc furnace steel production, rose \$82 per metric ton (MT) (76 percent) to \$190 per MT in 2004. Prices also increased significantly for many non-ferrous metals, such as aluminum (up 20 percent, to \$0.82 per pound), copper (up 59 percent, to \$1.28 per pound), gold (up 12 percent, to \$410 per ounce), nickel (up 44 percent, to \$6.28 per pound), and molybdenum (up 155 percent, to \$29.67 per kg).⁵

¹ In 2003 and 2004, the U.S. economy grew by 4.4 percent and 3.7 percent, respectively, while those of other countries in the Organization for Economic Cooperation and Development increased by only 2.2 percent and 2.7 percent, respectively. *Economic Report of the President* (Washington, DC: U.S. Government Printing Office, Feb. 2005), p. 37, found at <http://www.whitehouse.gov/cea/erpcover2005.pdf>, retrieved Apr. 14, 2005.

² Michael D. Fenton, "Iron and Steel, The Mineral Industry of China," *U.S. Geological Survey Mineral Yearbook-2002*, pp. 9.1–9.2.

³ Industry sources maintain that the continuing decline in the value of the dollar against the euro and other key currencies because of concerns about growing U.S. trade and budget deficits also encourages speculative buying by big-money funds and hedge funds. A weakening dollar usually makes dollar-denominated assets increasingly attractive.

⁴ This figure is reported by the producer price index for steel mill products. U.S. Geological Survey (USGS), *Mineral Commodity Summaries*, "Iron and Steel," Jan. 2005, pp. 86–87.

⁵ See generally *ibid.*

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, 2000–2004¹

Item	2000	2001	2002	2003	2004	Change, 2004 from 2003	
						Absolute	Percent
<i>Million dollars</i>							
U.S. exports of domestic merchandise:							
Canada	15,421	13,262	13,447	13,820	16,835	3,015	21.8
Mexico	8,210	6,956	6,671	6,454	7,958	1,503	23.3
China	1,333	1,497	1,539	2,636	3,197	561	21.3
Israel	573	732	677	231	457	226	97.8
Japan	2,344	1,919	1,590	1,654	1,955	300	18.2
Germany	1,380	1,440	1,196	1,338	1,513	175	13.1
United Kingdom	3,347	3,039	2,622	3,112	2,788	-324	-10.4
India	223	242	206	235	388	152	64.6
Taiwan	702	594	647	758	914	156	20.6
Brazil	488	462	322	283	353	70	24.7
All other	13,259	13,365	11,006	12,457	14,230	1,773	14.2
Total	47,280	43,507	39,924	42,980	50,588	7,608	17.7
EU-15	8,015	8,171	6,951	7,589	7,876	288	3.8
OPEC	751	805	754	687	997	311	45.3
Latin America	10,368	9,030	8,394	8,233	10,073	1,840	22.4
CBERA	770	777	749	846	910	64	7.5
Asia	7,596	7,177	6,622	8,346	10,285	1,939	23.2
Sub-Saharan Africa	219	250	265	269	344	76	28.2
Central and Eastern Europe	133	159	121	115	205	90	78.5
U.S. imports of merchandise for consumption:							
Canada	19,215	16,916	17,797	18,003	22,636	4,634	25.7
Mexico	6,767	6,528	7,013	7,116	9,623	2,507	35.2
China	6,947	7,250	8,656	10,054	13,890	3,835	38.1
Israel	5,693	5,412	6,073	6,365	7,527	1,162	18.2
Japan	5,339	4,634	4,123	4,036	4,724	688	17.1
Germany	3,998	3,724	3,438	3,654	4,637	983	26.9
United Kingdom	3,086	2,946	2,174	2,190	2,942	752	34.3
India	3,644	2,770	3,799	3,730	4,748	1,018	27.3
Taiwan	3,629	2,950	3,003	3,058	4,190	1,132	37.0
Brazil	2,717	2,246	2,495	2,521	4,666	2,145	85.1
All other	33,979	28,472	27,045	28,477	41,314	12,837	45.1
Total	95,015	83,847	85,616	89,204	120,897	31,693	35.5
EU-15	18,827	17,101	15,589	16,239	20,834	4,596	28.3
OPEC	1,422	1,259	1,311	1,282	1,846	563	43.9
Latin America	13,361	12,111	13,261	14,277	21,239	6,963	48.8
CBERA	628	552	657	689	1,008	319	46.2
Asia	24,558	21,771	23,501	24,657	32,610	7,954	32.3
Sub-Saharan Africa	3,201	3,082	2,705	2,995	4,344	1,348	45.0
Central and Eastern Europe	878	676	780	729	1,233	504	69.2

See footnote(s) at end of table.

Table MM-1—Continued

Minerals and metals: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2000–2004¹

Item	2000	2001	2002	2003	2004	Change, 2004 from 2003	
						Absolute	Percent
<i>Million dollars</i>							
U.S. merchandise trade balance:							
Canada	-3,795	-3,654	-4,350	-4,183	-5,801	-1,619	-38.7
Mexico	1,443	428	-342	-661	-1,665	-1,004	-151.8
China	-5,614	-5,754	-7,117	-7,418	-10,692	-3,274	-44.1
Israel	-5,121	-4,680	-5,396	-6,134	-7,070	-935	-15.2
Japan	-2,995	-2,716	-2,534	-2,382	-2,770	-388	-16.3
Germany	-2,618	-2,284	-2,242	-2,317	-3,124	-808	-34.9
United Kingdom	261	94	448	922	-153	-1,076	(²)
India	-3,421	-2,528	-3,592	-3,494	-4,360	-866	-24.8
Taiwan	-2,927	-2,355	-2,356	-2,300	-3,276	-976	-42.4
Brazil	-2,229	-1,784	-2,173	-2,238	-4,313	-2,075	-92.7
All other	-20,720	-15,106	-16,039	-16,020	-27,084	-11,064	-69.1
Total	-47,735	-40,341	-45,692	-46,224	-70,309	-24,085	-52.1
EU-15	-10,812	-8,930	-8,637	-8,650	-12,958	-4,308	-49.8
OPEC	-670	-453	-558	-596	-848	-252	-42.3
Latin America	-2,993	-3,081	-4,866	-6,044	-11,166	-5,122	-84.7
CBERA	142	225	92	157	-98	-255	(²)
Asia	-16,962	-14,594	-16,879	-16,311	-22,325	-6,014	-36.9
Sub-Saharan Africa	-2,982	-2,832	-2,440	-2,727	-4,000	-1,273	-46.7
Central and Eastern Europe	-744	-517	-660	-614	-1,029	-414	-67.4

¹Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

²Not meaningful for purposes of comparison.

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 2004.

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

Steel mill products were an important contributor to the trade deficit in this sector, accounting for more than one-fifth of the total amount. The U.S. safeguard measures implemented in March 2002 on a variety of steel products⁶ likely reduced imports of some steel mill products into the United States in 2003 (table MM-2). Following termination of these measures in December 2003 and in conjunction with the strong U.S. economic recovery, steel mill imports increased significantly in 2004, up \$11.1 billion (105 percent) to \$21.6 billion, while exports rose only \$1.5 billion (27 percent) to \$7.0 billion, resulting in a trade deficit of \$14.5 billion in 2004.⁷

Since 2003, following a period of restructuring, consolidation, and plant closures, the U.S. steel industry has become globally competitive and profitable. The predominant development in this industrial consolidation was the announcement in late 2004 by Netherlands-based Mittal Steel Co. of its acquisition of International Steel Group (ISG). The combination of ISG's former steel operations in the United States with those of Mittal Steel in 14 countries forms the world's largest steel producer.⁸

As the world's fourth-largest steel producer, the United States produced 96.2 million MTs of crude steel in 2004.⁹ Approximately 97 percent of U.S. steel was produced by the continuous casting process, a modern steelmaking technique.¹⁰ In 2004, in terms of volume, the United States was the world's largest net importer of semi-finished and finished steel products (estimated at 25.3 million MTs).¹¹

Another large contributor to the sector trade deficit was unwrought aluminum, which contributed \$5.4 billion (8 percent) to the total sector deficit in 2004. The United States is the world's fourth-largest producer of aluminum.¹² In 2004, Canada's aluminum production capacity amounted to 2.9 million MTs as compared with 4 million MTs in the United States. Canada, however, produced more than the United States because of its lower electricity costs.¹³ U.S. primary aluminum production also fell in 2004 because of the rising cost of imported alumina. As domestic production declined, imports from Canada (59 percent of total aluminum imports during 2000–2003) and Russia (17 percent during 2000–2003) rose to meet increased U.S. demand.

Copper and related articles accounted for \$2.6 billion (4 percent) of the sector trade deficit. As an excellent heat and electricity conductor, copper is an essential material for electric household and

⁶ Imports from several developed countries were subject to safeguard tariffs ranging from 8 percent to 30 percent.

⁷ Rounded numbers are used. In terms of value, U.S. imports of steel mill products were twice as large as exports in 2003 and were three times exports during 2004.

⁸ Mittal Steel formally acquired ISG on April 15, 2005, and combined its former Ispat Inland Inc. operations with those of ISG, whose facilities included the operations of the former LTV, National Steel, Bethlehem Steel, Acme Steel, Georgetown Steel, and Weirton Steel. Mittal Steel, based in Rotterdam, is now the world's most global steel company. In 2004 the combined production of Mittal Steel and ISG was estimated at 70 million MTs with 165,000 employees worldwide.

⁹ In 2004, in terms of raw steel production, the United States was behind China (263 million MTs), the EU (196 million MTs), and Japan (112 million MTs). USGS, *Mineral Commodity Summaries*, p. 87.

¹⁰ That compares with 91 percent in China and 98 percent in Japan in 2003. International Iron and Steel Institute (IISI), *World Steel in Figures*, 2004 ed., p. 7.

¹¹ As estimated by the IISI, in 2003, China was the world's largest net importer of semi-finished and finished steel products (35 million MTs). Japan was the world's largest net exporter (30 million MTs), followed by Russia (29 million MTs) and Ukraine (26 million MTs). *Ibid.*, pp. 78–82.

¹² In 2004, in terms of total production, the United States was behind China (6.1 million MTs), Russia (3.6 million MTs), and Canada (2.6 million MTs).

¹³ Aluminum smelting is a very electricity-intensive process. As production cutbacks increased, U.S. capacity utilization rates fell from 65 percent in 2003 to 63 percent in 2004. Patricia A. Plunkert, "Aluminum," *Mineral Commodity Summaries*, Jan. 2005, pp. 21–22, found at <http://minerals.usgs.gov/minerals/pubs/commodity/aluminum/alumimcs05.pdf>, retrieved June 29, 2005.

Table MM-2

Leading changes in U.S. exports and imports of minerals and metals, 2000–2004¹

Industry/commodity group	2000	2001	2002	2003	2004	Change, 2004 from 2003	
						Absolute	Percent
	<i>Million dollars</i>						
U.S. EXPORTS:							
Increases:							
Steel mill products (MM025)	4,911	4,756	4,533	5,525	7,015	1,490	27.0
Iron and steel waste and scrap (MM023)	1,030	1,151	1,307	1,960	2,923	963	49.1
Copper and related articles (MM036)	3,109	1,852	1,744	2,086	3,006	920	44.1
Natural and synthetic gemstones (MM019)	1,466	1,840	1,331	469	1,129	660	140.9
Aluminum mill products (MM038)	3,130	2,784	2,519	2,564	3,171	606	23.6
Unwrought aluminum (MM037)	1,130	923	950	1,000	1,397	397	39.7
Decreases:							
Unrefined and refined gold (MM020A)	5,099	4,186	2,639	4,130	3,465	-665	-16.1
All other	27,404	26,016	24,900	25,245	28,482	3,237	12.8
TOTAL	47,280	43,507	39,924	42,980	50,588	7,608	17.7
U.S. IMPORTS:							
Increases:							
Steel mill products (MM025)	15,026	11,630	12,203	10,499	21,559	11,060	105.3
Precious metals and non-numismatic coins (MM020)	10,082	8,193	6,263	6,759	9,055	2,296	34.0
Decreases:							
Ceramic household articles (MM013)	1,797	1,635	1,691	1,757	1,683	-74	-4.2
All other	68,110	62,390	65,459	70,189	88,600	18,410	26.2
TOTAL	95,015	83,847	85,616	89,204	120,897	31,693	35.5

¹Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

Note.—Calculations based on unrounded data.

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

industrial products ranging from electric wiring to aircraft. Global inventory of refined copper fell to its lowest level since the late 1980s, primarily because of increasing demand in China,¹⁴ the United States, and Japan (the three largest global consumers of copper) and mine closings in Chile and Indonesia in 2003.¹⁵ Copper prices have increased rapidly from a cyclical low in 2002, increasing 14 percent in 2003 and then 59 percent in 2004.¹⁶

In 2004, U.S. exports of natural and synthetic gemstones¹⁷ recorded an increase of \$660 million while U.S. imports increased \$1.8 billion, contributing \$14.6 billion (21 percent) to the total trade deficit of the sector. The United States imported mostly from Israel (approximately 48 percent of the total import value during 2000–2003), India (20 percent during 2000–2003), and Belgium (19 percent during 2000–2003).

