

# **U.S. TRADE SHIFTS IN SELECTED COMMODITY AREAS**

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# UNITED STATES INTERNATIONAL TRADE COMMISSION

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## Chapter 1

### Introduction

The trade analysts of the U.S. International Trade Commission routinely monitor trade developments in all agricultural and manufactured commodities. Trade monitoring at the commodity-specific level enables the Commission to better anticipate and address the issues of concern in the exercise of its various roles under U.S. trade statutes. These roles include the investigation of allegations that imports have caused injury to a domestic industry and the provision of advice to the President and the Congress on the likely effects of trade-policy changes and proposals. This report, prepared semiannually as an outgrowth of this monitoring function, provides a brief analysis of significant trade shifts at the commodity level.

The highlights of trade shifts that have occurred in 1990 relative to 1989 are presented in Chapter 1 of the report. These highlights include tabulations of the import, export, and trade balance shifts by major sector and with the United States' major trading partners. In addition, the most significant shifts at the detailed commodity level are summarized. Chapters 2 through 8 each address a specific industrial sector, providing an overview and commodity-specific analyses. Following each sector analysis is a statistical table summarizing trade for the major commodity groups within the sector.

The report includes two appendixes. Appendix A contains a listing of the commodity groups that the Commission monitors in this report. Appendix B provides estimated data on 1986-90 domestic consumption, production, employment, trade, and import penetration for the over 300 commodity groups covered in this report. These data have been estimated by the Commission's international trade analysts based on primary and secondary data sources including discussions with various Government and industry contacts. These estimated data are subject to change either from future secondary sources or from the 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, clarifications of classification practices, or redefinitions of industry classes.

### U.S. Trade Performance, 1990

During 1990, surging U.S. exports in industries such as aerospace, automotive parts, petroleum products, office equipment (including computers), and electronics outpaced U.S. import growth and resulted in an improvement in the U.S. trade balance. When compared to 1989, the U.S. merchandise trade deficit dropped by 2.2 percent, or \$2.6 billion, to a level of \$116.0 billion (table 1, figure 1).<sup>1</sup> The decline reflects an increase of 7.2 percent in U.S. exports to \$374.5 billion and a smaller 4.8-percent increase in

U.S. imports to \$490.6 billion. Export growth was experienced in every major industrial sector, with the machinery and equipment sector experiencing the largest absolute growth of \$24.4 billion. Import growth on a sector basis was most significant in the energy sector with growth of \$12.3 billion as crude petroleum and petroleum products led the increase.

Reflecting the above export and import shifts, the most significant improvement in trade position on a sector basis occurred in the machinery and equipment sector with a \$21.2 billion or 40-percent improvement. The energy sector experienced by far the most significant decline in trade position, with its trade deficit growing by \$10.0 billion to \$52.0 billion. During 1990, the United States maintained a positive balance of trade in only three sectors, agriculture, forest products, and chemicals. All other sectors continued their long-running negative position.

On a country basis, the United States improved its trade balance with most major trading partners (China, Germany, and the OPEC nations being notable exceptions), but nevertheless experienced continuing trade deficits with all but the European Community (table 2, figure 2).<sup>2</sup> The most significant improvements in trade position came with Japan and the European Community, which improved by \$6.4 billion and \$3.8 billion respectively.

### Exchange Rate Shifts

During 1990, the modest appreciation in the real value of the dollar that began in 1988 continued. The dollar registered a 2.9-percent appreciation from December 1989 to December 1990, as measured by the Dallas Fed's real index (RX-101) (table 3). However, all of this gain occurred in the first half of the year, with the June-to-December period marked by a 1.9-percent decline to October followed by a 1.4-percent rebound by December.

As is usually the case, the dollar did not move uniformly against all other major currencies. While appreciating 0.9 percent in real terms from December 1989 to December 1990 against the Canadian dollar, 5.9 percent against the Pacific newly industrialized countries (NICs), and by 55.1 percent (from December 1989 to November 1990) against the currencies of Western Hemisphere countries (excluding Canada), the dollar declined 14.3 percent against the European currencies and 5.3 percent against the Japanese yen over the same period.

The decline in the dollar from June on can be attributed both to increased perceptions of near-term decline in the U.S. economy and to increased interest rates abroad. The easing of monetary policy by the Fed in the latter part of 1990 in an attempt to stave off or minimize the magnitude of a recession also contributed to the declining real value of the dollar.

<sup>2</sup> It should be noted that beginning in 1990, U.S. exports to Canada as reported by the Bureau of the Census are derived from import data compiled by Canada. Census officials have reported to the Commission that pre-1990 exports to Canada (e.g., 1989) are understated by varying degrees according to product area.

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

**Table 1**  
**U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major commodity sectors, 1989 and 1990<sup>1</sup>**

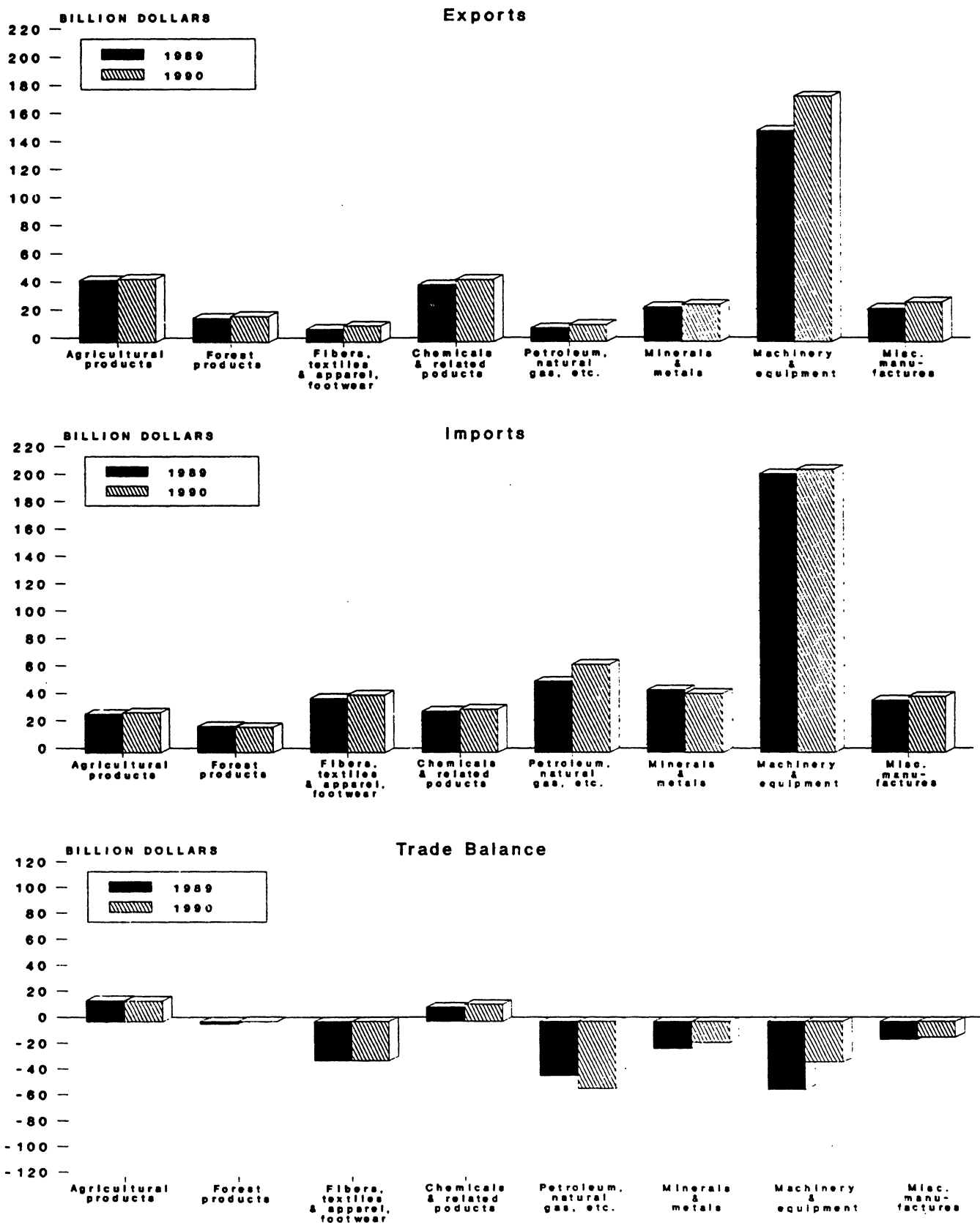
Item	1989	1990	Change from 1989 to 1990	
			Amount	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
Agricultural products . . . . .	44,329	45,260	932	2.1
Forest products . . . . .	17,226	18,696	1,470	8.5
Fibers, textiles, and apparel . . . . .	9,053	11,077	2,024	22.4
Footwear . . . . .	369	479	110	29.8
Chemicals and related products . . . . .	40,943	44,649	3,706	9.1
Petroleum, natural gas, etc . . . . .	9,889	12,189	2,300	23.3
Minerals and metals . . . . .	24,701	26,629	1,928	7.8
Machinery and equipment . . . . .	150,457	174,835	24,378	16.2
Miscellaneous manufactures . . . . .	24,083	28,473	4,390	18.2
Special provisions . . . . .	28,383	12,249	-16,134	-56.8
Total . . . . .	349,433	374,536	25,103	7.2
U.S. imports for consumption:				
Agricultural products . . . . .	28,099	29,306	1,207	4.3
Forest products . . . . .	19,106	18,528	-578	-3.0
Fibers, textiles, and apparel . . . . .	31,129	32,346	1,217	3.9
Footwear . . . . .	8,381	9,538	1,157	13.8
Chemicals and related products . . . . .	30,071	31,580	1,509	5.0
Petroleum, natural gas, etc . . . . .	51,881	64,163	12,282	23.7
Minerals and metals . . . . .	45,558	42,895	-2,663	-5.8
Machinery and equipment . . . . .	203,125	206,308	3,183	1.6
Miscellaneous manufactures . . . . .	38,089	40,679	2,590	6.8
Special provisions . . . . .	12,574	15,210	2,636	21.0
Total . . . . .	468,013	490,553	22,540	4.8
U.S. merchandise trade balance:				
Agricultural products . . . . .	16,230	15,954	-276	-1.7
Forest products . . . . .	-1,880	168	2,048	108.9
Fibers, textiles, and apparel . . . . .	-22,076	-21,269	807	3.7
Footwear . . . . .	-8,012	-9,059	-1,047	-13.1
Chemicals and related products . . . . .	10,872	13,069	2,197	20.2
Petroleum, natural gas, etc . . . . .	-41,992	-51,974	-9,982	-23.8
Minerals and metals . . . . .	-20,857	-16,266	4,591	22.0
Machinery and equipment . . . . .	-52,668	-31,473	21,195	40.2
Miscellaneous manufactures . . . . .	-14,006	-12,206	1,800	12.9
Special provisions . . . . .	15,809	-2,961	-18,770	-118.7
Total . . . . .	-118,580	-116,017	2,563	2.2

<sup>1</sup> Import values are based on Customs value; export values are based on f.a.s. value, U.S. port of export.

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

**Figure 1**

**U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major commodity sector, 1989 and 1990**



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

Table 2

All merchandise sectors: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1989 and 1990<sup>1</sup>

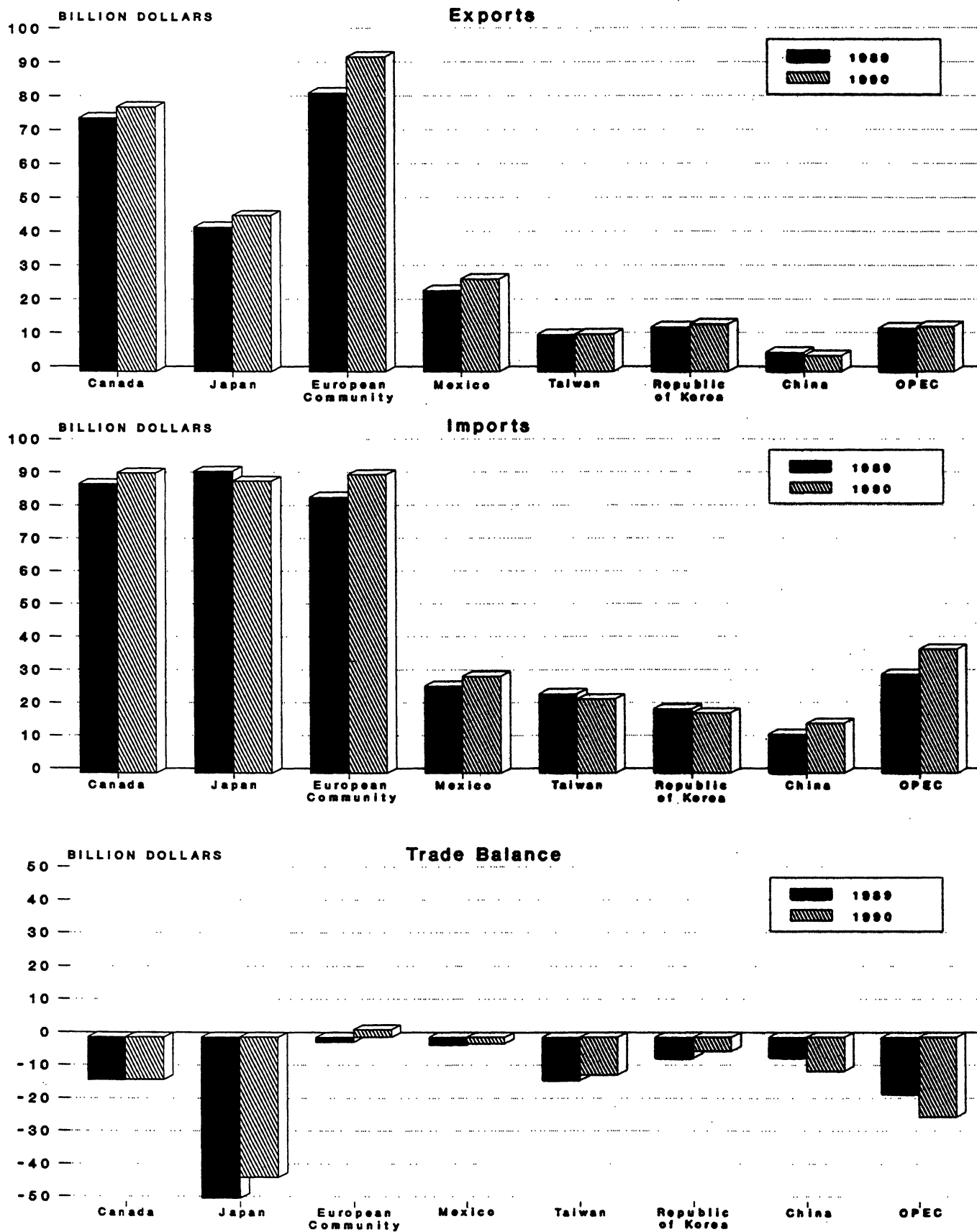
Item	1989	1990	Change from 1989 to 1990	
			Amount	Percent
Million dollars				
U.S. exports of domestic merchandise:				
Canada	74,977	78,218	3,241	4.3
Japan	42,764	46,138	3,374	7.8
Mexico	24,117	27,468	3,351	13.8
Germany	16,069	17,635	1,566	9.7
United Kingdom	19,643	22,236	2,593	13.2
Taiwan	10,975	11,142	167	1.5
Republic of Korea	13,208	14,074	866	6.5
France	10,919	12,958	2,039	18.6
Italy	6,929	7,642	713	10.2
China	5,775	4,776	-999	-17.2
Singapore	7,002	7,598	596	8.5
All other	117,055	124,653	7,598	6.4
Total	349,433	374,536	25,103	7.2
EC-12	82,525	93,060	10,535	12.7
OPEC	12,977	13,417	440	3.3
ASEAN	15,413	18,078	2,665	17.2
CBERA	8,785	9,241	456	5.1
Eastern Europe	1,413	1,641	228	16.1
U.S. imports for consumption:				
Canada	87,988	91,198	3,210	3.6
Japan	91,842	88,834	-3,008	-3.2
Mexico	26,557	29,506	2,949	11.1
Germany	24,774	28,035	3,261	13.1
United Kingdom	17,924	19,929	2,005	11.1
Taiwan	24,203	22,566	-1,637	-6.7
Republic of Korea	19,567	18,337	-1,230	-6.2
France	12,666	12,795	129	1.0
Italy	11,786	12,577	791	6.7
China	11,859	15,120	3,261	27.4
Singapore	8,886	9,785	899	10.1
All other	129,960	141,871	11,911	9.1
Total	468,013	490,553	22,540	4.8
EC-12	84,025	90,799	6,774	8.0
OPEC	30,071	37,699	7,628	25.3
ASEAN	24,523	27,087	2,564	10.4
CBERA	6,896	7,510	614	8.9
Eastern Europe	1,969	1,859	-110	-5.5
U.S. merchandise trade balance:				
Canada	-13,011	-12,980	31	0.2
Japan	-49,078	-42,696	6,382	13.0
Mexico	-2,440	-2,038	402	16.4
Germany	-8,705	-10,400	-1,695	-19.4
United Kingdom	1,719	2,307	588	34.2
Taiwan	-13,228	-11,424	1,804	13.6
Republic of Korea	-6,359	-4,263	2,096	32.9
France	-1,747	163	1,910	109.3
Italy	-4,857	-4,935	-78	-1.6
China	-6,084	-10,344	-4,260	-70.0
Singapore	-1,884	-2,187	-303	-16.0
All other	-12,905	-17,218	-4,313	-33.4
Total	-118,580	-116,017	2,563	2.2
EC-12	-1,500	2,261	3,761	250.7
OPEC	-17,094	-24,282	-7,188	-42.0
ASEAN	-9,110	-9,009	101	1.1
CBERA	1,889	1,731	-158	-8.3
Eastern Europe	-556	-218	338	60.7

<sup>1</sup> Import values are based on Customs value; export values are based on f.a.s. value, U.S. port of export.

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

Figure 2

U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major trading partners, 1989 and 1990



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

In the long run, dollar appreciations should lead to a worsening of the trade balance while dollar depreciations should lead to an improvement. However, in the short run, changes in the exchange rate are not likely to be fully reflected in the trade balance. In fact, changes in the exchange rate may have a perverse effect on the balance with appreciations associated with an improvement and depreciations associated with a worsening. This incongruous relationship has been variously attributed to lags in adjustments to the changes in the value of the dollar or to the "J-curve" effect. The latter phenomenon, where the trade balance worsens after a fall in the value of a currency, occurs because certain price elasticities are very low in the short run.<sup>3</sup>

For all of 1990, the average real value of the dollar increased by 1.8 percent over the comparable 1989 figure (table 3). For the same period of comparison, the U.S. merchandise trade balance showed an improvement, with the deficit declining by 2.2 percent (table 1). Illustrating the tenuous link in the short run between the real value of the dollar and the trade balance, the U.S. trade balance with both Japan and the

EC improved even though the real value of the U.S. dollar appreciated against the Japanese yen (comparing average 1989 and 1990 values) and depreciated against the European currencies. The U.S. merchandise trade balance with Japan improved by \$6.4 billion between 1989 and 1990. Comparing average values for those 2 years, the real value of the dollar against the yen appreciated by 7.3 percent (table 3). Similarly, the U.S. merchandise trade balance with the EC improved by \$3.8 billion between 1989 and 1990, while the dollar was depreciating by 12.8 percent against the European currencies.

### Summaries of Significant Commodity Shifts

Numerous important commodity shifts occurred in the periods under review within each of the major industrial sectors. These shifts are discussed in detail in chapters 2 through 8, and tabular summaries of the most significant of these shifts are presented on the following pages in tables 4 through 9. These six tables provide listings of the most significant export, import, and trade balance shifts in rank order, including an indication of the absolute and percentage changes between the two periods under consideration.

<sup>3</sup> See Richard E. Caves and Ronald W. Jones, *World Trade and Payments: An Introduction (Third Edition)*, (Boston: Little, Brown and Company, 1981) for further discussion of the "J-curve" effect.

**Table 3**  
Real exchange rate indexes of foreign currencies or baskets of currencies against the U.S. dollar, January 1989-December 1990<sup>1</sup>

Period	Total <sup>2</sup>	Europe	Pacific NICs	Canada	Japan	Western <sup>3</sup> Hemisphere
<b>1989:</b>						
January .....	90.6	90.3	100.9	105.3	54.0	119.3
February .....	90.9	91.2	100.2	104.9	54.6	118.7
March .....	92.6	92.5	100.4	105.6	55.8	128.2
April .....	92.3	92.6	99.3	105.3	55.9	126.4
May .....	93.9	95.8	97.7	105.2	58.6	125.2
June .....	95.1	98.7	98.1	105.4	61.1	123.8
July .....	93.6	94.4	98.0	104.1	60.0	124.9
August .....	93.8	95.8	97.5	103.0	60.4	124.6
September .....	94.5	96.9	96.9	103.9	61.7	125.2
October .....	93.1	93.6	96.8	103.2	60.2	126.0
November .....	93.4	92.4	97.9	102.7	61.7	127.5
December .....	92.6	89.0	99.5	102.2	61.8	126.4
<b>1990:</b>						
January .....	93.2	86.6	102.9	103.3	62.9	123.0
February .....	93.6	85.3	103.2	105.5	63.2	124.7
March .....	94.6	86.9	103.7	104.2	66.6	123.1
April .....	94.6	85.3	103.2	102.9	68.5	125.8
May .....	94.4	83.7	103.1	103.6	66.1	134.2
June .....	95.8	84.4	104.0	103.4	66.9	144.8
July .....	95.5	81.9	103.5	102.0	65.3	158.7
August .....	95.5	78.7	103.7	101.8	64.7	174.6
September .....	95.4	79.0	102.8	103.6	61.0	182.3
October .....	94.0	76.8	103.5	103.5	56.5	189.8
November .....	94.2	75.5	104.6	103.4	56.5	196.0
December .....	95.3	76.3	105.4	103.1	58.5	( <sup>4</sup> )
<b>Average:</b>						
1989 .....	93.0	93.7	98.6	104.2	58.8	124.7
1990 .....	94.7	81.7	103.6	103.4	63.1	( <sup>4</sup> )
Percent change .....	1.8	-12.8	5.1	-0.8	7.3	( <sup>4</sup> )

<sup>1</sup> Index numbers: 1973 (1st quarter) = 100.

<sup>2</sup> The Dallas Fed's index of real exchange rates weighted by U.S. bilateral trade with 101 trading partners (RX-101).

<sup>3</sup> Western Hemisphere excludes Canada.

<sup>4</sup> Not available.

Source: Federal Reserve Bank of Dallas, *Trade-Weighted Value of the Dollar*, June 1990, September 1990, and March 1991.

**Table 4**  
**Domestic export growth: Ranking of top 20 commodity groups**

USITC code	Commodity group	U.S. exports		Change from 1989 to 1990	
		1989	1990	Amount	Percent
Million dollars					
Absolute value growth basis:					
ME058	Aircraft, spacecraft, and related equipment . . . . .	23,290	29,439	6,149	26.4
ME055	Certain motor-vehicle parts . . . . .	10,754	13,886	3,132	29.1
CH006	Petroleum products . . . . .	5,521	7,236	1,715	31.1
ME023	Office machines . . . . .	23,184	24,726	1,542	6.7
ME048	Apparatus for making, breaking, protecting, or connecting electrical circuits . . . . .	3,781	5,280	1,499	39.6
AG048	Cigarettes . . . . .	3,369	4,761	1,392	41.3
ME051	Diodes, transistors, integrated circuits and similar semiconductor solid-state devices . . . . .	9,657	10,857	1,200	12.4
ME042	Radio transmission and reception apparatus, including cellular telephones, and combinations thereof . . . . .	2,763	3,799	1,036	37.5
ME002	Internal combustion piston engines, other than for aircraft . . . . .	4,611	5,596	985	21.4
GM014	Medical goods . . . . .	4,493	5,317	824	18.3
ME024	Miscellaneous industrial machinery . . . . .	8,141	8,942	801	9.8
GM015	Scientific instruments . . . . .	7,971	8,763	792	9.9
ME041	Records, tapes, compact discs, computer software, and other recored media . . . . .	1,126	1,872	746	66.3
CH028	Medicinal chemicals, except antibiotics . . . . .	3,249	3,909	660	20.3
MM022	Precious metals and related articles . . . . .	3,167	3,815	648	20.5
GM030	Works of art, collectors' pieces, and antiques . . . . .	1,620	2,267	647	39.9
GM019	Furniture and selected furnishings . . . . .	1,098	1,731	633	57.7
CH050	Miscellaneous rubber or plastics products . . . . .	1,737	2,366	629	36.2
TX001	Textile fibers and waste . . . . .	3,091	3,641	550	17.8
ME012	Construction and mining equipment . . . . .	2,591	3,111	520	20.1
Percentage growth basis:					
MM008	Precious metal ores and concentrates . . . . .	2	13	11	550.0
MM006	Zinc ores and residues . . . . .	75	269	194	258.7
CH005	Crude petroleum . . . . .	62	183	121	195.2
CH001	Electrical energy . . . . .	180	491	311	172.8
AG023	Mushrooms and truffles . . . . .	11	30	19	172.7
AG016	Cut flowers . . . . .	11	30	19	172.7
MM046	Table flatware and related products . . . . .	17	43	26	152.9
GM010	Bicycles . . . . .	46	114	68	147.8
AG019	Certain fresh, chilled, or frozen winter vegetables . . . . .	68	151	83	122.1
MM017	Glass containers . . . . .	45	98	53	117.8
MM005	Lead ores and residues . . . . .	30	62	32	106.7
MM023	Pig iron . . . . .	1	2	1	100.0
TX015	Curtains and draperies . . . . .	7	14	7	100.0
AG014	Live plants . . . . .	52	104	52	100.0
TX006	Knit fabrics . . . . .	121	218	97	80.2
AG028	Other fresh fruits . . . . .	225	405	180	80.0
AG018	Fresh, chilled, or frozen vegetables . . . . .	350	626	276	78.9
MM034	Industrial fasteners of base metal . . . . .	383	651	268	70.0
ME062	Motors and engines, except internal combustion, aircraft, or electric . . . . .	62	105	43	69.4
ME041	Records, tapes, compact discs, computer software, and other recorded media . . . . .	1,126	1,872	746	66.3

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

**Table 5**  
**Domestic export declines: Ranking of top 20 commodity groups**

USITC code	Commodity group	U.S. exports		Change from 1989 to 1990	
		1989	1990	Amount	Percent
Million dollars					
Absolute value decline basis:					
AG035	Cereals	14,814	11,941	-2,873	-19.4
MM021	Natural and synthetic gemstones	1,361	545	-816	-60.0
AG037	Oilseeds	4,088	3,705	-383	-9.4
AG060	Pulp and wastepaper	4,362	4,056	-306	-7.0
CH019	Fertilizers	2,952	2,697	-255	-8.6
CH013	Miscellaneous organic chemicals	4,584	4,336	-248	-5.4
CH002	Nuclear materials	1,308	1,068	-240	-18.3
CH020	Certain inorganic pigments	641	449	-192	-30.0
MM007	Certain ores, concentrates, ash, and residues	550	362	-188	-34.2
AG013	Animal feeds	3,133	2,953	-180	-5.7
CH011	Benzenoid commodity chemicals	1,685	1,507	-178	-10.6
AG039	Animal or vegetable fats and oils	1,329	1,172	-157	-11.8
MM039	Unwrought aluminum	2,044	1,898	-146	-7.1
MM004	Copper ores and concentrates	571	446	-125	-21.9
MM025	Iron and steel waste and scrap	1,755	1,642	-113	-6.4
ME028	Boilers, turbines, and related machinery	742	632	-110	-14.8
AG010	Dairy produce	365	282	-83	-22.7
AG036	Milled grains, malts, and starches	466	391	-75	-16.1
MM003	Iron ores and concentrates	193	123	-70	-36.3
CH014	Selected inorganic chemicals and elements	899	858	-41	-4.6
Percentage decline basis:					
MM021	Natural and synthetic gemstones	1,361	545	-816	-60.0
AG061	Building papers and asphalt roofing shingles	12	7	-5	-41.7
MM037	Iron construction castings and other nonmalleable cast-iron articles	50	31	-19	-38.0
MM003	Iron ores and concentrates	193	123	-70	-36.3
MM007	Certain ores, concentrates, ash, and residues	550	362	-188	-34.2
AG052	Poles, piles, and posts	9	6	-3	-33.3
CH020	Certain inorganic pigments	641	449	-192	-30.0
AG010	Dairy produce	365	282	-83	-22.7
MM004	Copper ores and concentrates	571	446	-125	-21.9
CH024	Natural tanning and dyeing materials	14	11	-3	-21.4
MM002	Certain miscellaneous mineral substances	5	4	-1	-20.0
AG035	Cereals	14,814	11,941	-2,873	-19.4
TX032	Fur apparel and other fur articles	67	54	-13	-19.4
CH002	Nuclear materials	1,308	1,068	-240	-18.3
AG036	Milled grains, malts, and starches	466	391	-75	-16.1
ME028	Boilers, turbines, and related machinery	742	632	-110	-14.8
TX029	Gloves, including gloves for sports	182	158	-24	-13.2
AG039	Animal or vegetable fats and oils	1,329	1,172	-157	-11.8
AG050	Furskins	232	205	-27	-11.6

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

**Table 6**  
**Domestic Import growth: Ranking of top 20 commodity groups**

USITC code	Commodity group	U.S. exports		Change from 1989 to 1990	
		1989	1990	Amount	Percent
Million dollars					
Absolute value growth basis:					
CH005	Crude petroleum	35,041	43,833	8,792	25.1
CH006	Petroleum products	13,161	16,138	2,977	22.6
ME023	Office machines	25,625	26,871	1,246	4.9
ME048	Apparatus for making, breaking, protecting, or connecting electrical circuits	4,409	5,452	1,043	23.7
TX036	Nonrubber footwear and footwear parts	7,815	8,831	1,016	13.0
ME001	Aircraft engines and gas turbines	4,119	5,083	964	23.4
CH007	Natural gas and components	2,412	3,229	817	33.9
ME054	Automobiles, trucks, buses, and bodies and chassis of the foregoing	58,760	59,504	744	1.3
GM016	Watches <sup>1</sup>	749	1,443	694	92.7
ME058	Aircraft, spacecraft, and related equipment	5,728	6,369	641	11.2
AG002	Live cattle and fresh, chilled, or frozen meat of cattle, except offal	2,131	2,647	516	24.2
GM014	Medical goods	2,799	3,292	493	17.6
GM027	Games and fairground amusements	2,413	2,818	405	16.8
ME057	Miscellaneous vehicles and transportation-related equipment	708	1,078	370	52.3
TX022	Women's and girls' suits, skirts, and coats	2,203	2,560	357	16.2
TX020	Shirts and blouses	6,781	7,135	354	5.2
TX019	Trousers	4,334	4,674	340	7.8
AG042	Nonalcoholic beverages including fruit and vegetable juices	945	1,219	274	29.0
ME014	Farm and garden machinery and equipment	2,528	2,783	255	10.1
GM015	Scientific instruments	3,837	4,059	222	5.8
Percentage growth basis:					
MM008	Precious metal ores and concentrates	4	30	26	650.0
TX034	Nonwoven, paper, and felt apparel and footwear	49	154	105	214.3
MM004	Copper ores and concentrates	53	134	81	152.8
GM016	Watches	749	1,443	694	92.7
GM017	Clocks and timing devices	128	233	105	82.0
MM001	Clays and nonmetallic minerals and products, not elsewhere specified or included	76	122	46	60.5
GM011	Optical fibers, optical fiber bundles and cables	40	62	22	55.0
ME057	Miscellaneous vehicles and transportation-related equipment	708	1,078	370	52.3
CH039	PVC resins in primary forms	45	67	22	48.9
AG019	Certain fresh, chilled, or frozen winter vegetables	478	667	189	39.5
TX013	Sacks and bags of textile materials	30	41	11	36.7
CH007	Natural gas and components	2,412	3,229	817	33.9
TX012	Miscellaneous textiles and articles	525	700	175	33.3
CH029	Antibiotics	558	738	180	32.3
CH041	PET and other polyester resins	51	66	15	29.4
CH037	Polyethylene resins in primary forms	408	528	120	29.4
AG042	Nonalcoholic beverages including fruit and vegetable juices	945	1,219	274	29.0
CH032	Soaps, detergents, and surface-active agents	250	321	71	28.4
MM026	Direct reduced iron, ferrous powders, and grit and shot	72	92	20	27.8
ME008	Centrifuges and filtering and purifying equipment	459	586	127	27.7

<sup>1</sup> Imports of watches were significantly underreported during the period January 1989 to May 1990. Thus, although both years are underreported, data for 1990 is accurate for 7 months and, therefore, appears much higher than imports in 1989. It is estimated that true growth in imports was very small.

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

**Table 7**  
**Domestic import declines: Ranking of top 20 commodity groups**

USITC code	Commodity group	U.S. exports		Change from 1989 to 1990	
		1989	1990	Amount	Percent
Million dollars					
Absolute value decline basis:					
MM027	Steel mill products, all grades	8,958	8,385	-573	-6.4
TX021	Sweaters	2,675	2,111	-564	-21.1
MM043	Certain base metals and chemical elements	2,447	1,925	-522	-21.3
AG033	Coffee and tea	2,563	2,045	-518	-20.2
ME039	Tape recorders, tape players, video cassette recorders, turntables, and compact disc players	5,016	4,543	-473	-9.4
MM021	Natural and synthetic gemstones	5,069	4,703	-366	-7.2
MM038	Copper and related articles	2,327	1,966	-361	-15.5
AG053	Lumber	3,024	2,671	-353	-11.7
MM039	Unwrought aluminum	2,561	2,252	-309	-12.1
CH044	Natural rubber and other synthetic rubber	1,385	1,130	-255	-18.4
ME059	Ships, tugs, pleasure boats, and similar vessels	600	348	-252	-42.0
ME044	Television receivers and video monitors and combinations including television receivers	3,405	3,174	-231	-6.8
ME024	Miscellaneous industrial machinery	5,860	5,643	-217	-3.7
AG060	Pulp and wastepaper	3,084	2,886	-198	-6.4
ME042	Radio transmission and reception apparatus, including cellular telephones, and combinations thereof	5,592	5,395	-197	-3.5
ME004	Fans, blowers, compressors, air and vacuum pumps, and air-conditioning equipment	3,085	2,892	-193	-6.3
ME056	Motorcycles, mopeds, and parts	637	449	-188	-29.5
MM022	Precious metals and related articles	3,941	3,758	-183	-4.6
MM042	Zinc and related articles	1,214	1,034	-180	-14.8
ME037	Telephone and telegraph apparatus	4,321	4,144	-177	-4.1
Percentage decline basis:					
CH009	Other olefins	31	14	-17	-54.8
ME059	Ships, tugs, pleasure boats, and similar vessels	600	348	-252	-42.0
TX032	Fur apparel and other fur articles	370	249	-121	-32.7
AG050	Furskins	146	100	-46	-31.5
TX028	Neckwear	407	282	-125	-30.7
CH003	Coal and other carbonaceous materials	415	288	-127	-30.6
ME056	Motorcycles, mopeds, and parts	637	449	-188	-29.5
GM023	Prefabricated buildings	47	34	-13	-27.7
AG052	Poles, piles, and posts	15	11	-4	-26.7
TX033	Rubber, plastic, and coated-fabric apparel	160	119	-41	-25.6
ME036	Electric and gas welding and soldering equipment	461	345	-116	-25.2
MM006	Zinc ores and residues	32	24	-8	-25.0
MM007	Certain ores, concentrates, ash, and residues	633	495	-138	-21.8
MM043	Certain base metals and chemical elements	2,447	1,925	-522	-21.3
TX021	Sweaters	2,675	2,111	-564	-21.1
AG033	Coffee and tea	2,563	2,045	-518	-20.2
MM002	Certain miscellaneous mineral substances	70	56	-14	-20.0
TX002	Spun yarns	309	248	-61	-19.7
MM011	Ceramic bricks and miscellaneous ceramic construction articles	27	22	-5	-18.5
CH044	Natural rubber and other synthetic rubber	1,385	1,130	-255	-18.4

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

**Table 8**  
**U.S. trade position improvements: Ranking of top 30 commodity groups**  
*(In millions of dollars)*

USITC code	Commodity group	U.S. balance		Absolute change
		1989	1990	from 1989 to 1990
ME058	Aircraft, spacecraft, and related equipment	17,562	23,070	5,508
ME055	Certain motor-vehicle parts	-2,029	1,268	3,297
AG048	Cigarettes	3,341	4,730	1,389
ME051	Diodes, transistors, integrated circuits and similar semiconductor solid-state devices	-2,663	-1,312	1,351
ME042	Radio transmission and reception apparatus, including cellular telephones, and combinations thereof	-2,829	-1,596	1,233
ME002	Internal combustion piston engines, other than for aircraft	-1,213	-135	1,078
ME024	Miscellaneous industrial machinery	2,281	3,299	1,016
MM022	Precious metals and related articles	-774	57	831
ME004	Fans, blowers, compressors, air and vacuum pumps, and air-conditioning equipment	-541	157	698
ME041	Records, tapes, compact discs, computer software, and other recorded media	860	1,556	696
MM038	Copper and related articles	-788	-133	655
TX001	Textile fibers and waste	2,457	3,044	587
GM015	Scientific instruments	4,134	4,704	570
TX021	Sweaters	-2,660	-2,092	568
MM043	Certain base metals and chemical elements	-1,438	-877	561
MM027	Steel mill products, all grades	-6,149	-5,601	548
ME039	Tape recorders, tape players, video cassette recorders, turntables, and compact disc players	-4,412	-3,865	547
GM019	Furniture and selected furnishings	-3,864	-3,319	545
ME059	Ships, tugs, pleasure boats, and similar vessels	411	943	532
ME012	Construction and mining equipment	323	848	525
AG033	Coffee and tea	-2,462	-1,950	512
GM018	Arms and ammunition	1,373	1,873	500
ME037	Telephone and telegraph apparatus	-2,121	-1,624	497
GM030	Works of art, collectors' pieces, and antiques	-533	-46	487
AG063	Industrial papers and paperboards	1,384	1,867	483
CH028	Medicinal chemicals, except antibiotics	233	702	469
ME048	Apparatus for making, breaking, protecting, or connecting electrical circuits	-628	-172	456
AG067	Printed matter	1,003	1,456	453
CH050	Miscellaneous rubber or plastics products	-1,366	-918	448
AG007	Fish, except shellfish, frozen	-249	195	444

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

**Table 9**  
**U.S. trade position declines: Ranking of top 30 commodity groups**

USITC code	Commodity group	U.S. balance		Absolute change
		1989	1990	from 1989 to 1990
CH005	Crude petroleum	-34,979	-43,650	-8,671
AG035	Cereals	14,433	11,627	-2,806
CH006	Petroleum products	-7,640	-8,902	-1,262
TX036	Nonrubber footwear and footwear parts	-7,453	-8,360	-907
CH007	Natural gas and components	-1,940	-2,736	-796
GM016	Watches <sup>1</sup>	-653	-1,323	-670
ME001	Aircraft engines and gas turbines	3,307	2,746	-561
MM021	Natural and synthetic gemstones	-3,708	-4,158	-450
AG037	Oilseeds	3,926	3,515	-411
AG002	Live cattle and fresh, chilled, or frozen meat of cattle, except offal	-631	-1,013	-382
ME054	Automobiles, trucks, buses, and bodies and chassis of the foregoing	-45,868	-46,245	-377
TX022	Women's and girls' suits, skirts, and coats	-2,083	-2,396	-313
CH002	Nuclear materials	363	53	-310
CH013	Miscellaneous organic chemicals	1,951	1,664	-287
TX020	Shirts and blouses	-6,451	-6,725	-274
ME057	Miscellaneous vehicles and transportation-related equipment	912	661	-251
GM027	Games and fairground amusements	-2,038	-2,271	-233
CH011	Benzenoid commodity chemicals	1,255	1,022	-233
TX019	Trousers	-3,771	-3,989	-218
MM004	Copper ores and concentrates	518	312	-206
TX035	Other wearing apparel	-1,108	-1,291	-183
AG042	Nonalcoholic beverages including fruit and vegetable juices	-550	-726	-176
AG013	Animal feeds	2,745	2,569	-176
CH020	Certain inorganic pigments	393	226	-167
AG039	Animal or vegetable fats and oils	666	499	-167
GM025	Dolls	-597	-755	-158
CH012	Benzenoid specialty chemicals	1,181	1,023	-158
CH037	Polyethylene resins in primary forms	732	578	-154
TX037	Rubber footwear	-518	-647	-129
TX018	Men's and boys' coats and jackets	-886	-1,011	-125

<sup>1</sup> Imports of watches were significantly underreported during the period January 1989 to May 1990. Thus, although both years are underreported, data for 1990 is accurate for 7 months and, therefore, appears much higher than imports in 1989. It is estimated that true growth in imports was very small.