The trade deficit in the minerals and metals sector was slightly tempered by a \$1.7 billion trade surplus in iron and steel waste and scrap,¹⁸ a vital raw material in electric-arc furnace steel production. The United States is the world's largest producer, exporter, and consumer of steel and iron scrap.¹⁹ Nearly one-third of China's industrial fixed asset investment is for infrastructure-related projects. Its scrap generation ability is highly limited, and China has relied on the United States for scrap²⁰ to support steel production. The Korean steel producing and consuming industries are export oriented, and Korea's domestic iron and steel scrap supply is also insufficient to meet demand. High demand by steel-producing countries in combination with tight supplies of scrap drove prices up by 76 percent in 2004 and has had an effect on the users of this raw material input, such as the ferrous foundry and steel industries. Recently, in an effort to ease world supply, the U.S. Government has reportedly encouraged Russia and Ukraine to eliminate export taxes on steel scrap as a condition for accession to the WTO.²¹

During the last 5 years, China has consistently recorded the largest surplus in sector trade with the United States, accounting for nearly 14 percent of the total U.S. trade deficit in this sector in 2004 (see table MM-1). U.S. imports from China during the last few years have increased significantly, enabling China to replace Mexico as the second-largest supplier of minerals and metals products since 2000. In 2004, however, U.S. exports to China increased \$561 million (21 percent), and China replaced the United

¹⁴ During the last 2 years, copper prices have almost doubled as demand continues to rise in China. During the past 10 years, China has doubled its share of total world consumption to 20 percent. The price rise has induced BHP Billiton, the Anglo-Australian firm owner of the world's largest copper mine, to attempt to purchase WMC Resources, its competitor, to become the world's second-largest copper producer. Codelco, Chile's state-owned producer is the largest copper producer. Arizona-based Phelps Dodge is second.

¹⁵ For more information on 2003 developments, see Christopher B. Mapes, "Minerals and Metals," in *Shifts in U.S. Merchandise Trade 2003*, found at http://www.usitc.gov/tradeshifts/documents/09mm_000.pdf, retrieved Apr. 29, 2005.

¹⁶ High-grade copper, London Metal Exchange. In early 2005, copper prices continued to rise as worldwide commodities demand continue to benefit from a declining dollar and strong demand from China. USGS, *Mineral Commodity Summaries*, p. 54.

¹⁷ Mainly cut diamonds.

¹⁸ In 2004, U.S. exports of steel and iron scrap (\$2.9 billion) were almost 2.5 times the amount of imports (\$1.2 billion) in this group.

¹⁹ See IISI, *World Steel in Figures*, p. 16.

²⁰ World Steel Dynamics, Global Steel Alert #26, *China: Not a Long-Term Threat*, Mar. 23, 2005, p. 19.

²¹ Office of the U.S. Trade Representative, *2004 National Trade Estimate Report on Foreign Trade Barriers*, found at http://www.ustr.gov/assets/Document_Library/Reports_Publications/2004/2004_National_Trade_Estimate/2004_NT_E_Report/asset_upload_file231_4191.pdf, retrieved May 16, 2005; Nancy E. Kelly, "Russia, Ukraine Face Pressure to Drop Scrap Taxes," *AMM.com*, Feb. 4, 2005, found at <http://www.amm.com>, retrieved Feb. 7, 2005; and "Industry, Administration Explore Scrap Options After Latest Talks," *Inside U.S. Trade*, Oct. 22, 2004.

Kingdom as the third-largest market for U.S. minerals and metals products, behind NAFTA partners Canada and Mexico.²²

²² U.S. exports to China in 2004 were almost 2.5 times U.S. exports to China in 2000 (see table MM-1).

Copper and Related Articles

Change in 2004 from 2003:

U.S. trade deficit: Increased \$0.8 billion (42 percent) to \$2.6 billion

U.S. exports: Increased \$0.9 billion (44 percent) to \$3.0 billion

U.S. imports: Increased \$1.7 billion (43 percent) to \$5.6 billion

The 2004 U.S. trade deficit for copper and related articles²³—the largest in five years—was principally the result of a significant upturn in copper metal prices. The average London Metal Exchange²⁴ price for high-grade copper rose from \$0.81 per pound in 2003 to \$1.28 per pound in 2004, an increase of 59 percent.²⁵ This price increase was in response to surging copper consumption, especially in China,²⁶ without an equivalent increase in production.²⁷ U.S. trading quantities in most copper and related articles declined, as many manufacturers continued to consume local inventory and U.S. consumers imported finished products.

U.S. exports

Copper industry exports were primarily to the NAFTA partners and China, with Mexico remaining the principal market. Exports to Mexico increased \$312 million (67 percent) to \$779 million, while exports to China rose \$12 million (2 percent) to \$608 million, reflecting a quantity decline. Exports to Canada increased \$182 million (46 percent) to \$578 million. None of the top trading partners observed a recorded value decrease. Exports were spread over many copper forms, the largest being high-grade copper waste and scrap (anodes and other forms), totaling \$882 million (29 percent of the export total) and refined copper wire rod of varied thicknesses totaling \$464 million (15 percent). Exports of copper cathodes, the dominantly traded copper form worldwide, and unrefined anodes also observed significant export shifts (table MM-3).

The primary destination for U.S. copper scrap exports in 2004 was China, which accounted for \$477 million (54 percent), an increase of \$70 million (17 percent). However, the increase was strictly the result of high prices; on a volume basis, such exports to China declined 2 percent. Overall, scrap export

²³ This industry/commodity group includes refined and unrefined copper and copper alloys in unwrought form and various semi-manufactured forms (wire rod, profiles, plate, sheet, strip, tube, and pipe) as well as copper waste, scrap, ash, and residues.

²⁴ The London Metal Exchange is the primary metal commodity warehousing and trading exchange in the world. The New York Stock Commodity Metal Exchange is the other common exchange, but deals almost completely with futures trading, and maintains significantly lower inventories.

²⁵ Daniel Edelstein, *Mineral Commodity Summaries*, Jan. 2005, found at <http://minerals.usgs.gov/minerals/pubs/commodity/copper/coppemcs05.pdf>.

²⁶ China's copper consumption has experienced double-digit growth since the late 1990s to feed China's burgeoning manufacturing industry. In 2002, China surpassed the United States as the world's largest copper consumer and is widely acknowledged as the dominant reason for the world copper market turnaround. See varied issues of the International Copper Study Group's Monthly Press Releases, available at <http://www.icsg.org/>; and Edelstein, *Mineral Commodity Summaries*.

²⁷ Copper inventories declined substantially as a result. This is in contrast to the situation during 1997–2003 when inventories increased because of a sustained period of oversupply which resulted in record-low copper prices. The price downturn led to the closure or partial shutdown of many copper-producing facilities worldwide, some of which are now being restored to production due to the increased price. Many copper-producing facilities did not re-open until the second half of 2004, exacerbating the declining worldwide inventory and placing upward pressure on the commodity price. For a detailed review of the domestic market issues during the downturn, see Christopher B. Mapes, "Major Contraction of the Domestic Refined Copper Industry," *Industry Trade and Technology Review*, USITC, Dec. 2002, pp. 1–20, found at http://hotdocs.usitc.gov/docs/pubs/industry_trade_technology_review/pub3574.pdf, retrieved Apr. 29, 2005.

volumes increased 4 percent in 2004, primarily to Canada, Taiwan, and Germany,²⁸ compared to an increase of 251,693 short tons (47 percent) during 2000–2004.²⁹

Copper wire rod was exported almost exclusively to Mexico (\$407 million, 88 percent of the total), recording a 163 percent increase in 2004. The significant export increase is due primarily to the production ramp-up at Asarco's Amarillo, TX,³⁰ and Phelps Dodge's El Paso, TX, refinery/rod mill facilities in response to the price upturn and increased mine production.³¹ The trade shift was facilitated by the continued increase in Mexican magnet wire drawing, motor-winding, and electrical component manufacturing facilities.³²

Exports of copper cathodes increased \$49 million (29 percent) to \$219 million in 2004 on lower volumes (table MM-3). However, cathode exports to China fell 61 percent and were redirected to multiple countries, notably Taiwan, Mexico, Italy, and Saudi Arabia.³³ Exports of unrefined copper anodes rose significantly in 2004 (up 175 percent, to \$121 million), reflecting a 107 percent increase to Canada (\$44 million) and a 16-fold increase to Korea (\$36 million), which recently started a new refining facility.

U.S. imports

Reflecting the increased price of copper, U.S. imports of copper and related articles increased in 2004, with imports from Canada increasing \$549 million (52 percent) to \$1.6 billion, those from Chile increasing \$329 million (48 percent) to \$1.0 billion, and imports from Mexico increasing \$179 million (55 percent) to \$509 million. The primary industry product imported (36 percent by value) was copper cathodes, increasing \$527 million (36 percent) to \$2.0 billion, despite a 9 percent decline in imported volume (see table MM-3). U.S. cathode imports were primarily from three countries: Chile, increasing \$252 million (46 percent) in value to \$796 million, but declining 10 percent in volume;³⁴ Canada,

²⁸ Several U.S. trade investigations on copper scrap in 2004, notably by the U.S. Department of Commerce Bureau of Industry and Security, reportedly caused China to halt imports of No. 2 copper scrap (the primary high-grade scrap form traded). Coupled with significant congestion at the Shanghai port and customs delays, there were several months during which U.S. scrap inventories accumulated. Some of this scrap was redirected to other Asian destinations, notably Taiwan, Japan, and Hong Kong. Daniel Edelstein, USGS Commodity Specialist, interview with USITC staff, Apr. 4, 2005.

²⁹ The United States no longer produces secondary refined copper from scrap; the last U.S. secondary copper-refining operation closed in 2001. Almost all copper scrap, excepting some high-quality alloyed scrap which is consumed by domestic brass and bronze manufacturers, must now be exported to be refined. See Edelstein, *Mineral Commodity Summaries*; and Mapes, "Major Contraction of the Domestic Refined Copper Industry."

³⁰ Owned by Grupo Mexico.

³¹ According to industry sources, U.S. magnet wire consumption has not grown very much, and much of the magnet wire and cabling capacity has moved to Asia in response to consumption growth there. Industry sources, interview with USITC staff, Apr. 4, 2004.

³² Grupo Mexico has its own rod mill, and much of the U.S. magnet wire production has shifted to Mexico. Phelps Dodge also operates magnet wire facilities there.

³³ Similar to declines in scrap. For more information, see footnote 27.

³⁴ A large portion of the Chilean imports represented withdrawals from the metal exchange warehouses (free-trade zone [FTZ] inventory), which were at record inventory levels in 2003. Almost 39 percent of copper cathode imports from Chile during 1998–2002 went into FTZ warehouses in the United States; this volume was thus classified as "General Imports," rather than "Imports for Consumption," and by January 2003 totaled \$799 million. As the worldwide production/consumption balance shifted to a deficit during 2003, inventory withdrawal began to occur and general imports were reclassified to imports for consumption upon withdrawal. U.S. Customs National Commodity Specialist, interview with USITC staff, June 22, 2004.

increasing \$270 million (69 percent) to \$662 million, reflecting a 28 percent volume increase; and Peru, declining \$25 million (6 percent) to \$422 million, reflecting a 41 percent volume decrease.³⁵

Other significant imports in the industry group included copper rod (\$832 million, up 79 percent), largely from the NAFTA partners and Russia;³⁶ copper anodes (\$419 million, up 7 percent, although the volume declined 6 percent), primarily from Canada and Chile;³⁷ and copper tube and pipe (\$338 million, up 63 percent), primarily from the NAFTA partners (table MM-4).

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³⁵ The decline in U.S. copper cathode imports from Peru reflects redirection to varied places, notably China and Mexico. Unlike Chilean cathode imports, Peruvian cathode imported directly by U.S. producers did not result in a large, unconsumed buildup in the exchange warehouses, largely because of U.S. investment in the major Peruvian copper mining facilities. As such, imports for consumption remained relatively level for years, increasing only when new mines came online. However, Grupo Mexico is now the majority owner of Southern Peru Copper Corp., through the 1999 acquisition of Asarco, and the reorganization of Grupo's assets in 2003–2004 has led to a shift of Peruvian cathode to Mexico. For more detail, see U.S. International Trade Commission, *The Impact of the Andean Trade Preference Act, Tenth Report, 2003*, Sept. 2004, USITC publication 3725, found at <http://hotdocs.usitc.gov/docs/pubs/332/pub3725.pdf>, retrieved May 27, 2005.

³⁶ Russia has instituted an export tariff on copper cathodes, reportedly to increase value-added rod production, according to industry sources. Industry sources, interview with USITC staff, Sept. 24, 2003. U.S. imports of wire rod from Russia have increased 85-fold since 2000.

³⁷ Anode imports by refineries declined as domestic mining and smelting operations increased production with the higher copper prices.

Table MM-3
Changes in U.S. exports of copper and related articles, 2000–2004

Item	2000	2001	2002	2003	2004	Change, 2004 from 2003	
						Absolute	Percent
<i>Million dollars</i>							
Copper spent anodes	275	280	260	349	469	120	34
Refined copper wire rod	208	169	191	191	464	273	143
Copper waste/scrap, >94% Cu . . .	261	258	249	315	412	97	31
Refined copper cathodes	160	23	41	170	219	49	29
Unrefined copper anodes	42	47	51	44	121	77	175
Other	2,163	1,075	952	1,017	1,321	304	30
Total	3,109	1,852	1,744	2,086	3,006	920	44

Note.—Calculations based on unrounded data.
Source: Compiled from official statistics of the U.S. Department of Commerce.

Table MM-4
Changes in U.S. imports of copper and related articles, 2000–2004

Item	2000	2001	2002	2003	2004	Change, 2004 from 2003	
						Absolute	Percent
<i>Million dollars</i>							
Refined copper cathodes	1,793	1,501	1,374	1,464	1,991	527	36
Refined copper wire rod	533	438	446	465	832	367	79
Unrefined copper anodes	429	638	366	390	419	29	7
Refined copper tube/pipe	219	201	199	208	338	130	63
Other	1,907	1,518	1,330	1,366	1,985	619	45
Total	4,881	4,296	3,715	3,893	5,565	1,672	43

Note.—Calculations based on unrounded data.
Source: Compiled from official statistics of the U.S. Department of Commerce.

Natural and Synthetic Gemstones

Change in 2004 from 2003:

U.S. trade deficit: Increased \$1.2 billion (9 percent) to \$14.6 billion

U.S. exports: Increased \$0.7 billion (141 percent) to \$1.1 billion

U.S. imports: Increased \$1.8 billion (13 percent) to \$15.7 billion

The expansion in the trade deficit for natural and synthetic gemstones in 2004 was principally the result of higher-valued diamond imports (table MM-5).³⁸ As the world's largest consumer market for diamonds with little or no natural deposits of its own,³⁹ the United States relies on imports to supply most of its requirements.⁴⁰ After 2 consecutive years of decline, U.S. gemstone exports rebounded in 2004, reflecting a stronger economy for many major diamond markets, notably much of the European Union and Japan.⁴¹ The stronger global economy led to higher diamond prices in the global market⁴² and increased demand in foreign markets for cut diamonds (table MM-6).⁴³

U.S. exports

In 2004, Hong Kong, Israel, and Belgium—major diamond-trading centers—were the top U.S. export markets by value. These three countries together represented \$535 million (56 percent) of all U.S. diamond exports, an increase of \$425 million (389 percent) from 2003. The principal U.S. exports of other gemstone products included natural-color gemstones to Hong Kong, the principal market worldwide, and pearls to Australia and Japan. In 2004, U.S. natural-color gemstone exports to Hong Kong rose \$14 million (89 percent) to \$29 million, or 30 percent of total U.S. natural-color gemstone exports. Pearl exports to Australia and Japan rose \$12 million (267 percent) to \$17 million, or 65 percent of total U.S. pearl exports. Japan and Mexico together received almost \$25 million (43 percent) of U.S. synthetic gemstones, an increase of \$11 million (77 percent).

³⁸ Cut diamonds greater than one-half carat was the dominant import category, registering an increased import value of \$1.7 billion (18 percent) to \$11.2 billion in 2004. The quantity increased by 419,000 carats (7 percent) to 6.2 million carats, and the unit value increased by \$168 (10 percent) to \$1,810 per carat.

³⁹ The United States reportedly accounts for 50 percent of global diamond sales. See Merrill Lynch, Rio Tinto Limited, "Diamonds Are a Girl's Best Friend...The Real Ones - Not the Synthetic Sort!," Mar. 23, 2005, p. 1, found at http://www.cwes01.com/9093/24013/ds/4851_4_0.PDF, retrieved Mar. 23, 2005.

⁴⁰ The United States does not have major diamond-mining operations, but it is an internationally recognized diamond cutting and trading center.

⁴¹ "General Assessment of the Macroeconomic Situation," *OECD Economic Outlook*, No. 76 (Dec. 2004), p. 15, found at <http://www.oecd.org>, retrieved Mar. 9, 2005.

⁴² De Beers raised rough diamond prices during 2004 an average of 14 percent, attributable to the relatively strong global diamond market. See Saul Singer, "De Beers 2004 Financial Performance," *Rapaport News*, Mar. 3, 2005, found at <http://www.diamonds.net/news/newsitem.asp?num=11558>, retrieved Mar. 9, 2005.

⁴³ Cut diamonds greater than one-half carat was the dominant export category, registering an increased export value of \$431 million (183 percent) to \$667 million in 2004. The quantity increased by 134,053 carats (139 percent) to 230,532 carats, and the trade-weighted average unit export value increased by \$448 (18 percent) to \$2,893.

U.S. imports

The U.S. diamond industry entered 2004 with favorable growth prospects, following a better than anticipated holiday season.⁴⁴ The strength of the U.S. economy;⁴⁵ higher diamond prices in the global market; and continued strong demand for larger, better quality stones⁴⁶ resulted in an increase of cut diamond imports in the greater-than-one-half-carat group. The inability of diamond wholesalers to pass on price increases to jewelry manufacturers,⁴⁷ however, appears to have prompted the restocking of inventory with predominantly less expensive larger cuts, underscored by the magnitude of imports from India. As the low-priced supplier of cut diamonds,⁴⁸ India accounted for 315,000 carats (73 percent) of the increase in imports by weight and 1.5 million carats (25 percent) of total imports of cut diamonds greater than one-half carat.⁴⁹

As in previous years, Israel, India, and Belgium—major diamond cutting and trading centers—remained the principal suppliers for most U.S. diamond imports by value.⁵⁰ These three countries together represented \$12.8 billion (87 percent) of all diamond imports in 2004, an increase of \$1.5 billion (13 percent) from 2003. Principal sources of other gemstone products included Thailand and India as the dominant suppliers of natural-color gemstones, together accounting for \$289 million (43 percent) of imports in 2004, an increase of \$16 million (6 percent). Japan and Australia together supplied \$163 million (51 percent) of pearl imports, an increase of \$32 million (24 percent). China and Germany together supplied nearly \$30 million (57 percent) of synthetic gemstone imports, an increase of \$4 million (15 percent).

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⁴⁴ Sayre Priddy, "Hopeful New Year Predictions," *Rapaport News*, Feb. 6, 2004, found at <http://www.diamonds.net/news/newsitem.asp?num=9180>, retrieved Mar. 22, 2005.

⁴⁵ Factors used by the industry as market indicators for gemstones are real disposable personal income which was up by 3.4 percent to nearly \$8 trillion in 2004 compared with 2003; real gross domestic product, up by 4.4 percent to \$10.8 trillion; average prime rate of interest, up by less than a percentage point to 4.34 percent, and the consumer confidence index, up by 16.5 percentage points to 96.1. The annual average consumer confidence index is based on monthly data from The Conference Board.

⁴⁶ Martin Rapaport, "New Year's Message 2005," *Rapaport News*, Jan. 5, 2005, p. 2.

⁴⁷ *Ibid.*

⁴⁸ The average unit price for cut diamonds greater than one-half carat from India was \$710 per carat in 2004, an increase of \$37 dollars (5 percent) from 2003. This compared with the average unit price from Israel of \$2,158 per carat, an increase of \$311 (17 percent) and from Belgium of \$1,995 per carat, an increase of \$166 (9 percent) from 2003.

⁴⁹ Although India has long been among the top three U.S. suppliers of cut stones greater than one-half carat, imports of this product group from India increased by 442 carats (66 percent) to 1.1 million carats in 2002 and has grown since that period. In 2004, India displaced Belgium as the second-largest supplier in terms of quantity, although Belgium remains the second-largest supplier in terms of value, following Israel.

⁵⁰ China is also becoming a major diamond-cutting center, where diamantaires from Israel, India, and Belgium reportedly own and operate cutting facilities. See Rapaport, "New Year's Message 2005," pp. 4–5.

Table MM-6
Changes in U.S. exports of natural and synthetic gemstones, 2000–2004

Item	2000	2001	2002	2003	2004	Change, 2004 from 2003	
						Absolute	Percent
<i>Million dollars</i>							
Diamonds	1,289	1,707	1,189	338	949	611	181
Natural-color gemstones	80	71	79	77	96	19	25
Pearls	22	23	27	12	26	14	117
Synthetics and reconstructed	75	39	36	42	58	16	38
Total	1,466	1,840	1,331	469	1,129	660	141

Note.—Calculations based on unrounded data.
Source: Compiled from official statistics of the U.S. Department of Commerce.

Table MM-5
Changes in U.S. imports of natural and synthetic gemstones, 2000–2004

Item	2000	2001	2002	2003	2004	Change, 2004 from 2003	
						Absolute	Percent
<i>Million dollars</i>							
Diamonds	12,060	10,625	12,088	12,931	14,651	1,720	13
Natural-color gemstones	711	572	629	617	665	48	8
Pearls	391	321	301	261	321	60	23
Synthetics and reconstructed	71	58	45	45	53	8	18
Total	13,234	11,577	13,063	13,854	15,690	1,836	13

Note.—Calculations based on unrounded data.
Source: Compiled from official statistics of the U.S. Department of Commerce.

Steel Mill Products

Change in 2004 from 2003:

U.S. trade deficit: Increased \$9.6 billion (192 percent) to \$14.5 billion

U.S. exports: Increased \$1.5 billion (27 percent) to \$7.0 billion

U.S. imports: Increased \$11.1 billion (105 percent) to \$21.6 billion

The U.S. trade deficit in steel mill products⁵¹ nearly tripled in 2004 (from \$5.0 billion in 2003), as strong demand caused the value of imports to more than double. Import quantities increased 54 percent (from 23.5 million tons to 36.1 million tons) following the December 2003 termination of the Section 201 steel safeguard tariffs⁵² and the July 2004 expiration of the Agreement Concerning Trade in Certain Steel Products from the Russian Federation.⁵³ Average unit price increases from \$543 per ton to \$726 per ton (34 percent) in 2004 magnified the impact of increased import quantities on the trade balance.⁵⁴ Average unit prices for exports in 2004 increased \$252 per ton (31 percent) to \$1,057 per ton, more than offsetting a 4 percent decrease in export quantity.

U.S. exports

Canada and Mexico are the most significant export markets for U.S. steel mill products. In 2004, Canada's share of U.S. exports grew from 47 percent to 56 percent (from \$5.5 billion to \$6.9 billion) while Mexico's share declined slightly from 20 percent to 19 percent, even as the value of U.S. exports increased from \$1.1 billion to \$1.3 billion. China was the third-largest export destination, accounting for \$223 million (3 percent) of U.S. exports during 2004, down from \$427 million (8 percent) during 2003.⁵⁵

Exports of carbon and alloy pipes and tubes increased \$383 million (39 percent) to \$1.4 billion in 2004 (table MM-7). North American markets were the primary destinations for this merchandise, accounting for \$874 million, or about two-thirds, of exports during 2004,⁵⁶ but shipments of pipe and tube to China more than tripled in 2004, with nearly one-half consisting of seamless, alloy pipe and tube, which is used primarily in the chemical and industrial processing industries and for the production of antifriction bearing races.

Exports of carbon and alloy plate, sheet, and strip increased \$377 million (15 percent) to \$2.9 billion in 2004, principally to Canada and Mexico, which represent the primary growth markets. This merchandise is used primarily in transportation equipment manufacturing.⁵⁷ Exports to Belgium, the third-largest market for U.S. exports of these products, almost doubled in 2004. Grain-oriented electrical steel, which is used to manufacture electric transformers, transducers, and magnetic amplifier cores, accounted for \$44 million (85 percent) of exports of this merchandise to Belgium during 2004, up from \$20 million (77 percent) in 2003.

⁵¹ This industry/commodity group contains 14 subgroups, which include carbon and alloy semifinished; carbon and alloy plates, sheets, and strips; carbon and alloy bars, rods, and light shapes; carbon and alloy angles, shapes, and sections; carbon and alloy wire; stainless semifinished; stainless plates, sheets, and strips; stainless bars, rods, and light shapes; stainless angles, shapes, and sections; stainless wire; carbon and alloy rails; carbon and alloy pipes and tubes; stainless pipes and tubes; and tool steels.

⁵² U.S. steel imports reached a 10-year low during 2003 after implementation of the Section 201 steel safeguard tariffs in March 2002.

⁵³ During 2003 and the first 6 months of 2004, imports from Russia were below their limits under the agreement.

⁵⁴ Variance analysis attributes 51 percent of the total increase in import value to volume increase and 49 percent to average unit price increase.

⁵⁵ China's steel production increased by 23 percent in 2004, partially diminishing import demand.

⁵⁶ Exports to Canada and Mexico also accounted for about two-thirds of exports of this merchandise in 2003.

⁵⁷ Exports to Canada and Mexico accounted for more than 86 percent of exports of this merchandise in 2004, up from 69 percent in 2003.

Exports of carbon and alloy bars, rods, and light shapes increased \$217 million (45 percent) to \$697 million in 2004, with North American markets accounting for more than \$550 million (80 percent) of U.S. exports in this group during 2004.⁵⁸ Exports to the United Kingdom, the third-largest export market for merchandise in this group, almost tripled in 2004, primarily due to increased exports of light, hot-rolled carbon steel angles, shapes, and sections.