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

## Chapter 2

### Agricultural Products

The agricultural products sector traditionally has been the largest surplus contributor to the U.S. balance

of trade. The U.S. trade balance in agricultural products fell slightly in 1990 compared with that of the previous year. The U.S. agricultural trade balance showed a surplus of \$16.0 billion in 1990, which was about 2 percent lower than the \$16.2 billion surplus in 1989 (table 10). U.S. imports of agricultural products

**Table 10**  
**Agricultural, animal, and vegetable products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1989 and 1990<sup>1</sup>**

			Change from 1989 to 1990	
Item	1989	1990	Amount	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
Canada	2,434	4,510	2,076	85.2
Japan	10,275	10,866	591	5.7
Mexico	2,736	2,537	-199	-7.2
Germany	951	1,111	160	16.8
United Kingdom	729	883	154	21.1
Taiwan	1,831	1,780	-51	-2.7
Republic of Korea	2,408	2,487	79	3.2
France	497	613	116	23.3
Italy	647	660	13	2.0
China	1,210	547	-663	-54.7
Singapore	283	305	22	7.7
All other	20,329	18,960	-1,369	-6.7
Total	44,330	45,259	929	2.0
EC-12	7,691	8,762	1,071	13.9
OPEC	2,743	2,305	-438	-15.9
ASEAN	1,013	1,078	65	6.4
CBERA	1,526	1,522	-4	-0.2
Eastern Europe	320	536	216	67.5
U.S. imports for consumption:				
Canada	4,547	4,886	339	7.4
Japan	392	386	-6	-1.5
Mexico	2,762	2,972	210	7.6
Germany	567	581	14	2.4
United Kingdom	776	759	-17	-2.1
Taiwan	392	363	-29	-7.3
Republic of Korea	229	204	-25	-10.9
France	1,057	1,027	-30	-2.8
Italy	762	859	97	12.7
China	602	651	49	8.1
Singapore	109	122	13	11.9
All other	15,905	16,496	591	3.7
Total	28,100	29,306	1,206	4.2
EC-12	5,495	5,672	177	3.2
OPEC	1,305	1,325	20	1.5
ASEAN	2,107	2,201	94	4.4
CBERA	1,991	2,016	25	1.2
Eastern Europe	341	361	20	5.8
U.S. merchandise trade balance:				
Canada	-2,113	-376	1,737	82.2
Japan	9,883	10,480	597	6.0
Mexico	-26	-435	-409	-1,573.0
Germany	384	530	146	38.0
United Kingdom	-47	124	171	363.8
Taiwan	1,439	1,417	-22	-1.5
Republic of Korea	2,179	2,283	104	4.7
France	-560	-414	146	26.0
Italy	-115	-199	-84	-73.0
China	608	104	-712	-117.1
Singapore	17	183	9	5.1
All other	4,424	2,464	-1,960	-44.3
Total	16,230	15,953	-277	-1.7
EC-12	2,196	3,090	894	40.7
OPEC	1,438	980	-458	-31.8
ASEAN	-1,094	-1,123	-29	-2.6
CBERA	-465	-494	-29	-6.2
Eastern Europe	-21	175	196	933.3

<sup>1</sup> Import values are based on Customs value; export values are based on f.a.s. value, U.S. port of export.

rose from \$28.1 billion in 1989 to \$29.3 billion in 1990, or by about 4 percent, while U.S. exports of such products rose from \$44.3 billion in 1989 to \$45.3 billion in 1990, or by about 2 percent. Generally declining world commodities prices limited the rate of increase in the value of total U.S. exports of agricultural products (which tend to be basic commodities), while generally rising domestic prices for import demand items (which tend to be further processed food items) contributed to a higher rate of increase in imports compared with exports. In addition, a continuing weak dollar in 1990 combined with these price effects to augment the gap in the rates of increase between imports and exports which led to the deteriorating U.S. agricultural trade balance.

The leading U.S. agricultural export categories in 1990 in absolute terms were cereals (\$11.9 billion), cigarettes (\$4.8 billion), oilseeds (\$3.7 billion), and animal feeds (\$3.0 billion). The largest absolute increase in exports occurred for cigarettes, which rose by \$1.5 billion in 1990 compared with the previous year. This increase was primarily due to increased export marketing efforts and rising demand in Asia, Eastern Europe, and the Soviet Union. The U.S. tobacco industry has been actively pursuing export markets in recent years in the face of declining domestic demand because of health considerations. Other agricultural commodity groups that registered significant increases in U.S. exports in 1990 included edible preparations, frozen fish, and fresh, chilled, or frozen vegetables. The largest absolute decline in exports was accounted for by cereals, which fell \$2.9 billion, or 19 percent, during the period under review. A world glut of wheat was the primary factor in this decline. Significant declines also occurred in 1990 for U.S. exports of oilseeds, animal feed, and fats and oils.

The leading U.S. agricultural import categories were live cattle (\$2.6 billion), shellfish (\$2.6 billion), coffee and tea (\$2.0 billion), and frozen fish (\$1.6 billion). The largest absolute rise in imports occurred for live cattle and meats thereof, which increased by \$516 million in 1990. This increase was primarily the result of lower domestic production and higher domestic prices for live cattle and beef during 1990. Other significant increases in imports in 1990 were registered for nonalcoholic beverages, sugar and other sweeteners, and winter vegetables. The most substantial decline in U.S. imports of agricultural products was in the coffee and tea category; U.S. imports of coffee and tea declined by \$518 million in 1990 compared with the previous year. An increased world harvest of green coffee beans and a subsequent drop in coffee prices led to this decline. Other agricultural product categories that showed a significant decline in imports in 1990 included frozen fish, cereals, and hides, skins and leather. The largest improvement in the balance of trade occurred in the cigarette category, which experienced a \$1.4 billion surplus gain from 1989 to 1990 (table 8). The largest decline in the balance of trade occurred in the cereals category, which suffered a

\$8.7 billion surplus reduction during the period under review (table 9).

## U.S. Bilateral Trade

The major U.S. trading partners in agricultural products during 1990 were the EC, Japan, Canada, and Mexico, which together accounted for about \$40.6 billion in agricultural trade, or 54 percent of the U.S. total (table 10). These partners provided 47 percent of total U.S. imports of \$29.3 billion in 1990 and received 59 percent of total U.S. exports of \$45.3 billion that year. Improvement in the U.S. agricultural trade balance occurred with respect to the EC, Canada, and Japan, while the balance with Mexico deteriorated.

The trade balance with the EC improved 41 percent between 1989 and 1990; the surplus totaled \$3.1 billion the latter year. The principal U.S. agricultural product exports to the EC include oilseeds and products, feed grains and products, and live animals and meat. The major U.S. agricultural products imported from the EC include alcoholic beverages, meat and dairy products, and prepared and preserved vegetables.

A \$2.1 billion agricultural trade deficit with Canada in 1989 diminished by 82.2 percent to \$376 million in 1990. It is believed that this improvement is largely an accounting anomaly caused by the change in the export-reporting system enacted in 1990 whereby the United States and Canada use each other's import data to report exports. U.S. agricultural exports to Canada increased 85 percent in 1990 compared with the previous year. The primary U.S. agricultural products exported to Canada include live animals and meat, and fruits and vegetables; the principle import items include meat, fruits and vegetables, and feedgrains.

The U.S. agricultural trade balance with Japan improved slightly during the period under review, as the existing surplus grew 6 percent to \$10.5 billion in 1990. Major U.S. export items include feed grains, live animals and meat, and oilseeds. Primary U.S. import items include fish and shellfish, fruits and vegetables, alcoholic beverages, and grains.

The U.S. agricultural trade balance with Mexico, while at a relatively small deficit of \$26 million in 1989, deteriorated to a deficit of \$435 million in 1990. U.S. agricultural export trade with Mexico consists mainly of feed grains, oilseeds and products, and live animals and meat. U.S. agricultural imports from Mexico consist mainly of fruits and vegetables, coffee, fish and shellfish, and alcoholic beverages.

## Commodity Analyses

### *Live cattle and fresh, chilled, or frozen meat of cattle, except offal*

U. S. imports of live cattle and fresh, chilled, or frozen meat of cattle (except offal) increased from 0.9 billion kilograms, valued at \$2.1 billion, in 1989 to 1.1 billion kilograms, valued at \$2.6 billion, in 1990, or by

20 percent in quantity and 24 percent in value. U.S. beef production was 1.5-percent less in 1990 than in 1989 and live cattle and beef prices rose to record levels in 1990 owing to lower beef supplies.<sup>4</sup> The reduced U.S. production and higher prices in the United States apparently contributed to larger exports from most countries that ship cattle and beef to the United States. Imports from Australia, almost all frozen beef, rose by \$213 million. Australian beef production as well as its exports to most markets increased in 1990 from 1989. According to the USDA, Foreign Agricultural Service (FAS) "Relatively high slaughter levels [in 1990] have resulted from dry conditions in some cattle growing areas, a weaker Australian dollar and generally strong export demand."<sup>5</sup> Imports from Canada, which include significant quantities of both live cattle and fresh, chilled, or frozen beef, were up by \$183 million. FAS officials also reported that tight supplies for slaughter cattle in the United States and strong demand by U.S. packers, has resulted in more Canadian beef exported to the United States on the hoof.<sup>6</sup> U.S. imports from Mexico, most of which consisted of cattle destined for U.S. feedlots, were \$139 million more in 1990 than 1989. FAS reported that, "In 1990, Mexican cattlemen increased steer exports to the United States due to an on-going policy of gradual reduction of the export tax for feeder steers, dry conditions during the first 6 months of 1990 in Northern States, lower domestic interest rates, and attractive U.S. steer prices."<sup>7</sup>

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### *Dairy produce*

The value of U.S. exports of dairy produce declined from \$365 million in 1989 to \$282 million in 1990, or about 23 percent. Most of the decline was accounted for by decreased exports of nonfat dry milk to Mexico. From 1989 to 1990, the value of the exports to Mexico dropped about 72 percent, or from \$200 million to \$57 million.

World export supplies of nonfat dry milk shrank in 1988 as production in the European Community (EC) and the United States dropped and accumulated stocks were depleted. As these events occurred, world prices soared to record high levels of about 90 cents per pound by late 1988 and the United States became an important world supplier of the product, particularly to Mexico. Unlike the export situation of earlier years, exports of U.S.-produced nonfat dry milk from mid-1988 through 1989 originated in the private sector, rather than from Government-owned stocks, largely in response to the high world prices. In late 1989, however, world prices for nonfat dry milk softened; by

<sup>4</sup> USDA Economic Research Service "Livestock and Poultry Situation and Outlook Report" (LPS-45) January 1991, p. 12.

<sup>5</sup> USDA, FAS "Livestock Semi-Annual" from Australia, February 1, 1991, p. 2.

<sup>6</sup> USDA, FAS "Livestock Semi-Annual" from Canada, February 5, 1991, p. 3.

<sup>7</sup> USDA, FAS "Livestock Semi-Annual Report" from Mexico, February 1, 1991, p. 2.

January 1990, they averaged 77 cents per pound. Such prices continued to decline during 1990 and by year-end they averaged 57 cents per pound as supplies of nonfat dry milk exported from Eastern Europe and the EC rose. Consequently, the decline in U.S. exports of nonfat dry milk in 1990 was primarily a reflection of stiff price competition in the world market.

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### *Sugar and other sweeteners*

U.S. trade in sugar and other sweeteners saw both an increase in imports and an increase in exports in 1990. U.S. imports of sugar and other sweeteners rose 26 percent from \$776 million in calendar year 1989 to \$978 million in calendar year 1990. U.S. exports of sugar and other sweeteners in 1990 rose 31 percent from \$277 million to \$362 million.

The increase in U.S. imports of sugar reflected the decrease in domestic production from 6,841 thousand short tons, raw value (strv) in 1989 to 6,319 thousand strv in 1990. The continued repercussions of the December 1989 freeze in the continental cane areas and lower than expected yield and sucrose content in sugar beets were among the major reasons for lessened U.S. production. As a consequence of the reduction in domestic production, the U.S. sugar import quota for the 21-month period January 1, 1989-September 30, 1990, was revised four times between September 1989 and April 1990. The final increase on April 27, 1990, was to 2,833,050 metric tons. Cumulative entries at the end of the quota year (Sept. 30, 1990) were 2,717,788 metric tons, with an additional 45,000 metric tons of 1989/90 quota sugar entering during October-December 1990 but charged to the previous quota period. The USDA's tariff-rate quota for the first tier for fiscal 1990/91 is 2.313 million short tons.

U.S. exports of sugar and other sweeteners increased from 1989 to 1990. U.S. trade in sweeteners other than sugar is usually relatively small, except for high fructose corn syrup (HFCS). However, over the past 2 years, the re-export program for sugar has helped increase U.S. sugar exports, with the October-December 1990 exports of 182,000 short tons being the highest quarterly level of sugar exports in years. The majority of exports of refined sugar have been to the Mexican market. Exports of HFCS rose from 29,000 short tons, dry weight in 1989 to 83,000 short tons, dry weight in 1990, excluding exports to Puerto Rico. In 1991, USDA anticipates U.S. exports of HFCS to increase further to 100,000 short tons, dry basis.

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### *Coffee and tea*

The value of U.S. coffee and tea imports decreased from \$2.6 billion in 1989 to \$2.0 billion in 1990. Green coffee beans made up over 90 percent of all such imports during these years. The decline in value was

primarily the result of a decline in the unit value of green coffee beans imported during the period-20.2 percent in both unit value and total value. Trade sources indicate the decline in value was a reflection of the increased coffee harvest, compared with the previous year, and the resulting lower prices.

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### *Cereals, milled grains, malts and starches, and animal feeds*

U.S. exports of cereal grains declined from \$14.8 billion in 1989 to \$11.9 billion in 1990, a more than 19-percent decrease. During the same period of time, the exports of milled grains, malts and starches declined by over 16 percent, from \$466 million in 1989 to \$390.7 million in 1990. Exports of animal feeds also declined, although by only slightly over 5 percent, from \$3.2 billion in 1989 to \$3 billion in 1990. For all three commodity groups there was also a decline in imports, and the U.S. trade position remained positive, although declining for both cereals and animal feeds.

According to the U.S. Department of Agriculture (USDA)<sup>8</sup>, between crop years<sup>9</sup> 1988/89 and 1990/91<sup>10</sup>, total world production of wheat and milled wheat increased by 18.6 percent, rising from 500.3 million metric tons to 593.2 million metric tons. The largest gains were registered by the Soviet Union, China, Canada, and the United States. During the same period of time world ending stocks rose by 23 percent, increasing from 117.4 million metric tons in 1988/89 to 144 million metric tons in 1990/91. World utilization also increased by less than 7 percent during the same period of time, far less than the increase in world production.

During the period of 1989/90 to 1990/91, total world trade declined slightly from 96.8 million metric tons to 95.3 million metric tons. However, the U.S. share of world trade declined from 38.8 percent to 30.4 percent. As U.S. exporters faced a world glut of wheat, farm prices fell from close to \$150 per metric ton<sup>11</sup> in 1989 to less than \$90 per metric ton in 1990.

Worldwide, there is a greater tendency to mill grains, and compound feeds, close to the point of consumption, rather than import these types of commodities (because of the greater ease of handling grain, the need to bag milled grains, and the greater tendency to rancidity of milled grain products). Therefore, the world glut of grains also serves to decrease world trade in milled grains and grain byproducts for animal feed compounding. Further, a glut of wheat decreases world demand for corn, since surplus wheat is fed instead.

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<sup>8</sup> U.S. Department of Agriculture, Economic Research Service, *Wheat, Situation and Outlook Report* (WS-291, November 1990).

<sup>9</sup> The wheat crop year runs from July to June.

<sup>10</sup> Projected by the USDA, as of November 1990.

<sup>11</sup> Hard red winter wheat.

### *Oilseeds and animal or vegetable fats and oils*

Sharply lower oilseed prices offset a higher volume of U.S. exports in 1990, and U.S. exports of oilseeds declined by 9 percent to \$3.7 billion, as compared with exports in 1989. The volume of U.S. exports of the leading oilseed soybeans rose by 2 percent to 15.5 million metric tons in 1990, and its export price (export unit value) fell by 12 percent to \$232 per metric ton of soybeans during 1990. The abundant U.S. soybean crop harvested in 1989 improved available supplies but contributed to the lower prices.

The EC, the leading U.S. market, purchased about 34 percent of U.S. oilseed exports in 1990. Lower U.S. prices, and strong EC demand for animal feedstuffs stimulated U.S. soybean sales in that market. The depreciation of the U.S. dollar vis-à-vis most EC currencies magnified the effect of the lower price of U.S. soybeans in Europe.

U.S. exports of animal and vegetable oils, fats, and greases meanwhile declined by 12 percent in 1990 to \$1.2 billion as the volume sold abroad declined sharply. U.S. fats and oils became increasingly uncompetitive on a price basis in world markets during 1990: for example, the export unit value of U.S. crude soybean oil of \$546 per metric ton in 1990 was 31-percent higher than the price of competitive Brazilian soybean oil. World markets for fats and oils were abundantly supplied during the year, and key importing countries (particularly India and Egypt) reduced their purchases of U.S. products, turning to other suppliers such as Brazil, Argentina, Malaysia or the EC. U.S. imports of fats and oils (which are mostly coconut and palm-kernel oils) increased by 2 percent to \$673 million.

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### *Tobacco*

U.S. exports of tobacco and tobacco products in 1990 were \$6.5 billion, or 30-percent higher than in 1989. Cigarettes continued to lead other tobacco products in the pace of export growth, rising by 41 percent in value, from \$3.4 billion in 1989 to \$4.8 billion in 1990.

Asian markets accounted for a major share of the growth in cigarette exports, following the pattern of recent years. Japan and other Asian countries were destinations for about 40 percent of U.S. cigarette exports in 1990. U.S. cigarette exports to Asian markets increased about 30 percent in 1990 compared with 1989 levels.

The opening of new markets in Eastern Europe and the Soviet Union contributed to a surge in U.S. cigarette shipments to the region in 1990, although trade data do not indicate the exact amount of this increase. Many U.S. exports that were recorded as destined for the EC actually were transshipped to other destinations, including Eastern Europe. Although the precise value

of U.S. exports to Eastern Europe in 1990 is uncertain, the data suggest that such exports in 1990 were more than double the level exported to Eastern Europe during the previous year. U.S. exports to the Soviet Union increased from negligible amounts in 1989 to over \$47 million in 1990.

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### *Winter vegetables*

Winter vegetables are typically defined as tomatoes, cucumbers, eggplants, peppers (capsicum or pimenta), and squash. Although fresh, chilled, and frozen winter vegetables are covered here, the bulk of trade in these vegetables is generally in the fresh or chilled state, with some minor activity in the trade of frozen tomatoes.

During 1989-90, U.S. imports of winter vegetables rose from \$478 million to \$667 million, or by 40 percent. Despite this increase in the value of imports, the

quantity of imports actually declined by 8 percent during the period. This anomaly was apparently owing to adverse weather conditions in some areas, which likely contributed to increased demand for imports, thus putting upward pressure on import unit values. The aggregate import unit value for winter vegetables increased by 51 percent during 1989-90, rising dramatically from 57 cents per kilogram to 87 cents per kilogram.

Mexico typically accounts for the bulk of U.S. imports of winter vegetables. During 1989-90, imports from Mexico increased from \$439 million to \$632 million, or by 44 percent. Fresh or chilled tomatoes account for the majority of U.S. imports of winter vegetables from Mexico. Compared to other foreign suppliers, Mexico has the competitive advantage in terms of growing conditions, geographic location, and marketing experience in shipping to the U.S. market.

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**Table 11**  
**Agricultural, animal, and vegetable products sector: U.S. trade for selected commodity groups, by specified periods, 1989**  
**and 1990<sup>1</sup>**

and 1990

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
AG001	Certain miscellaneous live animals, meat, and animal products:				
	Exports .....	1,161	1,317	156	13.4
	Imports .....	947	998	51	5.4
	Trade balance .....	214	319	105	49.1
AG002	Live cattle and fresh, chilled, or frozen meat of cattle, except offal:				
	Exports .....	1,500	1,634	134	8.9
	Imports .....	2,131	2,647	516	24.2
	Trade balance .....	-631	-1,013	-382	-60.5
AG003	Live swine and fresh, chilled, or frozen pork, except offal:				
	Exports .....	312	298	-14	-4.5
	Imports .....	495	607	112	22.6
	Trade balance .....	-183	-309	-126	-68.9
AG004	Lamb, fresh, chilled, or frozen:				
	Exports .....	4	5	1	25.0
	Imports .....	34	31	-3	-8.8
	Trade balance .....	-30	-26	4	13.3
AG005	Poultry:				
	Exports .....	600	775	175	29.2
	Imports .....	26	28	2	7.7
	Trade balance .....	574	747	173	30.1
AG006	Fish, except shellfish, fresh or chilled:				
	Exports .....	155	164	9	5.8
	Imports .....	611	592	-19	-3.1
	Trade balance .....	-456	-428	28	6.1
AG007	Fish, except shellfish, frozen:				
	Exports .....	1,236	1,572	336	27.2
	Imports .....	1,485	1,377	-108	-7.3
	Trade balance .....	-249	195	444	178.3
AG008	Fish, except shellfish, in airtight containers, or cured or otherwise prepared, including live fish:				
	Exports .....	342	330	-12	-3.5
	Imports .....	724	682	-42	-5.8
	Trade balance .....	-382	-352	30	7.9
AG009	Shellfish:				
	Exports .....	577	755	178	30.8
	Imports .....	2,629	2,560	-69	-2.6
	Trade balance .....	-2,052	-1,805	247	12.0
AG010	Dairy produce:				
	Exports .....	365	282	-83	-22.7
	Imports .....	815	853	38	4.7
	Trade balance .....	-450	-571	-121	-26.9
AG011	Eggs:				
	Exports .....	88	99	11	12.5
	Imports .....	28	24	-4	-14.3
	Trade balance .....	60	75	15	25.0
AG012	Sugar and other sweeteners:				
	Exports .....	277	362	85	30.7
	Imports .....	776	978	202	26.0
	Trade balance .....	-499	-616	-117	-23.4
AG013	Animal feeds:				
	Exports .....	3,133	2,953	-180	-5.7
	Imports .....	388	384	-4	-1.0
	Trade balance .....	2,745	2,569	-176	-6.4
AG014	Live plants:				
	Exports .....	52	104	52	100.0
	Imports .....	147	162	15	10.2
	Trade balance .....	-95	-58	37	38.9

See footnotes at end of table.

Table 11-Continued

Agricultural, animal, and vegetable products sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
AG015	Seeds:				
	Exports .....	245	262	17	6.9
	Imports .....	126	122	-4	-3.2
	Trade balance .....	119	140	21	17.6
AG016	Cut flowers:				
	Exports .....	11	30	19	172.7
	Imports .....	316	326	10	3.2
	Trade balance .....	-305	-296	9	3.0
AG017	Miscellaneous vegetable substances:				
	Exports .....	283	304	21	7.4
	Imports .....	362	416	54	14.9
	Trade balance .....	-79	-112	-33	-41.8
AG018	Fresh, chilled, or frozen vegetables:				
	Exports .....	350	626	276	78.9
	Imports .....	456	484	28	6.1
	Trade balance .....	-106	142	248	234.0
AG019	Certain fresh, chilled, or frozen winter vegetables:				
	Exports .....	68	151	83	122.1
	Imports .....	478	667	189	39.5
	Trade balance .....	-410	-516	-106	-25.9
AG020	Prepared or preserved vegetables:				
	Exports .....	297	409	112	37.7
	Imports .....	399	373	-26	-6.5
	Trade balance .....	-102	36	138	135.3
AG021	Olives:				
	Exports .....	4	4	0	0
	Imports .....	145	136	-9	-6.2
	Trade balance .....	-141	-132	9	6.4
AG022	Dried vegetables:				
	Exports .....	447	532	85	19.0
	Imports .....	124	146	22	17.7
	Trade balance .....	323	386	63	19.5
AG023	Mushrooms and truffles:				
	Exports .....	11	30	19	172.7
	Imports .....	160	146	-14	-8.8
	Trade balance .....	-149	-116	33	22.1
AG024	Edible nuts:				
	Exports .....	886	1,018	132	14.9
	Imports .....	344	401	57	16.6
	Trade balance .....	542	617	75	13.8
AG025	Certain tropical fruits, fresh or dried:				
	Exports .....	42	55	13	31.0
	Imports .....	963	1,062	99	10.3
	Trade balance .....	-921	-1,007	-86	-9.3
AG026	Citrus fruits:				
	Exports .....	593	583	-10	-1.7
	Imports .....	74	89	15	20.3
	Trade balance .....	519	494	-25	-4.8
AG027	Certain deciduous fruits, fresh:				
	Exports .....	302	477	175	57.9
	Imports .....	115	114	-1	-0.9
	Trade balance .....	187	363	176	94.1
AG028	Other fresh fruits:				
	Exports .....	225	405	180	80.0
	Imports .....	421	506	85	20.2
	Trade balance .....	-196	-101	95	48.5
AG029	Dried fruits, other than tropical:				
	Exports .....	276	326	50	18.1
	Imports .....	34	33	-1	-2.9
	Trade balance .....	242	293	51	21.1

See footnotes at end of table.

Table 11-Continued

Agricultural, animal, and vegetable products sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
AG030	Fruit, uncooked, or cooked in water, frozen:				
	Exports	32	42	10	31.3
	Imports	47	56	9	19.1
	Trade balance	-15	-14	1	6.7
AG031	Jams, fruit jellies and marmalades; cooked fruit or nut purees and pastes; and fruit or other edible parts of plants preserved by sugar:				
	Exports	17	21	4	23.5
	Imports	41	43	2	4.9
	Trade balance	-24	-22	2	8.3
AG032	Canned fruits, provisionally preserved fruits and nuts, fruit flours, and fruits (except citrus) preserved in ways not elsewhere specified or included:				
	Exports	80	100	20	25.0
	Imports	269	264	-5	-1.9
	Trade balance	-189	-164	25	13.2
AG033	Coffee and tea:				
	Exports	101	95	-6	-5.9
	Imports	2,563	2,045	-518	-20.2
	Trade balance	-2,462	-1,950	512	20.8
AG034	Spices:				
	Exports	24	34	10	41.7
	Imports	258	216	-42	-16.3
	Trade balance	-234	-182	52	22.2
AG035	Cereals:				
	Exports	14,814	11,941	-2,873	-19.4
	Imports	381	314	-67	-17.6
	Trade balance	14,433	11,627	-2,806	-19.4
AG036	Milled grains, malts, and starches:				
	Exports	466	391	-75	-16.1
	Imports	115	103	-12	-10.4
	Trade balance	351	288	-63	-17.9
AG037	Oilseeds:				
	Exports	4,088	3,705	-383	-9.4
	Imports	162	190	28	17.3
	Trade balance	3,926	3,515	-411	-10.5
AG038	Natural gums, resins, and gum resins:				
	Exports	58	58	0	0
	Imports	98	98	0	0
	Trade balance	-40	-40	0	0
AG039	Animal or vegetable fats and oils:				
	Exports	1,329	1,172	-157	-11.8
	Imports	663	673	10	1.5
	Trade balance	666	499	-167	-25.1
AG040	Edible preparations:				
	Exports	1,013	1,440	427	42.2
	Imports	873	966	93	10.7
	Trade balance	140	474	334	238.6
AG041	Cocoa, chocolate, and confectionery:				
	Exports	237	328	91	38.4
	Imports	1,158	1,267	109	9.4
	Trade balance	-921	-939	-18	-2.0
AG042	Nonalcoholic beverages including fruit and vegetable juices:				
	Exports	395	493	98	24.8
	Imports	945	1,219	274	29.0
	Trade balance	-550	-726	-176	-32.0
AG043	Malt beverages:				
	Exports	107	139	32	29.9
	Imports	839	907	68	8.1
	Trade balance	-732	-768	-36	-4.9

See footnotes at end of table.

**Table 11-Continued**  
**Agricultural, animal, and vegetable products sector: U.S. trade for selected commodity groups, by specified periods, 1989**  
**and 1990<sup>1</sup>**

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
AG044	Wine and certain other fermented beverages:				
	Exports .....	99	127	28	28.3
	Imports .....	937	924	-13	-1.4
	Trade balance .....	-838	-797	41	4.9
AG045	Distilled spirits:				
	Exports .....	227	254	27	11.9
	Imports .....	1,358	1,511	153	11.3
	Trade balance .....	-1,131	-1,257	-126	-11.1
AG046	Unmanufactured tobacco:				
	Exports .....	1,341	1,441	100	7.5
	Imports .....	550	583	33	6.0
	Trade balance .....	791	858	67	8.5
AG047	Certain manufactured tobacco products, including cigars, smoking tobacco, chewing tobacco, and snuff:				
	Exports .....	263	279	16	6.1
	Imports .....	60	63	3	5.0
	Trade balance .....	203	216	13	6.4
AG048	Cigarettes:				
	Exports .....	3,369	4,761	1,392	41.3
	Imports .....	28	31	3	10.7
	Trade balance .....	3,341	4,730	1,389	41.6
AG049	Hides, skins, and leather:				
	Exports .....	2,197	2,372	175	8.0
	Imports .....	855	788	-67	-7.8
	Trade balance .....	1,342	1,584	242	18.0
AG050	Furskins:				
	Exports .....	232	205	-27	-11.6
	Imports .....	146	100	-46	-31.5
	Trade balance .....	86	105	19	22.1

<sup>1</sup> Import values are based on Customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>2</sup> This coding system is used by the U.S. International Trade Commission to identify major groupings of HTS import and export items for trade monitoring purposes.

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



## Chapter 3

### Forest Products

The 1989 trade deficit of \$1.9 billion in forest products improved to a surplus of \$167 million in

1990 (table 12). Total U.S. forest product exports increased by 9 percent, from \$17.2 billion during 1989 to \$18.7 billion during 1990. U.S. imports of forest products decreased by 3 percent, from \$19.1 billion to \$18.5 billion between corresponding annual periods.

Table 12

Forest products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1989 and 1990<sup>1</sup>

	Change from 1989 to 1990			
Item	1989	1990	Amount	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
Canada	2,498	4,033	1,535	61.4
Japan	4,629	4,335	-294	-6.3
Mexico	1,296	1,337	41	3.1
Germany	763	768	5	0.6
United Kingdom	909	926	17	1.8
Taiwan	519	472	-47	-9.0
Republic of Korea	943	915	-28	-2.9
France	316	357	41	12.9
Italy	609	601	-8	-1.3
China	387	329	-58	-14.9
Singapore	109	121	12	11.0
All other	4,246	4,503	257	6.0
Total	17,224	18,697	1,473	8.5
EC-12	3,694	3,956	262	7.0
OPEC	570	560	-10	-1.7
ASEAN	405	451	46	11.3
CBERA	561	569	8	1.4
Eastern Europe	32	58	26	81.2
U.S. imports for consumption:				
Canada	13,176	12,662	-514	-3.9
Japan	436	444	8	1.8
Mexico	631	456	-175	-27.7
Germany	440	425	-15	-3.4
United Kingdom	432	476	44	10.1
Taiwan	501	398	-103	-20.5
Republic of Korea	108	124	16	14.8
France	183	212	29	15.8
Italy	203	247	44	21.6
China	199	223	24	12.0
Singapore	89	106	17	19.1
All other	2,709	2,757	48	1.7
Total	19,107	18,530	-577	-3.0
EC-12	1,681	1,782	101	6.0
OPEC	378	425	47	12.4
ASEAN	701	782	81	11.5
CBERA	71	74	3	4.2
Eastern Europe	20	16	-4	-20.0
U.S. merchandise trade balance:				
Canada	-10,678	-8,629	2,049	19.1
Japan	4,193	3,891	-302	-7.2
Mexico	665	881	216	32.4
Germany	323	343	20	6.1
United Kingdom	477	450	-27	-5.6
Taiwan	18	74	56	311.1
Republic of Korea	835	791	-44	-5.2
France	133	145	12	9.0
Italy	406	354	-52	-12.8
China	188	106	-82	-43.6
Singapore	20	15	-5	-25.0
All other	1,537	1,746	209	13.5
Total	-1,883	167	2,050	108.8
EC-12	2,013	2,174	161	7.9
OPEC	192	135	-57	-29.6
ASEAN	-296	-331	-35	-11.8
CBERA	490	495	5	1.0
Eastern Europe	12	42	30	250.0

<sup>1</sup> Import values are based on Customs value; export values are based on f.a.s. value, U.S. port of export.

Historically, U.S. exports of pulp and wastepaper, logs, printed matter, and industrial papers account for about 70 percent of all forest product exports. U.S. exports of industrial papers (primarily composed of kraft linerboard) increased from \$2.4 billion in 1989 to \$2.8 billion in 1990. U.S. lumber and structural panel product exports also increased; to \$2.1 billion (for lumber) and to \$770 million (for structural panel products). Domestic printed matter exports also posted an increase; these exports increased from \$2.6 billion to \$3.1 billion. U.S. log and rough wood product exports increased to \$3.0 billion in 1990, up from \$2.9 billion in 1989. Another strong export sector, pulp and waste paper, experienced a decline in export levels. Pulp and waste paper exports decreased from \$4.4 billion during 1989 to \$4.1 billion in 1990.

Historically, U.S. imports of newsprint and other printing/writing papers, pulp, and lumber account for about two-thirds of all forest product imports. U.S. imports of newsprint declined slightly from \$6.6 billion in 1989 to \$6.5 billion in 1990. U.S. imports of pulp decreased by about 6 percent to \$2.9 billion in 1990. U.S. imports of lumber declined from \$3.0 billion during 1989 to \$2.7 billion during 1990. One area where U.S. imports increased was in printed matter. These imports increased from \$1.57 billion to \$1.62 billion.

### U.S. Bilateral Trade

During 1990, U.S. bilateral trade in forest products amounted to \$37.2 billion. Slightly more than one-third of this trade was accounted for by U.S. imports from Canada, valued at \$12.7 billion. Canada supplied almost 70 percent of all U.S. forest product imports. The leading Canadian import commodities were newsprint, pulp, and softwood lumber. The second-leading source for U.S. imports was the EC. The EC supplied 10 percent of all U.S. forest product imports in 1990; these imports were valued at \$1.8 billion.

During 1990, about two-thirds of all U.S. forest product exports found its destination in either Japan, the EC, or Canada. Exports accounted for 91 percent of all forest product trade with Japan and amounted to \$4.3 billion during 1990. About 69 percent of all forest product trade with the EC is also U.S. exports; these exports amounted to \$4.0 billion during 1990. U.S. exports to Canada during 1990 amounted to \$4.0 billion. The fourth-leading market for U.S. forest product exports was Mexico. During 1990, U.S. forest product exports to Mexico amounted to \$1.3 billion. U.S. exports accounted for about three-quarters of all forest product trade with Mexico in 1990.

### Commodity Analyses

#### *Wood and wood products*<sup>12</sup>

The U.S. trade surplus in wood and wood products rose from \$150 million in 1989 to \$1.0 billion in

1990, as the level of imports declined and the level of exports increased. Imports of wood and wood products declined by 7 percent, falling to \$5.5 billion during 1990. Exports of these products increased by 8 percent, to \$6.5 billion during 1990.

U.S. imports of lumber accounted for most of the decrease in imports of wood and wood products. Imports of lumber fell by almost 12 percent, decreasing from \$3.0 billion during 1989 to \$2.7 billion during 1990. The decline was the result of a sharp decline in the level of U.S. housing starts, the major driving force behind U.S. lumber consumption, combined with declining demand from the repair and remodeling and the materials-handling industries. U.S. housing starts declined by almost 12 percent from 1989, to about 1.2 million units during 1990, and the repair and remodeling industry consumed about 1 percent less lumber during the period. Imports of structural panel products decreased by 2 percent, from \$1.0 billion in 1989 to \$993 million in 1990. Most of the decrease was the result of lower imports from Taiwan and Canada. Imports of all structural wood panels from Taiwan and Canada decreased by 11 percent, to a combined total of \$432 million in 1990.