U.S. imports

Canada and Mexico are the major sources for U.S. imports of steel mill products, although their combined share of U.S. imports declined from \$3.9 billion (37 percent) to \$6.1 billion (28 percent) in 2004.⁵⁹ The next 10 import sources each supplied 3–6 percent of U.S. imports in 2004.

Imports of carbon and alloy plates, sheets, and strips increased \$4.4 billion (145 percent) to \$7.4 billion in 2004 (table MM-8). Together, Canada and Mexico supplied \$1.8 billion (approximately 25 percent) of this merchandise in 2004. Canada and Mexico's share declined from 39 percent even as import values increased from \$1.2 billion in 2003. The growth in imports was led by Russia, which increased exports to the United States from less than \$30 million during 2003 to almost \$700 million during 2004, making Russia the second-largest source of this merchandise after Canada. A major decline in these steel imports supplied by China as well as the termination of U.S. safeguard tariffs in December 2003 allowed Russian steel to be available for the U.S. market. U.S. imports of this merchandise from Brazil, India, Korea, Mexico, the Netherlands, and Taiwan each also increased more than 100 percent in 2004.

Imports of carbon and alloy bars, rods, and light shapes increased \$2.1 billion (126 percent) to \$3.8 billion in 2004. Canada and Mexico supplied almost \$1 billion (27 percent) of imports of this merchandise in 2004. The value of these imports from Canada and Mexico increased from \$642 million in 2003 even as their share declined from 38 percent. The most significant trade-flow changes were in imports from Turkey and China, which together grew from \$218 million (14 percent) of total sector imports in 2003 to more than \$991 million (26 percent) in 2004. Turkey, a traditional source of such products, benefited from strong market demand and removal of U.S. safeguard tariffs, but the increase also was inflated by high steel unit values. Imports from Turkey consisted primarily of rebar and merchant bar and rod; imports from China were almost entirely merchant bar and rod.

Imports of carbon and alloy semifinished products increased \$1.6 billion (151 percent) in 2004. Mexico and Brazil together supplied \$1.7 billion (62 percent) of U.S. imports of this merchandise during 2004. The value of imports from these sources increased from \$762 million in 2003 even as their import share declined from 70 percent. The most significant trade-flow change was a rise in imports from Russia, which increased almost tenfold, from \$42 million (4 percent) of such imports in 2003 to more than \$407 million (15 percent) in 2004. Imports of carbon and alloy semifinished products from Argentina, Belgium, China, Turkey, Ukraine, the United Kingdom, and Venezuela each also increased more than 100 percent in 2004.

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⁵⁸ Exports to Canada and Mexico also accounted for more than 80 percent of exports of this merchandise in 2003.

⁵⁹ From 2003 to 2004, Canada's share of U.S. imports decreased from 26 percent to 17 percent, and Mexico's share decreased from 12 percent to 11 percent.

Table MM-7
Changes in U.S. exports of steel mill products, 2000–2004

Item	2000	2001	2002	2003	2004	Change, 2004 from 2003	
						Absolute	Percent
<i>Million dollars</i>							
Carbon and alloy pipes and tubes . .	932	1,015	1,016	977	1,360	383	39
Carbon and alloy plates, sheets, and strips	2,087	1,926	1,799	2,476	2,853	377	15
Carbon and alloy bars, rods, and light shapes	432	409	415	479	697	217	45
Carbon and alloy angles, shapes, and sections	238	199	156	220	377	157	71
Carbon and alloy wire	181	180	159	172	275	103	60
All other steel mill products	1,044	1,029	990	1,204	1,458	254	21
Total	4,911	4,756	4,533	5,525	7,015	1,490	27

Note.—Calculations based on unrounded data.
Source: Compiled from official statistics of the U.S. Department of Commerce.

Table MM-8
Changes in U.S. imports of steel mill products, 2000–2004

Item	2000	2001	2002	2003	2004	Change, 2004 from 2003	
						Absolute	Percent
<i>Million dollars</i>							
Carbon and alloy plates, sheets, and strips	5,150	3,422	3,860	3,028	7,406	4,378	145
Carbon and alloy bars, rods, and light shapes	2,077	1,886	1,928	1,669	3,769	2,100	126
Carbon and alloy semifinished	1,705	1,056	1,601	1,078	2,700	1,622	151
Carbon and alloy pipes and tubes . .	2,221	2,434	2,136	2,098	3,483	1,386	66
Stainless plates, sheets, and strips	868	512	553	624	1,139	515	82
All other steel mill products	3,185	2,320	2,125	2,002	3,062	1,060	53
Total	15,206	11,630	12,203	10,499	21,559	11,060	105

Note.—Calculations based on unrounded data.
Source: Compiled from official statistics of the U.S. Department of Commerce.

Table MM-9
Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2000–2004¹

USITC code ²	Industry/commodity group	2000	2001	2002	2003	2004	Change, 2004 from 2003	
							Absolute	Percent
<i>Million dollars</i>								
MM001	Clays and related mineral products:							
	Exports	1,040	973	941	986	1,069	83	8.4
	Imports	195	179	158	180	210	30	16.7
	Trade balance	845	794	782	806	859	53	6.6
MM002	Fluorspar and miscellaneous mineral substances:							
	Exports	71	51	39	30	36	5	17.8
	Imports	145	159	147	147	167	20	13.6
	Trade balance	-74	-108	-109	-117	-131	-15	-12.6
MM003	Iron ores and concentrates:							
	Exports	246	229	249	248	334	86	34.7
	Imports	420	293	313	328	370	42	12.9
	Trade balance	-174	-64	-64	-80	-36	44	54.9
MM004	Copper ores and concentrates:							
	Exports	173	84	79	73	134	61	83.4
	Imports	(³)	58	105	18	25	7	36.8
	Trade balance	173	26	-26	55	109	54	98.7
MM005	Lead ores, concentrates, and residues:							
	Exports	73	108	133	197	215	18	9.0
	Imports	8	1	(³)	0	(³)	(³)	(⁴)
	Trade balance	65	108	133	197	215	18	9.0
MM005A	Lead ores and concentrates:							
	Exports	54	106	117	144	207	62	43.2
	Imports	8	(³)	(³)	0	0	0	9(⁴)
	Trade balance	46	105	117	144	207	62	43.2
MM006	Zinc ores, concentrates, and residues:							
	Exports	317	299	339	349	426	77	22.0
	Imports	38	38	53	68	109	41	60.9
	Trade balance	279	260	286	281	317	36	12.7
MM006A	Zinc ores and concentrates:							
	Exports	308	290	328	340	417	77	22.8
	Imports	27	32	45	60	99	39	64.4
	Trade balance	281	259	283	280	319	39	13.8
MM007	Certain ores, concentrates, ash, and residues:							
	Exports	232	248	183	289	507	219	75.8
	Imports	790	797	728	685	962	277	40.5
	Trade balance	-558	-549	-545	-396	-454	-58	-14.8

See footnote(s) at end of table.

Table MM-9—Continued
Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2000–2004¹

USITC code ²	Industry/commodity group	2000	2001	2002	2003	2004	Change, 2004 from 2003	
							Absolute	Percent
<i>Million dollars</i>								
MM007A	Molybdenum ores and concentrates:							
	Exports	104	110	112	194	358	164	84.3
	Imports	35	33	37	51	268	217	421.8
	Trade balance	68	77	76	143	90	-53	-37.1
MM008	Precious metal ores and concentrates:							
	Exports	34	85	68	32	40	8	26.4
	Imports	10	14	43	23	21	-2	-10.3
	Trade balance	25	71	26	8	19	11	127.4
MM008A	Gold ores and concentrates:							
	Exports	10	7	10	13	16	3	22.4
	Imports	1	1	28	22	19	-3	-13.4
	Trade balance	10	6	-18	-9	-3	6	66.3
MM008B	Silver ores and concentrates:							
	Exports	21	72	57	16	2	-15	-90.7
	Imports	(³)	3	13	1	2	(³)	18.4
	Trade balance	21	69	44	15	(³)	-15	(⁴)
MM009	Cement, stone, and related products:							
	Exports	1,307	1,322	1,279	1,405	1,648	243	17.3
	Imports	4,408	4,407	4,611	4,945	5,897	951	19.2
	Trade balance	-3,101	-3,085	-3,332	-3,540	-4,248	-708	-20.0
MM009A	Cement:							
	Exports	64	56	58	62	63	1	2.3
	Imports	1,074	987	939	940	1,139	199	21.2
	Trade balance	-1,010	-931	-881	-879	-1,076	-198	-22.5
MM010	Industrial ceramics:							
	Exports	748	711	645	600	625	25	4.1
	Imports	827	640	497	551	672	121	22.0
	Trade balance	-80	71	148	49	-48	-97	(⁴)
MM011	Ceramic bricks and similar articles:							
	Exports	23	23	23	26	46	20	74.8
	Imports	35	31	34	38	50	12	31.8
	Trade balance	-11	-8	-12	-12	-4	8	66.3
MM012	Ceramic floor and wall tiles:							
	Exports	26	27	28	27	27	-1	-2.4
	Imports	1,118	1,112	1,290	1,430	1,631	201	14.0
	Trade balance	-1,092	-1,086	-1,262	-1,403	-1,604	-202	-14.4

See footnote(s) at end of table.

Table MM-9—Continued
Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2000–2004¹

USITC code ²	Industry/commodity group	2000	2001	2002	2003	2004	Change, 2004 from 2003	
							Absolute	Percent
<i>Million dollars</i>								
MM013	Ceramic household articles:							
	Exports	115	96	83	88	107	18	21.0
	Imports	1,797	1,635	1,691	1,757	1,683	-74	-4.2
	Trade balance	-1,683	-1,539	-1,608	-1,669	-1,577	92	5.5
MM014	Flat glass:							
	Exports	1,807	1,791	1,694	1,747	1,882	135	7.7
	Imports	1,473	1,500	1,553	1,699	1,959	261	15.3
	Trade balance	334	291	140	49	-77	-125	(⁴)
MM015	Glass containers:							
	Exports	174	211	165	161	185	24	15.0
	Imports	585	538	608	607	659	52	8.6
	Trade balance	-411	-327	-443	-446	-474	-28	-6.2
MM016	Household glassware:							
	Exports	195	209	177	165	183	17	10.5
	Imports	930	835	888	919	947	28	3.0
	Trade balance	-735	-625	-711	-753	-764	-11	-1.4
MM017	Miscellaneous glass products:							
	Exports	862	814	729	748	812	64	8.6
	Imports	856	769	653	701	822	120	17.1
	Trade balance	6	46	76	46	-10	-56	(⁴)
MM018	Fiberglass insulation products:							
	Exports	59	74	75	88	92	4	4.6
	Imports	137	124	131	155	214	59	37.8
	Trade balance	-78	-50	-56	-67	-122	-55	-81.6
MM019	Natural and synthetic gemstones:							
	Exports	1,466	1,840	1,331	469	1,129	660	140.9
	Imports	13,234	11,577	13,063	13,854	15,690	1,836	13.3
	Trade balance	-11,768	-9,737	-11,731	-13,386	-14,562	-1,176	-8.8
MM020	Precious metals and non-numismatic coins:							
	Exports	7,685	6,826	5,070	6,299	6,204	-94	-1.5
	Imports	10,082	8,193	6,263	6,759	9,055	2,296	34.0
	Trade balance	-2,397	-1,366	-1,193	-460	-2,851	-2,391	-519.6
MM020A	Unrefined and refined gold:							
	Exports	5,099	4,186	2,639	4,130	3,465	-665	-16.1
	Imports	2,262	1,700	2,143	2,689	3,680	991	36.8
	Trade balance	2,836	2,486	496	1,441	-215	-1,656	(⁴)

See footnote(s) at end of table.

Table MM-9—Continued
Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2000–2004¹

USITC code ²	Industry/commodity group	2000	2001	2002	2003	2004	Change, 2004 from 2003	
							Absolute	Percent
<i>Million dollars</i>								
MM021	Primary iron products:							
	Exports	13	7	7	11	10	-1	-6.8
	Imports	759	632	729	815	1,898	1,083	132.9
	Trade balance	-746	-624	-722	-804	-1,887	-1,084	-134.8
MM022	Ferroalloys:							
	Exports	96	74	50	51	81	29	57.2
	Imports	1,104	660	713	899	1,885	987	109.7
	Trade balance	-1,008	-586	-663	-848	-1,805	-957	-112.9
MM023	Iron and steel waste and scrap:							
	Exports	1,030	1,151	1,307	1,960	2,923	963	49.1
	Imports	393	284	397	518	1,244	726	140.2
	Trade balance	637	867	911	1,442	1,680	237	16.4
MM024	Abrasive and ferrous products:							
	Exports	565	476	445	466	543	77	16.6
	Imports	854	718	746	769	889	120	15.6
	Trade balance	-289	-242	-301	-304	-346	-42	-13.9
MM024A	Abrasive products:							
	Exports	315	289	284	310	345	35	11.2
	Imports	552	473	505	540	631	91	16.8
	Trade balance	-237	-184	-222	-230	-286	-56	-24.4
MM025	Steel mill products:							
	Exports	4,911	4,756	4,533	5,525	7,015	1,490	27.0
	Imports	15,026	11,630	12,203	10,499	21,559	11,060	105.3
	Trade balance	-10,114	-6,874	-7,670	-4,974	-14,544	-9,570	-192.4
MM025A	Ingots, blooms, billets, and slabs of carbon and alloy steels:							
	Exports	82	70	55	121	169	48	39.8
	Imports	1,705	1,056	1,601	1,078	2,700	1,622	150.5
	Trade balance	-1,623	-986	-1,546	-957	-2,531	-1,574	-164.5
MM025B	Plates, sheets, and strips of carbon and alloy steels:							
	Exports	2,087	1,926	1,799	2,476	2,853	377	15.2
	Imports	5,150	3,422	3,860	3,028	7,406	4,378	144.6
	Trade balance	-3,063	-1,495	-2,062	-552	-4,554	-4,001	-724.4

See footnote(s) at end of table.