U.S. exports of wood and wood products increased from \$6.0 billion during 1989 to \$6.5 billion in 1990. U.S. exports of structural panels led the increase rising by 20 percent, to \$770 million. Logs and rough wood products, rose by 4 percent, to \$2.97 billion, and lumber, rose by 5 percent, to \$2.1 billion. Increased demand coupled with short world supplies led to increased prices for U.S. exports of lumber. Increased structural panel product exports to Canada more than offset a 27 and 19 percent drop, respectively, in exports of these structural panel products to Denmark and the United Kingdom. Exports of logs and rough wood products to Canada increased from \$121 million during 1989 to \$213 million in 1990. Softwood logs accounted for three-fourths of all exports of logs and rough wood products. A weak U.S. dollar relative to the Canadian dollar combined with an accounting anomaly caused by the change in the export-reporting system enacted in 1990 whereby the United States and Canada use each other's import data to report exports contributed to the increase in the value of U.S. exports of logs and rough wood products to Canada.

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#### *Pulp, paper, paperboard, and printed material*<sup>13</sup>

The United States recorded a \$846 million deficit of trade in pulp, paper, paperboard, and printed material in 1990, down sharply from the \$2.0 billion deficit posted during 1989. The decrease in the deficit was achieved through a 9-percent increase in U.S. exports coupled with a 1-percent decrease in imports between

<sup>12</sup> Wood and wood products include chs. 44, 45, and 46 of the *Harmonized Tariff Schedule of the United States*.

<sup>13</sup> Pulp, paper, paperboard, and printed material include chs. 47, 48, and 49 of the *Harmonized Tariff Schedules of the United States*.

1989 and 1990. During 1990, the value of U.S. exports increased to 94 percent of U.S. imports, up from 85 percent during the corresponding period of 1989.

U.S. imports of pulp, paper, paperboard, and printed material decreased from \$13.2 billion in 1989 to \$13.1 billion in the corresponding period of 1990, while U.S. exports of these products increased from \$11.2 billion in 1989 to \$12.2 billion in the corresponding period of 1990. Canada accounted for about 80 percent of all U.S. imports of pulp, paper, paperboard, and printed matter in 1990. However, imports of these products from Canada decreased slightly to \$10.46 billion in 1990 from \$10.47 billion in the corresponding period of 1989. U.S. exports to Canada increased from \$2.6 billion in 1989 to \$3.5 billion in 1990.

U.S. imports of industrial papers and pulp and wastepaper accounted for a significant portion of the decline in U.S. imports, declining from a combined \$4.1 billion in 1989 to \$3.8 billion in the corresponding period of 1990. This decrease, most of which is attributable to a decrease in U.S. imports of Canadian pulp, and industrial papers from Mexico, is the result of a decrease in the average price (value) of these commodities; and a change in the mix of industrial papers primarily imported from Mexico, which dropped in unit value from \$1,640 a metric ton in 1989, to \$890

a metric ton in 1990. Canada supplied about 90 percent of all U.S. pulp and wastepaper imports in both 1989 and 1990. Mexico supplied about 13 percent of all U.S. imports of industrial papers, in 1990, down substantially from about 28 percent in 1989. U.S. imports of newsprint the leading forest product category, in terms of value, remained steady, declining less than 1 percent, with imports valued at \$6.5 billion in 1990.

U.S. exports experiencing noticeable increases included most major sectors, with the exception of pulp and wastepaper. The value of U.S. pulp and wastepaper exports decreased by 7 percent, from \$4.4 billion during 1989 to \$4.1 billion during 1990, primarily a result of decreases to Japan, Mexico, West Germany and Korea. Exports of industrial papers and paperboard increased by 17 percent, from \$2.4 billion in 1989 to \$2.8 billion in 1990. Kraftliner accounted for a large share of the increase in paperboard exports with across-the-board increases to most major trading partners. U.S. exports of printed matter (books and other printed material) increased by 20 percent between 1989 and 1990, from \$2.6 billion to \$3.1 billion. Printed books, including textbooks and directories, accounted for the bulk of the increase.

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Table 13

Forest products sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
AG051	Logs and rough wood products:				
	Exports	2,854	2,967	113	4.0
	Imports	289	294	5	1.7
	Trade balance	2,565	2,673	108	4.2
AG052	Poles, piles, and posts:				
	Exports	9	6	-3	-33.3
	Imports	15	11	-4	-26.7
	Trade balance	-6	-5	1	16.7
AG053	Lumber:				
	Exports	2,047	2,138	91	4.4
	Imports	3,024	2,671	-353	-11.7
	Trade balance	-977	-533	444	45.4
AG054	Moldings, millwork, and joinery:				
	Exports	248	327	79	31.9
	Imports	602	579	-23	-3.8
	Trade balance	-354	-252	102	28.8
AG055	Structural panel products:				
	Exports	643	770	127	19.8
	Imports	1,011	993	-18	-1.8
	Trade balance	-368	-223	145	39.4
AG056	Wooden containers:				
	Exports	52	70	18	34.6
	Imports	152	149	-3	-2.0
	Trade balance	-100	-79	21	21.0
AG057	Tools and tool handles of wood:				
	Exports	11	13	2	18.2
	Imports	77	75	-2	-2.6
	Trade balance	-66	-62	4	6.1
AG058	Miscellaneous articles of wood:				
	Exports	123	155	32	26.0
	Imports	367	378	11	3.0
	Trade balance	-244	-223	21	8.6
AG059	Cork and rattan:				
	Exports	25	38	13	52.0
	Imports	322	318	-4	-1.2
	Trade balance	-297	-280	17	5.7
AG060	Pulp and wastepaper:				
	Exports	4,362	4,056	-306	-7.0
	Imports	3,084	2,886	-198	-6.4
	Trade balance	1,278	1,170	-108	-8.5
AG061	Building papers and asphalt roofing shingles:				
	Exports	12	7	-5	-41.7
	Imports	59	52	-7	-11.9
	Trade balance	-47	-45	2	4.3
AG062	Paper boxes and bags:				
	Exports	372	473	101	27.2
	Imports	192	225	33	17.2
	Trade balance	180	248	68	37.8
AG063	Industrial papers and paperboards:				
	Exports	2,412	2,813	401	16.6
	Imports	1,028	946	-82	-8.0
	Trade balance	1,384	1,867	483	34.9
AG064	Newsprint and other printing and writing papers:				
	Exports	832	982	150	18.0
	Imports	6,570	6,530	-40	-0.6
	Trade balance	-5,738	-5,548	190	3.3
AG065	Certain specialty papers:				
	Exports	216	332	116	53.7
	Imports	419	450	31	7.4
	Trade balance	-203	-118	85	41.9
AG066	Miscellaneous paper products:				
	Exports	442	478	36	8.1
	Imports	328	355	27	8.2
	Trade balance	114	123	9	7.9

See footnotes at end of table.

Table 13-Continued

Forest products sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
		————— Million dollars —————			
AG067	Printed matter:				
	Exports .....	2,569	3,072	503	19.6
	Imports .....	1,566	1,616	50	3.2
	Trade balance .....	1,003	1,456	453	45.2

<sup>1</sup> Import values are based on Customs value; export values are based on f.a.s. value, U.S. port of export.<sup>2</sup> This coding system is used by the U.S. International Trade Commission to identify major groupings of HTS import and export items for trade monitoring purposes.

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



## Chapter 4

### Fibers, Textiles, Apparel, and Footwear

The U.S. trade deficit in the fiber, textile, and apparel sector narrowed in 1990, declining by 4 percent, or \$1.2 billion, from 1989 to \$21.3 billion (tables 14 and 15).<sup>14</sup> The improvement came about as exports increased by 22 percent to a record \$11.1 billion, and imports advanced by a smaller 4 percent, but also to a record of \$32.3 billion. The deficit in 1990 was second only to the 1989 trade gap, and represented just over 18 percent of the total U.S. merchandise trade deficit, in contrast to 13 percent as recently as 1987.

The export growth in 1990 reflected greater shipments of raw fibers and intermediate goods such as yarn and fabric. Exports of textile fibers, primarily cotton, increased by \$550 million, or 18 percent, to \$3.6 billion. Competitive U.S. prices, strong worldwide demand, and favorable exchange rates were the primary reasons for this increase.<sup>15</sup> Exports of yarn increased by 23 percent, or \$223 million, to \$1.2 billion. Most of the increase in yarn exports went to Europe, where favorable exchange rates improved the price competitiveness of U.S. yarn. Exports of fabric increased by 31 percent, or \$533 million, to \$2.2 billion. Carpet exports increased by 44 percent, or \$168 million, to \$551 million, mostly to Canada and largely as a result of favorable exchange rates and preferential tariffs for exports to Canada under the United States-Canada Free-Trade Agreement.

The \$1.2 billion increase in imports for the fiber, textile, and apparel sector was concentrated in apparel. Such imports in 1990 rose by \$979 million, or 4 percent, over the 1989 level to \$25.5 billion. Significant increases were recorded in shirts and blouses, up by \$354 million to \$7.1 billion; trousers, up by \$340 million to \$4.7 billion; and women's and girls' suits, skirts, and coats, up by \$357 million to \$2.6 billion. In contrast, significant declines were registered in imports of sweaters<sup>16</sup>, down by \$564 million to \$2.1 billion, and neckwear, down by \$125 million to \$282 million. The slowdown in growth of imports for the entire sector in 1990 can be attributed to the soft domestic market. During 1990, estimated U.S. consumption of textile mill products and apparel declined by 4 percent to \$150 billion and estimated domestic production declined by 5 percent to \$120 billion.

### U.S. Bilateral Trade

Three-fourths of the U.S. bilateral trade deficit in the fiber, textile, and apparel sector in 1990 was accounted for by the major Asian suppliers-Hong Kong,

Korea, Taiwan (the "Big Three"), China, and the ASEAN countries. These sources accounted for 58 percent of total imports of the sector in 1990.

The improvement in the sector's trade balance in 1990 resulted primarily from smaller bilateral deficits with the Big Three and the EC and larger bilateral surpluses with Canada and Japan. The deficit with the Big Three improved by \$729 million to \$9.8 billion and that with the EC narrowed by \$402 million to \$1.4 billion. The trade surplus with Canada more than tripled, rising by \$570 million to \$800 million; and for Japan the surplus rose by \$196 million to \$417 million.

Partially offsetting these improvements was the ongoing deterioration in U.S. trade balances with China, Mexico, and the Caribbean Basin countries. In 1990, the deficit with China increased by \$576 million to \$3.7 billion, chiefly as the result of an increase in imports of \$600 million. The \$54 million surplus with Mexico recorded in 1989 became a \$1 million deficit in 1990 as imports rose by \$235 million and exports by \$180 million. The deficit with the Caribbean Basin countries increased by \$171 million in 1990 to \$804 million, primarily the result of imports increasing by \$228 million. The major share of trade with Mexico and the Caribbean Basin countries involved the export of U.S. components for assembly there and the return of the finished garments for sale in the United States. This trade accounted for an estimated 78 percent of the \$1.9 billion in imports from the Caribbean Basin countries and 91 percent of the imports from Mexico in 1990.

### Commodity Analyses

#### *Carpets and rugs*

The U.S. trade deficit in carpets and rugs (carpets) narrowed considerably to \$47 million in 1990 from \$230 million in 1989. The improvement resulted almost entirely from a significant increase in exports which rose by 44 percent over 1989 to \$551 million. In contrast, imports, which had peaked at \$678 million in 1987, declined by 2 percent, or \$15 million, to \$598 million, the lowest in 5 years.

The most notable export development in 1990 was a tripling in shipments to Canada to \$204 million. Rapid growth in carpet exports to Canada since 1986 enabled it to pass Saudi Arabia in 1989 to become the leading market by far, accounting for 17 percent of total shipments in 1989 and 37 percent in 1990. Industry and government sources attribute the increase in exports to Canada primarily to the staged tariff reductions under the United States-Canada Free-Trade Agreement, which began in January 1989, and favorable exchange rates. U.S. producers also benefited from lower transportation and labor costs than those of their Canadian counterparts. Additionally, since the United States-Canada Free-Trade Agreement became effective, several major Canadian carpet producers have acquired U.S. carpet mills and another producer closed its Canadian facilities and consolidated its carpet production at its U.S. mills.

<sup>14</sup> Footwear is discussed separately at the end of this section.

<sup>15</sup> Further information describing this is in *U.S. Trade Shifts in Selected Commodity Areas, January-June 1990*, USITC Publication 2341, December 1990.

<sup>16</sup> For a discussion of the primary factors contributing to the decline in imports of sweaters, see *Ibid.*

Table 14

Fibers, textiles, and apparel: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1989 and 1990<sup>1</sup>

Item	1989	1990	Change from 1989 to 1990	
			Amount	Percent
			Million dollars	
U.S. exports of domestic merchandise:				
Canada	903	1,533	630	69.7
Japan	1,098	1,184	86	7.8
Mexico	831	1,011	180	21.6
Germany	326	396	70	21.4
United Kingdom	357	418	61	17.0
Taiwan	154	197	43	27.9
Republic of Korea	564	609	45	7.9
France	114	157	43	37.7
Italy	257	363	106	41.2
China	418	446	28	6.6
Singapore	58	79	21	36.2
All other	3,973	4,685	712	17.9
Total	9,053	11,078	2,025	22.3
EC-12	1,699	2,180	481	28.3
OPEC	585	594	9	1.5
ASEAN	489	647	158	32.3
CBERA	1,203	1,260	57	4.7
Eastern Europe	62	85	23	37.0
U.S. imports for consumption:				
Canada	673	733	60	8.9
Japan	877	767	-110	-12.5
Mexico	777	1,012	235	30.2
Germany	433	467	34	7.8
United Kingdom	528	538	10	1.8
Taiwan	3,257	2,948	-309	-9.4
Republic of Korea	4,127	3,836	-291	-7.0
France	369	406	37	10.0
Italy	1,395	1,363	-32	-2.2
China	3,492	4,096	604	17.2
Singapore	633	630	-3	-0.4
All other	14,567	15,549	982	6.7
Total	31,128	32,345	1,217	3.9
EC-12	3,492	3,571	79	2.2
OPEC	754	860	106	14.0
ASEAN	3,369	3,736	367	10.8
CBERA	1,836	2,064	228	12.4
Eastern Europe	268	246	-22	-8.2
U.S. merchandise trade balance:				
Canada	230	800	570	247.8
Japan	221	417	196	88.6
Mexico	54	-1	-55	-101.8
Germany	-107	-71	36	33.6
United Kingdom	-171	-120	51	29.8
Taiwan	-3,103	-2,751	352	11.3
Republic of Korea	-3,563	-3,227	336	9.4
France	-255	-249	6	2.3
Italy	-1,138	-1,000	138	12.1
China	-3,074	-3,650	-576	-18.7
Singapore	-575	-551	24	4.1
All other	-10,594	-10,864	-270	-2.5
Total	-22,075	-21,267	808	3.6
EC-12	-1,793	-1,391	402	22.4
OPEC	-169	-266	-97	-57.3
ASEAN	-2,880	-3,089	-209	-7.2
CBERA	-633	-804	-171	-27.0
Eastern Europe	-206	-161	45	21.8

<sup>1</sup> Import values are based on Customs value; export values are based on i.a.s. value, U.S. port of export.

Table 15

Footwear: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1989 and 1990<sup>1</sup>

Item	1989	1990	Change from 1989 to 1990	
			Amount	Percent
			Million dollars	
U.S. exports of domestic merchandise:				
Canada	33	57	24	72.7
Japan	44	48	4	9.0
Mexico	68	61	-7	-10.2
Germany	9	21	12	133.3
United Kingdom	16	19	3	18.7
Taiwan	9	17	8	88.8
Republic of Korea	11	19	8	72.7
France	16	23	7	43.7
Italy	24	24	0	0
China	0	0	0	0
Singapore	3	3	0	0
All other	136	186	50	36.7
Total	369	478	109	29.5
EC-12	83	129	46	55.4
OPEC	7	11	4	57.1
ASEAN	4	6	2	50.0
CBERA	70	59	-11	-15.7
Eastern Europe	1	5	4	400.0
U.S. imports for consumption:				
Canada	55	53	-2	-3.6
Japan	8	5	-3	-37.5
Mexico	170	165	-5	-2.9
Germany	31	28	-3	-9.6
United Kingdom	34	43	9	26.4
Taiwan	2,005	1,528	-477	-23.7
Republic of Korea	2,183	2,558	375	17.1
France	56	47	-9	-16.0
Italy	808	973	165	20.4
China	720	1,475	755	104.8
Singapore	0	0	0	0
All other	2,311	2,662	351	15.1
Total	8,381	9,537	1,156	13.7
EC-12	1,323	1,517	194	14.6
OPEC	86	247	161	187.2
ASEAN	321	579	258	80.3
CBERA	120	157	37	30.8
Eastern Europe	135	146	11	8.1
U.S. merchandise trade balance:				
Canada	-22	4	26	118.1
Japan	36	43	7	19.4
Mexico	-102	-104	-2	-1.9
Germany	-22	-7	15	68.1
United Kingdom	-18	-24	-6	-33.3
Taiwan	-1,996	-1,511	485	24.2
Republic of Korea	-2,172	-2,539	-367	-16.8
France	-40	-24	16	40.0
Italy	-784	-949	-165	-21.0
China	-720	-1,475	-755	-104.8
Singapore	3	3	0	0
All other	-2,175	-2,476	-301	-13.8
Total	-8,012	-9,059	-1,047	-13.0
EC-12	-1,240	-1,388	-148	-11.9
OPEC	-79	-236	-157	-198.7
ASEAN	-317	-573	-256	-80.7
CBERA	-50	-98	-48	-96.0
Eastern Europe	-134	-141	-7	-5.2

<sup>1</sup> Import values are based on Customs value; export values are based on i.a.s. value, U.S. port of export.

Saudi Arabia's prominence as the largest export market for the U.S. carpet industry throughout the 1980s ended in 1989 when shipments to that market dropped 37 percent from the previous year's level. These exports partially recovered in 1990, rising by 18 percent to \$55 million, but they remained well below levels reached in the early 1980s. The weakness in export sales to Saudi Arabia reportedly stemmed from a slowdown in its building boom of earlier years and the opening of several carpet mills there.

The U.S. carpet industry also has been expanding exports to smaller, but potentially profitable markets. In Asian markets, exports to Singapore in 1990 increased by 78 percent over 1989 levels to \$27 million, and those to Hong Kong rose by 16 percent to \$20 million. Carpet exports to Japan, after increasing at an average annual rate of 80 percent during 1987-89, declined by 13 percent in 1990, to \$48 million. Although Japan has the fourth-largest carpet industry in the world, it reportedly has been unable to meet consumer demand in its domestic market or the nearby Asian markets.

Significant growth also occurred in carpet exports to Mexico in 1990, when these shipments grew by 51 percent to \$41 million. These shipments are believed to consist primarily of carpet for automobiles assembled in Mexico for sale in the United States and also carpet for use in hotels and resorts.

Modest declines in carpet imports, none exceeding 7 percent, were recorded for four of the leading five suppliers—India, China, Pakistan, and Canada. Belgium, the other leading source, recorded a 3-percent increase. The Asian products consist primarily of handmade carpets that are not produced commercially in the United States, such as oriental carpets. Imports from Canada consist predominately of carpet underlays and nonwoven carpets, while those from Belgium consist mostly of moderate-priced woven pile carpets, including machine-made oriental-design carpets.

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## **Yarns**

The value of U.S. yarn exports (spun, filament, and miscellaneous) increased by 23 percent in 1990 compared with 1989, while imports decreased by 8 percent. As a result of these trade shifts, the United States exported almost twice as much as it imported in 1990, and the U.S. trade surplus in yarns increased to \$557.6 million. In volume, U.S. exports increased by 28 percent to 289,000 metric tons, while imports decreased by 16 percent to 149,000 metric tons.

Soft U.S. market conditions and exchange rates were important factors in the 1990 trade shifts in yarn. According to industry sources, soft market conditions largely accounted for the decrease in U.S. imports, as well as encouraged U.S. producers to increase their

sales efforts in foreign markets. Appreciation of European currencies against the U.S. dollar increased the price competitiveness of U.S. products in those countries. Most notably, U.S. shipments to the UK increased by 64 percent, accounting for 12 percent of the total increase in U.S. yarn exports. Exchange rates also tended to have a negative effect on U.S. imports from European sources, particularly Italy. U.S. imports from Italy declined by 50 percent.

Exports to Canada, the largest foreign market for U.S. yarns, increased by 31 percent in 1990, accounting for 15 percent of the total increase in U.S. yarn exports. Increased exports to Canada can be attributed, in part, to the preferential tariff treatment received under the United States-Canada Free-Trade Agreement enacted in 1988. Intracompany transfers accounted for a large portion of the trade between the United States and Canada. The reciprocal increase in U.S. imports of yarn from Canada was not as significant, however. Reportedly, in recent years the Canadian industry has shrunk as a result of increased imports, largely of cotton/polyester blended yarns from Korea, Taiwan, and Brazil.

To some extent, U.S. yarn exports were negatively affected by external factors. U.S. exports to Iraq were stopped when trade sanctions were placed against that country last year. Also, spun yarn exports to Mexico, a major U.S. market, fell. Reportedly, many Mexican textile mills have closed as a result of a surge in imports of fabrics and finished goods that occurred after Mexico began liberalizing its barriers to trade.

Trade shifts appeared to be more significant in U.S. exports of manmade fiber yarns than in cotton yarns. Although the exchange rates favored U.S. yarn exports to Europe, the preponderance of low-cost suppliers, such as Brazil, Turkey, Greece, and Egypt, has limited U.S. producer's ability to break into the European market for cotton spun yarns. U.S. exports of filament yarns and spun yarns, which accounted for 94 percent of total volume of U.S. trade in yarn, increased by 27 percent. The growth in filament yarn exports was accounted for largely by increased shipments to Europe and Canada. Exports of carded or combed acrylic yarns to China, South Korea, and Taiwan accounted for the major portion of the increase in U.S. spun yarn exports.

U.S. imports of filament yarns and spun yarns decreased by 17 percent in volume, in 1990, though imports of filament yarns increased slightly in value. Two-thirds of the volume decrease was accounted for by decreased shipments of spun yarns, most notably from Thailand, Brazil, and Italy. In volume, import decreases occurred largely in yarns of cotton and of manmade fibers, although to a slightly greater extent in the latter. The decrease in imports of manmade fiber yarns was accounted for almost entirely by polyester and acrylic yarns.

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## Footwear

The U.S. footwear trade deficit widened sharply in 1990, increasing by \$1 billion over the 1989 level to \$9.1 billion. The deterioration resulted from a pickup in imports, which, after remaining unchanged in 1989, rose by 14 percent in 1990 to \$9.5 billion. Exports also grew that year, but from a much smaller base, rising by 30 percent to \$477 million.

The import growth in 1990 was largely accounted for by the upturn in nonrubber (mainly leather and vinyl) footwear imports, although these shipments remained below the levels attained in 1986-88. Non-rubber footwear import volume, after falling for 3 consecutive years, rebounded by 4 percent over 1989 to 898 million pairs, valued at \$8.4 million. U.S. production, on the other hand, continued on a downward path, declining by 11 percent, to a preliminary 200 million pairs. As a result, imports' share of the U.S. nonrubber footwear market by volume rose 3 percentage points in 1990, to a record 83 percent.

The much smaller rubber footwear market also registered an increase in imports in 1990. Imports of fabric-upper footwear with rubber or plastic soles, such as sneakers and joggers, rose by 5 percent to almost 200 million pairs (\$652 million). Imports of protective footwear ended their 5-year decline, rising by 6 percent to nearly 9 million pairs (\$52 million). Import penetration remained fairly stable in both market segments in 1990, averaging a record 74 percent for the fabric-upper shoes and 37 percent for the protective products.

On a geographical basis, the most striking development in 1990 was the emergence of China as the largest volume supplier of footwear. Imports from China accelerated 60 percent over 1989 and by more than 150

percent from 2 years ago. The 385 million pairs from China in 1990 were nearly 200 million more than those from Taiwan and Korea, the largest suppliers during the 1980s. Shoe imports from Taiwan continued their slide, falling 35 percent, to 187 million pairs, valued at \$1.5 billion, in 1990. Those from Korea declined by a much smaller 4 percent to 200 million pairs. However, Korea remained the largest source in terms of value, when its shipments rose by 17 percent to \$2.5 billion, reflecting the shift to better quality shoes incorporating new technologies.

Although Taiwan and Korea remain major suppliers, their competitive position has been undermined by rising production costs and appreciating currencies against a backdrop of market saturation in the United States. Consequently, high-volume shoe production has been moving out of Taiwan and Korea and primarily into China. This is particularly evident from the shift in trade that occurred in low-cost nonrubber footwear (i.e., valued at \$8 a pair or less, f.o.b.), which constituted 88 percent of China's footwear shipments in 1990. China expanded its share of this import segment to 48 percent from 30 percent in 1989, whereas Taiwan's share declined in half, to 22 percent, as did Korea's share, to 4 percent. Aside from China, Thailand and Indonesia have benefited from the ongoing shift in trade. Imports from Indonesia climbed 173 percent in 1990 and are up eightfold from 2 years ago. Shipments from Thailand advanced 40 percent in 1990 and are up 76 percent in 2 years. Thailand and Indonesia now rank as the sixth- and seventh-largest suppliers, respectively, with combined shipments of 68 million pairs, valued at more than \$500 million, in 1990.

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Table 16

Fibers, textiles, apparel, and footwear sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
TX001	Textile fibers and waste:				
	Exports .....	3,091	3,641	550	17.8
	Imports .....	634	597	-37	-5.8
	Trade balance .....	2,457	3,044	587	23.9
TX002	Spun yarns:				
	Exports .....	242	306	64	26.4
	Imports .....	309	248	-61	-19.7
	Trade balance .....	-67	58	125	186.6
TX003	Filament yarns:				
	Exports .....	647	776	129	19.9
	Imports .....	332	335	3	0.9
	Trade balance .....	315	441	126	40.0
TX004	Miscellaneous yarns:				
	Exports .....	77	107	30	39.0
	Imports .....	42	48	6	14.3
	Trade balance .....	35	59	24	68.6
TX005	Broadwoven fabrics:				
	Exports .....	993	1,236	243	24.5
	Imports .....	2,608	2,657	49	1.9
	Trade balance .....	-1,615	-1,421	194	12.0
TX006	Knit fabrics:				
	Exports .....	121	218	97	80.2
	Imports .....	117	144	27	23.1
	Trade balance .....	4	74	70	1,750.0
TX007	Miscellaneous fabrics:				
	Exports .....	117	147	30	25.6
	Imports .....	91	90	-1	-1.1
	Trade balance .....	26	57	31	119.2
TX008	Coated, covered, impregnated, or laminated textile fabrics:				
	Exports .....	239	287	48	20.1
	Imports .....	172	185	13	7.6
	Trade balance .....	67	102	35	52.2
TX009	Nonwoven fabrics:				
	Exports .....	243	357	114	46.9
	Imports .....	142	161	19	13.4
	Trade balance .....	101	196	95	94.1
TX010	Cordage, nets, and netting:				
	Exports .....	32	44	12	37.5
	Imports .....	127	137	10	7.9
	Trade balance .....	-95	-93	2	2.1
TX011	Certain textile articles and fabrics suitable for industrial use:				
	Exports .....	153	184	31	20.3
	Imports .....	112	135	23	20.5
	Trade balance .....	41	49	8	19.5
TX012	Miscellaneous textiles and articles:				
	Exports .....	463	526	63	13.6
	Imports .....	525	700	175	33.3
	Trade balance .....	-62	-174	-112	-180.6
TX013	Sacks and bags of textile materials:				
	Exports .....	12	15	3	25.0
	Imports .....	30	41	11	36.7
	Trade balance .....	-18	-26	-8	-44.4
TX014	Carpets and rugs:				
	Exports .....	383	551	168	43.9
	Imports .....	613	598	-15	-2.4
	Trade balance .....	-230	-47	183	79.6
TX015	Curtains and draperies:				
	Exports .....	7	14	7	100.0
	Imports .....	63	58	-5	-7.9
	Trade balance .....	-56	-44	12	21.4

See footnotes at end of table.

Table 16-Continued

Fibers, textiles, apparel, and footwear sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
TX016	Bedding, linens, and miscellaneous furnishings:				
	Exports .....	139	182	43	30.9
	Imports .....	677	695	18	2.7
	Trade balance .....	-538	-513	25	4.6
TX017	Men's and boys' suits and sports coats:				
	Exports .....	51	73	22	43.1
	Imports .....	576	508	-68	-11.8
	Trade balance .....	-525	-435	90	17.1
TX018	Men's and boys' coats and jackets:				
	Exports .....	31	51	20	64.5
	Imports .....	917	1,062	145	15.8
	Trade balance .....	-886	-1,011	-125	-14.1
TX019	Trousers:				
	Exports .....	563	685	122	21.7
	Imports .....	4,334	4,674	340	7.8
	Trade balance .....	-3,771	-3,989	-218	-5.8
TX020	Shirts and blouses:				
	Exports .....	330	410	80	24.2
	Imports .....	6,781	7,135	354	5.2
	Trade balance .....	-6,451	-6,725	-274	-4.2
TX021	Sweaters:				
	Exports .....	15	19	4	26.7
	Imports .....	2,675	2,111	-564	-21.1
	Trade balance .....	-2,660	-2,092	568	21.3
TX022	Women's and girls' suits, skirts, and coats:				
	Exports .....	120	164	44	36.7
	Imports .....	2,203	2,560	357	16.2
	Trade balance .....	-2,083	-2,396	-313	-15.0
TX023	Women's and girls' dresses:				
	Exports .....	42	51	9	21.4
	Imports .....	882	965	83	9.4
	Trade balance .....	-840	-914	-74	-8.8
TX024	Robes:				
	Exports .....	12	11	-1	-8.3
	Imports .....	157	176	19	12.1
	Trade balance .....	-145	-165	-20	-13.8
TX025	Underwear and nightwear:				
	Exports .....	125	169	44	35.2
	Imports .....	745	854	109	14.6
	Trade balance .....	-620	-685	-65	-10.5
TX026	Hosiery:				
	Exports .....	59	73	14	23.7
	Imports .....	148	186	38	25.7
	Trade balance .....	-89	-113	-24	-27.0
TX027	Body-supporting garments:				
	Exports .....	176	182	6	3.4
	Imports .....	338	366	28	8.3
	Trade balance .....	-162	-184	-22	-13.6
TX028	Neckwear:				
	Exports .....	14	16	2	14.3
	Imports .....	407	282	-125	-30.7
	Trade balance .....	-393	-266	127	32.3
TX029	Gloves, including gloves for sports:				
	Exports .....	182	158	-24	-13.2
	Imports .....	890	871	-19	-2.1
	Trade balance .....	-708	-713	-5	-0.7
TX030	Headwear:				
	Exports .....	43	64	21	48.8
	Imports .....	341	429	88	25.8
	Trade balance .....	-298	-365	-67	-22.5

See footnotes at end of table.

Table 16-Continued

Fibers, textiles, apparel, and footwear sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
TX031	Leather apparel and accessories:				
	Exports .....	63	75	12	19.0
	Imports .....	1,310	1,354	44	3.4
	Trade balance .....	-1,247	-1,279	-32	-2.6
TX032	Fur apparel and other fur articles:				
	Exports .....	67	54	-13	-19.4
	Imports .....	370	249	-121	-32.7
	Trade balance .....	-303	-195	108	35.6
TX033	Rubber, plastic, and coated-fabric apparel:				
	Exports .....	45	48	3	6.7
	Imports .....	160	119	-41	-25.6
	Trade balance .....	-115	-71	44	38.3
TX034	Nonwoven, paper, and felt apparel and footwear:				
	Exports .....	9	12	3	33.3
	Imports .....	49	154	105	214.3
	Trade balance .....	-40	-142	-102	-255.0
TX035	Other wearing apparel:				
	Exports .....	148	172	24	16.2
	Imports .....	1,256	1,463	207	16.5
	Trade balance .....	-1,108	-1,291	-183	-16.5
TX036	Nonrubber footwear and footwear parts:				
	Exports .....	325	417	92	28.3
	Imports .....	7,815	8,831	1,016	13.0
	Trade balance .....	-7,490	-8,414	-924	-12.3
TX037	Rubber footwear:				
	Exports .....	42	60	18	42.9
	Imports .....	560	707	147	26.3
	Trade balance .....	-518	-647	-129	-24.9

<sup>1</sup> Import values are based on Customs value; export values are based on f.a.s. value, U.S. port of export.<sup>2</sup> This coding system is used by the U.S. International Trade Commission to identify major groupings of HTS import and export items for trade monitoring purposes.

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

## Chapter 5

### Energy and Chemicals

During 1990, the U.S. trade deficit in chemicals, coal, petroleum, natural gas, and related products in-

creased to \$38.9 billion, compared with a deficit of \$31.1 billion for these products during 1989. The increase in the deficit is attributable to an increase of nearly 24 percent in the deficit for petroleum, natural gas, and related products (table 17, and 18).

Table 17

Chemicals and related products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1989 and 1990<sup>1</sup>

Item	1989	1990	Change from 1989 to 1990	
			Amount	Percent
			Million dollars	
U.S. exports of domestic merchandise:				
Canada	5,524	8,115	2,591	46.9
Japan	5,074	5,014	-60	-1.1
Mexico	2,829	3,071	242	8.5
Germany	1,700	1,988	288	16.9
United Kingdom	1,746	1,737	-9	-0.5
Taiwan	1,818	1,605	-213	-11.7
Republic of Korea	1,725	1,812	87	5.0
France	1,069	1,266	197	18.4
Italy	796	867	71	8.9
China	1,154	1,068	-86	-7.4
Singapore	702	751	49	6.9
All other	16,806	17,356	550	3.2
Total	40,943	44,650	3,707	9.0
EC-12	10,701	11,614	913	8.5
OPEC	1,530	1,667	137	8.9
ASEAN	1,725	1,900	175	10.1
CBERA	1,132	1,162	30	2.6
Eastern Europe	138	112	-26	-18.8
U.S. imports for consumption:				
Canada	5,640	6,000	360	6.3
Japan	4,054	4,000	-54	-1.3
Mexico	968	1,014	46	4.7
Germany	3,222	3,513	291	9.0
United Kingdom	2,242	2,285	43	1.9
Taiwan	1,378	1,339	-39	-2.8
Republic of Korea	558	666	108	19.3
France	1,673	1,670	-3	-0.1
Italy	944	1,011	67	7.0
China	496	723	227	45.7
Singapore	224	425	201	89.7
All other	8,672	8,933	261	3.0
Total	30,071	31,579	1,508	5.0
EC-12	10,321	10,864	543	5.2
OPEC	756	637	-119	-15.7
ASEAN	1,327	1,358	31	2.3
CBERA	625	656	31	4.9
Eastern Europe	140	137	-3	-2.1
U.S. merchandise trade balance:				
Canada	-116	2,115	2,231	1,923.2
Japan	1,020	1,014	-6	-0.5
Mexico	1,861	2,057	196	10.5
Germany	-1,522	-1,525	-3	-0.1
United Kingdom	-496	-548	-52	-10.4
Taiwan	440	266	-174	-39.5
Republic of Korea	1,167	1,146	-21	-1.7
France	-604	-404	200	33.1
Italy	-148	-144	4	2.7
China	658	345	-313	-47.5
Singapore	478	326	-152	-31.7
All other	8,134	8,423	289	3.5
Total	10,872	13,071	2,199	20.2
EC-12	380	750	370	97.3
OPEC	774	1,030	256	33.0
ASEAN	398	542	144	36.1
CBERA	507	506	-1	-0.1
Eastern Europe	-2	-25	-23	-1,150.0

<sup>1</sup> Import values are based on Customs value; export values are based on f.a.s. value, U.S. port of export.

Table 18

Petroleum, natural gas, and related products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1989 and 1990<sup>1</sup>

Item	1989	1990	Change from 1989 to 1990	
			Amount	Percent
			Million dollars	
U.S. exports of domestic merchandise:				
Canada	1,689	2,158	469	27.7
Japan	1,511	1,456	-55	-3.6
Mexico	714	827	113	15.8
Germany	105	105	0	0
United Kingdom	259	325	66	25.4
Taiwan	516	491	-25	-4.8
Republic of Korea	344	720	376	109.3
France	334	477	143	42.8
Italy	632	750	118	18.6
China	14	5	-9	-64.2
Singapore	109	144	35	32.1
All other	3,661	4,733	1,072	29.2
Total	9,888	12,191	2,303	23.2
EC-12	2,737	3,730	993	36.2
OPEC	285	271	-14	-4.9
ASEAN	148	194	46	31.0
CBERA	593	879	286	48.2
Eastern Europe	167	167	0	0
U.S. imports for consumption:				
Canada	7,766	9,829	2,063	26.5
Japan	140	90	-50	-35.7
Mexico	4,201	5,192	991	23.5
Germany	105	59	-46	-43.8
United Kingdom	1,630	2,038	408	25.0
Taiwan	0	0	0	0
Republic of Korea	25	10	-15	-60.0
France	154	365	211	137.0
Italy	328	531	203	61.8
China	468	669	201	42.9
Singapore	166	204	38	22.8
All other	36,899	45,178	8,279	22.4
Total	51,882	64,165	12,283	23.6
EC-12	3,650	4,499	849	23.2
OPEC	25,811	33,062	7,251	28.0
ASEAN	1,801	1,629	-172	-9.5
CBERA	1,067	1,353	286	26.8
Eastern Europe	224	134	-90	-40.1
U.S. merchandise trade balance:				
Canada	-6,077	-7,671	-1,594	-26.2
Japan	1,371	1,366	-5	-0.3
Mexico	-3,487	-4,365	-878	-25.1
Germany	0	46	46	(2)
United Kingdom	-1,371	-1,713	-342	-24.9
Taiwan	516	491	-25	-4.8
Republic of Korea	319	710	391	122.5
France	180	112	-68	-37.7
Italy	304	219	-85	-27.9
China	-454	-664	-210	-46.2
Singapore	-57	-60	-3	-5.2
All other	-33,238	-40,445	-7,207	-21.6
Total	-41,994	-51,974	-9,980	-23.7
EC-12	-913	-769	144	15.7
OPEC	-25,526	-32,791	-7,265	-28.4
ASEAN	-1,653	-1,435	218	13.1
CBERA	-474	-474	0	0
Eastern Europe	-57	33	90	157.8

<sup>1</sup> Import values are based on Customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>2</sup> Not applicable.

The U.S. chemicals industry, excluding petroleum and energy-related sectors, maintained its position as a leading world producer of both chemical intermediates and chemical products during 1989 and 1990. A trade surplus continued also, attaining a level of \$13.1 billion during 1990, compared with \$10.9 billion during 1989. A growth of 20.2 percent in the trade surplus of chemicals and related products was reached largely through increased exports and trade position increases in medicinal chemicals and other chemical product groups such as paints, inks and related items; and natural rubber and other synthetic rubber.

For petroleum, natural gas, and related products, the trade deficit increased to \$52.0 billion during 1990, or an increase of 24 percent over the level of \$42.0 billion attained during 1989. Imports of products in this group increased by 24 percent to \$64.2 billion during 1990, while exports increased by nearly 23 percent. Exports of these products to Canada provided the greatest absolute increase, from \$1.7 billion in 1989 to \$2.2 billion in 1990, a change of 28 percent.

### U.S. Bilateral Trade

The major sources of imports in the energy and chemical products sector during 1990 were Canada, Japan, and West Germany. Canada and Japan were the top two export markets, followed by Mexico. The European Community was the largest source of imports and market for exports of chemical products during 1990, making up 26 percent of total U.S. exports and 34 percent of total imports.

Trade in the chemicals products sector reflected increased industrial and private consumer demands for imports of energy products. The three largest increases in the chemical products sector were crude petroleum, petroleum products, and natural gas and components. Imports of crude petroleum increased by 25 percent to \$43.8 billion in 1990 compared with 1989. Lower prices for crude petroleum during the first half of 1990 coupled with decreases in U.S. production are believed responsible for the rising imports of crude petroleum during that period, although the threat of a major supply disruption resulting from the Persian Gulf war resulted in higher import pricing during the second half of 1990. Natural gas and components imports have increased by \$817 million (33.9 percent) to supplement domestic supplies available to local geographic areas such as the Northeastern United States.

### Commodity Analyses

#### *Crude petroleum*

U.S. imports of crude petroleum continue to increase as domestic production falls. Imports of crude petroleum, which account for approximately half of the U.S. trade deficit, accounted for more than 50 percent of domestic consumption of crude petroleum during 1990 compared with 46 percent during 1989. U.S. imports began to increase in late 1985 when world crude

petroleum prices plummeted as a result of an oversupply of crude on the world market. U.S. imports of crude petroleum increased from 2.1 billion barrels in 1989 to 2.2 billion barrels in 1990. Saudi Arabia, Nigeria, and Venezuela, all members of OPEC, were the principal sources of imports; Mexico, the fourth principal source of U.S. imports in 1990, was the largest source of non-OPEC crude petroleum. The per barrel price of crude petroleum imports rose from \$16.47 in 1989 to \$19.72 in 1990; the increase in price is attributable to the threat of a major supply disruption resulting from the Persian Gulf war.

U.S. exports of crude petroleum are prohibited except as approved by the U.S. Government. Canada has been the only consistent market for these exports as part of a commercial exchange agreement between U.S. and Canadian refiners, and approved by the Secretary of the Department of Energy. In 1987, small shipments of Alaskan North Slope crude petroleum were approved for export to the Republic of Korea, Taiwan, and Australia. U.S. exports increased from 3.8 million barrels in 1989 to 7.2 million barrels in 1990. Canada accounted for about 90 percent of these U.S. exports.

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#### *Petroleum products*

The value of U.S. imports of petroleum products increased from \$13.2 billion in 1989 to \$16.1 billion in 1990. Venezuela and Algeria, both members of OPEC, remained the leading sources of imported petroleum products. The low per barrel price of crude has led U.S. consumers to abandon the conservation measure. As a result, demand for petroleum products, primarily motor fuels, has increased. U.S. refineries are operating at over 90-percent capacity with imports accounting for any remaining demand.

The United States is not a major exporter of petroleum products. The value of U.S. exports of petroleum products increased from \$5.5 billion in 1989 to \$7.2 billion in 1990. Canada, Japan, the Netherlands, and Mexico remained the major U.S. markets for these exports.

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#### *Electrical energy*

Most U.S. utilities do not use foreign sources to provide major portions of their electricity supply. Electricity trade plays a varying role from region to region and fluctuates from year to year as a result of changing hydroelectric conditions. Canada is the primary U.S. electricity trading partner. Trade in electricity is conducted over the existing interconnected transmission systems. Trade with Quebec uses direct current lines. The Provinces of New Brunswick, Ontario, Manitoba, and Saskatchewan are interconnected with the United States in an alternating current grid and are synchronized with utilities in the eastern

U.S. power grid. Alberta and British Columbia are synchronized with U.S. utilities operating in the western power grid and sell electricity to the western portion of the United States.

U.S. imports of electricity decreased from \$557.9 million in 1989 to \$462.5 million in 1990. U.S. exports increased from \$180.4 million in 1989 to \$491.1 million in 1990.

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### *Miscellaneous organic chemicals*

U.S. imports of miscellaneous organic chemicals increased from a value of \$2.6 billion during 1989, to \$2.7 billion during 1990, or by 1.5 percent. This trend is mainly attributable to some continued growth in the U.S. economy during the first half of 1990. High-valued imports, consisting of pharmaceutical intermediates, additives for plastics, and miscellaneous chemicals were supplied from Singapore, amounting to a total of \$297 million during 1990, compared with \$125 million during 1989.

U.S. exports of miscellaneous organic chemicals decreased from a value of \$4.9 billion in 1989, to \$4.3 billion in 1990. The decrease in value was accounted for by a gradual shift towards more basic commodity chemicals to nearly all countries. This trend has led to overall decreases in the average unit value of exports by about 18 percent from 1989 to 1990. However, increases in exports to Brazil, primarily shipments of fuel-grade ethanol for Brazil's Alcohol Fuel Program, tended to offset any major decreases in exports. There are at least two major U.S. producers of fuel-grade ethanol currently shipping to Brazil. General pressure by the Brazilian government to reduce its own dependence on foreign oil imports, coupled with general acceptance by Brazilian consumers has currently outstripped Brazilian capacity to produce ethanol.

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### *Natural gas*

The value of imports of natural gas and products made from natural gas increased from \$2.4 billion during 1989 to more than \$3.23 billion during 1990. Much of this 34 percent increase was related to increased imports of natural gas products from the three largest foreign suppliers of natural gas and its products to the domestic market, Canada, Algeria, and Mexico. Canada remains the United States' primary import source of natural gas and natural gas products, accounting for more than 83 percent of all imports in terms of value. Increased Canadian natural gas sales in the domestic market were concentrated in the Western United States, primarily to utilities for electricity generation. Increased imports from Algeria resulted from the expansion of LNG purchases, which continue after the reestablishment several years ago of contract LNG sales, that had been suspended during the 1980's. Im-

ports of LNG from Algeria increased by more than 129 percent during 1989-90, to a value of approximately \$288 million. Imports of natural gas products from Mexico increased by nearly 123 percent in terms of value, reaching a value of \$160 million in 1990.

The value of exports of natural gas and its products increased during 1989-90, increasing from \$472 million during 1989 to more than \$493 million during 1990. The largest foreign markets for U.S. exports of natural gas and its products during 1989-90 were Mexico, Japan and Canada. The value of exports of natural gas and its products to Mexico increased from \$150 million in 1989 to nearly \$166 million in 1990. Exports of LNG to Japan decreased slightly, from a value of \$168 million during 1989 to about \$164 million during 1990.

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### *Salts and other inorganic chemicals*

U.S. import of salts and other inorganic chemicals rose from \$1.2 billion in 1989 to \$1.31 billion in 1990 whereas exports of these chemicals rose from \$1.8 billion to \$2.1 billion. The positive trade balance for these chemicals rose from \$616 million in 1989 to \$770 million in 1990.

U.S. imports of sodium chlorate, a chemical used primarily in wood pulp bleaching in paper manufacture, rose from 301 million kilograms, valued at \$93 million, in 1989 to 351 million kilograms, valued at \$107 million, in 1990. Almost all of these imports came from Canada. U.S. imports of sodium chlorate have been increasing steadily since at least 1986, in part because of growing demand for the chemical in pulp bleaching. U.S. consumption of sodium chlorate has been rising principally because sodium chlorate has been replacing more environmentally worrisome chlorine in pulp bleaching. Another factor accounting for the growth in imports from Canada of sodium chlorate is that the Canadians have rapidly increased their sodium chlorate capacity to meet their own burgeoning demand and that of the United States. Sodium chlorate is made from a process that requires a great deal of electrical power and the Canadians are able to produce the chemical relatively inexpensively because of the abundant hydroelectric power that is available in Canada.

U.S. imports of sodium cyanide, a chemical which is primarily used in the processing of gold ore, amounted to 26 million kilograms, valued at \$43 million, in 1989 but declined to 13 million kilograms, valued at \$17 million in 1990. Most of these imports come from West Germany and the United Kingdom. U.S. imports of sodium cyanide declined in 1990 because domestic capacity increased sharply in late 1989 in anticipation of increased demand.

U.S. exports of catalytic mixtures and reaction initiators and accelerators rose from \$391 million in 1989 to \$471 million in 1990. Most of these exports went to Canada, Japan, Mexico, and Western Europe. U.S. ex-

ports of catalysts have been increasing in part because of burgeoning world-wide demand for catalysts in environmental applications especially for use in catalytic converters.

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### *Benzenoid intermediate chemicals*

U.S. imports of benzenoid intermediate chemicals increased from a value of \$2.1 billion during 1989, to \$2.3 billion during 1990, or by 13 percent. The principal reason for this increase was an increase in imports of benzenoid specialty chemicals from \$1.6 billion during 1989, to \$1.8 billion during 1990. The increase in imports of certain of these specialty chemicals, such as pharmaceutical intermediate chemicals and synthetic dye and pigment intermediates, was attributable to related party transactions between either foreign parent companies and their U.S. subsidiaries, or U.S. multinational chemical firms and their foreign subsidiaries. Benzenoid commodity chemicals, used as precursors in the manufacture of plastics resins, adhesives, synthetic fibers and as feedstocks for producing other intermediate chemicals, increased from \$430 million during 1989, to \$485 million during 1990. The principal reason for this increase was an increase in the cost of raw materials to produce these petroleum-derived chemicals as a result of the Gulf war. The quantity of imports of these products increased by only 1 percent over 1989-90, while the unit value increased by 11 percent.

The principal sources of imports of benzenoid commodity chemicals by value during 1990 were Canada (41 percent), the Netherlands (34 percent), Japan (4 percent), France (4 percent), and Brazil (3 percent). The principal sources of imports of benzenoid specialty chemicals by value during this same period were West Germany (18 percent), Japan (15 percent), the United Kingdom (13 percent), Switzerland (8 percent), France (7 percent), Italy (7 percent), Ireland (6 percent), and Canada (5 percent).

U.S. exports of benzenoid intermediate chemicals decreased from a value of \$4.5 billion during 1989, to \$4.4 billion during 1990. A decrease of 11 percent in the value of exports of benzenoid commodity chemicals was the major reason for this change.

The principal markets for benzenoid commodity chemicals by value during 1990 were Taiwan (25 percent), Korea (12 percent), the Netherlands (10 percent), China (10 percent), Canada (8 percent), Japan (7 percent), and Belgium (4 percent). The principal markets for exports of benzenoid specialty chemicals by value during this period were Japan (13 percent), Canada (12 percent), Belgium (8 percent), the Netherlands (7 percent), Mexico (6 percent), the United Kingdom (6 percent), and Korea (5 percent).

The U.S. trade surplus for benzenoid chemicals decreased by 16 percent over 1989-90, from \$2.4 billion to \$2.0 billion. The largest decrease over these periods occurred in the trade balance for benzenoid commodity chemicals, from \$1.3 billion during 1989, to \$1.0 bil-

lion during 1990. The increased costs of these products resulting from the sudden increase in the price of crude petroleum during the Gulf war was primarily responsible for the change.

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### *Miscellaneous rubber or plastic products*

U.S. exports of these products increased from \$1.7 billion during 1989 to 2.4 billion during 1990. This 41-percent increase in export value was mainly the result of increased exports to Canada which went from \$389 million to \$794 million during the periods covered. Most of these items are miscellaneous plastic products and rubber gaskets, washers and other seals.

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### *Pneumatic tires and tubes*

U.S. exports of these products increased from \$812 million during 1989 to \$1,097 million during 1990. This 35-percent increase in export value was mainly the result of increased exports to Canada. U.S. exports of these products have increased every year since 1987. Acquisitions and mergers of major domestic tire manufacturers have led to a highly concentrated and efficient U.S. tire industry. A reduction in the rate of increase of U.S. tire imports and a steadily increasing level of exports are reflections of these domestic developments.

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### *Fertilizers*

U.S. imports of fertilizers decreased approximately 8 percent in value, from \$1.6 billion during 1989 to \$1.5 billion during 1990. This decline may be partially explained by a variety of factors.

Nitrogenous fertilizer imports from the Soviet Union have fallen off somewhat due to the unrest in that country. Nitrogenous fertilizer imports from Trinidad and Tobago have been interrupted due to transfer of ownership of production facilities in that country. Phosphatic fertilizer imports from Morocco, primarily phosphate rock, have declined due to repercussions of the Middle East crisis. These decreases are partially offset by an increase in imports of nitrogenous fertilizers, primarily ammonia and urea at reduced unit value, from Mexico due to U.S. production and supply problems.

U.S. fertilizer exports decreased about 9 percent from approximately \$3 billion during 1989 to \$2.7 billion during 1990. A significant portion of this decrease can be attributed to a decline in phosphatic fertilizers to India during 1990 possibly due to the formation of a new government in India.

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Table 19

Energy and chemicals sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
CH001	Electrical energy:				
	Exports .....	180	491	311	172.8
	Imports .....	558	463	-95	-17.0
	Trade balance .....	-378	28	406	107.4
CH002	Nuclear materials:				
	Exports .....	1,308	1,068	-240	-18.3
	Imports .....	945	1,015	70	7.4
	Trade balance .....	363	53	-310	-85.4
CH003	Coal and other carbonaceous materials:				
	Exports .....	4,395	4,608	213	4.8
	Imports .....	415	288	-127	-30.6
	Trade balance .....	3,980	4,320	340	8.5
CH004	Coal chemicals:				
	Exports .....	412	396	-16	-3.9
	Imports .....	264	296	32	12.1
	Trade balance .....	148	100	-48	-32.4
CH005	Crude petroleum:				
	Exports .....	62	183	121	195.2
	Imports .....	35,041	43,833	8,792	25.1
	Trade balance .....	-34,979	-43,650	-8,671	-24.8
CH006	Petroleum products:				
	Exports .....	5,521	7,236	1,715	31.1
	Imports .....	13,161	16,138	2,977	22.6
	Trade balance .....	-7,640	-8,902	-1,262	-16.5
CH007	Natural gas and components:				
	Exports .....	472	493	21	4.4
	Imports .....	2,412	3,229	817	33.9
	Trade balance .....	-1,940	-2,736	-796	-41.0
CH008	Major primary olefins:				
	Exports .....	157	209	52	33.1
	Imports .....	250	265	15	6.0
	Trade balance .....	-93	-56	37	39.8
CH009	Other olefins:				
	Exports .....	259	263	4	1.5
	Imports .....	31	14	-17	-54.8
	Trade balance .....	228	249	21	9.2
CH010	Benzene, toluene, and mixed xylenes:				
	Exports .....	182	276	94	51.6
	Imports .....	115	124	9	7.8
	Trade balance .....	67	152	85	126.9
CH011	Benzenoid commodity chemicals:				
	Exports .....	1,685	1,507	-178	-10.6
	Imports .....	430	485	55	12.8
	Trade balance .....	1,255	1,022	-233	-18.6
CH012	Benzenoid specialty chemicals:				
	Exports .....	2,811	2,862	51	1.8
	Imports .....	1,630	1,839	209	12.8
	Trade balance .....	1,181	1,023	-158	-13.4
CH013	Miscellaneous organic chemicals:				
	Exports .....	4,584	4,336	-248	-5.4
	Imports .....	2,633	2,672	39	1.5
	Trade balance .....	1,951	1,664	-287	-14.7
CH014	Selected inorganic chemicals and elements:				
	Exports .....	899	858	-41	-4.6
	Imports .....	1,694	1,738	44	2.6
	Trade balance .....	-795	-880	-85	-10.7
CH015	Inorganic acids:				
	Exports .....	104	109	5	4.8
	Imports .....	180	179	-1	-0.6
	Trade balance .....	-76	-70	6	7.9

See footnotes at end of table.

Table 19-Continued

Energy and chemicals sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
CH016	Salts and other inorganic chemicals:				
	Exports .....	1,826	2,083	257	14.1
	Imports .....	1,210	1,313	103	8.5
	Trade balance .....	616	770	154	25.0
CH017	Chlor-alkali chemicals:				
	Exports .....	822	800	-22	-2.7
	Imports .....	191	199	8	4.2
	Trade balance .....	631	601	-30	-4.8
CH018	Industrial gases:				
	Exports .....	169	165	-4	-2.4
	Imports .....	29	32	3	10.3
	Trade balance .....	140	133	-7	-5.0
CH019	Fertilizers:				
	Exports .....	2,952	2,697	-255	-8.6
	Imports .....	1,641	1,513	-128	-7.8
	Trade balance .....	1,311	1,184	-127	-9.7
CH020	Certain inorganic pigments:				
	Exports .....	641	449	-192	-30.0
	Imports .....	248	223	-25	-10.1
	Trade balance .....	393	226	-167	-42.5
CH021	Synthetic organic pigments:				
	Exports .....	178	214	36	20.2
	Imports .....	177	208	31	17.5
	Trade balance .....	1	6	5	500.0
CH022	Synthetic dyes and couplers:				
	Exports .....	139	193	54	38.8
	Imports .....	388	459	71	18.3
	Trade balance .....	-249	-266	-17	-6.8
CH023	Synthetics tanning agents:				
	Exports .....	12	11	-1	-8.3
	Imports .....	3	3	0	0
	Trade balance .....	9	8	-1	-11.1
CH024	Natural tanning and dyeing materials:				
	Exports .....	14	11	-3	-21.4
	Imports .....	61	51	-10	-16.4
	Trade balance .....	-47	-40	7	14.9
CH025	Photographic chemicals and preparations:				
	Exports .....	198	245	47	23.7
	Imports .....	355	370	15	4.2
	Trade balance .....	-157	-125	32	20.4
CH026	Pesticide products and formulations:				
	Exports .....	1,411	1,513	102	7.2
	Imports .....	591	590	-1	-0.2
	Trade balance .....	820	923	103	12.6
CH027	Adhesives, glues, and gelatin:				
	Exports .....	163	210	47	28.8
	Imports .....	139	156	17	12.2
	Trade balance .....	24	54	30	125.0
CH028	Medicinal chemicals, except antibiotics:				
	Exports .....	3,249	3,909	660	20.3
	Imports .....	3,016	3,207	191	6.3
	Trade balance .....	233	702	469	201.3
CH029	Antibiotics:				
	Exports .....	1,192	1,262	70	5.9
	Imports .....	558	738	180	32.3
	Trade balance .....	634	524	-110	-17.4
CH030	Essential oils and other flavoring materials:				
	Exports .....	488	582	94	19.3
	Imports .....	415	476	61	14.7
	Trade balance .....	73	106	33	45.2

See footnotes at end of table.

**Table 19-Continued**  
**Energy and chemicals sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>**

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
CH031	Perfumes, cosmetics, and toiletries:				
	Exports .....	653	852	199	30.5
	Imports .....	598	638	40	6.7
	Trade balance .....	55	214	159	289.1
CH032	Soaps, detergents, and surface-active agents:				
	Exports .....	561	775	214	38.1
	Imports .....	250	321	71	28.4
	Trade balance .....	311	454	143	46.0
CH033	Fatty chemicals:				
	Exports .....	186	202	16	8.6
	Imports .....	71	74	3	4.2
	Trade balance .....	115	128	13	11.3
CH034	Miscellaneous chemical specialties:				
	Exports .....	650	716	66	10.2
	Imports .....	293	340	47	16.0
	Trade balance .....	357	376	19	5.3
CH035	Paints, inks, and related items:				
	Exports .....	765	1,198	433	56.6
	Imports .....	529	579	50	9.5
	Trade balance .....	236	619	383	162.3
CH036	Explosives and propellant powders:				
	Exports .....	164	157	-7	-4.3
	Imports .....	149	156	7	4.7
	Trade balance .....	15	1	-14	-93.3
CH037	Polyethylene resins in primary forms:				
	Exports .....	1,140	1,106	-34	-3.0
	Imports .....	408	528	120	29.4
	Trade balance .....	732	578	-154	-21.0
CH038	Polypropylene resins in primary forms:				
	Exports .....	629	730	101	16.1
	Imports .....	33	38	5	15.2
	Trade balance .....	596	692	96	16.1
CH039	PVC resins in primary forms:				
	Exports .....	388	419	31	8.0
	Imports .....	45	67	22	48.9
	Trade balance .....	343	352	9	2.6
CH040	Styrene polymers in primary forms:				
	Exports .....	457	516	59	12.9
	Imports .....	117	138	21	17.9
	Trade balance .....	340	378	38	11.2
CH041	PET and other polyester resins:				
	Exports .....	252	339	87	34.5
	Imports .....	51	66	15	29.4
	Trade balance .....	201	273	72	35.8
CH042	Other plastics in primary forms:				
	Exports .....	2,743	3,174	431	15.7
	Imports .....	917	1,009	92	10.0
	Trade balance .....	1,826	2,165	339	18.6
CH043	SBR rubber in primary forms:				
	Exports .....	203	206	3	1.5
	Imports .....	98	94	-4	-4.1
	Trade balance .....	105	112	7	6.7
CH044	Natural rubber and other synthetic rubber:				
	Exports .....	702	822	120	17.1
	Imports .....	1,385	1,130	-255	-18.4
	Trade balance .....	-683	-308	375	54.9
CH045	Pneumatic tires and tubes (new):				
	Exports .....	812	1,097	285	35.1
	Imports .....	2,644	2,522	-122	-4.6
	Trade balance .....	-1,832	-1,425	407	22.2

See footnotes at end of table.

**Table 19-Continued**  
**Energy and chemicals sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>**

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
CH046	Other tires:				
	Exports	51	49	-2	-3.9
	Imports	77	67	-10	-13.0
	Trade balance	-26	-18	8	30.8
CH047	Plastic or rubber semifabricated forms:				
	Exports	1,594	1,933	339	21.3
	Imports	1,232	1,307	75	6.1
	Trade balance	362	626	264	72.9
CH048	Plastic containers and closures:				
	Exports	413	565	152	36.8
	Imports	640	683	43	6.7
	Trade balance	-227	-118	109	48.0
CH049	Hose, belting and plastic pipe:				
	Exports	528	634	106	20.1
	Imports	533	587	54	10.1
	Trade balance	-5	47	52	1,040.0
CH050	Miscellaneous rubber or plastics products:				
	Exports	1,737	2,366	629	36.2
	Imports	3,103	3,284	181	5.8
	Trade balance	-1,366	-918	448	32.8

<sup>1</sup> Import values are based on Customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>2</sup> This coding system is used by the U.S. International Trade Commission to identify major groupings of HTS import and export items for trade monitoring purposes.

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



## Chapter 6

### Minerals and Metals

The minerals and metals sector recorded a 22-percent decline in the trade deficit to \$16.3 billion during 1990. The decline reflects an 8-percent increase in ex-

ports, which rose to \$26.6 billion, and a 6-percent decline in imports, which fell to \$42.9 billion (table 20). The increase in exports was primarily to Canada, Mexico, and the European Community. Import declines were largest from Canada, Taiwan, Japan, and Korea.

Table 20

Minerals and metals: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1989 and 1990<sup>1</sup>

Item	1989	1990	Change from 1989 to 1990	
			Amount	Percent
			Million dollars	
U.S. exports of domestic merchandise:				
Canada	4,889	7,603	2,714	55.5
Japan	3,963	3,733	-230	-5.8
Mexico	2,044	2,354	310	15.1
Germany	885	889	4	0.4
United Kingdom	1,477	1,732	255	17.2
Taiwan	794	796	2	0.2
Republic of Korea	1,367	1,239	-128	-9.3
France	662	781	119	17.9
Italy	426	431	5	1.1
China	407	183	-224	-55.0
Singapore	299	361	62	20.7
All other	7,489	6,526	-963	-12.8
Total	24,702	26,628	1,926	7.7
EC-12	4,939	5,061	122	2.4
OPEC	537	578	41	7.6
ASEAN	737	808	71	9.6
CBERA	526	489	-37	-7.0
Eastern Europe	62	28	-34	-54.8
U.S. imports for consumption:				
Canada	10,791	9,228	-1,563	-14.4
Japan	5,235	4,814	-421	-8.0
Mexico	2,215	2,181	-34	-1.5
Germany	2,270	2,391	121	5.3
United Kingdom	1,704	1,778	74	4.3
Taiwan	2,290	2,189	-101	-4.4
Republic of Korea	1,290	1,282	-8	-0.6
France	1,466	1,435	-31	-2.1
Italy	1,204	1,249	45	3.7
China	792	845	53	6.6
Singapore	98	79	-19	-19.3
All other	16,204	15,425	-779	-4.8
Total	45,559	42,896	-2,663	-5.8
EC-12	9,923	9,809	-114	-1.1
OPEC	657	686	29	4.4
ASEAN	621	623	2	0.3
CBERA	407	396	-11	-2.7
Eastern Europe	321	289	-32	-9.9
U.S. merchandise trade balance:				
Canada	-5,902	-1,625	4,277	72.4
Japan	-1,272	-1,081	191	15.0
Mexico	-171	173	344	201.1
Germany	-1,385	-1,502	-117	-8.4
United Kingdom	-227	-46	181	79.7
Taiwan	-1,496	-1,393	103	6.8
Republic of Korea	77	-43	-120	-155.8
France	-804	-654	150	18.6
Italy	-778	-818	-40	-5.1
China	-385	-662	-277	-71.9
Singapore	201	282	81	40.2
All other	-8,715	-8,899	-184	-2.1
Total	-20,857	-16,268	4,589	22.0
EC-12	-4,984	-4,748	236	4.7
OPEC	-120	-108	12	10.0
ASEAN	116	185	69	59.4
CBERA	119	93	-26	-21.8
Eastern Europe	-259	-261	-2	-0.7

<sup>1</sup> Import values are based on Customs value; export values are based on f.a.s. value, U.S. port of export.

With respect to commodities, the reduction in the trade deficit resulted largely from overall positive shifts in trade in precious metals and related articles (a \$831 million shift), copper and related products (\$655 million), steel mill products (\$548 million), and industrial fasteners (\$272 million). The following developments contributed to these trade balance shifts: (1) the closure of a recycling facility in the United States, which resulted in an increase in shipments of precious metals waste and scrap to Canada; (2) a weakening in prices for steel mill products in the U.S. market; (3) an increase in demand in the Far East for copper and related products; and (4) an overall rise in the prices of industrial fasteners in Canada, the largest U.S. export market for these products. There were a number of negative shifts in the trade balance. The largest occurred in natural and synthetic gemstones (a deficit increase of \$450 million) and iron ores and concentrates (an increase of \$110 million).

## **U.S. Bilateral Trade**

In the minerals and metals sector, Canada, Japan, and EC countries continued to be the principal U.S. trading partners during 1990. Aggregate imports from these countries accounted for 49 percent of total sector imports and 56 percent of sector exports; on balance the U.S. imported \$5.7 billion more from these countries than it exported to them during 1990. This represented a 45-percent lower deficit than that recorded during 1989. The products that represented the largest value of trade with these countries during 1990 included iron and steel mill products, precious metals, and natural and synthetic gemstones. With respect to trade with Mexico, the United States recorded a trade surplus of \$173 million during 1990, compared to a trade deficit of \$171 million in 1989. This positive trade shift with Mexico represented a 15-percent increase in U.S. exports to \$2.4 billion, whereas, imports from that country declined 2 percent to \$2.2 billion.

The most significant trade shifts in this sector during 1990 (on a country-by-country basis), occurred in the trade of iron and steel mill products and precious metals and related articles with Canada. A \$677 million increase in U.S. exports to Canada of iron and steel mill products appears to reflect the effects of prolonged steel strike in that country during 1990. U.S. imports from Canada of precious metals and related articles declined by \$546 million largely as a result of reduced speculative activity that has lowered U.S. demand.

## **Commodity Analyses**

### ***Steel mill products***

Continued improvement in the competitiveness of U.S. steel producers and relatively strong conditions in foreign markets relative to the U.S. market contributed to a 6-percent drop in the value of U.S. imports of steel mill products in 1990 (to \$8.4 billion). U.S. exports

also decreased, falling by 1 percent (to \$2.8 billion). The net result was a 9-percent decrease (to \$5.6 billion) in the trade deficit in steel mill products in 1990.

Imports from Japan, traditionally the greatest foreign supplier of steel, declined by 13 percent (to \$2.0 billion), as Japanese producers continued to focus on supplying their domestic market where the demand for steel was relatively strong. The decline more than offset 22-percent and 23-percent increases in imports from Korea and Mexico, respectively. In terms of product categories, the decrease in imports was most marked in bars, heavy structural shapes, and wire and wire products as declining prices (resulting in large part from domestic capacity expansion and a weakening of the construction market) made those markets less attractive to foreign suppliers.

The 1-percent decline in exports represents a marked change from the rapid growth experienced in 1988 and 1989, which culminated with exports reaching a 15-year high. The decline would have been considerably greater had there not been prolonged strikes at two Canadian steel companies. U.S. steel exports to that country rose by 135 percent in 1990. The offsetting decline in exports were in shipments to China, whose economic and foreign exchange problems limited U.S. exports to \$23 million (compared to \$230 million in 1989).

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### ***Precious metals and related articles***

A decrease in speculative and industrial demand and the closure of a recycling plant caused the U.S. trade position in precious metals and related articles to improve from a deficit of \$774 million in 1989 to a surplus of \$57 million in 1990, continuing a trend established in first half comparisons of 1989 and 1990. U.S. import demand for unwrought gold and silver bullion was lower because favorable political developments in Eastern Europe have led to a lessening of world tensions and reportedly contributed to less of a demand for speculative purchases of precious metals. Import demand was also lower because a sluggish U.S. economy caused reduced industrial consumption of precious metals. At the same time, consistently rising U.S. production has caused gold bullion imports to decline over the last several years. Environmental compliance problems at a domestic recycling plant forced it to be shut down, resulting in increased exports of precious metal waste and scrap. Overall, imports of precious metals and related articles declined from almost \$4 billion in 1989 to \$3.8 billion in 1990 while exports increased from \$3.2 billion to \$3.8 billion over the same time periods. Trade with Canada showed the greatest change with imports declining from \$1.3 billion to \$742 million and exports increasing from \$467 million to \$635 million.

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## *Copper and related articles*

Strong foreign demand and a weakening U.S. economy reduced the U.S. trade deficit in copper and related articles from \$788 million in 1989 to \$133 million in 1990. The improvement was mostly due to decreased imports and increased exports of unwrought copper. Domestic demand for unwrought copper declined because slow downs in the building construction and automotive sectors caused less of a demand for imports. The domestic copper industry, which has been modernizing and reducing costs for the last several years, maintained its share of the domestic unwrought copper market and was able to increase exports because of strong demand from the Far East. Overall, imports decreased from \$2.3 billion in 1989 to just under \$2 billion in 1990, while exports increased from \$1.5 billion to \$1.8 billion over the same time periods.

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## *Industrial fasteners of base metal*

The Canadian market experienced an overall increase in the prices of industrial fasteners (i.e. bolts, nuts, screws, and similar articles) during 1989/90. The rise in prices was largely responsible for an increase in the value of total U.S. exports of these products, which rose by 70 percent to \$651 million in 1990. Exports to Canada, which accounted for 55 percent of total industrial fastener exports, increased by 186 percent to \$356 million.

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## *Natural and synthetic gemstones*

Demand for the larger, more expensive diamonds that the United States tends to export declined as a result of cumulative price increases of about 40 percent over the last few years. This caused a continuation of the first 6 months trend with an increase in the U.S. trade deficit for natural and synthetic gemstones by \$450 million to \$4.2 billion in 1990 compared with 1989. This reflects a 60-percent decrease in the export value of natural and synthetic gemstones to \$545 million, of which natural diamonds accounted for 61 percent. Exports of natural diamonds decreased by 70 percent to \$328 million; that of colored gemstones and synthetics decreased by 17 percent to \$212 million. Switzerland, Japan, Hong Kong, Canada, and Belgium accounted for 60 percent (\$328 million) of the export value.

The value of imports of natural and synthetic gemstones declined by 7.2 percent to \$4.7 billion in 1990 compared with 1989. Israel, Belgium, India and the United Kingdom supplied almost 76 percent of U.S. imports of natural and synthetic gemstones.

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## *Iron ore*

Weakened demand for steel in the U.S. market during the first 6 months of 1990 was the principal reason for the decline in U.S. imports of iron ore and concentrates, which fell by 8 percent to 18 million metric tons during 1989/90. The value of these imports, however, increased by 8 percent to \$560 million during the 2-year period, largely reflecting an average rise in prices of about 16 percent.

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## *Metallic containers*

Continued growth in the aluminum food and beverage container markets overseas (similar to the sustained growth in the U.S. market) contributed to a 269-percent increase in the U.S. trade surplus in metallic containers; the surplus rose from \$39 million in 1989 to \$144 million in 1990. Total exports of metallic containers rose by 30 percent from \$308 million to \$401 million. The export growth principally reflects expansion in aluminum food and beverage container markets and the growing emphasis on can recycling; aluminum cans are generally regarded as easier to recycle than steel cans. Major country markets included Canada, which accounted for 33 percent of container exports in 1990; Mexico, 12 percent; and Japan, 7 percent. In Canada, increased exports of beer have apparently spurred greater consumption of lighter-weight aluminum cans, which are less costly to transport. In Japan, increased demand for aluminum cans appears to have been stimulated by widespread conversion from steel to aluminum food and beverage packaging in an effort to increase the country's rate of recycling.

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## *Ferroalloys*

Continuing the trend since 1989, world-wide demand for U.S. imports of ferroalloys remained weak at yearend 1990, leading to lower prices, although the volume of these imports were relatively stable. The net result was a 13.5-percent decline in the value of U.S. imports, which fell from \$1.1 billion to \$908 million during 1990. The principal U.S. suppliers affected by the price decline were South Africa, Brazil, Zimbabwe, and Yugoslavia.

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## *Certain base metals and chemical elements*

Continuing the trend of the first 6 months of 1990, the U.S. trade deficit in certain base metals and chemical elements improved from \$1.4 billion for 1989 to a deficit of \$877 million in 1990, representing an improvement of \$561 million. The decline in imports was caused by weak demand and lower prices paid for imports of unwrought nickel and tin which reflects declining conditions in the transportation and

construction sectors of the economy, the principal consumers of nickel-based stainless and alloy steels, and the continuing oversupply of tin in world stockpiles. Imports of unwrought nickel declined from \$1.3 billion in 1989 to \$950 million in 1990 as nickel prices dropped from an average of \$6.05 per pound in 1989 to an average of \$4.00 per pound in 1990; whereas, imports of unwrought tin declined from \$334 million in 1989 to \$253 million in 1990 as tin prices fell from an average of \$3.97 per pound in 1989 to an average of \$2.87 per pound in 1990. Unwrought nickel and unwrought tin imports accounted for 50 percent and 13 percent, respectively, of total imports of this product category in 1990. Canada supplied 41 percent of total imports in 1990.

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### *Unwrought aluminum and waste and scrap*

The continuing correction in the international supply/demand situation for primary aluminum and further price declines contributed to the improvement of the trade deficit by \$163 million. Unwrought aluminum and waste and scrap imports decreased by 12 percent to nearly \$2.3 billion during 1989-90 whereas the volume of these imports rose by 9 percent to 14.5 million metric tons. Imports from Canada, the traditional source of U.S. ingot imports, rose by 8 percent during the period to 1.0 million metric tons (\$1.6 billion) and accounted for 70 percent of the value of imports. Jamaica and Guinea were the principal sources of bauxite/alumina for the manufacture of primary aluminum.

Increased demand in the Canadian market boosted U.S. exports of unwrought aluminum and waste and scrap by 6 percent during 1989-90 to 1.3 million metric tons, whereas lower prices caused the value of these exports to fall by 7 percent to \$1.9 billion. Japan remained the principal U.S. export market and a net importer of unwrought aluminum and waste and scrap. Japanese purchases of U.S. unwrought aluminum and waste and scrap remained stable at 788,359 metric tons, but the value of these purchases declined by nearly 11 percent to \$1.3 billion. U.S. exports to Canada rose by 73 percent to 158,583 metric tons (\$213.2 million).

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### *Copper ores and concentrates*

A shift to a foreign supplier and the alleviation of production interruptions at a U.S. copper smelter caused the U.S. trade surplus in copper ores and concentrates to decline from \$518 million in 1989 to \$312 million in 1990, continuing a trend established in first half comparisons of 1989 and 1990. Imports increased mainly because a U.S. copper producer switched to a Mexican supplier in late 1989 when a contract dispute with a U.S. concentrate supplier caused the producer to seek a new source of concentrates. Exports decreased because of increased demand for concentrates by a new domestic copper smelter that operated continuously in 1990 following production problems and shutdowns in late 1988 and 1989. Overall, imports increased from \$53 million in 1989 to \$134 million in 1990, while exports decreased from \$571 million to \$446 million over the same time periods.