Table MM-9—Continued
Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2000–2004¹

USITC code ²	Industry/commodity group	2000	2001	2002	2003	2004	Change, 2004 from 2003	
							Absolute	Percent
<i>Million dollars</i>								
MM025C	Bars, rods, and light shapes of carbon and alloy steels:							
	Exports	432	409	415	479	697	217	45.4
	Imports	2,077	1,886	1,928	1,669	3,769	2,100	125.8
	Trade balance	-1,644	-1,477	-1,513	-1,190	-3,072	-1,882	-158.2
MM025D	Angles, shapes, and sections of carbon and alloy steels:							
	Exports	235	197	154	217	372	155	71.4
	Imports	777	421	338	286	448	162	56.7
	Trade balance	-543	-224	-184	-69	-76	-7	-10.2
MM025E	Wire of carbon and alloy steels:							
	Exports	181	180	159	172	275	103	59.6
	Imports	496	449	467	463	731	269	58.0
	Trade balance	-315	-269	-308	-291	-456	-166	-57.1
MM025F	Ingots, blooms, billets, and slabs of stainless steels:							
	Exports	38	37	59	27	46	19	71.3
	Imports	428	299	306	242	388	146	60.6
	Trade balance	-389	-262	-247	-214	-342	-127	-59.3
MM025G	Plates, sheets, and strips of stainless steels:							
	Exports	441	403	410	575	632	57	9.9
	Imports	868	512	553	624	1,139	515	82.4
	Trade balance	-427	-108	-142	-49	-507	-458	-932.3
MM025H	Bars, rods, and light shapes of stainless steels:							
	Exports	88	94	82	89	131	42	47.5
	Imports	437	351	284	215	378	163	76.0
	Trade balance	-350	-257	-202	-126	-247	-121	-96.0
MM025I	Angles, shapes, and sections of stainless steels:							
	Exports	8	7	6	5	7	2	36.0
	Imports	24	14	12	9	16	8	93.5
	Trade balance	-16	-7	-6	-3	-9	-6	-190.2
MM025J	Wire of stainless steels:							
	Exports	61	71	67	52	56	4	6.9
	Imports	108	98	92	96	143	47	48.7
	Trade balance	-47	-27	-25	-44	-87	-43	-98.8

See footnote(s) at end of table.

Table MM-9—Continued
Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2000–2004¹

USITC code ²	Industry/commodity group	2000	2001	2002	2003	2004	Change, 2004 from 2003	
							Absolute	Percent
<i>Million dollars</i>								
MM025K	Rails and accessories of carbon and alloy steels:							
	Exports	78	77	73	67	104	37	54.9
	Imports	190	154	167	163	221	58	35.3
	Trade balance	-112	-77	-93	-96	-117	-21	-21.7
MM025L	Pipes and tubes of carbon and alloy steels:							
	Exports	932	1,015	1,016	977	1,360	383	39.2
	Imports	2,221	2,434	2,136	2,098	3,483	1,386	66.1
	Trade balance	-1,289	-1,419	-1,120	-1,120	-2,123	-1,003	-89.5
MM025M	Pipes and tubes of stainless steels:							
	Exports	148	141	118	148	160	12	7.8
	Imports	319	338	274	309	465	156	50.5
	Trade balance	-171	-197	-156	-161	-305	-144	-89.7
MM025N	Tool steels:							
	Exports	100	128	118	119	153	34	29.0
	Imports	225	196	184	220	271	51	23.3
	Trade balance	-125	-68	-65	-101	-118	-17	-16.6
MM026	Steel pipe and tube fittings and certain cast products:							
	Exports	767	707	669	705	900	195	27.7
	Imports	706	697	669	609	838	229	37.6
	Trade balance	61	10	(³)	95	62	-34	-35.2
MM027	Fabricated structurals:							
	Exports	204	184	166	160	203	43	26.9
	Imports	534	638	627	501	508	8	1.5
	Trade balance	-329	-454	-460	-341	-305	35	10.4
MM028	Metal construction components:							
	Exports	533	505	497	561	675	115	20.4
	Imports	922	990	1,135	1,212	1,501	289	23.8
	Trade balance	-388	-485	-638	-652	-826	-174	-26.8
MM029	Metallic containers:							
	Exports	697	666	661	616	716	100	16.3
	Imports	549	570	645	660	760	100	15.1
	Trade balance	148	96	16	-45	-44	(³)	0.8

See footnote(s) at end of table.

Table MM-9—Continued
Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2000–2004¹

USITC code ²	Industry/commodity group	2000	2001	2002	2003	2004	Change, 2004 from 2003	
							Absolute	Percent
<i>Million dollars</i>								
MM030	Wire products of base metal:							
	Exports	826	718	732	760	853	93	12.2
	Imports	1,419	1,355	1,416	1,591	2,191	600	37.7
	Trade balance	-593	-637	-684	-831	-1,338	-507	-61.0
MM031	Miscellaneous products of base metal:							
	Exports	5,814	5,264	5,283	5,227	5,255	28	0.5
	Imports	7,324	7,107	7,773	8,403	10,163	1,760	20.9
	Trade balance	-1,510	-1,843	-2,491	-3,176	-4,908	-1,733	-54.6
MM032	Industrial fasteners of base metal:							
	Exports	1,663	1,481	1,496	1,520	1,672	152	10.0
	Imports	2,325	2,006	2,085	2,348	2,977	629	26.8
	Trade balance	-663	-525	-589	-828	-1,305	-477	-57.7
MM033	Cooking and kitchen ware:							
	Exports	271	260	201	199	198	-1	-0.3
	Imports	1,798	1,743	1,933	2,070	2,170	101	4.9
	Trade balance	-1,527	-1,483	-1,732	-1,871	-1,972	-101	-5.4
MM034	Metal and ceramic sanitary ware:							
	Exports	141	124	134	142	159	16	11.5
	Imports	533	588	742	863	1,062	199	23.1
	Trade balance	-393	-464	-608	-721	-903	-183	-25.4
MM035	Construction castings and other cast-iron articles:							
	Exports	32	24	25	23	30	6	27.7
	Imports	123	110	112	124	180	56	45.1
	Trade balance	-91	-86	-87	-101	-151	-50	-49.2
MM036	Copper and related articles:							
	Exports	3,109	1,852	1,744	2,086	3,006	920	44.1
	Imports	4,881	4,296	3,715	3,893	5,565	1,672	43.0
	Trade balance	-1,772	-2,444	-1,972	-1,807	-2,559	-752	-41.6
MM036A	Unrefined and refined copper:							
	Exports	202	69	92	214	339	125	58.5
	Imports	2,223	2,140	1,740	1,854	2,411	556	30.0
	Trade balance	-2,021	-2,070	-1,648	-1,640	-2,071	-431	-26.3
MM036B	Copper alloy plate, sheet, and strip:							
	Exports	208	155	117	144	198	54	37.8
	Imports	182	145	118	104	176	72	69.1
	Trade balance	26	9	-1	40	22	-17	-43.9

See footnote(s) at end of table.

Table MM-9—Continued
Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2000–2004¹

USITC code ²	Industry/commodity group	2000	2001	2002	2003	2004	Change, 2004 from 2003	
							Absolute	Percent
<i>Million dollars</i>								
MM037	Unwrought aluminum:							
	Exports	1,130	923	950	1,000	1,397	397	39.7
	Imports	5,085	4,748	4,774	5,000	6,837	1,838	36.8
	Trade balance	-3,955	-3,825	-3,824	-3,999	-5,440	-1,441	-36.0
MM037A	Primary and secondary aluminum:							
	Exports	636	466	431	376	608	232	61.6
	Imports	4,297	4,085	4,188	4,401	6,001	1,600	36.4
	Trade balance	-3,660	-3,619	-3,757	-4,025	-5,393	-1,368	-34.0
MM038	Aluminum mill products:							
	Exports	3,130	2,784	2,519	2,564	3,171	606	23.6
	Imports	2,674	2,305	2,516	2,768	3,512	745	26.9
	Trade balance	456	479	3	-203	-342	-138	-68.1
MM038A	Aluminum bars, rods, and profiles:							
	Exports	252	245	226	243	304	61	25.3
	Imports	449	352	417	435	581	146	33.5
	Trade balance	-197	-108	-191	-192	-277	-85	-43.9
MM038B	Aluminum wire:							
	Exports	122	84	77	80	97	17	20.7
	Imports	231	162	190	269	359	90	33.5
	Trade balance	-109	-78	-114	-189	-263	-74	-38.9
MM038C	Aluminum plate, sheet, and strip:							
	Exports	2,129	1,872	1,652	1,655	2,077	421	25.5
	Imports	1,425	1,242	1,331	1,411	1,817	405	28.7
	Trade balance	703	629	321	244	260	16	6.5
MM038D	Aluminum foil:							
	Exports	331	328	319	338	403	65	19.2
	Imports	446	441	468	500	565	65	13.1
	Trade balance	-114	-113	-150	-162	-163	-1	-0.4
MM038E	Aluminum tubes, pipes, and fittings:							
	Exports	248	215	205	198	237	39	19.8
	Imports	109	90	95	134	171	37	28.0
	Trade balance	139	125	111	64	66	2	2.6
MM039	Lead and related articles:							
	Exports	170	78	68	117	108	-9	-7.9
	Imports	215	167	125	113	203	91	80.5
	Trade balance	-45	-88	-57	5	-95	-100	(⁴)

See footnote(s) at end of table.

Table MM-9—Continued
Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2000–2004¹

USITC code ²	Industry/commodity group	2000	2001	2002	2003	2004	Change, 2004 from 2003	
							Absolute	Percent
<i>Million dollars</i>								
MM039A	Refined lead:							
	Exports	16	8	14	48	38	-10	-21.2
	Imports	117	90	82	65	128	63	95.8
	Trade balance	-101	-83	-68	-18	-90	-73	-411.5
MM040	Zinc and related articles:							
	Exports	103	86	84	94	139	45	47.6
	Imports	1,298	968	908	845	1,135	290	34.4
	Trade balance	-1,195	-882	-825	-750	-996	-245	-32.7
MM040A	Unwrought zinc:							
	Exports	3	1	1	2	5	4	203.9
	Imports	1,104	786	731	676	947	270	40.0
	Trade balance	-1,101	-785	-730	-674	-941	-267	-39.6
MM041	Certain base metals and chemical elements:							
	Exports	1,503	1,702	1,498	1,571	1,913	341	21.7
	Imports	2,873	2,467	1,952	2,248	3,825	1,577	70.2
	Trade balance	-1,371	-765	-454	-676	-1,912	-1,236	-182.7
MM041A	Titanium ingot:							
	Exports	12	22	12	11	14	3	31.2
	Imports	17	27	13	7	15	8	120.2
	Trade balance	-5	-6	-1	4	(³)	-5	(⁴)
MM042	Nonpowered handtools:							
	Exports	2,263	2,119	2,038	2,109	2,361	252	11.9
	Imports	3,163	2,996	3,284	3,652	4,136	484	13.3
	Trade balance	-901	-876	-1,246	-1,543	-1,776	-233	-15.1
MM043	Certain cutlery, sewing implements, and related products:							
	Exports	546	556	551	550	553	2	0.4
	Imports	888	865	912	1,053	1,133	79	7.5
	Trade balance	-342	-309	-361	-503	-580	-77	-15.3
MM044	Table flatware and related products:							
	Exports	25	28	29	22	24	3	12.0
	Imports	507	463	478	484	518	34	7.1
	Trade balance	-481	-435	-450	-462	-494	-32	-6.8

See footnote(s) at end of table.

Table MM-9—Continued

Minerals and metals: U.S. trade for industry/commodity groups and subgroups, 2000–2004¹

USITC code ²	Industry/commodity group	2000	2001	2002	2003	2004	Change, 2004 from 2003	
							Absolute	Percent
<i>Million dollars</i>								
MM045	Certain builders' hardware:							
	Exports	1,084	961	907	911	982	72	7.9
	Imports	1,973	1,948	2,197	2,405	3,063	658	27.4
	Trade balance	-889	-987	-1,289	-1,494	-2,080	-586	-39.2

¹Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

²This 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

³Less than \$500,000.

⁴Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data.

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

Table MM-10

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
MM001	Clays and related mineral products:						
	Number of establishments	230	230	240	240	240	0.0
	Employees (thousands)	7.0	7.0	6.0	6.0	6.0	0.0
	Capacity utilization (percent)	(¹)					
	U.S. shipments (million dollars)	1,520	1,510	1,580	1,660	1,730	4.2
	U.S. exports (million dollars)	1,040	973	941	986	1,069	8.4
	U.S. imports (million dollars)	195	179	158	180	210	16.7
	Apparent U.S. consumption (million dollars)	675	716	798	854	871	2.0
	Trade balance (million dollars)	845	794	782	806	859	6.6
	Ratio of imports to consumption (percent)	28.9	25.0	19.9	21.1	24.2	14.7
	Ratio of exports to shipments (percent)	68.4	64.4	59.5	59.4	61.8	4.0
MM003	Iron ores and concentrates:						
	Number of establishments	13	13	12	11	12	9.1
	Employees (thousands)	7.0	6.0	5.0	5.0	5.0	0.0
	Capacity utilization (percent)	97	83	93	87	96	10.3
	U.S. shipments (million dollars)	2,500	1,900	1,900	1,700	2,200	29.4
	U.S. exports (million dollars)	246	229	249	248	334	34.7
	U.S. imports (million dollars)	420	293	313	328	370	12.9
	Apparent U.S. consumption (million dollars)	2,674	1,964	1,964	1,780	2,236	25.6
	Trade balance (million dollars)	-174	-64	-64	-80	-36	54.9
	Ratio of imports to consumption (percent)	15.7	14.9	15.9	18.4	16.6	-9.8
	Ratio of exports to shipments (percent)	9.8	12.1	13.1	14.6	15.2	4.1
MM004	Copper ores and concentrates:						
	Number of establishments	30	25	22	21	22	4.8
	Employees (thousands)	9.1	8.2	7.0	6.8	7.0	2.9
	Capacity utilization (percent)	83	82	72	72	74	2.8
	U.S. shipments (million dollars)	2,251	1,816	1,520	1,680	2,720	61.9
	U.S. exports (million dollars)	173	84	79	73	134	83.4
	U.S. imports (million dollars)	(²)	58	105	18	25	36.8
	Apparent U.S. consumption (million dollars)	2,078	1,790	1,546	1,625	2,611	60.7
	Trade balance (million dollars)	173	26	-26	55	109	98.7
	Ratio of imports to consumption (percent)	(³)	3.2	6.8	1.1	0.9	-18.2
	Ratio of exports to shipments (percent)	7.7	4.6	5.2	4.3	4.9	14.0

See footnote(s) at end of table.

Table MM-10—Continued

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
MM005A	Lead ores and concentrates:						
	Number of establishments	19	12	11	11	10	-9.1
	Employees (thousands)	1.0	1.0	1.0	1.0	1.0	0.0
	Capacity utilization (percent)	85	85	84	86	86	0.0
	U.S. shipments (million dollars)	341	367	350	393	412	4.8
	U.S. exports (million dollars)	54	106	117	144	207	43.2
	U.S. imports (million dollars)	8	(²)	(²)	0	0	0.0
	Apparent U.S. consumption (million dollars)	295	262	233	249	205	-17.4
	Trade balance (million dollars)	46	105	117	144	207	43.2
	Ratio of imports to consumption (percent)	2.6	0.2	(³)	0.0	0.0	0.0
	Ratio of exports to shipments (percent)	15.9	28.8	33.5	36.7	50.1	36.5
MM006A	Zinc ores and concentrates:						
	Number of establishments	19	12	11	11	11	0.0
	Employees (thousands)	3.0	2.0	2.0	1.0	1.0	0.0
	Capacity utilization (percent)	90	89	98	92	96	4.3
	U.S. shipments (million dollars)	564	433	352	350	477	36.3
	U.S. exports (million dollars)	308	290	328	340	417	22.8
	U.S. imports (million dollars)	27	32	45	60	99	64.4
	Apparent U.S. consumption (million dollars)	283	174	69	70	158	125.9
	Trade balance (million dollars)	281	259	283	280	319	13.8
	Ratio of imports to consumption (percent)	9.5	18.1	64.6	85.6	62.3	-27.2
	Ratio of exports to shipments (percent)	54.6	67.0	93.1	97.1	87.5	-9.9
MM007A	Molybdenum ores and concentrates:						
	Number of establishments	7	6	6	6	7	16.7
	Employees (thousands)	0.6	0.5	0.5	0.5	0.6	20.0
	Capacity utilization (percent)	55	56	49	51	58	13.7
	U.S. shipments (million dollars)	231	196	267	391	1,249	219.4
	U.S. exports (million dollars)	104	110	112	194	358	84.3
	U.S. imports (million dollars)	35	33	37	51	268	421.8
	Apparent U.S. consumption (million dollars)	163	119	191	248	1,159	366.8
	Trade balance (million dollars)	68	77	76	143	90	-37.1
	Ratio of imports to consumption (percent)	21.7	27.6	19.2	20.7	23.1	11.6
	Ratio of exports to shipments (percent)	44.8	56.2	42.1	49.6	28.6	-42.3

See footnote(s) at end of table.

Table MM-10—Continued

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
MM008A	Gold ores and concentrates:						
	Number of establishments	225	200	180	178	181	1.7
	Employees (thousands)	11.0	10.0	9.0	9.0	9.0	0.0
	Capacity utilization (percent)	90	90	86	87	87	0.0
	U.S. shipments (million dollars)	2,534	2,335	2,376	2,590	2,600	(³)
	U.S. exports (million dollars)	10	7	10	13	16	22.4
	U.S. imports (million dollars)	1	1	28	22	19	(³)
	Apparent U.S. consumption (million dollars)	2,524	2,329	2,394	2,599	2,603	(³)
	Trade balance (million dollars)	10	6	-18	-9	-3	66.3
	Ratio of imports to consumption (percent)	(³)	0.1	1.2	0.8	0.7	-12.5
	Ratio of exports to shipments (percent)	0.4	0.3	0.4	0.5	0.6	20.0
MM008B	Silver ores and concentrates:						
	Number of establishments	13	12	11	11	11	0.0
	Employees (thousands)	1.0	1.0	1.0	1.0	1.0	0.0
	Capacity utilization (percent)	90	90	86	87	87	0.0
	U.S. shipments (million dollars)	207	171	147	136	180	32.4
	U.S. exports (million dollars)	21	72	57	16	2	-90.7
	U.S. imports (million dollars)	(²)	3	13	1	2	18.4
	Apparent U.S. consumption (million dollars)	186	102	103	121	180	48.8
	Trade balance (million dollars)	21	69	44	15	(²)	(⁴)
	Ratio of imports to consumption (percent)	0.1	2.7	12.8	1.1	0.9	-18.2
	Ratio of exports to shipments (percent)	10.2	42.2	39.1	12.0	0.8	-93.3
MM009A	Cement:						
	Number of establishments	116	116	116	116	114	-1.7
	Employees (thousands)	18.0	18.0	18.0	18.0	18.0	0.0
	Capacity utilization (percent)	(¹)					
	U.S. production (million dollars)	7,200	7,100	7,000	7,000	8,000	14.3
	U.S. exports (million dollars)	64	56	58	62	63	2.3
	U.S. imports (million dollars)	1,074	987	939	940	1,139	21.2
	Apparent U.S. consumption (million dollars)	8,210	8,031	7,881	7,879	9,076	15.2
	Trade balance (million dollars)	-1,010	-931	-881	-879	-1,076	-22.5
	Ratio of imports to consumption (percent)	13.1	12.3	11.9	11.9	12.6	5.9
	Ratio of exports to production (percent)	0.9	0.8	0.8	0.9	0.8	-11.1

See footnote(s) at end of table.

Table MM-10—Continued

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
MM010	Industrial ceramics:						
	Number of establishments	200	200	190	190	190	0.0
	Employees (thousands)	12.0	12.0	11.0	10.0	10.0	0.0
	Capacity utilization (percent)	(¹)					
	U.S. shipments (million dollars)	3,000	2,950	2,800	1,874	2,900	54.7
	U.S. exports (million dollars)	748	711	645	600	625	4.1
	U.S. imports (million dollars)	827	640	497	551	672	22.0
	Apparent U.S. consumption (million dollars)	3,080	2,879	2,652	1,825	2,948	61.5
	Trade balance (million dollars)	-80	71	148	49	-48	(⁴)
	Ratio of imports to consumption (percent)	26.9	22.2	18.7	30.2	22.8	-24.5
	Ratio of exports to shipments (percent)	24.9	24.1	23.0	32.0	21.5	-32.8
MM011	Ceramic bricks and similar articles:						
	Number of establishments	207	207	207	207	207	0.0
	Employees (thousands)	14.0	14.0	14.0	14.0	14.0	0.0
	Capacity utilization (percent)	(¹)					
	U.S. shipments (million dollars)	1,775	1,765	1,785	1,900	2,200	15.8
	U.S. exports (million dollars)	23	23	23	26	46	74.8
	U.S. imports (million dollars)	35	31	34	38	50	31.8
	Apparent U.S. consumption (million dollars)	1,786	1,773	1,797	1,912	2,204	15.3
	Trade balance (million dollars)	-11	-8	-12	-12	-4	66.3
	Ratio of imports to consumption (percent)	1.9	1.7	1.9	2.0	2.3	15.0
	Ratio of exports to shipments (percent)	1.3	1.3	1.3	1.4	2.1	50.0
MM012	Ceramic floor and wall tiles:						
	Number of establishments	203	203	203	203	203	0.0
	Employees (thousands)	9.0	8.0	7.0	7.0	7.0	0.0
	Capacity utilization (percent)	(¹)					
	U.S. shipments (million dollars)	867	776	825	757	810	7.0
	U.S. exports (million dollars)	26	27	28	27	27	-2.4
	U.S. imports (million dollars)	1,118	1,112	1,290	1,430	1,631	14.0
	Apparent U.S. consumption (million dollars)	1,959	1,862	2,087	2,160	2,414	11.8
	Trade balance (million dollars)	-1,092	-1,086	-1,262	-1,403	-1,604	-14.4
	Ratio of imports to consumption (percent)	57.1	59.7	61.8	66.2	67.6	2.1
	Ratio of exports to shipments (percent)	3.0	3.4	3.4	3.6	3.3	-8.3

See footnote(s) at end of table.

Table MM-10—Continued

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
MM013	Ceramic household articles:						
	Number of establishments	63	60	60	60	60	0.0
	Employees (thousands)	6.0	6.0	6.0	6.0	6.0	0.0
	Capacity utilization (percent)	(¹)					
	U.S. shipments (million dollars)	344	330	328	323	325	0.6
	U.S. exports (million dollars)	115	96	83	88	107	21.0
	U.S. imports (million dollars)	1,797	1,635	1,691	1,757	1,683	(³)
	Apparent U.S. consumption (million dollars)	2,027	1,869	1,936	1,992	1,902	-4.5
	Trade balance (million dollars)	-1,683	-1,539	-1,608	-1,669	-1,577	5.5
	Ratio of imports to consumption (percent)	88.7	87.5	87.3	88.2	88.5	(³)
	Ratio of exports to shipments (percent)	33.3	29.1	25.3	27.3	32.8	20.1
MM014	Flat glass:						
	Number of establishments	80	80	80	80	80	0.0
	Employees (thousands)	12.0	12.0	12.0	12.0	12.0	0.0
	Capacity utilization (percent)	(¹)					
	U.S. shipments (million dollars)	2,869	2,585	2,691	2,803	2,800	-0.1
	U.S. exports (million dollars)	1,807	1,791	1,694	1,747	1,882	7.7
	U.S. imports (million dollars)	1,473	1,500	1,553	1,699	1,959	15.3
	Apparent U.S. consumption (million dollars)	2,535	2,294	2,551	2,754	2,877	4.4
	Trade balance (million dollars)	334	291	140	49	-77	(⁴)
	Ratio of imports to consumption (percent)	58.1	65.4	60.9	61.7	68.1	10.4
	Ratio of exports to shipments (percent)	63.0	69.3	62.9	62.3	67.2	7.9
MM015	Glass containers:						
	Number of establishments	61	61	61	61	60	-1.6
	Employees (thousands)	17.0	16.0	16.0	16.0	16.0	0.0
	Capacity utilization (percent)	92	94	(¹)	(¹)	(¹)	(¹)
	U.S. shipments (million dollars)	4,106	4,209	4,345	4,343	4,400	1.3
	U.S. exports (million dollars)	174	211	165	161	185	15.0
	U.S. imports (million dollars)	585	538	608	607	659	8.6
	Apparent U.S. consumption (million dollars)	4,517	4,536	4,788	4,789	4,874	1.8
	Trade balance (million dollars)	-411	-327	-443	-446	-474	-6.2
	Ratio of imports to consumption (percent)	13.0	11.9	12.7	12.7	13.5	6.3
	Ratio of exports to shipments (percent)	4.2	5.0	3.8	3.7	4.2	13.5

See footnote(s) at end of table.