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**Table 21**  
**Minerals and metals sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>**

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
MM001	Clays and nonmetallic minerals and products, not elsewhere specified or included:				
	Exports .....	634	701	67	10.6
	Imports .....	76	122	46	60.5
	Trade balance .....	558	579	21	3.8
MM002	Certain miscellaneous mineral substances:				
	Exports .....	5	4	-1	-20.0
	Imports .....	70	56	-14	-20.0
	Trade balance .....	-65	-52	13	20.0
MM003	Iron ores and concentrates:				
	Exports .....	193	123	-70	-36.3
	Imports .....	520	560	40	7.7
	Trade balance .....	-327	-437	-110	-33.6
MM004	Copper ores and concentrates:				
	Exports .....	571	446	-125	-21.9
	Imports .....	53	134	81	152.8
	Trade balance .....	518	312	-206	-39.8
MM005	Lead ores and residues:				
	Exports .....	30	62	32	106.7
	Imports .....	4	4	0	0
	Trade balance .....	26	58	32	123.1
MM006	Zinc ores and residues:				
	Exports .....	75	269	194	258.7
	Imports .....	32	24	-8	-25.0
	Trade balance .....	43	245	202	469.8
MM007	Certain ores, concentrates, ash, and residues:				
	Exports .....	550	362	-188	-34.2
	Imports .....	633	495	-138	-21.8
	Trade balance .....	-83	-133	-50	-60.2
MM008	Precious metal ores and concentrates:				
	Exports .....	2	13	11	550.0
	Imports .....	4	30	26	650.0
	Trade balance .....	-2	-17	-15	-750.0
MM009	Certain nonmetallic minerals and articles:				
	Exports .....	820	982	162	19.8
	Imports .....	1,845	1,923	78	4.2
	Trade balance .....	-1,025	-941	84	8.2
MM010	Refractory and heat-insulating articles:				
	Exports .....	208	251	43	20.7
	Imports .....	137	136	-1	-0.7
	Trade balance .....	71	115	44	62.0
MM011	Ceramic bricks and miscellaneous ceramic construction articles:				
	Exports .....	12	18	6	50.0
	Imports .....	27	22	-5	-18.5
	Trade balance .....	-15	-4	11	73.3
MM012	Ceramic floor and wall tiles:				
	Exports .....	18	21	3	16.7
	Imports .....	431	421	-10	-2.3
	Trade balance .....	-413	-400	13	3.1
MM013	Ceramic sanitary fixtures:				
	Exports .....	41	54	13	31.7
	Imports .....	73	72	-1	-1.4
	Trade balance .....	-32	-18	14	43.8
MM014	Ceramic table, toilet, and kitchen articles:				
	Exports .....	53	55	2	3.8
	Imports .....	787	779	-8	-1.0
	Trade balance .....	-734	-724	10	1.4
MM015	Miscellaneous ceramic articles:				
	Exports .....	123	135	12	9.8
	Imports .....	565	526	-39	-6.9
	Trade balance .....	-442	-391	51	11.5
MM016	Flat glass and certain flat glass products:				
	Exports .....	533	751	218	40.9
	Imports .....	632	614	-18	-2.8
	Trade balance .....	-99	137	236	238.4
MM017	Glass containers:				
	Exports .....	45	98	53	117.8
	Imports .....	175	214	39	22.3
	Trade balance .....	-130	-116	14	10.8

See footnotes at end of table.

**Table 21-Continued**  
**Minerals and metals sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>**

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
MM018	Household glassware:				
	Exports .....	86	123	37	43.0
	Imports .....	513	524	11	2.1
	Trade balance .....	-427	-401	26	6.1
MM019	Certain glass and glass products:				
	Exports .....	295	344	49	16.6
	Imports .....	297	286	-11	-3.7
	Trade balance .....	-2	58	60	3,000.0
MM020	Fiber glass products:				
	Exports .....	356	347	-9	-2.5
	Imports .....	112	112	0	0
	Trade balance .....	244	235	-9	-3.7
MM021	Natural and synthetic gemstones:				
	Exports .....	1,361	545	-816	-60.0
	Imports .....	5,069	4,703	-366	-7.2
	Trade balance .....	-3,708	-4,158	-450	-12.1
MM022	Precious metals and related articles:				
	Exports .....	3,167	3,815	648	20.5
	Imports .....	3,941	3,758	-183	-4.6
	Trade balance .....	-774	57	831	107.4
MM023	Pig iron:				
	Exports .....	1	2	1	100.0
	Imports .....	73	60	-13	-17.8
	Trade balance .....	-72	-58	14	19.4
MM024	Ferroalloys:				
	Exports .....	86	94	8	9.3
	Imports .....	1,050	908	-142	-13.5
	Trade balance .....	-964	-814	150	15.6
MM025	Iron and steel waste and scrap:				
	Exports .....	1,755	1,642	-113	-6.4
	Imports .....	173	180	7	4.0
	Trade balance .....	1,582	1,462	-120	-7.6
MM026	Direct reduced iron, ferrous powders, and grit and shot:				
	Exports .....	34	51	17	50.0
	Imports .....	72	92	20	27.8
	Trade balance .....	-38	-41	-3	-7.9
MM027	Steel mill products, all grades:				
	Exports .....	2,809	2,784	-25	-0.9
	Imports .....	8,958	8,385	-573	-6.4
	Trade balance .....	-6,149	-5,601	548	8.9
MM028	Steel pipe and tube fittings, and certain cast products:				
	Exports .....	326	422	96	29.4
	Imports .....	368	364	-4	-1.1
	Trade balance .....	-42	58	100	238.1
MM029	Fabricated structurals:				
	Exports .....	58	84	26	44.8
	Imports .....	79	72	-7	-8.9
	Trade balance .....	-21	12	33	157.1
MM030	Metal construction components:				
	Exports .....	292	335	43	14.7
	Imports .....	182	150	-32	-17.6
	Trade balance .....	110	185	75	68.2
MM031	Metallic containers:				
	Exports .....	308	401	93	30.2
	Imports .....	269	257	-12	-4.5
	Trade balance .....	39	144	105	269.2
MM032	Wire products of iron, steel, aluminum, copper, and nickel:				
	Exports .....	190	249	59	31.1
	Imports .....	772	638	-134	-17.4
	Trade balance .....	-582	-389	193	33.2
MM033	Chain:				
	Exports .....	326	312	-14	-4.3
	Imports .....	427	476	49	11.5
	Trade balance .....	-101	-164	-63	-62.4

See footnotes at end of table.

Table 21-Continued

Minerals and metals sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
MM034	Industrial fasteners of base metal:				
	Exports .....	383	651	268	70.0
	Imports .....	1,490	1,486	-4	-0.3
	Trade balance .....	-1,107	-835	272	24.6
MM035	Cooking and kitchen ware:				
	Exports .....	138	170	32	23.2
	Imports .....	735	725	-10	-1.4
	Trade balance .....	-597	-555	42	7.0
MM036	Metal sanitary ware:				
	Exports .....	51	71	20	39.2
	Imports .....	107	101	-6	-5.6
	Trade balance .....	-56	-30	26	46.4
MM037	Iron construction castings and other nonmalleable cast-iron articles:				
	Exports .....	50	31	-19	-38.0
	Imports .....	65	58	-7	-10.8
	Trade balance .....	-15	-27	-12	-80.0
MM038	Copper and related articles:				
	Exports .....	1,539	1,833	294	19.1
	Imports .....	2,327	1,966	-361	-15.5
	Trade balance .....	-788	-133	655	83.1
MM039	Unwrought aluminum:				
	Exports .....	2,044	1,898	-146	-7.1
	Imports .....	2,561	2,252	-309	-12.1
	Trade balance .....	-517	-354	163	31.5
MM040	Aluminum mill products:				
	Exports .....	1,386	1,512	126	9.1
	Imports .....	1,253	1,227	-26	-2.1
	Trade balance .....	133	285	152	114.3
MM041	Lead and related articles:				
	Exports .....	66	107	41	62.1
	Imports .....	97	91	-6	-6.2
	Trade balance .....	-31	16	47	151.6
MM042	Zinc and related articles:				
	Exports .....	118	118	0	0
	Imports .....	1,214	1,034	-180	-14.8
	Trade balance .....	-1,096	-916	180	16.4
MM043	Certain base metals and chemical elements:				
	Exports .....	1,009	1,048	39	3.9
	Imports .....	2,447	1,925	-522	-21.3
	Trade balance .....	-1,438	-877	561	39.0
MM044	Nonpowered handtools:				
	Exports .....	850	1,063	213	25.1
	Imports .....	1,383	1,378	-5	-0.4
	Trade balance .....	-533	-315	218	40.9
MM045	Cutlery other than tableware, certain sewing implements, and related products:				
	Exports .....	159	223	64	40.3
	Imports .....	393	415	22	5.6
	Trade balance .....	-234	-192	42	17.9
MM046	Table flatware and related products:				
	Exports .....	17	43	26	152.9
	Imports .....	185	172	-13	-7.0
	Trade balance .....	-168	-129	39	23.2
MM047	Certain builders' hardware:				
	Exports .....	417	554	137	32.9
	Imports .....	829	843	14	1.7
	Trade balance .....	-412	-289	123	29.9
MM048	Miscellaneous products of base metal:				
	Exports .....	1,112	1,410	298	26.8
	Imports .....	2,053	2,123	70	3.4
	Trade balance .....	-941	-713	228	24.2

<sup>1</sup> Import values are based on Customs value; export values are based on f.a.s. value, U.S. port of export.<sup>2</sup> This coding system is used by the U.S. International Trade Commission to identify major groupings of HTS import and export items for trade monitoring purposes.

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



## Chapter 7

### Machinery and Equipment

U.S. merchandise trade in machinery and equipment showed a 40-percent improvement in 1990, with

the trade deficit in these products decreasing to \$31.5 billion from the \$52.7 billion recorded for 1989 (table 22). This improvement may be partially attributed to the continued weakening of the dollar against the currencies of certain major trading partners, including

Table 22

Machinery and equipment: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1989 and 1990<sup>1</sup>

Item	1989	1990	Change from 1989 to 1990	
			Amount	Percent
			Million dollars	
U.S. exports of domestic merchandise:				
Canada	33,310	43,188	9,878	29.6
Japan	11,526	14,389	2,863	24.8
Mexico	10,929	13,059	2,130	19.4
Germany	8,721	9,578	857	9.8
United Kingdom	11,349	12,989	1,640	14.4
Taiwan	4,572	4,910	338	7.3
Republic of Korea	5,079	5,223	144	2.8
France	6,359	7,355	996	15.6
Italy	2,641	2,937	296	11.2
China	1,870	1,911	41	2.1
Singapore	4,760	5,058	298	6.2
All other	49,341	54,236	4,895	9.9
Total	150,457	174,833	24,376	16.2
EC-12	40,639	45,497	4,858	11.9
OPEC	5,722	6,201	479	8.3
ASEAN	9,728	11,601	1,873	19.2
CBERA	2,213	2,128	-85	-3.8
Eastern Europe	500	474	-26	-5.2
U.S. imports for consumption:				
Canada	39,170	40,825	1,655	4.2
Japan	72,135	68,749	-3,386	-4.6
Mexico	11,922	13,378	1,456	12.2
Germany	14,631	16,797	2,166	14.8
United Kingdom	7,704	8,536	832	10.7
Taiwan	8,765	8,570	-195	-2.2
Republic of Korea	8,939	7,673	-1,266	-14.1
France	5,880	5,616	-264	-4.4
Italy	3,278	3,484	206	6.2
China	1,972	2,410	438	22.2
Singapore	6,985	7,575	590	8.4
All other	21,742	22,695	953	4.3
Total	203,123	206,308	3,185	1.5
EC-12	35,297	38,621	3,324	9.4
OPEC	95	148	53	55.7
ASEAN	12,147	13,656	1,509	12.4
CBERA	287	267	-20	-6.9
Eastern Europe	271	292	21	7.7
U.S. merchandise trade balance:				
Canada	-5,860	2,363	8,223	140.3
Japan	-60,609	-54,360	6,249	10.3
Mexico	-993	-319	674	67.8
Germany	-5,910	-7,219	-1,309	-22.1
United Kingdom	3,645	4,453	808	22.1
Taiwan	-4,193	-3,660	533	12.7
Republic of Korea	-3,860	-2,450	1,410	36.5
France	479	1,739	1,260	263.0
Italy	-637	-547	90	14.1
China	-102	-499	-397	-389.2
Singapore	-2,225	-2,517	-292	-13.1
All other	27,599	31,541	3,942	14.2
Total	-52,666	-31,475	21,191	40.2
EC-12	5,342	6,876	1,534	28.7
OPEC	5,627	6,053	426	7.5
ASEAN	-2,419	-2,055	364	15.0
CBERA	1,926	1,861	-65	-3.3
Eastern Europe	229	182	-47	-20.5

<sup>1</sup> Import values are based on Customs value; export values are based on f.a.s. value, U.S. port of export.

Canada and the EC, which resulted in a 16-percent rise in U.S. exports of these products, from \$150.5 billion in 1989 to \$174.8 billion in 1990. Principal export markets included the EC, Canada, Japan, and Mexico. U.S. imports of machinery and equipment products increased by almost 2 percent, from \$203.1 billion in 1989, to \$206.3 billion in 1990. Principal sources of imports were Japan, Canada, the EC, and Mexico. Significant changes in the trade balance between 1989 and 1990 for the machinery and equipment sector occurred in: aircraft; internal combustion piston engines, other than for aircraft; fans, blowers, compressors, air and vacuum pumps, and air-conditioning equipment; certain motor-vehicle parts; miscellaneous industrial machinery; construction and mining equipment; semiconductors; telecommunication products and radio transmission and reception apparatus.

### U.S. Bilateral Trade

The major U.S. trading partners in machinery and equipment in 1990 were Japan, Canada, the EC, and Taiwan. The U.S. trade deficit with Japan decreased by approximately 10 percent over the period, dropping from \$60.6 billion in 1989 to \$54.4 billion in 1990. The 1989 trade deficit with Canada of \$5.9 billion became a surplus of \$2.4 billion in 1990. The U.S. trade surplus with the EC continued to rise, increasing by 29 percent to \$6.9 billion, and the trade deficit with Taiwan decreased by 13 percent, to \$3.7 billion.

Significant increases in U.S. exports of machinery and equipment to Canada, the EC, and other major trading partners contributed to the decline in the trade deficit for machinery and equipment. U.S. exports of machinery and equipment to Canada rose by 30 percent between December 1989 and December 1990, rising from \$33.3 billion to \$43.2 billion. Among the many industries increasing their exports to Canada were electrical household appliances and certain heating equipment; telephone and telegraph apparatus; tape recorders, tape players, video cassette recorders, turntables, and compact disc players; articles for making and breaking electrical circuits; construction and mining equipment; and certain motor vehicle parts. Exports to the EC increased by 12 percent over the same period, from \$40.6 billion to \$45.5 billion. Notable increased exports to EC countries were in aircraft engines and gas turbines; aircraft, spacecraft, and related equipment; and automobiles, trucks, buses, and bodies and chassis of the foregoing.

### Commodity Analyses

#### *Aircraft engines and gas turbines*

Imports of aircraft engines and gas turbines increased from \$4.1 billion in 1989 to \$5.1 billion in 1990, or by 23 percent. Imports from France, which accounted for 34 percent of the 1990 annual total, rose by 12 percent to \$1.7 billion. The United Kingdom was the second-largest supplier with a 34-percent increase, to \$1.4 billion. Imports from France and the

United Kingdom were primarily complete aircraft engines and aircraft engine parts. The rise in imports of engines and engine parts is attributable to the rise in U.S. shipments of aircraft and the increased utilization of existing aircraft due to the increase in demand for air transportation services. Increased utilization requires more frequent servicing and maintenance, and parts replacement.

Exports of aircraft engines and gas turbines increased by 5 percent in 1990, from \$7.4 billion to \$7.8 billion. The largest markets for U.S. exports of these products in 1990 were France and the United Kingdom. France received \$1.9 billion in exports in 1990, whereas exports to the United Kingdom increased by 6 percent, to \$924 million. The increase in exports of engines and gas turbines stems from the continued strong demand for transport aircraft, including those manufactured by European nations, and the increased utilization of existing aircraft.

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#### *Internal combustion engines, piston-type*

U.S. exports of internal combustion engines, piston-type, increased by 21 percent, from \$4.6 billion in 1989 to \$5.6 billion in 1990. The largest foreign market for these engines in 1990 was Canada, which received \$2.9 billion in U.S. exports. A large portion of the rise in U.S. exports can be attributed to one Japanese-owned Canadian automaker that increased its purchases of U.S.-produced engines in 1990. Mexico was also an important foreign market, accounting for 9 percent of U.S. exports in 1990. Exports of internal combustion gasoline engines accounted for the largest share of total exports of all piston-type internal combustion engines in 1990. The U.S. trade deficit in internal combustion engines, piston-type, decreased by 89 percent in 1990, to \$135 million.

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#### *Fans, blowers, compressors, air and vacuum pumps, air-conditioning equipment*

U.S. imports of fans, blowers, compressors, air and vacuum pumps, and air-conditioning equipment (and parts) were valued at \$2.9 billion in 1990, representing a decrease of approximately 6 percent from 1989 imports. The majority of the decrease in imports was from Mexico, Taiwan, and Canada, which declined by 22, 21, and 18 percent, respectively. The decrease from Taiwan was largely due to decreasing production of ceiling fans and blowers by U.S. producers that import under HTS item 9802.00.80. Several large U.S. producers opted to shift production of these products to other low-cost supplier nations, such as China and Brazil. The decrease in imports from Mexico and Canada was primarily attributable to a slowdown in the U.S. automotive and construction market for products such as fuel-injection pumps, air and vacuum pumps, refrigeration compressors, and window air-conditioners.

U.S. exports of fans, blowers, compressors, air and vacuum pumps, and air-conditioning equipment (and parts) increased, from \$2.5 billion in 1989 to \$3.0 billion in 1990, or by 20 percent. The largest foreign market for these products was Canada, whose share of total U.S. exports amounted to 31 percent (\$967 million), compared with 27 percent (\$697 million) in 1989. The large increase in U.S. exports of fans, blowers, compressors, and vacuum pumps, and air-conditioning equipment to Canada was reportedly related to the United States-Canada Free-Trade Agreement. The bulk of these exports were component parts used predominantly by U.S. manufacturers and their Canadian subsidiaries in an effort to rationalize production. Other principal export markets for these products included Mexico (\$286 million) and Korea (\$164 million). In recent years, these countries have implemented trade and tariff liberalization measures encouraging imports of these products.

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### *Electrical household appliances and certain heating equipment*

U.S. imports of these articles declined by 3 percent, from \$2.6 billion in 1989 to \$2.5 billion in 1990. A large share of the decline was attributed to the continued reduction of shipments of electric cooking ranges and ovens and parts from Pacific Basin countries such as Korea, Taiwan, and Hong Kong. Despite the decline in shipments, however, these countries remained major U.S. suppliers of these articles, together accounting for over 25 percent of total imports in 1990. According to industry experts, since Korea, Taiwan, and Hong Kong lost GSP eligibility for these products during 1988-89, Japanese and U.S. producers have continued to shift production away from those countries to manufacturing subsidiaries in the United States.

For the first time in recent years, Canada accounted for a significant share of the reduction of U.S. imports. Canadian subsidiaries of U.S. manufacturers have curtailed production of electrical appliances in Canada for shipment to the U.S. and Canadian markets. As a result of the United States-Canada Free-Trade Agreement, U.S. companies no longer manufacture products in Canada to avoid duties on products exported by U.S. firms to the Canadian market. In contrast to the decline in total imports, imports of household appliances from Mexico increased. U.S. producers, as well as U.S. subsidiaries of Japanese producers, have established maquiladora assembly plants in Mexican border cities for export of household appliances to the U.S. market.

In 1990, U.S. exports increased by more than 32 percent, from \$1.2 billion in 1989 to \$1.5 billion in 1990, with the largest increases to Mexico and Canada. The increase to Mexico was primarily due to U.S. producers and Japanese subsidiaries exporting parts and supplies to border factories in Mexico. As noted previously, the increase to Canada is due to production

curtailment in Canada by U.S. producers of electrical appliances.

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### *Construction and mining equipment*

U.S. imports of construction and mining equipment decreased by 0.2 percent, from \$2.27 billion in 1989 to \$2.26 billion in 1990, reflecting sluggish construction activity in the United States in 1990. Japan continued to be the principal supplier, accounting for 39 percent of total imports in 1990. While imports from most of the leading countries decreased in 1990, there were notable increases in imports of construction and mining equipment from Mexico (22 percent) and Japan (14 percent). Increased imports from Mexico are composed primarily of parts for such equipment, as a result of U.S. construction and mining equipment manufacturers' continuing shift to low cost suppliers. U.S. subsidiaries are also active in Mexico. There was a 17-percent decrease in imports from Germany, from \$294 million in 1989 to \$245 million in 1990. Industry sources attribute this to a diversion of production from exports to internal use, in conjunction with the unification of East and West Germany. These sources also cite a drop in the competitiveness of German products. The largest decrease (20 percent) in construction and mining equipment imports was from Brazil. Brazil is an important location for U.S. subsidiaries; however, the current economic and political situation has likely caused these subsidiaries to scale back their production, and hence their exports, to the United States.

U.S. exports of construction and mining equipment increased by 20 percent, from \$2.6 billion in 1989 to \$3.1 billion in 1990. Canada continued to provide the largest market, receiving 27 percent of total exports in 1990; U.S. exports to Canada by increased 36 percent, from \$612 million in 1989 to \$835 million in 1990. Despite the recessionary climate in Canada and the subsequent construction slump, recent increased development of Canadian natural resources contributed to the increase in Canada's share of U.S. exports. Belgium and Australia continued to be the second- and third-largest export markets for U.S. construction and mining machinery, respectively. The largest increases in exports of construction and mining equipment in 1990 were to Mexico, Korea, and the United Kingdom, with 102-percent, 54-percent, and 37-percent increases over 1989 exports, respectively. Exports to Mexico soared in 1990, continuing a recent trend triggered by reforms of the Government of Mexico in the areas of import-licensing and tariffs. Moreover, the recent toll road construction program, along with other infrastructure projects and the recent privatization of various mines in Mexico, has dramatically increased the demand for construction and mining equipment in Mexico. Increases in exports of construction equipment to the United Kingdom reflect increased construction activity, while increased exports to Korea, according to U.S. industry sources, are due both to the

recent efforts of the Korean Government to open its market, and the high level of construction activity currently generating increased demand for construction equipment in Korea.

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### *Farm and garden machinery and equipment*

U.S. imports of farm and garden machinery and equipment rose from \$2.5 billion in 1989 to \$2.8 billion in 1990, with imports of agricultural tractors increasing from \$1.1 billion to \$1.3 billion and imports of harvesting and threshing machinery and parts increasing from \$223 million to \$248 million. The rise in U.S. demand for both domestically produced and imported tractors brought about by factors such as gains in net farm income, a decline in interest expenses, and a drop in the number of acres idled by restrictions of the commodity reserve programs. Imports from Canada, the principal supplier, fell by 8 percent in 1990 to \$624 million as U.S. consumers shifted their purchases of equipment to European suppliers.

U.S. exports of farm and garden machinery and equipment rose by 4 percent to \$3.4 billion in 1990, with shipments of tractor parts, harvesting and threshing machinery, mowers and parts, and miscellaneous farm and garden machinery accounting for the bulk of the increased exports. The principal export markets in 1990 included Canada, Mexico, Australia, and France. Exports to Canada, historically the largest U.S. export market for farm and garden machinery, rose by 5 percent to \$1.0 billion, while exports to Mexico, the second-leading export market, rose by 73 percent to \$244 million. Farmers in both countries were more able to replace older equipment and less efficient tractors in 1990 as a result of an increase in their net cash receipts and a decrease in debt-to-asset ratios.

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### *Machine tools for cutting metal and parts; tool holders, work holders; dividing heads and other special attachments for machine tools*

U.S. imports of metal-cutting machine tools, work-holders, and other special attachments decreased by 7 percent in 1990, declining to \$2.3 billion. Japan remained the largest supplier during the period, although imports from Japan showed the largest decline, falling by 17 percent to \$1.0 billion. Imports from Canada also showed a large decline, decreasing by 32 percent to \$73 million. Imports of certain types of metal-cutting machine tools from Japan and Taiwan are limited under voluntary-restraint agreements. The decline in imports from Japan is attributable to Japanese machine tool firms starting production in the United States. In contrast, imports from West Germany and the United

Kingdom rose during the period, increasing to \$425 million and \$145 million, respectively. West Germany and the United Kingdom were the second- and third-largest suppliers to the U.S. market in 1990.

U.S. exports of metal-cutting machine tools showed a strong increase in 1990, rising by 10 percent to \$1.2 billion. Principal export markets included Canada, West Germany, and Japan. Together, these countries accounted for 40 percent of total U.S. exports of machine tools in 1990. In contrast, exports to the United Kingdom (\$94 million), Mexico (\$92 million), and China (\$29 million) declined during the period. In 1989, the United Kingdom and Mexico were the second- and third-largest foreign markets for U.S. products. The increase in U.S. exports was due to favorable exchange rates and product specialization by U.S. producers.

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### *Office machines*

The trade deficit in office machine products, such as automatic data-processing machines, computers, word processors, calculators, cash registers, and the like, and parts, slackened somewhat to \$2.1 billion in 1990 or by 12 percent when compared to the \$2.4 billion deficit in 1989. This is the first upward trend since the decline began in 1982. Imports rose by only 4.9 percent to \$26.9 billion while exports rose 6.6 percent to \$24.7 billion in 1990. By comparison, in 1989 U.S. imports rose by 14.3 percent over the preceding year. Imports from Japan, by far the largest supplier of office machine products to the United States, declined by 1.3 percent in 1990 compared to 1989, while U.S. exports to Japan rose by 11.7 percent. The overall improved export picture is significant considering that exports grew by only one-half percentage point in 1989 compared to 1988. U.S. exports to Canada surged by one third to \$3.4 billion in 1990.

With the exception of plug-in, hard-disk magnetic storage units, last year's import levels for the various office machine products were flat or declining. Imports of hard disk drives increased by \$1 billion over 1989 to \$4 billion. Continued improvements in storage capacity, data access speed, and price created a strong market for the higher capacity storage units on which to store the proliferating user-friendly computer programs and games. Singapore was the leading gainer with exports to the United States of hard disk drives up nearly 40 percent to \$2.2 billion. Imports from Japan showed a 52-percent increase over 1989 to \$1.1 billion in 1990. Imports of complete computers such as desk-top and lap-top machines decreased to under \$400 million in 1990, less than half the value imported in 1988. This indicates that the U.S. market is being served by machines being assembled in the United States from imported parts and subassemblies. Parts, minor subassemblies, and accessories for automatic data-processing continued to be the largest single import category accounting for \$7.5 billion or 28 percent of 1990 office machine imports. However, imported

parts grew by less than 4 percent in 1990 compared to 1989.

With few exceptions, the improvement in U.S. exports was spread uniformly among almost all exported office machine products. Exports of parts of office machines, which had declined sharply in 1989, showed a slight increase to \$9.2 billion, or by 4.2 percent, when compared to 1989. Parts of office machines have been a strong U.S. export commodity, and in 1990, accounted for nearly 40 percent all office machine exports. Exports of digital processing units rose significantly to \$5.1 billion, or 17 percent, compared to 1989. Exports of these units, which are the heart of automatic data processing machines and computers, also showed strong growth in 1989 by nearly doubling. Such export growth indicates that the United States is still competitive worldwide in spite of the inroads made by Pacific Rim nations. The principal foreign markets for U.S. exports were Canada, Japan, the United Kingdom, West Germany, the Netherlands, and France.

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### *Miscellaneous industrial machinery<sup>17</sup>*

The value of U.S. imports of special industrial machinery declined to \$5.6 billion in 1990, down 3.7 percent from 1989 figures. Import categories that declined significantly were industrial robots, semiconductor production and assembly equipment, machines for assembling electric or electronic lamps, and injection-molding machines. Japan, West Germany, and Canada supplied about two-thirds of these imports, by value, in 1989 and 1990. However, in 1990, West Germany replaced Canada as the second-leading supplier; furthermore, West Germany was the only one of these three to improve its performance, up 18.4 percent from the year earlier. The United Kingdom remained the fourth-leading supplier in 1990, with its share of \$302.0 million, although this was down 7.9 percent from 1989. Italy rose to fifth place, accounting for \$272.0 million, or 16.9 percent above its 1989 share.

The 1990 value of U.S. exports of miscellaneous industrial machinery rose to \$8.9 billion, or by 9.8 percent, compared with 1989 figures. Although a number of industries within this broad grouping experienced gains, the most significant were recorded by the industry manufacturing parts for oil, gas field, and other boring and sinking machinery and the semiconductor production and assembly industry. Other important increases were registered by parts manufacturers for the elevator and conveyor industry and the concrete and bituminous pourers, finishers, and spreaders industry. Exports of these varied products went to many coun-

<sup>17</sup> This category consists of a miscellany of industrial machinery and parts covered by 114 HTS 8-digit item numbers.

tries, with Canada, Japan, the United Kingdom, and Mexico accounting for about one-third of the total for 1990.

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### *Telephone and telegraph apparatus*

U.S. exports of telephone and telegraph apparatus increased from \$2.2 billion in 1989 to \$2.5 billion in 1990, or by 14 percent. The increase in exports was evident in both completed products and parts. The principal items exported were parts of telephonic switching apparatus, modems, and miscellaneous telephonic switching apparatus. The largest markets for U.S. exports were Canada, Japan, and Taiwan, which accounted for 13, 12, and 11 percent, respectively, of U.S. exports in 1990. The increase in U.S. exports to these three countries ranged from 6 percent for Japan to 23 percent for Canada and 100 percent for Taiwan. The large increase in exports to the Far East is generally believed to reflect offshore production activities of U.S. firms since exports of parts exhibited the largest growth.

U.S. imports of telephone and telegraph apparatus declined by 4 percent, falling from \$4.3 billion in 1989 to \$4.1 billion in 1990. The decline was apparent in imports of both complete units and parts. The overall decline in imports was likely to be due to weakening demand as growth in the U.S. economy slowed. The principal imported items were telephone sets, and electrical telegraphic apparatus, which includes facsimile machines and cordless handset telephones. The principal sources of imports in 1990 were Japan, Canada, and China, which supplied 35, 12, and 9 percent of imports, respectively. U.S. imports from Japan showed a decline of 18 percent, comparing the periods; however, imports from China and Canada increased by 33 and 17 percent, respectively. The increase in imports from China is believed to result from the shifting of production of low-end consumer products by U.S. and foreign manufacturers to that country to take advantage of the lower labor costs.

The U.S. trade balance in telephone and telegraph apparatus improved from a deficit of \$2.2 billion in 1989 to a deficit of \$1.8 billion in 1990. The trade balance with Japan improved from a deficit of \$1.5 billion in 1989 to a deficit of \$1.2 billion in 1990; however, Japan continued to account for the bulk of the U.S. trade deficit in telephone and telegraph apparatus.

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### *Tape recorders, tape players, video cassette recorders, turntables, and compact disc players*

U.S. imports of tape recorders, tape players, video cassette recorders (VCRs), turntables, and compact disc (CD) players declined by 9 percent in 1990 to reach \$4.5 billion, compared with \$5.0 billion in 1989. How-

ever, U.S. imports of CD players and video disc players set record highs in 1990, helping to offset the 3-percent decline in U.S. imports of VCRs for the year. Although Japan remained the dominant supplier of these products to the U.S. market, several new suppliers began shipping these devices to the United States in 1990. The United States imported VCRs from Hong Kong for the first time and China began shipping both VCRs and CD players to the U.S. market. At the same time, some of the developing nations that recently began exporting these products to the United States increased their share of the U.S. import market significantly in 1990. Japanese electronics firms moving manufacturing plants to developing nations to secure lower labor costs and to participate in the GSP are thought to be responsible for the increase in sources of imports.

U.S. imports of this audio and video hardware from Japan declined by 10 percent from \$3.4 billion in 1989 to \$3.0 billion in 1990. Japan supplied just over two-thirds of total U.S. imports of these devices in 1989 and 1990. U.S. imports from Korea and Taiwan, the second- and third-largest foreign suppliers to the U.S. market in 1989, declined by 34 and 47 percent respectively, to reach \$445.8 million and \$139.0 million. Imports from these two nations have been declining since they were graduated from the GSP in January 1989. These declines are also related to major Japanese electronics firms' decisions to shift production from Japan, Korea, and Taiwan to Thailand, Mexico, and Malaysia to take advantage of low-wage labor and to participate in the GSP, according to industry reports. As a result, U.S. imports of these devices from Thailand exceeded those from Taiwan in 1990, making Thailand the third-largest supplier of these products to the U.S. market. Thailand exported nearly 1.2 million VCRs to the United States in 1990, representing an increase of 94 percent over its 1989 level. Overall, U.S. imports of these products from Thailand, Mexico, and Malaysia totalled \$504.8 million in 1990, accounting for 11 percent of total U.S. imports. In 1989, these imports amounted to only \$278.3 million, which represented less than 5 percent of total U.S. imports of these devices.

U.S. exports of audio and video hardware rose by 12 percent between 1989 and 1990, increasing from \$604 million to \$678 million. Mexico, Canada, Japan, the United Kingdom, and West Germany were the major foreign markets for U.S. exports of these products in 1990.

The U.S. trade deficit in this product category declined by 12 percent between 1989 and 1990, falling from \$4.4 billion to \$3.9 billion due to the increase in U.S. exports of tape recorders, tape players, VCRs, turntables, and CD players, and the accompanying decline in U.S. imports of these devices.

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### *Radio transmission and reception apparatus*

Exports of radio transmission and reception apparatus increased by 38 percent from 1989 to 1990, from \$2.8 billion to \$3.8 billion. The principal products exported in 1990 were communications satellites; transmission apparatus combined with reception apparatus, including cellular telephones; transceivers operating with frequencies over 400 MHz; radio/tape and radio/CD combinations for use in motor vehicles; and radios for use in motor vehicles. These products also experienced the largest increases in exports from 1989 to 1990. The largest markets for these products were Mexico, Canada, International Organizations such as Intelsat, Japan, and French Guyana.

The increase in exports of communications satellites (by \$313 million, or 117 percent) in 1990 was due mostly to the launching of U.S.-built satellites by the United States for Intelsat, an international space consortium. "Export" via these launches accounted for 52 percent of satellite exports in 1990, and for almost 30 percent of the increase in total exports. There were no such exports to international organizations in 1989. These exports should not be construed to represent a particular trend, but rather are the final result of competition in the marketplace over the course of several years.

The increase in exports of transmission apparatus combined with reception apparatus, including cellular telephones, is due to expanding interest worldwide in cellular telecommunications. Japan was the largest market for exports of these products, accounting for 20 percent of the increase from 1989 to 1990, due largely to the widely publicized battle by Motorola to set up a cellular telephone network in Japan. The increase in exports of radios and radio/tape and radio/CD combinations for use in motor vehicles is likely the result of improving trade with Canada, as a result of the United States-Canada Free-Trade Agreement.

Imports of radio transmission and reception apparatus decreased by 4 percent from 1989 to 1990, from \$5.6 billion to \$5.4 billion. The principal products imported were radio/tape and radio/CD combinations for use in motor vehicles; transmission apparatus incorporating reception apparatus, including cellular telephones; portable radio/tape combinations; and transceivers not specifically provided for. The major sources of these products during 1990 were Japan, China, Malaysia, South Korea, and Singapore.

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### *Articles for making and breaking electrical circuits*

In 1990, the United States imported \$5.5 billion of articles for making and breaking electrical circuits, which include printed circuit boards, circuit breakers, switches, connectors, relays, and fuses as well as enclosures and parts for these devices. This figure represented an increase of 24 percent compared with

U.S. imports of these products in 1989. Canada was the primary source of this growth, displacing Japan as the largest foreign supplier to the U.S. market. Compared with the 1989 period, U.S. imports of these devices from Canada increased by 138 percent, accounting for 26 percent of total U.S. imports of these devices. Excluding imports from Canada, U.S. imports of these products only increased by 6 percent during this period. Japan, Mexico, and West Germany were the next-largest suppliers of U.S. imports of articles for making and breaking electrical circuits. All of these countries increased their supply of these imports during 1990. Japanese and West German firms together accounted for 30 percent of U.S. imports of these articles, and primarily supplied these devices to their automotive and computer electronics products plants in the United States. A large portion of U.S. imports of articles for making and breaking electrical circuits from Canada and Mexico are manufactured by U.S. firms that have established production facilities in these countries.

In 1990, there were \$5.3 billion in U.S. exports of these articles. This figure represents an increase of 40 percent over those exports in 1989. Canada was the primary source of most of this growth and superseded Japan as the largest foreign market for these U.S. exports. Comparing 1989 with 1990, U.S. exports of these devices to Canada increased by 253 percent, accounting for 42 percent of total U.S. exports of these products. This growth and the increase in imports from Canada was likely a result of tariff changes made under the United States-Canada Free-Trade Agreement, and changes in the practices used in accounting for, or classifying, printed circuit boards. A large portion of U.S. exports of printed circuit boards were U.S.-made subassemblies, which were returned to the United States after further processing. Excluding exports to Canada, U.S. exports of these devices decreased by 3 percent during this period. Mexico, the United Kingdom, Japan, and West Germany were the largest markets following Canada for U.S. exports of articles for making and breaking electrical circuits.

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### *Semiconductors*

U.S. exports of semiconductors were valued at \$10.9 billion in 1990, representing an increase of 12 percent over those in 1989. A large share of this increase reflects Japan's drive to comply with the market-access provisions of the Semiconductor Arrangement, and a strong demand for semiconductors in other countries of the Far East. The Semiconductor Arrangement was entered into by the United States and Japan in 1986, and it aims to increase the foreign share of Japan's semiconductor market to 20 percent by July 1991. The principal markets for U.S. exports were Malaysia, Canada, Singapore, Japan, Korea, and Taiwan. These countries were also the major sources of U.S. imports of semiconductors. With the exception of

high-density random access memory (RAM) chips from Korea and U.S. imports from Japan, a large proportion of U.S. imports of semiconductors are monolithic integrated circuits assembled and wire bonded from parts produced in U.S. wafer-fabrication facilities.

During 1990, the U.S. market grew weaker as demand for computer equipment and other semiconductor-using equipment decreased. As a result, U.S. imports of semiconductors declined by 1 percent from 1989 to 1990, to \$12.2 billion, and prices for these devices fell as the supply of semiconductors outpaced demand. The fall in prices was particularly large for RAM chips, which account for about 30 percent of total U.S. imports of semiconductors and are primarily supplied by Japan and Korea. While the quantity of U.S. imports of RAM chips remained largely unchanged, their dollar value fell by 15 percent, from \$3.1 billion in 1989 to \$2.7 billion in 1990. A large proportion in this drop in value was accounted for by U.S. imports from Korea. During 1990, the dollar value of U.S. imports of these products from Korea decreased by 21 percent. However, the quantity of these imports increased by 22 percent, and their average reported customs value was 46 percent below the average reported customs value of similar imports from other sources.

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### *Automobiles, trucks, buses, and bodies and chassis of the foregoing*

U.S. imports of motor vehicles totaled \$59.5 billion in 1990, increasing by about 1 percent, from \$58.8 billion, in 1989. Most imports consisted of passenger cars (about 80 percent) and light trucks (about 12 percent). Japan was the largest supplier of imported motor vehicles, accounting for 42 percent of total U.S. imports of these products. Imports from Japan decreased by 4 percent, from \$25.9 billion in 1989 to \$24.9 billion in 1990. The decline was related primarily to reduced U.S. motor vehicle sales and increasing production of automobiles in the eight Japanese-owned and joint venture assembly plants in the United States, the output of which often replaces autos imported from Japan. Canada, the second-largest supplier of motor vehicles to the United States, accounted for \$20.2 billion of U.S. motor vehicle imports in 1990, representing an increase of 3 percent from 1989. U.S. imports of motor vehicles from West Germany, the third-largest supplier, totaled \$6.1 billion in 1990, versus \$5.2 billion in 1989, representing a 16-percent increase.

U.S. exports of motor vehicles increased by 3 percent, from \$12.9 billion in 1989 to \$13.3 billion in 1990. Exports to Canada, which accounted for 62 percent of U.S. motor vehicle exports, totaled \$8.7 billion in 1989 versus \$8.2 billion in 1990, representing a 6-percent decrease. This decrease appears to have resulted largely from a slight adjustment in U.S. automakers' production and sales strategies. U.S. auto-

makers have assembly plants in Canada, and published production and sales data for Canada suggest that several firms have substituted some U.S. production for Canadian production. Japan and West Germany accounted for 6 percent and 4 percent, respectively, of total U.S. motor vehicle exports in 1990. Although these countries are of secondary importance as U.S. export markets, shipments to these countries rose substantially during 1990 compared with 1989, increasing by 72 percent to Japan (to \$809 million), and 49 percent to West Germany (to \$540 million). These countries have been characterized by recent strong motor vehicle sales, and U.S. automakers have increased their sales efforts in those markets.

The U.S. motor vehicle trade deficit was \$46.2 billion in 1990, compared with \$45.9 billion in 1989. The largest trade deficits in 1990 were with Japan (\$24.1 billion), Canada (\$12.0 billion), West Germany (\$5.6 billion), and Mexico (\$2.6 billion).

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### *Certain motor-vehicle parts<sup>18</sup>*

U.S. imports of certain motor vehicle parts decreased by 1 percent from \$12.8 billion in 1989 to \$12.6 billion in 1990. U.S. imports from Canada, the leading source of certain motor vehicle parts, decreased from \$5.8 billion in 1989 to \$5.4 billion in 1990, representing a 7-percent decline. The decrease in U.S. imports from Canada was largely attributable to the sluggish U.S. market for automobiles and a 12-percent increase in U.S. imports of certain motor vehicle parts from Mexico in 1990, representing a marked shift in foreign sourcing for the U.S. auto industry. U.S. imports from Japan, the second-leading source of these products, increased by 3 percent, from \$3.2 billion in 1989 to \$3.3 billion in 1990. This increase was linked to increased imports by Japanese-owned automobile producers in the United States.

U.S. exports of certain motor vehicle parts rose by 29 percent, from \$10.8 billion in 1989 to \$13.8 billion in 1990. U.S. exports to Canada, the leading export

<sup>18</sup> Products contained in this group include body stampings, bumpers, safety seat belts, brakes and parts, transmissions, wheels and parts, radiators, exhaust systems, shock absorbers, and miscellaneous parts and accessories.

market, rose from \$6.7 billion in 1989 to \$8.6 billion in 1990, or by 29 percent. This increase was partly the result of certain trade liberalizing provisions of the United States-Canada Free-Trade Agreement. U.S. exports of certain motor vehicle parts to Mexico grew by 47 percent, from \$1.9 billion in 1989 to \$2.7 billion in 1990. This rise was largely attributable to recent increases in imports by U.S. and other foreign-owned automakers in Mexico, as well as the greater overall rationalization and integration of the Mexican auto industry. The United States experienced an overall trade surplus of \$1.3 billion in this commodity group in 1990, compared with a deficit of \$2.0 billion in 1989.

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### *Aircraft, spacecraft, and related equipment*

Imports of aircraft, spacecraft, and related equipment rose from \$5.7 billion in 1989 to \$6.4 billion in 1990, or by 11 percent. Imports from Canada, the leading source of imports of these products, rose by 43 percent to \$1.8 billion in 1990. Imports from the United Kingdom, the second-largest source of these products, increased from \$911 million in 1989 to \$1.2 billion in 1990. Aircraft parts and commuter aircraft were the principal imports from these countries in 1990. The overall rise in imports was attributable to the increase in U.S. demand for air transportation, and the increased utilization of existing aircraft.

Exports of aircraft, spacecraft, and related equipment rose by 26 percent in 1990, from \$23.3 billion to \$29.4 billion. The leading foreign markets for U.S. exports of these products were the United Kingdom, Japan, and France. The United Kingdom received \$3.9 billion of U.S. exports in 1990 and \$2.5 billion in 1989. U.S. exports to Japan increased from \$1.9 billion in 1989 to \$3.5 billion in 1990, or by 82 percent. U.S. exports to France increased from \$852 million in 1989 to \$1.3 billion in 1990, or by 55 percent. These increases in U.S. exports were principally the result of a lack of the labor strife which depressed 1989 shipments, increased global demand for air transportation services, and increased servicing of existing fleets of aircraft.

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Table 23

Machinery and equipment sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
ME001	Aircraft engines and gas turbines:				
	Exports .....	7,426	7,829	403	5.4
	Imports .....	4,119	5,083	964	23.4
	Trade balance .....	3,307	2,746	-561	-17.0
ME002	Internal combustion piston engines, other than for aircraft:				
	Exports .....	4,611	5,596	985	21.4
	Imports .....	5,824	5,731	-93	-1.6
	Trade balance .....	-1,213	-135	1,078	88.9
ME003	Pumps for liquids:				
	Exports .....	1,375	1,542	167	12.1
	Imports .....	1,173	1,155	-18	-1.5
	Trade balance .....	202	387	185	91.6
ME004	Fans, blowers, compressors, air and vacuum pumps, and air-conditioning equipment:				
	Exports .....	2,544	3,049	505	19.9
	Imports .....	3,085	2,892	-193	-6.3
	Trade balance .....	-541	157	698	129.0
ME005	Certain industrial thermal-processing equipment and certain furnaces:				
	Exports .....	991	1,116	125	12.6
	Imports .....	563	645	82	14.6
	Trade balance .....	428	471	43	10.0
ME006	Commercial machinery:				
	Exports .....	1,320	1,464	144	10.9
	Imports .....	991	974	-17	-1.7
	Trade balance .....	329	490	161	48.9
ME007	Electrical household appliances and certain heating equipment:				
	Exports .....	1,153	1,523	370	32.1
	Imports .....	2,556	2,478	-78	-3.1
	Trade balance .....	-1,403	-955	448	31.9
ME008	Centrifuges and filtering and purifying equipment:				
	Exports .....	1,027	1,351	324	31.5
	Imports .....	459	586	127	27.7
	Trade balance .....	568	765	197	34.7
ME009	Wrapping, packaging, and can-sealing machinery:				
	Exports .....	486	579	93	19.1
	Imports .....	597	621	24	4.0
	Trade balance .....	-111	-42	69	62.2
ME010	Scales and weighing machinery:				
	Exports .....	83	91	8	9.6
	Imports .....	147	153	6	4.1
	Trade balance .....	-64	-62	2	3.1
ME011	Forklift trucks and similar industrial vehicles:				
	Exports .....	511	551	40	7.8
	Imports .....	982	817	-165	-16.8
	Trade balance .....	-471	-266	205	43.5
ME012	Construction and mining equipment:				
	Exports .....	2,591	3,111	520	20.1
	Imports .....	2,268	2,263	-5	-0.2
	Trade balance .....	323	848	525	162.5
ME013	Mineral processing machinery:				
	Exports .....	344	431	87	25.3
	Imports .....	287	240	-47	-16.4
	Trade balance .....	57	191	134	235.1
ME014	Farm and garden machinery and equipment:				
	Exports .....	3,274	3,412	138	4.2
	Imports .....	2,528	2,783	255	10.1
	Trade balance .....	746	629	-117	-15.7
ME015	Industrial food-processing and related machinery:				
	Exports .....	452	480	28	6.2
	Imports .....	340	405	65	19.1
	Trade balance .....	112	75	-37	-33.0
ME016	Pulp, paper, and paperboard machinery:				
	Exports .....	496	604	108	21.8
	Imports .....	962	880	-82	-8.5
	Trade balance .....	-466	-276	190	40.8

See footnotes at end of table.

**Table 23-Continued**  
**Machinery and equipment sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>**

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
ME017	Printing, typesetting, and bookbinding machinery and printing plates:				
	Exports .....	906	1,139	233	25.7
	Imports .....	1,245	1,192	-53	-4.3
	Trade balance .....	-339	-53	286	84.4
ME018	Textile machinery and parts:				
	Exports .....	630	716	86	13.7
	Imports .....	1,439	1,499	60	4.2
	Trade balance .....	-809	-783	26	3.2
ME019	Metal rolling mills and parts thereof:				
	Exports .....	242	252	10	4.1
	Imports .....	142	169	27	19.0
	Trade balance .....	100	83	-17	-17.0
ME020	Machine tools for cutting metal and parts; tool holders, work holders; dividing heads and other special attachments for machine tools:				
	Exports .....	1,044	1,151	107	10.2
	Imports .....	2,429	2,269	-160	-6.6
	Trade balance .....	-1,385	-1,118	267	19.3
ME021	Machine tools for metal forming and parts thereof:				
	Exports .....	662	664	2	0.3
	Imports .....	668	642	-26	-3.9
	Trade balance .....	-6	22	28	466.7
ME022	Non-metalworking machine tools and parts thereof:				
	Exports .....	367	375	8	2.2
	Imports .....	603	590	-13	-2.2
	Trade balance .....	-236	-215	21	8.9
ME023	Office machines:				
	Exports .....	23,184	24,726	1,542	6.7
	Imports .....	25,625	26,871	1,246	4.9
	Trade balance .....	-2,441	-2,145	296	12.1
ME024	Miscellaneous industrial machinery:				
	Exports .....	8,141	8,942	801	9.8
	Imports .....	5,860	5,643	-217	-3.7
	Trade balance .....	2,281	3,299	1,016	44.6
ME025	Taps, cocks, valves, and similar devices:				
	Exports .....	982	1,231	249	25.4
	Imports .....	1,437	1,635	198	13.8
	Trade balance .....	-455	-404	51	11.2
ME026	Ball and roller bearings:				
	Exports .....	511	738	227	44.4
	Imports .....	995	968	-27	-2.7
	Trade balance .....	-484	-230	254	52.5
ME027	Gear boxes and other speed changers; torque converters; ball screws; flywheels and pulleys; clutches and shaft couplings; universal joints; and parts thereof:				
	Exports .....	395	544	149	37.7
	Imports .....	737	832	95	12.9
	Trade balance .....	-342	-288	54	15.8
ME028	Boilers, turbines, and related machinery:				
	Exports .....	742	632	-110	-14.8
	Imports .....	337	332	-5	-1.5
	Trade balance .....	405	300	-105	-25.9
ME029	Electric motors, generators, and related equipment:				
	Exports .....	1,718	1,861	143	8.3
	Imports .....	2,115	2,249	134	6.3
	Trade balance .....	-397	-388	9	2.3
ME030	Electrical transformers, static converters, and inductors:				
	Exports .....	862	1,058	196	22.7
	Imports .....	1,506	1,643	137	9.1
	Trade balance .....	-644	-585	59	9.2
ME031	Primary cells and batteries and electric storage batteries:				
	Exports .....	479	590	111	23.2
	Imports .....	701	719	18	2.6
	Trade balance .....	-222	-129	93	41.9
ME032	Portable electric handtools:				
	Exports .....	190	224	34	17.9
	Imports .....	393	356	-37	-9.4
	Trade balance .....	-203	-132	71	35.0

See footnotes at end of table.

**Table 23-Continued**  
**Machinery and equipment sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>**

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
ME033	Nonelectrically powered hand tools and parts thereof:				
	Exports	334	341	7	2.1
	Imports	459	435	-24	-5.2
	Trade balance	-125	-94	31	24.8
ME034	Ignition, starting, lighting, and other electrical equipment:				
	Exports	614	860	246	40.1
	Imports	1,340	1,240	-100	-7.5
	Trade balance	-726	-380	346	47.7
ME035	Flashlights and other similar electric lights, light bulbs and fluorescent tubes; arc lamps:				
	Exports	316	439	123	38.9
	Imports	578	627	49	8.5
	Trade balance	-262	-188	74	28.2
ME036	Electric and gas welding and soldering equipment:				
	Exports	410	482	72	17.6
	Imports	461	345	-116	-25.2
	Trade balance	-51	137	188	368.6
ME037	Telephone and telegraph apparatus:				
	Exports	2,200	2,520	320	14.5
	Imports	4,321	4,144	-177	-4.1
	Trade balance	-2,121	-1,624	497	23.4
ME038	Microphones, loudspeakers, audio amplifiers and combinations thereof:				
	Exports	463	582	119	25.7
	Imports	1,121	1,121	0	0
	Trade balance	-658	-539	119	18.1
ME039	Tape recorders, tape players, video cassette recorders, turntables, and compact disc players:				
	Exports	604	678	74	12.3
	Imports	5,016	4,543	-473	-9.4
	Trade balance	-4,412	-3,865	547	12.4
ME040	Unrecorded magnetic tapes, discs, and other media:				
	Exports	1,292	1,706	414	32.0
	Imports	1,381	1,474	93	6.7
	Trade balance	-89	232	321	360.7
ME041	Records, tapes, compact discs, computer software, and other recorded media:				
	Exports	1,126	1,872	746	66.3
	Imports	266	316	50	18.8
	Trade balance	860	1,556	696	80.9
ME042	Radio transmission and reception apparatus, including cellular telephones, and combinations thereof:				
	Exports	2,763	3,799	1,036	37.5
	Imports	5,592	5,395	-197	-3.5
	Trade balance	-2,829	-1,596	1,233	43.6
ME043	Radio navigational aid, radar, and remote control apparatus:				
	Exports	1,193	1,218	25	2.1
	Imports	460	448	-12	-2.6
	Trade balance	733	770	37	5.0
ME044	Television receivers and video monitors and combinations including television receivers:				
	Exports	926	1,025	99	10.7
	Imports	3,405	3,174	-231	-6.8
	Trade balance	-2,479	-2,149	330	13.3
ME045	Television apparatus (except receivers and monitors), including cameras, camcorders, and cable apparatus:				
	Exports	156	206	50	32.1
	Imports	2,428	2,569	141	5.8
	Trade balance	-2,272	-2,363	-91	-4.0
ME046	Electric sound and visual signaling apparatus:				
	Exports	378	455	77	20.4
	Imports	1,007	961	-46	-4.6
	Trade balance	-629	-506	123	19.6
ME047	Electrical capacitors, and resistors:				
	Exports	762	766	4	0.5
	Imports	885	879	-6	-0.7
	Trade balance	-123	-113	10	8.1

See footnotes at end of table.

**Table 23-Continued**  
**Machinery and equipment sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>**

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
ME048	Apparatus for making, breaking, protecting, or connecting electrical circuits:				
	Exports .....	3,781	5,280	1,499	39.6
	Imports .....	4,409	5,452	1,043	23.7
	Trade balance .....	-628	-172	456	72.6
ME049	Television picture tubes and other cathode ray tubes:				
	Exports .....	352	430	78	22.2
	Imports .....	664	648	-16	-2.4
	Trade balance .....	-312	-218	94	30.1
ME050	Special-purpose tubes:				
	Exports .....	185	211	26	14.1
	Imports .....	154	133	-21	-13.6
	Trade balance .....	31	78	47	151.6
ME051	Diodes, transistors, integrated circuits and similar semiconductor solid-state devices:				
	Exports .....	9,657	10,857	1,200	12.4
	Imports .....	12,320	12,169	-151	-1.2
	Trade balance .....	-2,663	-1,312	1,351	50.7
ME052	Insulated electrical wire and cable, and conduit; glass and ceramic insulators:				
	Exports .....	1,695	1,861	166	9.8
	Imports .....	2,668	2,728	60	2.2
	Trade balance .....	-973	-867	106	10.9
ME053	Rail locomotive and rolling stock:				
	Exports .....	433	518	85	19.6
	Imports .....	791	701	-90	-11.4
	Trade balance .....	-358	-183	175	48.9
ME054	Automobiles, trucks, buses, and bodies and chassis of the foregoing:				
	Exports .....	12,892	13,259	367	2.8
	Imports .....	58,760	59,504	744	1.3
	Trade balance .....	-45,868	-46,245	-377	-0.8
ME055	Certain motor-vehicle parts:				
	Exports .....	10,754	13,886	3,132	29.1
	Imports .....	12,783	12,618	-165	-1.3
	Trade balance .....	-2,029	1,268	3,297	162.5
ME056	Motorcycles, mopeds, and parts:				
	Exports .....	199	306	107	53.8
	Imports .....	637	449	-188	-29.5
	Trade balance .....	-438	-143	295	67.4
ME057	Miscellaneous vehicles and transportation-related equipment:				
	Exports .....	1,620	1,739	119	7.3
	Imports .....	708	1,078	370	52.3
	Trade balance .....	912	661	-251	-27.5
ME058	Aircraft, spacecraft, and related equipment:				
	Exports .....	23,290	29,439	6,149	26.4
	Imports .....	5,728	6,369	641	11.2
	Trade balance .....	17,562	23,070	5,508	31.4
ME059	Ships, tugs, pleasure boats, and similar vessels:				
	Exports .....	1,011	1,291	280	27.7
	Imports .....	600	348	-252	-42.0
	Trade balance .....	411	943	532	129.4
ME060	Telecommunications products:				
	Exports .....	4,754	5,993	1,239	26.0
	Imports .....	5,957	6,011	54	0.9
	Trade balance .....	-1,203	-18	1,185	98.5
ME061	Electrical and electronic articles, apparatus, and parts not elsewhere provided for:				
	Exports .....	1,162	1,163	1	0.0
	Imports .....	890	977	87	9.8
	Trade balance .....	272	186	-86	-31.6

See footnotes at end of table.

Table 23-Continued

Machinery and equipment sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
		Million dollars			
ME062	Motors and engines, except internal combustion, aircraft, or electric:				
	Exports	62	105	43	69.4
	Imports	71	78	7	9.9
	Trade balance	-9	27	36	400.0

<sup>1</sup> Import values are based on Customs value; export values are based on f.a.s. value, U.S. port of export.<sup>2</sup> This coding system is used by the U.S. International Trade Commission to identify major groupings of HTS import and export items for trade monitoring purposes.

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



## Chapter 8

### Miscellaneous Manufactures

U.S. exports of miscellaneous manufactures exhibited strong growth, rising by \$4.4 billion (up 18

percent) from \$24.1 billion in 1989 to \$28.5 billion in 1990 (table 24). U.S. imports of miscellaneous manufactures also increased during the period, though the growth was more than offset by the performance of U.S. exports of these products. Imports rose \$2.6 billion, or by 7 percent, from \$38.1 billion in 1989 to

**Table 24**

**Miscellaneous manufactures: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1989 and 1990<sup>1</sup>**

Item	1989	1990	Change from 1989 to 1990	
			Amount	Percent
			Million dollars	
U.S. exports of domestic merchandise:				
Canada	2,687	4,485	1,798	66.9
Japan	4,070	4,356	286	7.0
Mexico	1,448	1,755	307	21.2
Germany	2,211	2,163	-48	-2.1
United Kingdom	2,185	2,357	172	7.8
Taiwan	578	626	48	8.3
Republic of Korea	648	883	235	36.2
France	1,245	1,508	263	21.1
Italy	743	791	48	6.4
China	285	240	-45	-15.7
Singapore	484	520	36	7.4
All other	7,498	8,789	1,291	17.2
Total	24,082	28,473	4,391	18.2
EC-12	8,332	9,304	972	11.6
OPEC	626	673	47	7.5
ASEAN	789	877	88	11.1
CBERA	445	507	62	13.9
Eastern Europe	62	99	37	59.6
U.S. imports for consumption:				
Canada	2,290	2,347	57	2.4
Japan	7,510	8,219	709	9.4
Mexico	1,675	1,835	160	9.5
Germany	2,248	2,541	293	13.0
United Kingdom	1,882	2,070	188	9.9
Taiwan	5,409	4,980	-429	-7.9
Republic of Korea	1,973	1,841	-132	-6.6
France	1,281	1,435	154	12.0
Italy	2,621	2,560	-61	-2.3
China	3,032	3,905	873	28.7
Singapore	266	254	-12	-4.5
All other	7,902	8,692	790	9.9
Total	38,089	40,679	2,590	6.7
EC-12	9,377	10,081	704	7.5
OPEC	76	121	45	59.2
ASEAN	1,621	1,904	283	17.4
CBERA	335	313	-22	-6.5
Eastern Europe	234	215	-19	-8.1
U.S. merchandise trade balance:				
Canada	397	2,138	1,741	438.5
Japan	-3,440	-3,863	-423	-12.2
Mexico	-227	-80	147	64.7
Germany	-37	-378	-341	-921.6
United Kingdom	303	287	-16	-5.2
Taiwan	-4,831	-4,354	477	9.8
Republic of Korea	-1,325	-958	367	27.6
France	-36	73	109	302.7
Italy	-1,878	-1,769	109	5.8
China	-2,747	-3,665	-918	-33.4
Singapore	218	266	48	22.0
All other	-404	97	501	124.0
Total	-14,007	-12,206	1,801	12.8
EC-12	-1,045	-777	268	25.6
OPEC	550	552	2	0.3
ASEAN	-832	-1,027	-195	-23.4
CBERA	110	194	84	76.3
Eastern Europe	-172	-116	56	32.5

<sup>1</sup> Import values are based on Customs value; export values are based on f.a.s. value, U.S. port of export.

\$40.7 billion during 1990. The U.S. trade deficit in the miscellaneous manufactures sector improved to \$12.2 billion in 1990, decreasing by \$1.8 billion or 13 percent, from the \$14.0 billion deficit recorded in 1989.

The most significant improvements in U.S. trade of miscellaneous manufactures occurred in scientific instruments and furniture. U.S. exports of scientific instruments increased by 10 percent to \$8.8 billion in 1990 as compared with 1989; the surplus in trade of scientific instruments rose to \$4.7 billion. Improved demand for advanced technology products by U.S. trading partners, increased emphasis by U.S. suppliers on exporting, and rationalization of production by U.S. manufacturers and their affiliates in Canada were principal causes of the increased exports.

Exports of furniture rose by 58 percent during 1990, as compared with 1989, to \$1.7 billion. The trade deficit in furniture decreased to \$3.3 billion. Exports of wooden-framed seats and wood living and dining room furniture mainly benefited from lower tariff rates provided for under the United States-Canada Free-Trade Agreement (CFTA). Increased exports of motor vehicle furniture to Canada was attributed to the highly integrated nature of North American automobile production.

The most significant declines in trade of miscellaneous manufactures occurred in games and fairground amusements and in dolls. Imports of games rose by 17 percent in 1990, as compared to 1989, to \$2.8 billion; the trade deficit in games increased to \$2.3 billion. The increased demand for hand-held video games and for parts of home video games sparked the increased imports.

Imports of dolls rose by 25 percent during the period, to \$772 million; the deficit for trade in dolls increased to \$755 million. Increased imports of dolls resulted from doll manufacturers in Hong Kong investing in the doll industry in China in order to access a larger pool of workers and take advantage of lower wage rates.

### U.S. Bilateral Trade

The major U.S. trading partners for miscellaneous manufactures during 1990 were the EC, Japan, Canada, Taiwan, and Mexico. These markets together accounted for 72 percent of total U.S. exports of miscellaneous manufactures during 1990, a proportion unchanged from 1989. The shares of exports accounted for by the EC, Canada, and Japan were also unchanged, equaling 33, 16, and 15 percent, respectively. Principal products exported were medical goods, scientific instruments, arms and ammunition, photographic supplies and cameras, and furniture. U.S. imports of miscellaneous manufactures from these nations represented 68 percent of the value of total imports of these products. The EC supplied 25 percent of the total, Japan 20 percent, and Taiwan, 12 percent. Canada and Mexico accounted for 6 and 5 percent, respectively. Principal products imported were furniture, scientific instruments, medical goods, games and fair-

ground amusements, precious jewelry, toys and games, and luggage.

Major shifts in trade resulted from expanded use of the CFTA by U.S. suppliers of furniture and by U.S. and Canadian suppliers of scientific instruments. Increased capital expenditures in the EC and an expanded industrial infrastructure in Korea also aided exports of scientific instruments; investment in China by manufacturers located principally in Hong Kong sparked increased imports of dolls.

## Commodity Analyses

### *Scientific instruments*

The trade surplus for scientific instruments reached \$4.7 billion in 1990, up 14 percent from a surplus of \$4.1 billion in 1989. The surplus rose despite a 6-percent increase in U.S. imports from \$3.8 billion to \$4.1 billion as U.S. exports rose 10 percent from \$8.0 billion to \$8.8 billion.

In terms of value, Canada was the largest market for scientific instruments in 1989, accounting for 17 percent of total U.S. exports, followed by Japan with 12 percent and the United Kingdom with 8 percent. Exports to Canada also showed the greatest growth, rising 67 percent to \$1.5 billion. Other markets showing significantly greater purchases of U.S. scientific instruments were Mexico, which grew by 14 percent to \$554 million, Korea, which grew by 30 percent to \$403 million, and the Netherlands, which rose by 9 percent to \$280 million.

Several factors accounted for most of the 10-percent gain in total U.S. exports in 1990. First, leading U.S. trading partners showed improved demand for advanced-technology products. Second, a growing number of U.S. manufacturers have become more export oriented. The marked increase in U.S. exports to Canada was, for the most part, generated by the CFTA. The increase in U.S. exports to Korea was the result of the expanding Korean industrial infrastructure. The gain in U.S. exports to certain EC countries was stimulated by preparation for the EC single market after 1992, which has invigorated capital expenditure in the Community by EC and non-EC investors.

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### *Furniture*

The U.S. trade balance for furniture improved from a trade deficit of \$3.9 billion in 1989 to one of \$3.3 billion in 1990. This improvement amounted to a 14-percent reduction in the trade deficit. U.S. imports rose by just 2 percent, to \$5 billion, while U.S. exports increased by 58 percent, to \$1.7 billion. The slow growth in U.S. imports was the result of a depressed demand for furniture owing to a sluggish economy and subsequent weak housing market. Canada, Taiwan, and Mexico were the principal sources of U.S. imports.

Canada and Mexico are also significant markets for U.S. exports. Growth in U.S. exports to Canada accounted for a large part of the reduction in the U.S. trade deficit for furniture. U.S. exports to Canada rose by 152 percent to \$747 million in 1990. The U.S. trade deficit with Canada for furniture subsequently fell from \$886 million to \$465 million. The increase in exports to Canada occurred in virtually all product categories; however, the most rapid gains were shown by exports of (1) motor vehicle furniture and parts, (2) seats with wooden frames, and (3) wood living room and dining room furniture other than seats. Canadian furniture producers have not as yet achieved the economies of scale that the opening of the U.S. market should allow, and thus are at a competitive disadvantage to producers in the United States. In addition, Canadian producers are suffering from a strong Canadian dollar and decreased protection because of lower tariff rates under the CFTA.

U.S. exports to Canada of motor vehicle seats and parts of motor vehicle furniture rose by 552 percent, to \$160 million, in 1990. The U.S. trade deficit with Canada for these products fell from \$487 million to \$373 million. A portion of the increase in U.S. exports of these products to Canada can be attributed to the highly integrated nature of North American car production. U.S. exports of these products generally fluctuate from year to year as car manufacturers award auto seat contracts on a competitive basis to producers on either side of the border. However, in the last year, certain U.S. producers of motor vehicles have relocated a portion of their automobile assembly operations to Canada. U.S. producers of seats supplied these relocated facilities.

U.S. exports to Canada of upholstered seats with wooden frames increased by 332 percent in 1990, to \$107 million. U.S. exports of wood dining room and living room furniture other than seats nearly tripled, from \$41 million to \$115 million in 1990 over 1989. Exports to Canada account for 60 percent of the combined total for these products. The Canadian household furniture industry is fragmented. Thus, although there are some larger Canadian firms that are better able to compete with those in the United States, most Canadian firms are relatively small, operate from single plants, and are unable to expand their market network to support wider distribution.

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### *Games and fairground equipment*

U.S. exports of games and fairground equipment increased for the second year in a row, expanding by 46 percent in 1990 over 1989, to \$547 million. Despite the strong growth in exports, an increase in U.S. imports of these products of 17 percent (from a larger base) to \$2.8 billion, generated a worsening trade deficit in 1990 of \$2.3 billion.

Japan continued to be the principal source of U.S. imports, accounting for 82 percent of total imports

(\$2.3 billion) in 1990. China was the second-largest source, accounting for 6 percent (\$183 million). Parts of home video games (\$899 million) and hand-held video games (\$550 million) accounted for virtually all of the growth in imports of games and fairground equipment during the period. By contrast, U.S. imports of coin-operated game machines (mainly arcade games) declined 27 percent to \$152 million, and other games (primarily board games, playing cards, and bowling equipment) decreased 9 percent to \$113 million. The decline in imports of arcade video games and board games was due, in part, to improved graphics and sound in home video games that narrowed the technology gap between the two systems. There was also declining interest in imported games such as Canadian-made *Trivial Pursuit*.

U.S. exports of games and fairground amusements increased by 46 percent, to \$547 million in 1990. Exports to Canada, Japan, Mexico, United Kingdom, Korea, France, Taiwan, Italy, and Australia all increased over 20 percent in 1990. Mexico experienced the greatest increase, rising 206 percent to \$55 million. Most of this growth of exports to Mexico resulted from the introduction of a new generation of video games in Mexico. Canada and Japan remained the top two markets of U.S. exports of games and fairground equipment, receiving 15 percent and 13 percent of the total, respectively. Most of the growth in exports was accounted for by home video games and parts, which doubled to \$80 million in 1990, and coin-operated games (excluding video games) which increased 28 percent to \$109 million in 1990.

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### *Dolls*

The U.S. trade deficit in dolls worsened by \$158 million, or by 27 percent, during 1990 when compared to the previous year, rising from \$597 million to \$755 million. The major aspect that accounted for the widened trade deficit in dolls was the increase in U.S. imports of \$156 million, or 25 percent, rising from \$616 million in 1989 to \$772 million in 1990. U.S. exports declined by \$2 million (11 percent), from \$19 million in 1989 to \$17 million in 1990.

Stuffed dolls accounted for the largest increase in U.S. imports of dolls, rising from \$210 million in 1989 to \$305 million in 1990. U.S. imports of nonstuffed dolls rose by \$50 million.

China registered by far the largest volume increase in U.S. imports of dolls in 1990, increasing by \$144 million, from \$344 million in 1989 to \$488 million in 1990. With the surge in imported dolls from China, a trend evidenced since the mid-1980s, China's share of U.S. imports of dolls rose from 56 percent in 1989 to 63 percent in 1990. U.S. imports of dolls also increased from Thailand, Mexico, West Germany, Malaysia, and Macao. Conversely, U.S. doll imports from Hong Kong declined 50 percent, causing Hong Kong's rank as a foreign supplier of dolls to the U.S.

market to drop from fourth to seventh. Much doll production formerly done in Hong Kong, as well as in the United States, moved to China in order to benefit from China's lower wage rates and larger supply of workers. Another aspect contributing to the decline in Hong

Kong's exports of dolls to the United States was the loss of favorable treatment under the Generalized System of Preferences in 1989.

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**Table 25**  
**Miscellaneous manufactures sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>**

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
GM001	Photographic supplies:				
	Exports .....	1,499	1,719	220	14.7
	Imports .....	1,330	1,409	79	5.9
	Trade balance .....	169	310	141	83.4
GM002	Exposed photographic plates, film, and paper:				
	Exports .....	85	110	25	29.4
	Imports .....	91	88	-3	-3.3
	Trade balance .....	-6	22	28	466.7
GM003	Luggage, handbags, and flatgoods:				
	Exports .....	103	133	30	29.1
	Imports .....	2,078	2,171	93	4.5
	Trade balance .....	-1,975	-2,038	-63	-3.2
GM004	Certain other leather goods:				
	Exports .....	48	44	-4	-8.3
	Imports .....	138	148	10	7.2
	Trade balance .....	-90	-104	-14	-15.6
GM005	Musical instruments and accessories:				
	Exports .....	250	293	43	17.2
	Imports .....	750	727	-23	-3.1
	Trade balance .....	-500	-434	66	13.2
GM006	Umbrellas, whips, riding crops, and canes:				
	Exports .....	6	8	2	33.3
	Imports .....	136	146	10	7.4
	Trade balance .....	-130	-138	-8	-6.2
GM007	Silverware and certain other articles of precious metal or metal clad with precious metal:				
	Exports .....	63	85	22	34.9
	Imports .....	61	50	-11	-18.0
	Trade balance .....	2	35	33	1,650.0
GM008	Precious jewelry and related articles:				
	Exports .....	424	428	4	0.9
	Imports .....	2,761	2,608	-153	-5.5
	Trade balance .....	-2,337	-2,180	157	6.7
GM009	Costume jewelry and related articles:				
	Exports .....	89	110	21	23.6
	Imports .....	437	461	24	5.5
	Trade balance .....	-348	-351	-3	-0.9
GM010	Bicycles:				
	Exports .....	46	114	68	147.8
	Imports .....	681	750	69	10.1
	Trade balance .....	-635	-636	-1	-0.2
GM011	Optical fibers, optical fiber bundles and cables:				
	Exports .....	143	172	29	20.3
	Imports .....	40	62	22	55.0
	Trade balance .....	103	110	7	6.8
GM012	Optical goods, including ophthalmic goods:				
	Exports .....	933	985	52	5.6
	Imports .....	1,811	1,872	61	3.4
	Trade balance .....	-878	-887	-9	-1.0
GM013	Photographic cameras and equipment:				
	Exports .....	759	764	5	0.7
	Imports .....	1,686	1,560	-126	-7.5
	Trade balance .....	-927	-796	131	14.1
GM014	Medical goods:				
	Exports .....	4,493	5,317	824	18.3
	Imports .....	2,799	3,292	493	17.6
	Trade balance .....	1,694	2,025	331	19.5
GM015	Scientific instruments:				
	Exports .....	7,971	8,763	792	9.9
	Imports .....	3,837	4,059	222	5.8
	Trade balance .....	4,134	4,704	570	13.8

See footnotes at end of table.

**Table 25-Continued**  
**Miscellaneous manufactures sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>**

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
Million dollars					
GM016	Watches:				
	Exports	96	120	24	25.0
	Imports	749	1,443	694	92.7
	Trade balance	-653	-1,323	-670	-102.6
GM017	Clocks and timing devices:				
	Exports	69	89	20	29.0
	Imports	128	233	105	82.0
	Trade balance	-59	-144	-85	-144.1
GM018	Arms and ammunition:				
	Exports	1,859	2,336	477	25.7
	Imports	486	463	-23	-4.7
	Trade balance	1,373	1,873	500	36.4
GM019	Furniture and selected furnishings:				
	Exports	1,098	1,731	633	57.7
	Imports	4,962	5,050	88	1.8
	Trade balance	-3,864	-3,319	545	14.1
GM020	Writing instruments and related articles:				
	Exports	168	193	25	14.9
	Imports	387	447	60	15.5
	Trade balance	-219	-254	-35	-16.0
GM021	Certain office and cosmetic supplies:				
	Exports	94	116	22	23.4
	Imports	144	178	34	23.6
	Trade balance	-50	-62	-12	-24.0
GM022	Lamps and lighting fittings:				
	Exports	246	315	69	28.0
	Imports	1,243	1,311	68	5.5
	Trade balance	-997	-996	1	0.1
GM023	Prefabricated buildings:				
	Exports	154	171	17	11.0
	Imports	47	34	-13	-27.7
	Trade balance	107	137	30	28.0
GM024	Children's vehicles:				
	Exports	15	23	8	53.3
	Imports	183	179	-4	-2.2
	Trade balance	-168	-156	12	7.1
GM025	Dolls:				
	Exports	19	17	-2	-10.5
	Imports	616	772	156	25.3
	Trade balance	-597	-755	-158	-26.5
GM026	Toys and models:				
	Exports	294	382	88	29.9
	Imports	2,694	2,716	22	0.8
	Trade balance	-2,400	-2,334	66	2.8
GM027	Games and fairground amusements:				
	Exports	375	547	172	45.9
	Imports	2,413	2,818	405	16.8
	Trade balance	-2,038	-2,271	-233	-11.4
GM028	Sporting goods:				
	Exports	795	828	33	4.2
	Imports	1,613	1,644	31	1.9
	Trade balance	-818	-816	2	0.2
GM029	Smokers' articles:				
	Exports	48	59	11	22.9
	Imports	105	130	25	23.8
	Trade balance	-57	-71	-14	-24.6
GM030	Works of art, collectors' pieces, and antiques:				
	Exports	1,620	2,267	647	39.9
	Imports	2,153	2,313	160	7.4
	Trade balance	-533	-46	487	91.4
GM031	Brooms, brushes, and hair grooming articles:				
	Exports	57	74	17	29.8
	Imports	436	423	-13	-3.0
	Trade balance	-379	-349	30	7.9
GM032	Apparel fasteners:				
	Exports	44	51	7	15.9
	Imports	79	90	11	13.9
	Trade balance	-35	-39	-4	-11.4

See footnotes at end of table.

Table 25

Miscellaneous manufactures sector: U.S. trade for selected commodity groups, by specified periods, 1989 and 1990<sup>1</sup>

USITC code <sup>2</sup>	Commodity group	1989	1990	Change from 1989 to 1990	
				Amount	Percent
		Million dollars			
GM033	Miscellaneous articles:				
	Exports .....	122	110	-12	-9.8
	Imports .....	1,013	1,030	17	1.7
	Trade balance .....	-891	-920	-29	-3.3

<sup>1</sup> Import values are based on Customs value; export values are based on f.a.s. value, U.S. port of export.<sup>2</sup> This coding system is used by the U.S. International Trade Commission to identify major groupings of HTS import and export items for trade monitoring purposes.