Table MM-10—Continued

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
MM016	Household glassware:						
	Number of establishments	240	240	220	200	180	-10.0
	Employees (thousands)	14.0	13.0	10.0	10.0	10.0	0.0
	Capacity utilization (percent)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
	U.S. shipments (million dollars)	2,000	1,800	1,635	1,488	1,450	-2.6
	U.S. exports (million dollars)	195	209	177	165	183	10.5
	U.S. imports (million dollars)	930	835	888	919	947	3.0
	Apparent U.S. consumption (million dollars)	2,735	2,425	2,346	2,241	2,214	-1.2
	Trade balance (million dollars)	-735	-625	-711	-753	-764	-1.4
	Ratio of imports to consumption (percent)	34.0	34.4	37.9	41.0	42.8	4.4
	Ratio of exports to shipments (percent)	9.7	11.6	10.8	11.1	12.6	13.5
MM018	Fiberglass insulation products:						
	Number of establishments	298	298	298	298	(¹)	(¹)
	Employees (thousands)	17.0	17.0	18.0	18.0	(¹)	(¹)
	Capacity utilization (percent)	83	86	(¹)	(¹)	(¹)	(¹)
	U.S. shipments (million dollars)	3,700	3,700	4,400	4,400	4,500	2.3
	U.S. exports (million dollars)	59	74	75	88	92	4.6
	U.S. imports (million dollars)	137	124	131	155	214	37.8
	Apparent U.S. consumption (million dollars)	3,778	3,750	4,456	4,467	4,622	3.5
	Trade balance (million dollars)	-78	-50	-56	-67	-122	-81.6
	Ratio of imports to consumption (percent)	3.6	3.3	2.9	3.5	4.6	31.4
	Ratio of exports to shipments (percent)	1.6	2.0	1.7	2.0	2.1	5.0
MM019	Natural and synthetic gemstones:						
	Number of establishments	223	224	225	224	223	-0.4
	Employees (thousands)	2.0	2.0	2.0	2.0	2.0	0.0
	Capacity utilization (percent)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
	U.S. production (million dollars)	540	340	430	680	450	-33.8
	U.S. exports (million dollars)	1,466	1,840	1,331	469	1,129	140.9
	U.S. imports (million dollars)	13,234	11,577	13,063	13,854	15,690	13.3
	Apparent U.S. consumption (million dollars)	12,308	10,077	12,161	14,066	15,012	6.7
	Trade balance (million dollars)	-11,768	-9,737	-11,731	-13,386	-14,562	-8.8
	Ratio of imports to consumption (percent)	⁵ 107.5	⁵ 114.9	⁵ 107.4	98.5	⁵ 104.5	6.1
	Ratio of exports to production (percent)	⁵ 271.5	⁵ 541.0	⁵ 309.6	68.9	⁵ 250.8	264.0

See footnote(s) at end of table.

Table MM-10—Continued

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
MM020A	Unrefined and refined gold:						
	Number of establishments	32	25	22	21	20	-4.8
	Employees (thousands)	2.0	2.0	2.0	2.0	1.0	-50.0
	Capacity utilization (percent)	77	69	67	81	83	2.5
	U.S. shipments (million dollars)	7,095	5,903	4,142	4,662	4,540	-2.6
	U.S. exports (million dollars)	5,099	4,186	2,639	4,130	3,465	-16.1
	U.S. imports (million dollars)	2,262	1,700	2,143	2,689	3,680	36.8
	Apparent U.S. consumption (million dollars)	4,259	3,417	3,646	3,221	4,755	47.6
	Trade balance (million dollars)	2,836	2,486	496	1,441	-215	(⁴)
	Ratio of imports to consumption (percent)	53.1	49.7	58.8	83.5	77.4	-7.3
	Ratio of exports to shipments (percent)	71.9	70.9	63.7	88.6	76.3	-13.9
MM021	Primary iron products:						
	Number of establishments	23	21	16	18	18	0.0
	Employees (thousands)	22.0	20.0	15.0	15.0	15.0	0.0
	Capacity utilization (percent)	88	79	84	81	84	3.7
	U.S. shipments (million dollars)	7,300	6,300	5,000	6,400	9,500	48.4
	U.S. exports (million dollars)	13	7	7	11	10	-6.8
	U.S. imports (million dollars)	759	632	729	815	1,898	132.9
	Apparent U.S. consumption (million dollars)	8,046	6,924	5,722	7,204	11,387	58.1
	Trade balance (million dollars)	-746	-624	-722	-804	-1,887	-134.8
	Ratio of imports to consumption (percent)	9.4	9.1	12.7	11.3	16.7	47.8
	Ratio of exports to shipments (percent)	0.2	0.1	0.1	0.2	0.1	-50.0
MM022	Ferroalloys:						
	Number of establishments	23	23	20	20	20	0.0
	Employees (thousands)	3.0	3.0	2.0	3.0	3.0	0.0
	Capacity utilization (percent)	(⁶)	(¹)				
	U.S. shipments (million dollars)	803	696	815	757	1,030	36.1
	U.S. exports (million dollars)	96	74	50	51	81	57.2
	U.S. imports (million dollars)	1,104	660	713	899	1,885	109.7
	Apparent U.S. consumption (million dollars)	1,811	1,282	1,478	1,605	2,835	76.7
	Trade balance (million dollars)	-1,008	-586	-663	-848	-1,805	-112.9
	Ratio of imports to consumption (percent)	60.9	51.5	48.3	56.0	66.5	18.8
	Ratio of exports to shipments (percent)	11.9	10.6	6.2	6.8	7.8	14.7

See footnote(s) at end of table.

Table MM-10—Continued

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
MM023	Iron and steel waste and scrap:						
	Number of establishments	5,000	5,000	5,000	4,000	4,000	0.0
	Employees (thousands)	28.0	28.0	28.0	28.0	22.0	-21.4
	Capacity utilization (percent)	75	75	75	77	80	3.9
	U.S. shipments (million dollars)	5,200	4,100	4,900	6,300	11,500	82.5
	U.S. exports (million dollars)	1,030	1,151	1,307	1,960	2,923	49.1
	U.S. imports (million dollars)	393	284	397	518	1,244	140.2
	Apparent U.S. consumption (million dollars)	4,563	3,233	3,989	4,858	9,820	102.2
	Trade balance (million dollars)	637	867	911	1,442	1,680	16.4
	Ratio of imports to consumption (percent)	8.6	8.8	9.9	10.7	12.7	18.7
	Ratio of exports to shipments (percent)	19.8	28.1	26.7	31.1	25.4	-18.3
MM024A	Abrasive products:						
	Number of establishments	50	50	50	50	50	0.0
	Employees (thousands)	(¹)					
	Capacity utilization (percent)	(¹)					
	U.S. shipments (million dollars)	3,781	3,202	3,368	3,462	3,500	1.1
	U.S. exports (million dollars)	315	289	284	310	345	11.2
	U.S. imports (million dollars)	552	473	505	540	631	16.8
	Apparent U.S. consumption (million dollars)	4,018	3,386	3,590	3,692	3,786	2.5
	Trade balance (million dollars)	-237	-184	-222	-230	-286	-24.4
	Ratio of imports to consumption (percent)	13.7	14.0	14.1	14.6	16.7	14.4
	Ratio of exports to shipments (percent)	8.3	9.0	8.4	9.0	9.9	10.0
MM025	Steel mill products:						
	Number of establishments	820	820	810	790	790	0.0
	Employees (thousands)	195.0	185.0	170.0	160.0	153.0	-4.4
	Capacity utilization (percent)	86	79	89	82	91	11.0
	U.S. shipments (million dollars)	60,300	51,100	50,631	48,907	52,917	8.2
	U.S. exports (million dollars)	4,911	4,756	4,533	5,525	7,015	27.0
	U.S. imports (million dollars)	15,026	11,630	12,203	10,499	21,559	105.3
	Apparent U.S. consumption (million dollars)	70,414	57,974	58,301	53,881	67,461	25.2
	Trade balance (million dollars)	-10,114	-6,874	-7,670	-4,974	-14,544	-192.4
	Ratio of imports to consumption (percent)	21.3	20.1	20.9	19.5	32.0	64.1
	Ratio of exports to shipments (percent)	8.1	9.3	9.0	11.3	13.3	17.7

See footnote(s) at end of table.

Table MM-10—Continued

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
MM026	Steel pipe and tube fittings and certain cast products:						
	Number of establishments	62	62	62	62	62	0.0
	Employees (thousands)	12.0	12.0	12.0	12.0	11.0	-8.3
	Capacity utilization (percent)	(¹)					
	U.S. shipments (million dollars)	2,100	2,100	2,100	2,100	2,100	0.0
	U.S. exports (million dollars)	767	707	669	705	900	27.7
	U.S. imports (million dollars)	706	697	669	609	838	37.6
	Apparent U.S. consumption (million dollars)	2,039	2,090	2,100	2,005	2,038	1.7
	Trade balance (million dollars)	61	10	(²)	95	62	-35.2
	Ratio of imports to consumption (percent)	34.6	33.3	31.9	30.4	41.1	35.2
	Ratio of exports to shipments (percent)	36.5	33.7	31.8	33.6	42.8	27.4
MM027	Fabricated structurals:						
	Number of establishments	2,830	3,030	3,760	3,730	2,860	-23.3
	Employees (thousands)	99.0	100.0	106.0	100.0	100.0	0.0
	Capacity utilization (percent)	69	67	58	60	63	5.0
	U.S. shipments (million dollars)	16,500	16,150	16,050	15,650	17,350	10.9
	U.S. exports (million dollars)	204	184	166	160	203	26.9
	U.S. imports (million dollars)	534	638	627	501	508	1.5
	Apparent U.S. consumption (million dollars)	16,829	16,604	16,510	15,991	17,655	10.4
	Trade balance (million dollars)	-329	-454	-460	-341	-305	10.4
	Ratio of imports to consumption (percent)	3.2	3.8	3.8	3.1	2.9	-6.5
	Ratio of exports to shipments (percent)	1.2	1.1	1.0	1.0	1.2	20.0
MM028	Metal construction components:						
	Number of establishments	2,650	2,530	2,500	2,430	2,200	-9.5
	Employees (thousands)	157.0	150.0	154.0	150.0	135.0	-10.0
	Capacity utilization (percent)	70	67	70	68	65	-4.4
	U.S. shipments (million dollars)	19,666	18,800	19,400	19,000	17,000	-10.5
	U.S. exports (million dollars)	533	505	497	561	675	20.4
	U.S. imports (million dollars)	922	990	1,135	1,212	1,501	23.8
	Apparent U.S. consumption (million dollars)	20,054	19,285	20,038	19,652	17,826	-9.3
	Trade balance (million dollars)	-388	-485	-638	-652	-826	-26.8
	Ratio of imports to consumption (percent)	4.6	5.1	5.7	6.2	8.4	35.5
	Ratio of exports to shipments (percent)	2.7	2.7	2.6	3.0	4.0	33.3

See footnote(s) at end of table.

Table MM-10—Continued

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
MM029	Metallic containers:						
	Number of establishments	520	520	520	510	510	0.0
	Employees (thousands)	54.0	52.0	50.0	48.0	48.0	0.0
	Capacity utilization (percent)	82	82	80	79	80	1.3
	U.S. shipments (million dollars)	18,485	17,415	16,900	16,430	16,500	(³)
	U.S. exports (million dollars)	697	666	661	616	716	16.3
	U.S. imports (million dollars)	549	570	645	660	760	15.1
	Apparent U.S. consumption (million dollars)	18,337	17,319	16,884	16,475	16,544	(³)
	Trade balance (million dollars)	148	96	16	-45	-44	0.8
	Ratio of imports to consumption (percent)	3.0	3.3	3.8	4.0	4.6	15.0
	Ratio of exports to shipments (percent)	3.8	3.8	3.9	3.7	4.3	16.2
MM030	Wire products of base metal:						
	Number of establishments	1,500	1,470	1,470	1,430	1,400	-2.1
	Employees (thousands)	96.0	92.0	94.0	91.0	83.0	-8.8
	Capacity utilization (percent)	(¹)					
	U.S. shipments (million dollars)	17,300	16,500	17,000	16,500	15,000	-9.1
	U.S. exports (million dollars)	826	718	732	760	853	12.2
	U.S. imports (million dollars)	1,419	1,355	1,416	1,591	2,191	37.7
	Apparent U.S. consumption (million dollars)	17,893	17,137	17,684	17,331	16,338	-5.7
	Trade balance (million dollars)	-593	-637	-684	-831	-1,338	-61.0
	Ratio of imports to consumption (percent)	7.9	7.9	8.0	9.2	13.4	45.7
	Ratio of exports to shipments (percent)	4.8	4.3	4.3	4.6	5.7	23.9
MM032	Industrial fasteners of base metal:						
	Number of establishments	920	880	860	840	820	-2.4
	Employees (thousands)	47.0	45.0	46.0	45.0	43.0	-4.4
	Capacity utilization (percent)	74	71	73	71	68	-4.2
	U.S. shipments (million dollars)	7,009	6,700	7,000	6,800	6,500	-4.4
	U.S. exports (million dollars)	1,663	1,481	1,496	1,520	1,672	10.0
	U.S. imports (million dollars)	2,325	2,006	2,085	2,348	2,977	26.8
	Apparent U.S. consumption (million dollars)	7,672	7,225	7,589	7,628	7,805	2.3
	Trade balance (million dollars)	-663	-525	-589	-828	-1,305	-57.7
	Ratio of imports to consumption (percent)	30.3	27.8	27.5	30.8	38.1	23.7
	Ratio of exports to shipments (percent)	23.7	22.1	21.4	22.4	25.7	14.7

See footnote(s) at end of table.