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

**APPENDIX A**  
**LISTING OF COMMODITY/INDUSTRY GROUPS**  
**COVERED IN THE REPORT**

**Agricultural, animal, and vegetable products sector**

AG001	Certain miscellaneous live animals, meat, and animal products
AG002	Live cattle and fresh, chilled, or frozen meat of cattle, except offal
AG003	Live swine and fresh, chilled, or frozen pork, except offal
AG004	Lamb, fresh, chilled, or frozen
AG005	Poultry
AG006	Fish, except shellfish, fresh or chilled
AG007	Fish, except shellfish, frozen
AG008	Fish, except shellfish, in airtight containers, or cured or otherwise prepared, including live fish
AG009	Shellfish
AG010	Dairy produce
AG011	Eggs
AG012	Sugar and other sweeteners
AG013	Animal feeds
AG014	Live plants
AG015	Seeds
AG016	Cut flowers
AG017	Miscellaneous vegetable substances
AG018	Fresh, chilled, or frozen vegetables
AG019	Certain fresh, chilled, or frozen winter vegetables
AG020	Prepared or preserved vegetables
AG021	Olives
AG022	Dried vegetables
AG023	Mushrooms and truffles
AG024	Edible nuts
AG025	Certain tropical fruits, fresh or dried
AG026	Citrus fruits
AG027	Certain deciduous fruits, fresh
AG028	Other fresh fruits
AG029	Dried fruits, other than tropical
AG030	Fruit, uncooked, or cooked in water, frozen
AG031	Jams, fruit jellies and marmalades; cooked fruit or nut purees and pastes; and fruit or other edible parts of plants preserved by sugar
AG032	Canned fruits, provisionally preserved fruits and nuts, fruit flours, and fruits (except citrus) preserved in ways not elsewhere specified or included
AG033	Coffee and tea
AG034	Spices
AG035	Cereals
AG036	Milled grains, malts, and starches
AG037	Oilseeds
AG038	Natural gums, resins, and gum resins
AG039	Animal or vegetable fats and oils
AG040	Edible preparations
AG041	Cocoa, chocolate, and confectionery
AG042	Nonalcoholic beverages including fruit and vegetable juices
AG043	Malt beverages
AG044	Wine and certain other fermented beverages
AG045	Distilled spirits
AG046	Unmanufactured tobacco
AG047	Certain manufactured tobacco products, including cigars, smoking tobacco, chewing tobacco, and snuff
AG048	Cigarettes
AG049	Hides, skins, and leather
AG050	Furskins

**Forest products sector**

AG051	Logs and rough wood products
AG052	Poles, piles, and posts
AG053	Lumber
AG054	Moldings, millwork, and joinery
AG055	Structural panel products
AG056	Wooden containers
AG057	Tools and tool handles of wood
AG058	Miscellaneous articles of wood
AG059	Cork and rattan
AG060	Pulp and wastepaper
AG061	Building papers and asphalt roofing shingles
AG062	Paper boxes and bags
AG063	Industrial papers and paperboards
AG064	Newsprint and other printing and writing papers
AG065	Certain specialty papers
AG066	Miscellaneous paper products
AG067	Printed matter

**Fibers, textiles, apparel, and footwear sector**

TX001	Textile fibers and waste
TX002	Spun yarns
TX003	Filament yarns
TX004	Miscellaneous yarns
TX005	Broadwoven fabrics
TX006	Knit fabrics

#### Fibers, textiles, apparel, and footwear sector—Continued

TX007 Miscellaneous fabrics  
TX008 Coated, covered, impregnated, or laminated textile fabrics  
TX009 Nonwoven fabrics  
TX010 Cordage, nets, and netting  
TX011 Certain textile articles and fabrics suitable for industrial use  
TX012 Miscellaneous textiles and articles  
TX013 Sacks and bags of textile materials  
TX014 Carpets and rugs  
TX015 Curtains and draperies  
TX016 Bedding, linens, and miscellaneous furnishings  
TX017 Men's and boys' suits and sports coats  
TX018 Men's and boys' coats and jackets  
TX019 Trousers  
TX020 Shirts and blouses  
TX021 Sweaters  
TX022 Women's and girls' suits, skirts, and coats  
TX023 Women's and girls' dresses  
TX024 Robes  
TX025 Underwear and nightwear  
TX026 Hosiery  
TX027 Body-supporting garments  
TX028 Neckwear  
TX029 Gloves, including gloves for sports  
TX030 Headwear  
TX031 Leather apparel and accessories  
TX032 Fur apparel and other fur articles  
TX033 Rubber, plastic, and coated-fabric apparel  
TX034 Nonwoven, paper, and felt apparel and footwear  
TX035 Other wearing apparel  
TX036 Nonrubber footwear and footwear parts  
TX037 Rubber footwear

#### Energy and chemicals sector

CH001 Electrical energy  
CH002 Nuclear materials  
CH003 Coal and other carbonaceous materials  
CH004 Coal chemicals  
CH005 Crude petroleum  
CH006 Petroleum products  
CH007 Natural gas and components  
CH008 Major primary olefins  
CH009 Other olefins  
CH010 Benzene, toluene, and mixed xylenes  
CH011 Benzenoid commodity chemicals  
CH012 Benzenoid specialty chemicals  
CH013 Miscellaneous organic chemicals  
CH014 Selected inorganic chemicals and elements  
CH015 Inorganic acids  
CH016 Salts and other inorganic chemicals  
CH017 Chlor-alkali chemicals  
CH018 Industrial gases  
CH019 Fertilizers  
CH020 Certain inorganic pigments  
CH021 Synthetic organic pigments  
CH022 Synthetic dyes and couplers  
CH023 Synthetics tanning agents  
CH024 Natural tanning and dyeing materials  
CH025 Photographic chemicals and preparations  
CH026 Pesticide products and formulations  
CH027 Adhesives, glues, and gelatin  
CH028 Medicinal chemicals, except antibiotics  
CH029 Antibiotics  
CH030 Essential oils and other flavoring materials  
CH031 Perfumes, cosmetics, and toiletries  
CH032 Soaps, detergents, and surface-active agents  
CH033 Fatty chemicals  
CH034 Miscellaneous chemical specialties  
CH035 Paints, inks, and related items  
CH036 Explosives and propellant powders  
CH037 Polyethylene resins in primary forms  
CH038 Polypropylene resins in primary forms  
CH039 PVC resins in primary forms  
CH040 Styrene polymers in primary forms  
CH041 PET and other polyester resins  
CH042 Other plastics in primary forms  
CH043 SBR rubber in primary forms  
CH044 Natural rubber and other synthetic rubber  
CH045 Pneumatic tires and tubes (new)  
CH046 Other tires

**Energy and chemicals sector—Continued**

CH047 Plastic or rubber semifabricated forms  
CH048 Plastic containers and closures  
CH049 Hose, belting and plastic pipe  
CH050 Miscellaneous rubber or plastics products

**Minerals and metals sector**

MM001 Clays and nonmetallic minerals and products, not elsewhere specified or included  
MM002 Certain miscellaneous mineral substances  
MM003 Iron ores and concentrates  
MM004 Copper ores and concentrates  
MM005 Lead ores and residues  
MM006 Zinc ores and residues  
MM007 Certain ores, concentrates, ash, and residues  
MM008 Precious metal ores and concentrates  
MM009 Certain nonmetallic minerals and articles  
MM010 Refractory and heat-insulating articles  
MM011 Ceramic bricks and miscellaneous ceramic construction articles  
MM012 Ceramic floor and wall tiles  
MM013 Ceramic sanitary fixtures  
MM014 Ceramic table, toilet, and kitchen articles  
MM015 Miscellaneous ceramic articles  
MM016 Flat glass and certain flat glass products  
MM017 Glass containers  
MM018 Household glassware  
MM019 Certain glass and glass products  
MM020 Fiber glass products  
MM021 Natural and synthetic gemstones  
MM022 Precious metals and related articles  
MM023 Pig iron  
MM024 Ferroalloys  
MM025 Iron and steel waste and scrap  
MM026 Direct reduced iron, ferrous powders, and grit and shot  
MM027 Steel mill products, all grades  
MM028 Steel pipe and tube fittings, and certain cast products  
MM029 Fabricated structurals  
MM030 Metal construction components  
MM031 Metallic containers  
MM032 Wire products of iron, steel, aluminum, copper, and nickel  
MM033 Chain  
MM034 Industrial fasteners of base metal  
MM035 Cooking and kitchen ware  
MM036 Metal sanitary ware  
MM037 Iron construction castings and other nonmalleable cast-iron articles  
MM038 Copper and related articles  
MM039 Unwrought aluminum  
MM040 Aluminum mill products  
MM041 Lead and related articles  
MM042 Zinc and related articles  
MM043 Certain base metals and chemical elements  
MM044 Nonpowered handtools  
MM045 Cutlery other than tableware, certain sewing implements, and related products  
MM046 Table flatware and related products  
MM047 Certain builders' hardware  
MM048 Miscellaneous products of base metal

**Machinery and equipment sector**

ME001 Aircraft engines and gas turbines  
ME002 Internal combustion piston engines, other than for aircraft  
ME003 Pumps for liquids  
ME004 Fans, blowers, compressors, air and vacuum pumps, and air-conditioning equipment  
ME005 Certain industrial thermal-processing equipment and certain furnaces  
ME006 Commercial machinery  
ME007 Electrical household appliances and certain heating equipment  
ME008 Centrifuges and filtering and purifying equipment  
ME009 Wrapping, packaging, and can-sealing machinery  
ME010 Scales and weighing machinery  
ME011 Forklift trucks and similar industrial vehicles  
ME012 Construction and mining equipment  
ME013 Mineral processing machinery  
ME014 Farm and garden machinery and equipment  
ME015 Industrial food-processing and related machinery  
ME016 Pulp, paper, and paperboard machinery  
ME017 Printing, typesetting, and bookbinding machinery and printing plates  
ME018 Textile machinery and parts  
ME019 Metal rolling mills and parts thereof  
ME020 Machine tools for cutting metal and parts; tool holders, work holders; dividing heads and other special attachments for machine tools  
ME021 Machine tools for metal forming and parts thereof  
ME022 Non-metalworking machine tools and parts thereof

## Machinery and equipment sector—Continued

ME023	Office machines
ME024	Special industry machinery
ME025	Taps, cocks, valves, and similar devices
ME026	Ball and roller bearings
ME027	Gear boxes and other speed changers; torque converters; ball screws; flywheels and pulleys; clutches and shaft couplings; universal joints; and parts thereof
ME028	Boilers, turbines, and related machinery
ME029	Electric motors, generators, and related equipment
ME030	Electrical transformers, static converters, and inductors
ME031	Primary cells and batteries and electric storage batteries
ME032	Portable electric handtools
ME033	Nonelectrically powered hand tools and parts thereof
ME034	Ignition, starting, lighting, and other electrical equipment
ME035	Flashlights and other similar electric lights, light bulbs and fluorescent tubes; arc lamps
ME036	Electric and gas welding and soldering equipment
ME037	Telephone and telegraph apparatus
ME038	Microphones, loudspeakers, audio amplifiers and combinations thereof
ME039	Tape recorders, tape players, video cassette recorders, turntables, and compact disc players
ME040	Unrecorded magnetic tapes, discs, and other media
ME041	Records, tapes, compact discs, computer software, and other recorded media
ME042	Radio transmission and reception apparatus, including cellular telephones, and combinations thereof
ME043	Radio navigational aid, radar, and remote control apparatus
ME044	Television receivers and video monitors and combinations including television receivers
ME045	Television apparatus (except receivers and monitors), including cameras, camcorders, and cable apparatus
ME046	Electric sound and visual signaling apparatus
ME047	Electrical capacitors, and resistors
ME048	Apparatus for making, breaking, protecting, or connecting electrical circuits
ME049	Television picture tubes and other cathode ray tubes
ME050	Special-purpose tubes
ME051	Diodes, transistors, integrated circuits and similar semiconductor solid-state devices
ME052	Insulated electrical wire and cable, and conduit; glass and ceramic insulators
ME053	Rail locomotive and rolling stock
ME054	Automobiles, trucks, buses, and bodies and chassis of the foregoing
ME055	Certain motor-vehicle parts
ME056	Motorcycles, mopeds, and parts
ME057	Miscellaneous vehicles and transportation-related equipment
ME058	Aircraft, spacecraft, and related equipment
ME059	Ships, tugs, pleasure boats, and similar vessels
ME060	Telecommunications products
ME061	Electrical and electronic articles, apparatus, and parts not elsewhere provided for
ME062	Motors and engines, except internal combustion, aircraft, or electric

## Miscellaneous manufactures sector

GM001	Photographic supplies
GM002	Exposed photographic plates, film, and paper
GM003	Luggage, handbags, and flatgoods
GM004	Certain other leather goods
GM005	Musical instruments and accessories
GM006	Umbrellas, whips, riding crops, and canes
GM007	Silverware and certain other articles of precious metal or metal clad with precious metal
GM008	Precious jewelry and related articles
GM009	Costume jewelry and related articles
GM010	Bicycles
GM011	Optical fibers, optical fiber bundles and cables
GM012	Optical goods, including ophthalmic goods
GM013	Photographic cameras and equipment
GM014	Medical goods
GM015	Scientific instruments
GM016	Watches
GM017	Clocks and timing devices
GM018	Arms and ammunition
GM019	Furniture and selected furnishings
GM020	Writing instruments and related articles
GM021	Certain office and cosmetic supplies
GM022	Lamps and lighting fittings
GM023	Prefabricated buildings
GM024	Children's vehicles
GM025	Dolls
GM026	Toys and models
GM027	Games and fairground amusements
GM028	Sporting goods
GM029	Smokers' articles
GM030	Works of art, collectors' pieces, and antiques
GM031	Brooms, brushes, and hair grooming articles
GM032	Apparel fasteners
GM033	Miscellaneous articles



**APPENDIX B**  
**PROFILE OF U.S. INDUSTRY AND MARKET,**  
**BY COMMODITY/INDUSTRY GROUP, 1986-90**

*Note.*—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 future secondary sources or from the 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, clarifications of classification practices, or redefinitions of industry classes.

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
	Agriculture, fisheries, and forest products							
AG001	Certain miscellaneous live animals, meat, and animal products:							
	Establishments (number)-----	190,091	184,015	181,488	163,183	156,865	(3.9)	(4.9)
	Employees (thousands)-----	232	221	211	205	203	(1.0)	(3.4)
	Capacity utilization (percent)-----	2/	2/	2/	2/	2/	-	-
	U.S. shipments (million dollars)-----	5,100	5,400	5,500	5,600	6,100	8.9	4.0
	U.S. exports (million dollars)-----	872	939	1,250	1,161	1,317	13.4	10.9
	U.S. imports (million dollars)-----	1,124	1,123	1,040	947	998	5.4	(4.0)
	Apparent U.S. consumption (million dollars)-----	5,352	5,584	5,290	5,386	5,781	7.3	1.2
	Trade balance (million dollars)-----	(252)	(184)	210	214	319	-	-
	Ratio of imports to apparent consumption (percent)-----	21.0	20.1	19.7	17.6	17.3	(1.8)	(5.1)
	Ratio of exports to shipments (percent)-----	17.1	17.4	22.7	20.7	21.6	4.1	6.6
AG002	Live cattle and fresh, chilled, or frozen meat of cattle, except offal:							
	Establishments (number)-----	1,440,000	1,395,777	1,365,909	1,324,500	1,289,600	(2.6)	(2.7)
	Employees (thousands)-----	1,574	1,525	1,489	1,409	1,373	(2.6)	(3.5)
	Capacity utilization (percent)-----	2/	2/	2/	2/	2/	-	-
	U.S. shipments (million dollars)-----	35,400	37,400	39,700	40,600	42,900	5.7	4.8
	U.S. exports (million dollars)-----	714	860	1,290	1,500	1,634	8.9	24.8
	U.S. imports (million dollars)-----	1,530	1,755	2,086	2,131	2,647	24.2	13.8
	Apparent U.S. consumption (million dollars)-----	36,216	38,295	40,496	41,231	43,913	6.5	4.7
	Trade balance (million dollars)-----	(816)	(895)	(796)	(631)	(1,013)	-	-
	Ratio of imports to apparent consumption (percent)-----	4.2	4.6	5.2	5.2	6.0	16.6	8.7
	Ratio of exports to shipments (percent)-----	2.0	2.3	3.2	3.7	3.8	3.1	19.1
AG003	Live swine and fresh, chilled, or frozen pork, except offal:							
	Establishments (number)-----	347,340	329,822	334,650	307,324	279,040	(9.2)	(5.0)
	Employees (thousands)-----	423	408	420	364	334	(8.2)	(5.7)
	Capacity utilization (percent)-----	2/	2/	2/	2/	2/	-	-
	U.S. shipments (million dollars)-----	15,500	16,200	15,800	15,600	18,200	16.7	2.9
	U.S. exports (million dollars)-----	80	122	245	312	298	(4.5)	42.9
	U.S. imports (million dollars)-----	542	628	555	495	607	22.6	(0.1)
	Apparent U.S. consumption (million dollars)-----	15,962	16,706	16,110	15,783	18,509	17.3	2.4
	Trade balance (million dollars)-----	(462)	(506)	(310)	(183)	(309)	-	-
	Ratio of imports to apparent consumption (percent)-----	3.4	3.8	3.4	3.1	3.3	4.6	(2.5)
	Ratio of exports to shipments (percent)-----	0.5	0.8	1.6	2.0	1.6	(18.1)	38.9

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG004	Lamb, fresh, chilled, or frozen:							
	Establishments (number)-----	113,570	114,546	114,317	111,909	109,690	(2.0)	(0.9)
	Employees (thousands)-----	115	116	116	112	110	(1.8)	(1.2)
	Capacity utilization (percent)-----	3/	3/	3/	3/	3/	-	-
	U.S. shipments (million dollars)-----	457	458	487	475	460	(3.2)	0.5
	U.S. exports (million dollars) 4/-----	3	3	3	4	5	25.0	14.0
	U.S. imports (million dollars)-----	26	29	34	34	31	(8.8)	5.2
	Apparent U.S. consumption (million dollars) 5/-----	480	484	518	505	486	(3.8)	0.7
	Trade balance (million dollars)-----	(23)	(26)	(31)	(30)	(26)	-	-
	Ratio of imports to apparent consumption (percent)-----	5.4	6.0	6.6	6.7	6.4	(5.3)	4.5
	Ratio of exports to shipments (percent)-----	0.7	0.7	0.6	0.8	1.1	29.1	13.4
AG005	Poultry:							
	Establishments (number)-----	500	450	400	350	300	(14.3)	(12.0)
	Employees (thousands)-----	124	133	138	166	173	4.2	9.3
	Capacity utilization (percent)-----	90	90	90	90	90	0.0	0.0
	U.S. production (million dollars)-----	10,681	9,913	11,783	13,325	13,352	0.2	7.7
	U.S. exports (million dollars)-----	372	487	551	600	775	29.2	18.3
	U.S. imports (million dollars)-----	31	29	28	26	28	7.7	(3.1)
	Apparent U.S. consumption (million dollars)-----	10,340	9,455	11,260	12,751	12,605	(1.1)	7.2
	Trade balance (million dollars)-----	341	458	523	574	747	-	-
	Ratio of imports to apparent consumption (percent)-----	0.3	0.3	0.2	0.2	0.2	8.9	(9.6)
	Ratio of exports to production (percent)-----	3.5	4.9	4.7	4.5	5.8	28.9	9.8
AG006	Fish, except shellfish, fresh or chilled:							
	Establishments (number)-----	90,000	80,000	80,000	90,000	90,000	0.0	1.2
	Employees (thousands)-----	225	220	220	225	225	0.0	0.2
	Capacity utilization (percent)-----	2/	2/	2/	2/	2/	-	-
	U.S. shipments (million dollars)-----	1,319	1,629	2,023	2,500	2,500	0.0	18.6
	U.S. exports (million dollars)-----	346	405	549	155	164	5.8	(21.8)
	U.S. imports (million dollars)-----	371	433	462	611	592	(3.1)	13.6
	Apparent U.S. consumption (million dollars)-----	1,344	1,657	1,936	2,956	2,928	(0.9)	23.8
	Trade balance (million dollars)-----	(25)	(28)	87	(456)	(428)	-	-
	Ratio of imports to apparent consumption (percent)-----	27.6	26.1	23.9	20.7	20.2	(2.2)	(8.2)
	Ratio of exports to shipments (percent)-----	26.2	24.9	27.1	6.2	6.6	5.8	(34.0)

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG007	Fish, except shellfish, frozen:							
	Establishments (number)-----	1,200	1,000	1,000	900	900	0.0	(6.6)
	Employees (thousands)-----	80	75	72	70	70	0.0	(3.3)
	Capacity utilization (percent)-----	80	75	70	75	75	0.0	(1.3)
	U.S. shipments (million dollars)-----	490	587	515	600	600	0.0	4.4
	U.S. exports (million dollars)-----	456	557	781	1,236	1,572	27.2	38.7
	U.S. imports (million dollars)-----	1,420	1,865	1,527	1,485	1,377	(7.3)	(2.9)
	Apparent U.S. consumption (million dollars)-----	1,454	1,895	1,261	849	405	(52.3)	(28.5)
	Trade balance (million dollars)-----	(964)	(1,308)	(746)	(249)	195	-	-
	Ratio of imports to apparent consumption (percent)-----	97.7	98.4	121.1	174.9	340.0	94.4	35.9
	Ratio of exports to shipments (percent)-----	93.1	94.9	151.7	206.0	262.0	27.2	32.9
AG008	Fish, except shellfish, in airtight containers, or cured or otherwise....:							
	Establishments (number)-----	800	800	700	700	700	0.0	(3.9)
	Employees (thousands)-----	27	27	25	26	26	0.0	(1.1)
	Capacity utilization (percent)-----	80	80	80	80	85	6.3	1.2
	U.S. shipments (million dollars)-----	1,550	1,600	1,500	1,700	1,800	5.9	3.7
	U.S. exports (million dollars)-----	235	249	374	342	330	(3.5)	10.5
	U.S. imports (million dollars)-----	581	601	660	724	682	(5.8)	5.2
	Apparent U.S. consumption (million dollars)-----	1,896	1,952	1,786	2,082	2,152	3.4	3.2
	Trade balance (million dollars)-----	(346)	(352)	(286)	(382)	(352)	-	-
	Ratio of imports to apparent consumption (percent)-----	30.6	30.8	37.0	34.8	31.7	(8.9)	1.9
	Ratio of exports to shipments (percent)-----	15.2	15.6	24.9	20.1	18.3	(8.9)	6.6
AG009	Shellfish:							
	Establishments (number)-----	900	900	900	850	800	(5.9)	(2.9)
	Employees (thousands)-----	68	60	65	57	60	5.3	(3.0)
	Capacity utilization (percent)-----	66	66	66	66	66	0.0	0.0
	U.S. production (million dollars)-----	1,444	1,486	1,497	1,512	1,600	5.8	2.3
	U.S. exports (million dollars)-----	260	379	477	577	755	30.8	29.1
	U.S. imports (million dollars)-----	2,406	2,774	2,727	2,629	2,560	(2.6)	0.7
	Apparent U.S. consumption (million dollars)-----	3,590	3,881	3,747	3,564	3,405	(4.5)	(1.9)
	Trade balance (million dollars)-----	(2,146)	(2,395)	(2,250)	(2,052)	(1,805)	-	-
	Ratio of imports to apparent consumption (percent)-----	67.0	71.5	72.8	73.8	75.2	1.9	2.6
	Ratio of exports to production (percent)-----	18.0	25.5	31.9	38.2	47.2	23.7	26.2

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG010	Dairy produce:							
	Establishments (number)-----	255,000	235,000	223,000	207,000	205,000	(1.0)	(5.5)
	Employees (thousands)-----	899	836	820	790	785	(0.6)	(3.2)
	Capacity utilization (percent)-----	80	81	81	82	82	0.0	0.6
	U.S. shipments (million dollars)-----	37,990	39,464	39,863	43,370	48,471	11.8	6.0
	U.S. exports (million dollars)-----	328	298	385	365	282	(22.7)	(1.0)
	U.S. imports (million dollars)-----	619	659	683	815	853	4.7	8.9
	Apparent U.S. consumption (million dollars)-----	38,281	39,825	40,161	43,820	49,042	11.9	6.1
	Trade balance (million dollars)-----	(291)	(361)	(298)	(450)	(571)	-	-
	Ratio of imports to apparent consumption (percent)-----	1.6	1.7	1.7	1.9	1.7	(6.5)	2.7
	Ratio of exports to shipments (percent)-----	0.9	0.8	1.0	0.8	0.6	(30.9)	(6.6)
AG011	Eggs:							
	Establishments (number)-----	80	80	80	80	80	0.0	0.0
	Employees (thousands)-----	9	9	9	9	9	0.0	0.0
	Capacity utilization (percent)-----	85	85	85	85	85	0.0	0.0
	U.S. production (million dollars)-----	3,104	2,602	2,310	4,386	4,574	4.3	13.9
	U.S. exports (million dollars)-----	81	88	117	88	99	12.5	4.1
	U.S. imports (million dollars)-----	15	15	15	28	24	(14.3)	16.9
	Apparent U.S. consumption (million dollars)-----	3,038	2,529	2,208	4,326	4,499	4.0	14.1
	Trade balance (million dollars)-----	66	73	102	60	75	-	-
	Ratio of imports to apparent consumption (percent)-----	0.5	0.6	0.7	0.6	0.5	(17.6)	2.4
	Ratio of exports to production (percent)-----	2.6	3.4	5.1	2.0	2.2	7.9	(8.6)
AG012	Sugar and other sweeteners:							
	Establishments (number)-----	109	107	105	103	100	(2.9)	(2.1)
	Employees (thousands)-----	33	33	33	33	32	(3.0)	(0.6)
	Capacity utilization (percent)-----	88	89	89	88	86	(2.3)	(0.6)
	U.S. shipments (million dollars)-----	7,836	8,188	8,500	7,920	7,920	0.0	(0.1)
	U.S. exports (million dollars)-----	158	190	199	277	362	30.7	22.6
	U.S. imports (million dollars)-----	869	561	623	776	978	26.0	5.8
	Apparent U.S. consumption (million dollars)-----	8,547	8,559	8,924	8,419	8,536	1.4	(0.2)
	Trade balance (million dollars)-----	(711)	(371)	(424)	(499)	(616)	-	-
	Ratio of imports to apparent consumption (percent)-----	10.2	6.6	7.0	9.2	11.5	24.3	6.0
	Ratio of exports to shipments (percent)-----	2.0	2.3	2.3	3.5	4.6	30.7	22.7

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG013	Animal feeds:							
	Establishments (number)-----	2,445	2,445	2,445	2,445	2,445	0.0	0.0
	Employees (thousands)-----	60	60	60	60	60	0.0	0.0
	Capacity utilization (percent)-----	85	85	85	85	85	0.0	0.0
	U.S. production (million dollars)-----	22,000	22,000	22,000	24,000	25,000	4.2	3.5
	U.S. exports (million dollars)-----	2,683	2,761	3,510	3,133	2,953	(5.7)	3.2
	U.S. imports (million dollars)-----	200	230	297	388	384	(1.0)	20.1
	Apparent U.S. consumption (million dollars)-----	19,517	19,469	18,787	21,255	22,431	5.5	3.7
	Trade balance (million dollars)-----	2,483	2,531	3,213	2,745	2,569	-	-
	Ratio of imports to apparent consumption (percent)-----	1.0	1.2	1.6	1.8	1.7	(6.2)	15.7
	Ratio of exports to production (percent)-----	12.2	12.6	16.0	13.1	11.8	(9.5)	(0.2)
AG014	Live plants:							
	Establishments (number)-----	25,000	25,000	25,000	25,000	25,000	0.0	0.0
	Employees (thousands)-----	125	125	125	125	125	0.0	0.0
	Capacity utilization (percent)-----	3/	3/	3/	3/	3/	-	-
	U.S. shipments (million dollars)-----	5,865	6,694	6,865	7,208	2/	(100.0)	-
	U.S. exports (million dollars)-----	34	35	41	52	104	100.0	30.1
	U.S. imports (million dollars)-----	122	132	146	147	162	10.2	7.0
	Apparent U.S. consumption (million dollars)-----	5,953	6,791	6,970	7,303	58	(99.2)	(60.1)
	Trade balance (million dollars)-----	(88)	(97)	(105)	(95)	(58)	-	-
	Ratio of imports to apparent consumption (percent)-----	2.0	1.9	2.1	2.0	279.3	13,776.2	168.2
	Ratio of exports to shipments (percent)-----	0.6	0.5	0.6	0.7	2/	-	-
AG015	Seeds:							
	Establishments (number)-----	15,000	15,000	15,000	15,000	15,000	0.0	0.0
	Employees (thousands)-----	230	230	230	230	230	0.0	0.0
	Capacity utilization (percent)-----	85	85	85	85	85	0.0	0.0
	U.S. shipments (million dollars)-----	2,500	2,500	2,500	2,000	2,000	0.0	(6.5)
	U.S. exports (million dollars)-----	212	225	265	245	262	6.9	5.2
	U.S. imports (million dollars)-----	95	129	122	126	122	(3.2)	4.9
	Apparent U.S. consumption (million dollars)-----	2,383	2,404	2,357	1,881	1,860	(1.1)	(7.1)
	Trade balance (million dollars)-----	117	96	143	119	140	-	-
	Ratio of imports to apparent consumption (percent)-----	4.0	5.4	5.2	6.7	6.6	(2.1)	12.9
	Ratio of exports to shipments (percent)-----	8.5	9.0	10.6	12.3	13.1	6.9	12.5

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG016	Cut flowers:							
	Establishments (number)-----	3,000	3,000	3,000	3,000	3,000	0.0	0.0
	Employees (thousands)-----	39	39	39	39	39	0.0	0.0
	Capacity utilization (percent)-----	3/	3/	3/	3/	3/	-	-
	U.S. shipments (million dollars)-----	383	464	476	500	525	5.0	7.3
	U.S. exports (million dollars)-----	7	7	11	11	30	172.7	40.0
	U.S. imports (million dollars)-----	235	253	295	316	326	3.2	9.2
	Apparent U.S. consumption (million dollars)-----	611	710	760	805	821	2.0	7.4
	Trade balance (million dollars)-----	(228)	(246)	(284)	(305)	(296)	-	-
	Ratio of imports to apparent consumption (percent)-----	38.5	35.6	38.8	39.3	39.7	1.2	1.6
	Ratio of exports to shipments (percent)-----	1.8	1.5	2.3	2.2	5.7	159.7	30.4
AG017	Miscellaneous vegetable substances:							
	Firms (number)-----	100	100	100	100	100	0.0	0.0
	Employees (thousands)-----	1	1	1	1	1	0.0	0.0
	Capacity utilization (percent)-----	85	85	85	85	85	0.0	0.0
	U.S. production (million dollars)-----	805	850	850	850	850	0.0	1.1
	U.S. exports (million dollars)-----	159	185	209	283	304	7.4	18.8
	U.S. imports (million dollars)-----	365	415	430	362	416	14.9	1.3
	Apparent U.S. consumption (million dollars)-----	1,011	1,080	1,071	929	962	3.6	(2.5)
	Trade balance (million dollars)-----	(206)	(230)	(221)	(79)	(112)	-	-
	Ratio of imports to apparent consumption (percent)-----	36.1	38.4	40.1	39.0	43.2	11.0	3.8
	Ratio of exports to production (percent)-----	19.8	21.8	24.6	33.3	35.8	7.4	17.5
AG018	Fresh, chilled, or frozen vegetables:							
	Establishments (number)-----	36,000	35,500	35,000	35,000	35,000	0.0	(0.7)
	Employees (thousands)-----	39	39	39	39	39	0.0	0.0
	Capacity utilization (percent)-----	90	90	90	90	90	0.0	0.0
	U.S. production (million dollars)-----	3,888	4,047	3,871	4,036	2/	(100.0)	-
	U.S. exports (million dollars)-----	218	250	304	350	626	78.9	27.7
	U.S. imports (million dollars)-----	259	321	347	456	484	6.1	17.4
	Apparent U.S. consumption (million dollars)-----	3,929	4,118	3,914	4,142	2/	-	-
	Trade balance (million dollars)-----	(41)	(71)	(43)	(106)	142	-	-
	Ratio of imports to apparent consumption (percent)-----	6.6	7.8	8.9	11.0	2/	-	-
	Ratio of exports to production (percent)-----	5.6	6.2	7.9	8.7	2/	-	-

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG019	Certain fresh, chilled, or frozen winter vegetables:							
	Establishments (number)-----	5,200	5,200	5,000	5,000	5,000	0.0	(1.2)
	Employees (thousands)-----	15	14	14	14	14	0.0	(1.4)
	Capacity utilization (percent)-----	90	90	90	90	90	0.0	0.0
	U.S. production (million dollars)-----	1,142	1,179	1,342	1,564	2/	(100.0)	-
	U.S. exports (million dollars)-----	49	55	59	68	151	122.1	27.9
	U.S. imports (million dollars)-----	509	342	316	478	667	39.5	9.1
	Apparent U.S. consumption (million dollars)-----	1,602	1,466	1,599	1,974	2/	-	-
	Trade balance (million dollars)-----	(460)	(287)	(257)	(410)	(516)	-	-
	Ratio of imports to apparent consumption (percent)-----	31.8	23.3	19.8	24.2	2/	-	-
	Ratio of exports to production (percent)-----	4.3	4.7	4.4	4.3	2/	-	-
AG020	Prepared or preserved vegetables:							
	Establishments (number)-----	685	669	653	650	645	(0.8)	(1.5)
	Employees (thousands)-----	68	67	67	67	66	(1.5)	(0.6)
	Capacity utilization (percent)-----	90	80	85	85	85	0.0	(0.5)
	U.S. shipments (million dollars)-----	14,022	14,122	15,392	16,163	16,971	5.0	5.3
	U.S. exports (million dollars)-----	192	221	283	297	409	37.7	19.8
	U.S. imports (million dollars)-----	284	316	346	399	373	(6.5)	8.1
	Apparent U.S. consumption (million dollars)-----	14,114	14,217	15,455	16,265	16,935	4.1	5.1
	Trade balance (million dollars)-----	(92)	(95)	(63)	(102)	36	-	-
	Ratio of imports to apparent consumption (percent)-----	2.0	2.2	2.2	2.5	2.2	(10.2)	2.8
	Ratio of exports to shipments (percent)-----	1.4	1.6	1.8	1.8	2.4	31.2	13.8
AG021	Olives:							
	Establishments (number)-----	1,385	1,390	1,395	1,400	1,405	0.4	0.4
	Employees (thousands)-----	2,000	4,500	4,600	4,600	4,800	4.3	19.4
	Capacity utilization (percent)-----	3/	3/	3/	3/	3/	-	-
	U.S. shipments (million dollars)-----	66	70	70	65	60	(7.7)	(2.6)
	U.S. exports (million dollars)-----	2	3	2	5	4	(20.0)	20.9
	U.S. imports (million dollars)-----	105	115	131	145	136	(6.2)	7.8
	Apparent U.S. consumption (million dollars)-----	169	182	199	205	192	(6.3)	3.8
	Trade balance (million dollars)-----	(103)	(112)	(129)	(140)	(132)	-	-
	Ratio of imports to apparent consumption (percent)-----	62.1	63.2	65.8	70.7	70.8	0.1	3.8
	Ratio of exports to shipments (percent)-----	3.0	4.3	2.9	7.7	6.7	(13.3)	24.1

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG022	Dried vegetables:							
	Establishments (number)-----	24	23	22	22	2/	-	-
	Employees (thousands)-----	4	4	4	4	2/	-	-
	Capacity utilization (percent)-----	92	93	95	95	2/	-	-
	U.S. production (million dollars)-----	828	844	826	825	2/	-	-
	U.S. exports (million dollars)-----	377	341	385	447	532	19.0	10.1
	U.S. imports (million dollars)-----	82	95	107	124	146	17.7	15.3
	Apparent U.S. consumption (million dollars)-----	533	598	548	502	2/	-	-
	Trade balance (million dollars)-----	295	246	278	323	386	-	-
	Ratio of imports to apparent consumption (percent)-----	15.4	15.9	19.5	24.7	2/	-	-
	Ratio of exports to production (percent)-----	45.5	40.4	46.6	54.2	2/	-	-
AG023	Mushrooms and truffles:							
	Firms (number)-----	24	23	22	20	20	0.0	(4.9)
	Employees (thousands)-----	11	11	10	2/	2/	-	-
	Capacity utilization (percent)-----	90	90	90	50	50	0.0	(16.2)
	U.S. production (million dollars)-----	400	539	545	122	133	9.0	(30.8)
	U.S. exports (million dollars)-----	5	6	8	11	30	172.7	52.0
	U.S. imports (million dollars)-----	147	156	147	160	146	(8.8)	0.1
	Apparent U.S. consumption (million dollars)-----	542	689	684	271	249	(8.1)	(22.0)
	Trade balance (million dollars)-----	(142)	(150)	(139)	(149)	(116)	-	-
	Ratio of imports to apparent consumption (percent)-----	27.1	22.6	21.5	59.0	58.6	(0.7)	28.4
	Ratio of exports to production (percent)-----	1.3	1.1	1.5	9.0	22.6	150.2	119.8
AG024	Edible nuts:							
	Establishments (number)-----	70,000	70,000	70,000	70,000	70,000	0.0	0.0
	Employees (thousands)-----	350	350	350	350	350	0.0	0.0
	Capacity utilization (percent)-----	3/	3/	3/	3/	3/	-	-
	U.S. shipments (million dollars)-----	2,040	2,157	2,218	2,137	2,421	13.3	3.4
	U.S. exports (million dollars)-----	788	846	920	886	1,018	14.9	5.7
	U.S. imports (million dollars)-----	367	382	313	344	401	16.6	0.7
	Apparent U.S. consumption (million dollars)-----	1,619	1,693	1,611	1,595	1,804	13.1	1.6
	Trade balance (million dollars)-----	421	464	607	542	617	-	-
	Ratio of imports to apparent consumption (percent)-----	22.7	22.6	19.4	21.6	22.2	3.1	(0.8)
	Ratio of exports to shipments (percent)-----	38.6	39.2	41.5	41.5	42.0	1.4	2.3