Table MM-10—Continued

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
MM033	Cooking and kitchen ware:						
	Number of establishments	87	87	88	88	88	0.0
	Employees (thousands)	7.0	6.0	6.0	6.0	5.0	-16.7
	Capacity utilization (percent)	(¹)					
	U.S. shipments (million dollars)	1,500	1,500	1,500	1,500	1,500	0.0
	U.S. exports (million dollars)	271	260	201	199	198	-0.3
	U.S. imports (million dollars)	1,798	1,743	1,933	2,070	2,170	4.9
	Apparent U.S. consumption (million dollars)	3,027	2,983	3,232	3,371	3,472	3.0
	Trade balance (million dollars)	-1,527	-1,483	-1,732	-1,871	-1,972	-5.4
	Ratio of imports to consumption (percent)	59.4	58.4	59.8	61.4	62.5	1.8
	Ratio of exports to shipments (percent)	18.1	17.3	13.4	13.3	13.2	-0.8
MM034	Metal and ceramic sanitary ware:						
	Number of establishments	140	140	140	140	140	0.0
	Employees (thousands)	18.0	17.0	17.0	17.0	17.0	0.0
	Capacity utilization (percent)	(¹)					
	U.S. shipments (million dollars)	2,800	2,600	2,700	2,700	2,700	0.0
	U.S. exports (million dollars)	141	124	134	142	159	11.5
	U.S. imports (million dollars)	533	588	742	863	1,062	23.1
	Apparent U.S. consumption (million dollars)	3,193	3,064	3,308	3,421	3,603	5.3
	Trade balance (million dollars)	-393	-464	-608	-721	-903	-25.4
	Ratio of imports to consumption (percent)	16.7	19.2	22.4	25.2	29.5	17.1
	Ratio of exports to shipments (percent)	5.0	4.8	4.9	5.3	5.9	11.3
MM035	Construction castings and other cast-iron articles:						
	Number of establishments	50	50	50	50	50	0.0
	Employees (thousands)	5.0	6.0	5.0	5.0	5.0	0.0
	Capacity utilization (percent)	85	85	85	85	85	0.0
	U.S. shipments (million dollars)	800	900	800	800	800	0.0
	U.S. exports (million dollars)	32	24	25	23	30	27.7
	U.S. imports (million dollars)	123	110	112	124	180	45.1
	Apparent U.S. consumption (million dollars)	891	986	887	901	951	5.5
	Trade balance (million dollars)	-91	-86	-87	-101	-151	-49.2
	Ratio of imports to consumption (percent)	13.8	11.1	12.6	13.8	19.0	37.7
	Ratio of exports to shipments (percent)	4.0	2.7	3.2	2.9	3.7	27.6

See footnote(s) at end of table.

Table MM-10—Continued

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
MM036A	Unrefined and refined copper:						
	Number of establishments	28	26	22	22	22	0.0
	Employees (thousands)	4.4	4.5	3.9	3.3	3.4	3.0
	Capacity utilization (percent)	68	70	62	54	55	1.9
	U.S. shipments (million dollars)	3,886	3,178	2,620	2,553	4,083	59.9
	U.S. exports (million dollars)	202	69	92	214	339	58.5
	U.S. imports (million dollars)	2,223	2,140	1,740	1,854	2,411	30.0
	Apparent U.S. consumption (million dollars)	5,907	5,248	4,268	4,193	6,154	46.8
	Trade balance (million dollars)	-2,021	-2,070	-1,648	-1,640	-2,071	-26.3
	Ratio of imports to consumption (percent)	37.6	40.8	40.8	44.2	39.2	-11.3
	Ratio of exports to shipments (percent)	5.2	2.2	3.5	8.4	8.3	-1.2
MM036B	Copper alloy plate, sheet, and strip:						
	Number of establishments	73	98	83	78	76	-2.6
	Employees (thousands)	6.4	6.4	5.4	5.1	4.9	-3.9
	Capacity utilization (percent)	86	61	63	60	58	-3.3
	U.S. shipments (million dollars)	1,184	765	791	801	1,061	32.5
	U.S. exports (million dollars)	208	155	117	144	198	37.8
	U.S. imports (million dollars)	182	145	118	104	176	69.1
	Apparent U.S. consumption (million dollars)	1,158	756	792	761	1,039	36.4
	Trade balance (million dollars)	26	9	-1	40	22	-43.9
	Ratio of imports to consumption (percent)	15.7	19.2	15.0	13.6	16.9	24.3
	Ratio of exports to shipments (percent)	17.6	20.2	14.8	17.9	18.6	3.9
MM037A	Primary and secondary aluminum:						
	Number of establishments	108	98	100	98	102	4.1
	Employees (thousands)	25.0	23.0	21.0	21.0	20.0	-4.8
	Capacity utilization (percent)	77	69	69	71	72	1.4
	U.S. shipments (million dollars)	8,286	5,835	5,589	5,730	5,700	-0.5
	U.S. exports (million dollars)	636	466	431	376	608	61.6
	U.S. imports (million dollars)	4,297	4,085	4,188	4,401	6,001	36.4
	Apparent U.S. consumption (million dollars)	11,946	9,454	9,346	9,755	11,093	13.7
	Trade balance (million dollars)	-3,660	-3,619	-3,757	-4,025	-5,393	-34.0
	Ratio of imports to consumption (percent)	36.0	43.2	44.8	45.1	54.1	20.0
	Ratio of exports to shipments (percent)	7.7	8.0	7.7	6.6	10.7	62.1

See footnote(s) at end of table.

Table MM-10—Continued

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
MM038	Aluminum mill products:						
	Number of establishments	363	379	372	381	383	0.5
	Employees (thousands)	57.0	59.0	58.0	58.0	58.0	0.0
	Capacity utilization (percent)	80	79	80	81	79	-2.5
	U.S. shipments (million dollars)	19,632	17,489	17,960	18,320	18,565	1.3
	U.S. exports (million dollars)	3,130	2,784	2,519	2,564	3,171	23.6
	U.S. imports (million dollars)	2,674	2,305	2,516	2,768	3,512	26.9
	Apparent U.S. consumption (million dollars)	19,176	17,010	17,957	18,523	18,907	2.1
	Trade balance (million dollars)	456	479	3	-203	-342	-68.1
	Ratio of imports to consumption (percent)	13.9	13.6	14.0	14.9	18.6	24.8
	Ratio of exports to shipments (percent)	15.9	15.9	14.0	14.0	17.1	22.1
MM039A	Refined lead:						
	Number of establishments	30	29	26	25	24	-4.0
	Employees (thousands)	2.0	2.0	2.0	2.0	2.0	0.0
	Capacity utilization (percent)	83	79	84	87	94	8.0
	U.S. shipments (million dollars)	1,366	1,278	1,280	1,308	1,598	22.2
	U.S. exports (million dollars)	16	8	14	48	38	-21.2
	U.S. imports (million dollars)	117	90	82	65	128	95.8
	Apparent U.S. consumption (million dollars)	1,467	1,361	1,348	1,326	1,688	27.4
	Trade balance (million dollars)	-101	-83	-68	-18	-90	-411.5
	Ratio of imports to consumption (percent)	8.0	6.6	6.1	4.9	7.6	55.1
	Ratio of exports to shipments (percent)	1.2	0.6	1.1	3.6	2.3	-36.1
MM040A	Unwrought zinc:						
	Number of establishments	15	15	15	14	14	0.0
	Employees (thousands)	2.0	1.0	1.0	1.0	1.0	0.0
	Capacity utilization (percent)	83	69	64	66	81	22.7
	U.S. shipments (million dollars)	455	302	251	271	421	55.4
	U.S. exports (million dollars)	3	1	1	2	5	203.9
	U.S. imports (million dollars)	1,104	786	731	676	947	40.0
	Apparent U.S. consumption (million dollars)	1,556	1,087	981	945	1,362	44.1
	Trade balance (million dollars)	-1,101	-785	-730	-674	-941	-39.6
	Ratio of imports to consumption (percent)	71.0	72.3	74.5	71.5	69.5	-2.8
	Ratio of exports to shipments (percent)	0.7	0.4	0.5	0.6	1.3	116.7

See footnote(s) at end of table.

Table MM-10—Continued

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
MM041A	Titanium ingot:						
	Number of establishments	9	5	5	2	2	0.0
	Employees (thousands)	0.3	0.3	0.3	0.3	0.3	0.0
	Capacity utilization (percent)	43	49	45	(¹)	(¹)	(¹)
	U.S. shipments (million dollars)	870	600	420	470	660	40.4
	U.S. exports (million dollars)	12	22	12	11	14	31.2
	U.S. imports (million dollars)	17	27	13	7	15	120.2
	Apparent U.S. consumption (million dollars)	875	606	421	466	660	41.8
	Trade balance (million dollars)	-5	-6	-1	4	(²)	(⁴)
	Ratio of imports to consumption (percent)	1.9	4.5	3.1	1.4	2.2	57.1
	Ratio of exports to shipments (percent)	1.4	3.6	3.0	2.3	2.2	-4.3
MM042	Nonpowered handtools:						
	Number of establishments	1,000	950	900	850	700	-17.6
	Employees (thousands)	120.0	115.0	106.0	95.0	91.0	-4.2
	Capacity utilization (percent)	71	70	70	68	72	5.9
	U.S. shipments (million dollars)	14,139	12,433	12,504	11,701	12,286	5.0
	U.S. exports (million dollars)	2,263	2,119	2,038	2,109	2,361	11.9
	U.S. imports (million dollars)	3,163	2,996	3,284	3,652	4,136	13.3
	Apparent U.S. consumption (million dollars)	15,040	13,309	13,750	13,244	14,062	6.2
	Trade balance (million dollars)	-901	-876	-1,246	-1,543	-1,776	-15.1
	Ratio of imports to consumption (percent)	21.0	22.5	23.9	27.6	29.4	6.5
	Ratio of exports to shipments (percent)	16.0	17.0	16.3	18.0	19.2	6.7
MM043	Certain cutlery, sewing implements, and related products:						
	Number of establishments	176	177	178	178	177	-0.6
	Employees (thousands)	10.0	9.0	9.0	9.0	9.0	0.0
	Capacity utilization (percent)	(¹)					
	U.S. shipments (million dollars)	2,000	1,900	1,800	1,800	1,900	5.6
	U.S. exports (million dollars)	546	556	551	550	553	(³)
	U.S. imports (million dollars)	888	865	912	1,053	1,133	7.5
	Apparent U.S. consumption (million dollars)	2,342	2,209	2,161	2,303	2,480	7.7
	Trade balance (million dollars)	-342	-309	-361	-503	-580	-15.3
	Ratio of imports to consumption (percent)	37.9	39.2	42.2	45.7	45.7	0.0
	Ratio of exports to shipments (percent)	27.3	29.3	30.6	30.6	29.1	-4.9

See footnote(s) at end of table.

Table MM-10—Continued

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
MM044	Table flatware and related products:						
	Number of establishments	5	5	5	4	4	0.0
	Employees (thousands)	1.0	1.0	1.0	1.0	1.0	0.0
	Capacity utilization (percent)	90	90	90	90	91	1.1
	U.S. shipments (million dollars)	253	205	200	200	212	6.0
	U.S. exports (million dollars)	25	28	29	22	24	12.0
	U.S. imports (million dollars)	507	463	478	484	518	7.1
	Apparent U.S. consumption (million dollars)	734	640	650	662	706	6.6
	Trade balance (million dollars)	-481	-435	-450	-462	-494	-6.8
	Ratio of imports to consumption (percent)	69.0	72.3	73.6	73.1	73.4	(³)
	Ratio of exports to shipments (percent)	9.9	13.5	14.3	10.8	11.4	5.6
MM045	Certain builders' hardware:						
	Number of establishments	283	278	230	226	221	-2.2
	Employees (thousands)	41.0	37.0	33.0	31.0	31.0	0.0
	Capacity utilization (percent)	75	71	69	64	67	4.7
	U.S. shipments (million dollars)	5,898	5,797	5,447	5,762	5,822	1.0
	U.S. exports (million dollars)	1,084	961	907	911	982	7.9
	U.S. imports (million dollars)	1,973	1,948	2,197	2,405	3,063	27.4
	Apparent U.S. consumption (million dollars)	6,787	6,784	6,736	7,256	7,902	8.9
	Trade balance (million dollars)	-889	-987	-1,289	-1,494	-2,080	-39.2
	Ratio of imports to consumption (percent)	29.1	28.7	32.6	33.1	38.8	17.2
	Ratio of exports to shipments (percent)	18.4	16.6	16.7	15.8	16.9	7.0

¹ Not available.

² Less than 500,000.

³ Less than 0.05 percent.

⁴ Not meaningful.

⁵ Inventory changes, for which data are not available, likely account for ratios that exceed 100 percent.

⁶ Capacity utilization could not be meaningfully calculated for this industry.

Note.—Calculations based on unrounded data.

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