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG025	Certain tropical fruits, fresh or dried:							
	Establishments (number)-----	3,000	3,000	3,000	3,000	3,000	0.0	0.0
	Employees (thousands)-----	10	10	10	10	10	0.0	0.0
	Capacity utilization (percent)-----	3/	3/	3/	3/	3/	-	-
	U.S. shipments (million dollars)-----	75	75	80	80	90	12.5	4.4
	U.S. exports (million dollars)-----	28	41	43	42	55	31.0	14.7
	U.S. imports (million dollars)-----	799	872	895	963	1,062	10.3	6.9
	Apparent U.S. consumption (million dollars)-----	846	906	932	1,001	1,097	9.6	6.4
	Trade balance (million dollars)-----	(771)	(831)	(852)	(921)	(1,007)	-	-
	Ratio of imports to apparent consumption (percent)-----	94.4	96.2	96.0	96.2	96.8	0.6	0.5
	Ratio of exports to shipments (percent)-----	37.3	54.7	53.8	52.5	61.1	16.4	9.9
AG026	Citrus fruits:							
	Establishments (number)-----	18,115	17,796	17,477	17,200	16,900	(1.7)	(1.7)
	Employees (thousands)-----	75	75	85	80	80	0.0	2.0
	Capacity utilization (percent)-----	3/	3/	3/	3/	3/	-	-
	U.S. shipments (million dollars)-----	2,049	2,619	2,665	2,600	2,600	0.0	4.8
	U.S. exports (million dollars)-----	477	506	544	593	583	(1.7)	5.8
	U.S. imports (million dollars)-----	24	26	19	74	89	20.3	44.3
	Apparent U.S. consumption (million dollars)-----	1,596	2,139	2,140	2,081	2,106	1.2	5.4
	Trade balance (million dollars)-----	453	480	525	519	494	-	-
	Ratio of imports to apparent consumption (percent)-----	1.5	1.2	0.9	3.6	4.2	18.8	36.9
	Ratio of exports to shipments (percent)-----	23.3	19.3	20.4	22.8	22.4	(1.7)	0.9
AG027	Certain deciduous fruits, fresh:							
	Farms (number)-----	107,000	93,000	93,000	93,000	93,000	0.0	(2.8)
	Employees (thousands)-----	107	107	100	100	100	0.0	(2.0)
	Capacity utilization (percent)-----	3/	3/	3/	3/	3/	-	-
	U.S. shipments (million dollars)-----	2,024	1,937	2,301	2,219	2,519	13.5	5.9
	U.S. exports (million dollars)-----	181	212	287	302	477	57.9	25.8
	U.S. imports (million dollars)-----	123	128	121	115	114	(0.9)	(2.6)
	Apparent U.S. consumption (million dollars)-----	1,966	1,853	2,135	2,032	2,156	6.1	2.8
	Trade balance (million dollars)-----	58	84	166	187	363	-	-
	Ratio of imports to apparent consumption (percent)-----	6.3	6.9	5.7	5.7	5.3	(6.6)	(5.2)
	Ratio of exports to shipments (percent)-----	8.9	10.9	12.5	13.6	18.9	39.1	18.7

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG028	Other fresh fruits:							
	Establishments (number)-----	20,000	20,000	20,000	20,000	20,000	0.0	0.0
	Employees (thousands)-----	30	30	30	30	30	0.0	0.0
	Capacity utilization (percent)-----	3/	3/	3/	3/	3/	-	-
	U.S. shipments (million dollars)-----	500	500	500	500	600	20.0	3.7
	U.S. exports (million dollars)-----	175	199	238	225	405	80.0	19.7
	U.S. imports (million dollars)-----	287	384	428	421	506	20.2	13.0
	Apparent U.S. consumption (million dollars)-----	612	685	690	696	701	0.7	2.9
	Trade balance (million dollars)-----	(112)	(185)	(190)	(196)	(101)	-	-
	Ratio of imports to apparent consumption (percent)-----	46.9	56.1	62.0	60.5	72.2	19.3	9.8
	Ratio of exports to shipments (percent)-----	35.0	39.8	47.6	45.0	67.5	50.0	15.4
AG029	Dried fruits, other than tropical:							
	Establishments (number)-----	10,000	10,000	10,000	10,000	10,000	0.0	0.0
	Employees (thousands)-----	20	20	20	20	20	0.0	0.0
	Capacity utilization (percent)-----	3/	3/	3/	3/	3/	-	-
	U.S. shipments (million dollars)-----	305	477	600	600	700	16.7	20.8
	U.S. exports (million dollars)-----	193	227	260	276	327	18.5	13.3
	U.S. imports (million dollars)-----	23	27	30	34	33	(2.9)	10.0
	Apparent U.S. consumption (million dollars)-----	135	277	370	358	406	13.4	27.9
	Trade balance (million dollars)-----	170	200	230	242	294	-	-
	Ratio of imports to apparent consumption (percent)-----	17.0	9.7	8.1	9.5	8.1	(14.4)	(14.0)
	Ratio of exports to shipments (percent)-----	63.3	47.6	43.3	46.0	46.7	1.6	(6.2)
AG030	Fruit, uncooked, or cooked in water, frozen:							
	Establishments (number)-----	200	200	200	200	200	0.0	0.0
	Employees (thousands)-----	40	40	40	40	40	0.0	0.0
	Capacity utilization (percent)-----	3/	3/	3/	3/	3/	-	-
	U.S. shipments (million dollars)-----	514	500	500	500	500	0.0	(0.6)
	U.S. exports (million dollars)-----	16	25	28	32	42	31.3	24.3
	U.S. imports (million dollars)-----	41	54	43	47	56	19.1	5.0
	Apparent U.S. consumption (million dollars)-----	539	529	515	515	514	(0.2)	(1.2)
	Trade balance (million dollars)-----	(25)	(29)	(15)	(15)	(14)	-	-
	Ratio of imports to apparent consumption (percent)-----	7.6	10.2	8.3	9.1	10.9	19.4	6.3
	Ratio of exports to shipments (percent)-----	3.1	5.0	5.6	6.4	8.4	31.3	25.0

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG031	Jams, fruit jellies and marmalades; cooked fruit or nut purees....:							
	Establishments (number)-----	50	50	50	50	50	0.0	0.0
	Employees (thousands)-----	40	40	40	40	40	0.0	0.0
	Capacity utilization (percent)-----	3/	3/	3/	3/	3/	-	-
	U.S. shipments (million dollars)-----	600	6,900	700	700	750	7.1	(16.8)
	U.S. exports (million dollars)-----	10	14	15	17	21	23.5	18.3
	U.S. imports (million dollars)-----	40	39	44	41	43	4.9	2.0
	Apparent U.S. consumption (million dollars)-----	630	6,925	729	724	772	6.6	(16.9)
	Trade balance (million dollars)-----	(30)	(25)	(29)	(24)	(22)	-	-
	Ratio of imports to apparent consumption (percent)-----	6.3	0.6	6.0	5.7	5.6	(1.6)	22.7
	Ratio of exports to shipments (percent)-----	1.7	0.2	2.1	2.4	2.8	15.3	42.2
AG032	Canned fruits, provisionally preserved fruits and nuts, fruit flours,....:							
	Establishments (number)-----	100	100	100	100	100	0.0	0.0
	Employees (thousands)-----	40	40	40	40	40	0.0	0.0
	Capacity utilization (percent)-----	3/	3/	3/	3/	3/	-	-
	U.S. shipments (million dollars)-----	240	260	280	300	320	6.7	7.4
	U.S. exports (million dollars)-----	69	73	83	80	100	25.0	8.7
	U.S. imports (million dollars)-----	219	206	231	269	264	(1.9)	6.6
	Apparent U.S. consumption (million dollars)-----	390	393	428	489	484	(1.0)	6.7
	Trade balance (million dollars)-----	(150)	(133)	(148)	(189)	(164)	-	-
	Ratio of imports to apparent consumption (percent)-----	56.2	52.4	54.0	55.0	54.5	(0.8)	(0.1)
	Ratio of exports to shipments (percent)-----	28.8	28.1	29.6	26.7	31.3	17.2	1.2
AG033	Coffee and tea:							
	Establishments (number)-----	167	164	165	165	165	0.0	(0.2)
	Employees (thousands)-----	16	16	16	16	16	0.0	0.0
	Capacity utilization (percent)-----	89	89	87	87	88	1.1	(0.5)
	U.S. shipments (million dollars)-----	7,896	8,127	8,370	8,704	9,053	4.0	3.5
	U.S. exports (million dollars)-----	102	96	85	101	95	(5.9)	(0.9)
	U.S. imports (million dollars)-----	4,681	3,018	2,605	2,563	2,045	(20.2)	(16.6)
	Apparent U.S. consumption (million dollars)-----	12,475	11,049	10,890	11,166	11,003	(1.5)	(2.4)
	Trade balance (million dollars)-----	(4,579)	(2,922)	(2,520)	(2,462)	(1,950)	-	-
	Ratio of imports to apparent consumption (percent)-----	37.5	27.3	23.9	23.0	18.6	(19.0)	(14.6)
	Ratio of exports to shipments (percent)-----	1.3	1.2	1.0	1.2	1.0	(9.6)	(4.2)

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG034	Spices:							
	Establishments (number)-----	77	75	75	75	76	1.3	(0.3)
	Employees (thousands)-----	7	7	8	8	8	0.0	4.1
	Capacity utilization (percent)-----	77	75	75	78	78	0.0	0.7
	U.S. shipments (million dollars)-----	914	969	1,027	1,253	1,278	2.0	9.7
	U.S. exports (million dollars)-----	20	23	25	24	34	41.7	11.7
	U.S. imports (million dollars)-----	282	313	239	258	216	(16.3)	(7.0)
	Apparent U.S. consumption (million dollars)-----	1,176	1,259	1,241	1,487	1,460	(1.8)	6.2
	Trade balance (million dollars)-----	(262)	(290)	(214)	(234)	(182)	-	-
	Ratio of imports to apparent consumption (percent)-----	24.0	24.9	19.3	17.4	14.8	(14.7)	(12.4)
	Ratio of exports to shipments (percent)-----	2.2	2.4	2.4	1.9	2.7	38.9	1.8
AG035	Cereals:							
	Establishments (number)-----	575,000	574,500	574,000	576,000	576,000	0.0	0.1
	Employees (thousands)-----	2,700	2,600	2,500	2,500	2,500	0.0	(1.9)
	Capacity utilization (percent)-----	3/	3/	3/	3/	3/	-	-
	U.S. production (million dollars)-----	20,897	21,122	25,000	35,000	35,000	0.0	16.6
	U.S. exports (million dollars)-----	6,862	7,584	11,739	14,814	11,941	(19.4)	19.5
	U.S. imports (million dollars)-----	153	153	272	381	314	(17.6)	26.5
	Apparent U.S. consumption (million dollars)-----	14,188	13,691	13,533	20,567	23,373	13.6	15.1
	Trade balance (million dollars)-----	6,709	7,431	11,467	14,433	11,627	-	-
	Ratio of imports to apparent consumption (percent)-----	1.1	1.1	2.0	1.9	1.3	(27.5)	9.9
	Ratio of exports to production (percent)-----	32.8	35.9	47.0	42.3	34.1	(19.4)	2.4
AG036	Milled grains, malts, and starches:							
	Establishments (number)-----	583	583	583	583	583	0.0	0.0
	Employees (thousands)-----	35	35	35	35	35	0.0	0.0
	Capacity utilization (percent)-----	85	85	85	85	85	0.0	0.0
	U.S. production (million dollars)-----	7,949	8,267	8,300	8,300	8,300	0.0	0.9
	U.S. exports (million dollars)-----	360	318	343	466	391	(16.1)	5.6
	U.S. imports (million dollars)-----	72	76	83	115	103	(10.4)	12.0
	Apparent U.S. consumption (million dollars)-----	7,661	8,025	8,040	7,949	8,012	0.8	0.8
	Trade balance (million dollars)-----	288	242	260	351	288	-	-
	Ratio of imports to apparent consumption (percent)-----	0.9	0.9	1.0	1.4	1.3	(11.1)	11.1
	Ratio of exports to production (percent)-----	4.5	3.8	4.1	5.6	4.7	(16.1)	4.7

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG037	Oilseeds:							
	Farms (number)-----	518	503	489	475	461	(2.9)	(2.9)
	Employees (thousands)-----	2/	2/	2/	2/	2/	-	-
	Capacity utilization (percent)-----	2/	2/	2/	2/	2/	-	-
	U.S. production (million dollars)-----	11,617	10,163	12,256	12,439	11,663	(6.2)	2.1
	U.S. exports (million dollars)-----	4,458	4,443	4,928	4,088	3,706	(9.3)	(4.4)
	U.S. imports (million dollars)-----	50	45	84	162	190	17.3	48.5
	Apparent U.S. consumption (million dollars)-----	7,209	5,765	7,412	8,513	8,147	(4.3)	6.5
	Trade balance (million dollars)-----	4,408	4,398	4,844	3,926	3,516	-	-
	Ratio of imports to apparent consumption (percent)-----	0.7	0.8	1.1	1.9	2.3	22.6	39.3
	Ratio of exports to production (percent)-----	38.4	43.7	40.2	32.9	31.8	(3.3)	(6.4)
AG038	Natural gums, resins, and gum resins:							
	Firms (number)-----	12	12	12	12	12	0.0	0.0
	Employees (thousands)-----	1	1	1	1	1	0.0	0.0
	Capacity utilization (percent)-----	3/	3/	3/	3/	3/	-	-
	U.S. production (million dollars)-----	320	280	340	2/	2/	-	-
	U.S. exports (million dollars)-----	55	67	84	58	58	0.0	(0.4)
	U.S. imports (million dollars)-----	100	96	125	98	98	0.0	(0.2)
	Apparent U.S. consumption (million dollars)-----	365	309	381	2/	2/	-	-
	Trade balance (million dollars)-----	(45)	(29)	(41)	(40)	(40)	-	-
	Ratio of imports to apparent consumption (percent)-----	27.4	31.1	32.8	2/	2/	-	-
	Ratio of exports to production (percent)-----	17.2	23.9	24.7	2/	2/	-	-
AG039	Animal or vegetable fats and oils:							
	Establishments (number)-----	388	366	344	322	300	(6.8)	(6.2)
	Employees (thousands)-----	35	33	34	32	32	0.0	(2.1)
	Capacity utilization (percent)-----	81	84	87	87	84	(3.4)	1.1
	U.S. shipments (million dollars)-----	5,451	5,327	5,689	5,900	5,900	0.0	2.6
	U.S. exports (million dollars)-----	1,064	1,028	1,511	1,329	1,170	(12.0)	4.6
	U.S. imports (million dollars)-----	492	548	755	663	673	1.5	8.5
	Apparent U.S. consumption (million dollars)-----	4,879	4,847	4,933	5,234	5,403	3.2	2.8
	Trade balance (million dollars)-----	572	480	756	666	497	-	-
	Ratio of imports to apparent consumption (percent)-----	10.1	11.3	15.3	12.7	12.5	(1.7)	5.5
	Ratio of exports to shipments (percent)-----	19.5	19.3	26.6	22.5	19.8	(12.0)	1.9

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG040	Edible preparations:							
	Establishments (number)-----	5,189	5,095	5,088	5,100	5,100	0.0	(0.3)
	Employees (thousands)-----	395	394	393	395	395	0.0	0.0
	Capacity utilization (percent)-----	80	82	83	84	85	1.2	1.5
	U.S. production (million dollars)-----	64,560	72,453	77,162	83,335	89,168	7.0	8.2
	U.S. exports (million dollars)-----	590	660	777	1,013	1,440	42.2	24.8
	U.S. imports (million dollars)-----	697	756	789	873	966	10.7	8.3
	Apparent U.S. consumption (million dollars)-----	64,667	72,549	77,174	83,195	88,694	6.6	8.0
	Trade balance (million dollars)-----	(107)	(96)	(12)	140	474	-	-
	Ratio of imports to apparent consumption (percent)-----	1.1	1.0	1.0	1.0	1.1	3.8	0.3
	Ratio of exports to production (percent)-----	0.9	0.9	1.0	1.2	1.6	32.9	15.3
AG041	Cocoa, chocolate, and confectionery:							
	Establishments (number)-----	865	860	838	838	838	0.0	(0.9)
	Employees (thousands)-----	64	63	57	57	57	0.0	(3.3)
	Capacity utilization (percent)-----	73	74	75	75	75	0.0	0.7
	U.S. shipments (million dollars)-----	9,387	9,810	10,309	10,863	11,300	4.0	4.8
	U.S. exports (million dollars)-----	99	124	181	237	328	38.4	35.6
	U.S. imports (million dollars)-----	1,382	1,471	1,257	1,158	1,267	9.4	(4.0)
	Apparent U.S. consumption (million dollars)-----	10,670	11,157	11,385	11,784	12,239	3.9	3.3
	Trade balance (million dollars)-----	(1,283)	(1,347)	(1,076)	(921)	(939)	-	-
	Ratio of imports to apparent consumption (percent)-----	13.0	13.2	11.0	9.8	10.4	5.3	(7.2)
	Ratio of exports to shipments (percent)-----	1.1	1.3	1.8	2.2	2.9	33.0	29.3
AG042	Nonalcoholic beverages including fruit and vegetable juices:							
	Establishments (number)-----	100	100	100	100	100	0.0	0.0
	Employees (thousands)-----	90	90	90	90	90	0.0	0.0
	Capacity utilization (percent)-----	3/	3/	3/	3/	3/	-	-
	U.S. shipments (million dollars)-----	847	1,035	1,394	200	200	0.0	(36.4)
	U.S. exports (million dollars)-----	178	233	358	395	493	24.8	29.2
	U.S. imports (million dollars)-----	818	881	1,013	945	1,219	29.0	9.1
	Apparent U.S. consumption (million dollars)-----	1,487	1,683	2,049	750	926	23.5	(16.1)
	Trade balance (million dollars)-----	(640)	(648)	(655)	(550)	(726)	-	-
	Ratio of imports to apparent consumption (percent)-----	55.0	52.3	49.4	126.0	131.6	4.5	30.0
	Ratio of exports to shipments (percent)-----	21.0	22.5	25.7	197.5	246.5	24.8	103.3

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG043	Malt beverages:							
	Establishments (number)-----	39	32	32	32	33	3.1	(3.3)
	Employees (thousands)-----	34	32	33	32	31	(3.1)	(1.8)
	Capacity utilization (percent)-----	80	80	80	2/	2/	-	-
	U.S. shipments (million dollars)-----	12,559	13,505	13,700	14,400	14,900	3.5	4.1
	U.S. exports (million dollars)-----	38	55	66	107	139	29.9	38.5
	U.S. imports (million dollars)-----	784	882	918	839	907	8.1	2.4
	Apparent U.S. consumption (million dollars)-----	13,305	14,332	14,552	15,132	15,668	3.5	3.9
	Trade balance (million dollars)-----	(746)	(827)	(852)	(732)	(768)	-	-
	Ratio of imports to apparent consumption (percent)-----	5.9	6.2	6.3	5.5	5.8	4.4	(1.4)
	Ratio of exports to shipments (percent)-----	0.3	0.4	0.5	0.7	0.9	25.5	33.0
AG044	Wine and certain other fermented beverages:							
	Establishments (number)-----	426	458	491	480	475	(1.0)	2.7
	Employees (thousands)-----	13	14	14	14	14	(1.4)	1.2
	Capacity utilization (percent)-----	74	70	70	2/	2/	-	-
	U.S. shipments (million dollars)-----	2,940	3,009	3,391	3,830	4,127	7.8	9.6
	U.S. exports (million dollars)-----	35	61	86	99	127	28.3	35.8
	U.S. imports (million dollars)-----	1,031	1,018	955	937	924	(1.4)	(3.0)
	Apparent U.S. consumption (million dollars)-----	3,936	3,966	4,260	4,668	4,924	5.5	6.3
	Trade balance (million dollars)-----	(996)	(957)	(869)	(838)	(797)	-	-
	Ratio of imports to apparent consumption (percent)-----	26.2	25.7	22.4	20.1	18.8	(6.5)	(8.7)
	Ratio of exports to shipments (percent)-----	1.2	2.0	2.5	2.6	3.1	19.1	23.9
AG045	Distilled spirits:							
	Establishments (number)-----	53	47	44	42	40	(4.8)	(6.5)
	Employees (thousands)-----	10	9	8	8	8	(2.5)	(5.8)
	Capacity utilization (percent)-----	77	77	75	2/	2/	-	-
	U.S. shipments (million dollars)-----	3,509	3,578	3,533	3,361	3,361	0.0	(1.5)
	U.S. exports (million dollars)-----	113	133	186	227	254	11.9	24.0
	U.S. imports (million dollars)-----	1,169	1,238	1,283	1,358	1,511	11.3	6.2
	Apparent U.S. consumption (million dollars)-----	4,565	4,683	4,630	4,492	4,618	2.8	(0.2)
	Trade balance (million dollars)-----	(1,056)	(1,105)	(1,097)	(1,131)	(1,257)	-	-
	Ratio of imports to apparent consumption (percent)-----	25.6	26.4	27.7	30.2	32.7	8.2	6.4
	Ratio of exports to shipments (percent)-----	3.2	3.7	5.3	6.8	7.6	11.9	25.9

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG046	Unmanufactured tobacco:							
	Establishments (number)-----	155,000	140,000	135,000	130,000	130,000	0.0	(4.2)
	Employees (thousands)-----	2/	2/	2/	2/	2/	-	-
	Capacity utilization (percent)-----	2/	2/	2/	2/	2/	-	-
	U.S. shipments (million dollars)-----	1,829	1,951	2,184	2,400	2,700	12.5	10.4
	U.S. exports (million dollars)-----	1,209	1,090	1,252	1,341	1,441	7.5	5.7
	U.S. imports (million dollars)-----	597	620	557	550	583	6.0	(1.7)
	Apparent U.S. consumption (million dollars)-----	1,217	1,481	1,489	1,609	1,842	14.5	9.5
	Trade balance (million dollars)-----	612	470	695	791	858	-	-
	Ratio of imports to apparent consumption (percent)-----	49.1	41.9	37.4	34.2	31.7	(7.4)	(10.2)
	Ratio of exports to shipments (percent)-----	66.1	55.9	57.3	55.9	53.4	(4.5)	(4.2)
AG047	Certain manufactured tobacco products, including cigars,...:							
	Establishments (number)-----	90	50	48	40	40	0.0	(16.8)
	Employees (thousands)-----	7	6	6	5	5	0.0	(8.2)
	Capacity utilization (percent)-----	69	68	69	2/	2/	-	-
	U.S. shipments (million dollars)-----	1,208	1,244	1,257	1,250	1,300	4.0	1.5
	U.S. exports (million dollars)-----	224	262	256	263	279	6.1	4.5
	U.S. imports (million dollars)-----	69	71	64	60	63	5.0	(3.4)
	Apparent U.S. consumption (million dollars)-----	1,053	1,053	1,065	1,047	1,084	3.5	0.5
	Trade balance (million dollars)-----	155	191	192	203	216	-	-
	Ratio of imports to apparent consumption (percent)-----	6.6	6.7	6.0	5.7	5.8	1.4	(3.9)
	Ratio of exports to shipments (percent)-----	18.5	21.1	20.4	21.0	21.5	2.0	3.0
AG048	Cigarettes:							
	Establishments (number)-----	8	8	8	8	8	0.0	0.0
	Employees (thousands)-----	33	32	31	30	29	(3.3)	(3.2)
	Capacity utilization (percent)-----	97	97	97	2/	2/	-	-
	U.S. shipments (million dollars)-----	15,028	16,700	18,500	19,600	19,500	(0.5)	7.0
	U.S. exports (million dollars)-----	1,298	2,047	2,645	3,369	4,761	41.3	36.3
	U.S. imports (million dollars)-----	17	22	22	28	31	10.7	15.5
	Apparent U.S. consumption (million dollars)-----	13,747	14,675	15,877	16,259	14,770	(9.2)	2.5
	Trade balance (million dollars)-----	1,281	2,025	2,623	3,341	4,730	-	-
	Ratio of imports to apparent consumption (percent)-----	0.1	0.1	0.1	0.2	0.2	21.9	12.7
	Ratio of exports to shipments (percent)-----	8.6	12.3	14.3	17.2	24.4	42.0	27.3

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG049	Hides, skins, and leather:							
	Establishments (number)-----	1,684	1,619	1,517	1,494	1,389	(7.0)	(4.5)
	Employees (thousands)-----	18	18	18	19	19	0.0	1.6
	Capacity utilization (percent)-----	74	76	76	76	76	0.0	0.5
	U.S. shipments (million dollars)-----	3,207	3,798	4,261	4,595	4,989	8.6	11.3
	U.S. exports (million dollars)-----	1,623	1,831	2,142	2,197	2,372	8.0	9.9
	U.S. imports (million dollars)-----	483	658	866	855	788	(7.8)	13.2
	Apparent U.S. consumption (million dollars)-----	2,067	2,625	2,985	3,253	3,405	4.7	12.9
	Trade balance (million dollars)-----	1,140	1,173	1,276	1,342	1,584	-	-
	Ratio of imports to apparent consumption (percent)-----	23.4	25.1	29.0	26.3	23.1	(12.0)	0.3
	Ratio of exports to shipments (percent)-----	50.6	48.2	50.3	47.8	47.5	(0.6)	(1.3)
AG050	Furskins:							
	Establishments (number)-----	989	1,027	1,027	952	925	(2.8)	(2.1)
	Employees (thousands)-----	4	4	4	4	3	(25.0)	(5.6)
	Capacity utilization (percent)-----	72	71	78	81	76	(6.2)	2.4
	U.S. shipments (million dollars)-----	406	444	366	220	229	4.1	(16.9)
	U.S. exports (million dollars)-----	294	405	316	232	205	(11.6)	(12.0)
	U.S. imports (million dollars)-----	169	243	170	146	100	(31.5)	(14.4)
	Apparent U.S. consumption (million dollars)-----	281	282	220	134	124	(7.5)	(21.2)
	Trade balance (million dollars)-----	125	162	146	86	105	-	-
	Ratio of imports to apparent consumption (percent)-----	60.1	86.2	77.3	109.0	80.6	(26.0)	8.6
	Ratio of exports to shipments (percent)-----	72.4	91.2	86.3	105.5	89.5	(15.1)	5.9
AG051	Logs and rough wood products:							
	Establishments (number)-----	11,200	11,100	11,100	11,100	10,800	(2.7)	(0.7)
	Employees (thousands)-----	72	72	72	75	72	(4.0)	0.4
	Capacity utilization (percent)-----	82	85	85	85	80	(5.9)	(0.5)
	U.S. shipments (million dollars)-----	6,683	6,962	8,209	9,300	9,500	2.2	10.4
	U.S. exports (million dollars)-----	1,437	1,864	2,576	2,854	2,967	4.0	20.6
	U.S. imports (million dollars)-----	242	229	253	289	294	1.7	6.4
	Apparent U.S. consumption (million dollars)-----	5,488	5,327	5,886	6,735	6,827	1.4	6.9
	Trade balance (million dollars)-----	1,195	1,635	2,323	2,565	2,673	-	-
	Ratio of imports to apparent consumption (percent)-----	4.4	4.3	4.3	4.3	4.3	0.4	(0.5)
	Ratio of exports to shipments (percent)-----	21.5	26.8	31.4	30.7	31.2	1.8	9.2

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG052	Poles, piles, and posts:							
	Establishments (number)-----	105	105	110	110	110	0.0	1.4
	Employees (thousands)-----	1	1	1	1	1	0.0	0.0
	Capacity utilization (percent)-----	62	60	64	65	60	(7.7)	0.1
	U.S. shipments (million dollars)-----	118	134	143	160	160	0.0	8.2
	U.S. exports (million dollars)-----	10	13	16	9	6	(33.3)	(13.0)
	U.S. imports (million dollars)-----	12	21	21	15	11	(26.7)	(5.0)
	Apparent U.S. consumption (million dollars)-----	120	142	148	166	165	(0.6)	8.3
	Trade balance (million dollars)-----	(2)	(8)	(5)	(6)	(5)	-	-
	Ratio of imports to apparent consumption (percent)-----	10.0	14.8	14.2	9.0	6.7	(26.2)	(12.2)
	Ratio of exports to shipments (percent)-----	8.5	9.7	11.2	5.6	3.8	(33.3)	(19.6)
AG053	Lumber:							
	Establishments (number)-----	5,510	5,500	5,500	5,400	5,300	(1.9)	(1.0)
	Employees (thousands)-----	135	136	136	135	132	(2.2)	(0.5)
	Capacity utilization (percent)-----	92	93	92	90	85	(5.6)	(1.9)
	U.S. shipments (million dollars)-----	13,881	14,586	15,258	15,700	15,500	(1.3)	3.0
	U.S. exports (million dollars)-----	977	1,326	1,789	2,047	2,138	4.4	22.1
	U.S. imports (million dollars)-----	2,980	3,084	2,963	3,024	2,671	(11.7)	(2.4)
	Apparent U.S. consumption (million dollars)-----	15,884	16,344	16,432	16,677	16,033	(3.9)	0.4
	Trade balance (million dollars)-----	(2,003)	(1,758)	(1,174)	(977)	(533)	-	-
	Ratio of imports to apparent consumption (percent)-----	18.8	18.9	18.0	18.1	16.7	(8.1)	(2.7)
	Ratio of exports to shipments (percent)-----	7.0	9.1	11.7	13.0	13.8	5.8	18.6
AG054	Moldings, millwork, and joinery:							
	Establishments (number)-----	2,675	2,680	2,680	2,600	2,600	0.0	(0.9)
	Employees (thousands)-----	82	82	82	80	79	(1.3)	(1.0)
	Capacity utilization (percent)-----	83	85	84	80	75	(6.3)	(2.6)
	U.S. shipments (million dollars)-----	8,409	9,116	9,758	10,000	10,000	0.0	4.5
	U.S. exports (million dollars)-----	124	144	167	248	327	31.9	28.2
	U.S. imports (million dollars)-----	428	579	586	602	579	(3.8)	6.6
	Apparent U.S. consumption (million dollars)-----	8,713	9,551	10,177	13,540	12,520	(7.5)	11.3
	Trade balance (million dollars)-----	(304)	(435)	(419)	(354)	(252)	-	-
	Ratio of imports to apparent consumption (percent)-----	4.9	6.1	5.8	4.4	4.6	4.0	(4.2)
	Ratio of exports to shipments (percent)-----	1.5	1.6	1.7	2.5	3.3	31.9	22.7

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG055	Structural panel products:							
	Establishments (number)-----	601	606	605	600	600	0.0	(0.1)
	Employees (thousands)-----	87	88	87	86	84	(2.3)	(0.9)
	Capacity utilization (percent)-----	89	88	85	85	80	(5.9)	(2.4)
	U.S. production (million dollars)-----	8,803	8,898	8,706	9,300	9,000	(3.2)	0.9
	U.S. exports (million dollars)-----	322	432	572	643	770	19.8	23.9
	U.S. imports (million dollars)-----	870	1,032	995	1,011	993	(1.8)	2.5
	Apparent U.S. consumption (million dollars)-----	9,351	9,498	9,129	9,668	9,223	(4.6)	(0.1)
	Trade balance (million dollars)-----	(548)	(600)	(423)	(368)	(223)	-	-
	Ratio of imports to apparent consumption (percent)-----	9.3	10.9	10.9	10.5	10.8	3.0	2.6
	Ratio of exports to production (percent)-----	3.7	4.9	6.6	6.9	8.6	23.7	22.8
AG056	Wooden containers:							
	Establishments (number)-----	2,540	2,580	2,590	2,600	2,600	0.0	0.5
	Employees (thousands)-----	32	32	33	31	30	(3.2)	(1.6)
	Capacity utilization (percent)-----	83	80	80	80	75	(6.3)	(2.0)
	U.S. production (million dollars)-----	2,041	2,102	2,185	2,300	2,400	4.3	4.2
	U.S. exports (million dollars)-----	30	33	43	52	70	34.6	24.0
	U.S. imports (million dollars)-----	169	208	207	152	149	(2.0)	(5.5)
	Apparent U.S. consumption (million dollars)-----	2,180	2,277	2,349	2,400	2,479	3.3	3.1
	Trade balance (million dollars)-----	(139)	(175)	(164)	(100)	(79)	-	-
	Ratio of imports to apparent consumption (percent)-----	7.8	9.1	8.8	6.3	6.0	(5.1)	(8.4)
	Ratio of exports to production (percent)-----	1.5	1.6	2.0	2.3	2.9	29.0	18.9
AG057	Tools and tool handles of wood:							
	Establishments (number)-----	138	139	138	138	136	(1.4)	(0.4)
	Employees (thousands)-----	3	3	3	3	3	0.0	0.0
	Capacity utilization (percent)-----	72	75	75	75	70	(6.7)	(0.6)
	U.S. shipments (million dollars)-----	142	149	150	155	150	(3.2)	1.5
	U.S. exports (million dollars)-----	4	5	7	11	13	18.2	37.0
	U.S. imports (million dollars)-----	91	106	108	77	75	(2.6)	(6.8)
	Apparent U.S. consumption (million dollars)-----	229	250	251	221	212	(4.1)	(2.7)
	Trade balance (million dollars)-----	(87)	(101)	(101)	(66)	(62)	-	-
	Ratio of imports to apparent consumption (percent)-----	39.7	42.4	43.0	34.8	35.4	1.5	(4.2)
	Ratio of exports to shipments (percent)-----	2.8	3.4	4.7	7.1	8.7	22.1	34.9

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG058	Miscellaneous articles of wood:							
	Establishments (number)-----	660	680	685	680	680	0.0	0.6
	Employees (thousands)-----	31	32	32	32	30	(6.3)	(0.7)
	Capacity utilization (percent)-----	72	75	75	75	70	(6.7)	(0.6)
	U.S. shipments (million dollars)-----	2,100	2,200	2,290	2,400	2,400	0.0	3.6
	U.S. exports (million dollars)-----	83	100	114	123	155	26.0	15.7
	U.S. imports (million dollars)-----	217	278	299	367	378	3.0	14.9
	Apparent U.S. consumption (million dollars)-----	2,234	2,378	2,475	2,644	2,623	(0.8)	4.4
	Trade balance (million dollars)-----	(134)	(178)	(185)	(244)	(223)	-	-
	Ratio of imports to apparent consumption (percent)-----	9.7	11.7	12.1	13.9	14.4	3.8	10.1
	Ratio of exports to shipments (percent)-----	4.0	4.5	5.0	5.1	6.5	26.0	11.7
AG059	Cork and rattan:							
	Establishments (number)-----	28	31	35	35	30	(14.3)	2.6
	Employees (thousands)-----	2	2	2	2	2	0.0	0.0
	Capacity utilization (percent)-----	72	75	75	75	70	(6.7)	(0.6)
	U.S. shipments (million dollars)-----	39	45	60	60	60	0.0	12.2
	U.S. exports (million dollars)-----	7	10	13	25	38	52.0	53.7
	U.S. imports (million dollars)-----	228	272	293	322	318	(1.2)	8.7
	Apparent U.S. consumption (million dollars)-----	260	307	340	357	340	(4.8)	7.1
	Trade balance (million dollars)-----	(221)	(262)	(280)	(297)	(280)	-	-
	Ratio of imports to apparent consumption (percent)-----	87.7	88.6	86.2	90.2	93.5	3.7	1.5
	Ratio of exports to shipments (percent)-----	17.9	22.2	21.7	41.7	63.3	52.0	37.0
AG060	Pulp and wastepaper:							
	Establishments (number)-----	29	29	29	29	28	(3.4)	(0.7)
	Employees (thousands)-----	16	17	17	17	17	0.0	1.2
	Capacity utilization (percent)-----	96	96	95	90	85	(5.6)	(3.0)
	U.S. shipments (million dollars)-----	6,200	7,400	9,000	10,200	9,500	(6.9)	12.5
	U.S. exports (million dollars)-----	2,159	2,905	3,732	4,362	4,056	(7.0)	18.1
	U.S. imports (million dollars)-----	1,618	2,096	2,642	3,084	2,886	(6.4)	16.7
	Apparent U.S. consumption (million dollars)-----	5,659	6,591	7,910	8,922	8,330	(6.6)	11.4
	Trade balance (million dollars)-----	541	809	1,090	1,278	1,170	-	-
	Ratio of imports to apparent consumption (percent)-----	28.6	31.8	33.4	34.6	34.6	0.2	4.8
	Ratio of exports to shipments (percent)-----	34.8	39.3	41.5	42.8	42.7	(0.2)	5.1

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG061	Building papers and asphalt roofing shingles:							
	Establishments (number)-----	50	50	50	50	50	0.0	0.0
	Employees (thousands)-----	6	6	6	6	6	0.0	0.0
	Capacity utilization (percent)-----	80	80	80	80	70	(12.5)	(2.6)
	U.S. shipments (million dollars)-----	1,300	1,200	1,200	1,200	1,200	0.0	(1.6)
	U.S. exports (million dollars)-----	5	8	8	12	7	(41.7)	11.4
	U.S. imports (million dollars)-----	102	111	112	59	52	(11.9)	(18.0)
	Apparent U.S. consumption (million dollars)-----	1,397	1,303	1,304	1,247	1,245	(0.2)	(2.7)
	Trade balance (million dollars)-----	(97)	(103)	(104)	(47)	(45)	-	-
	Ratio of imports to apparent consumption (percent)-----	7.3	8.5	8.6	4.7	4.2	(11.7)	(15.7)
	Ratio of exports to shipments (percent)-----	0.4	0.7	0.7	1.0	0.6	(41.7)	13.2
AG062	Paper boxes and bags:							
	Establishments (number)-----	2,600	2,600	2,600	2,600	2,600	0.0	0.0
	Employees (thousands)-----	212	214	215	215	215	0.0	0.3
	Capacity utilization (percent)-----	94	96	95	95	90	(5.3)	(1.0)
	U.S. shipments (million dollars)-----	25,800	27,400	30,000	32,000	31,000	(3.1)	5.4
	U.S. exports (million dollars)-----	156	197	282	372	473	27.2	33.0
	U.S. imports (million dollars)-----	102	129	153	192	225	17.2	21.9
	Apparent U.S. consumption (million dollars)-----	25,746	27,332	29,871	31,820	30,752	(3.4)	5.2
	Trade balance (million dollars)-----	54	68	129	180	248	-	-
	Ratio of imports to apparent consumption (percent)-----	0.4	0.5	0.5	0.6	0.7	21.3	15.9
	Ratio of exports to shipments (percent)-----	0.6	0.7	0.9	1.2	1.5	31.3	26.3
AG063	Industrial papers and paperboards:							
	Establishments (number)-----	700	700	700	700	700	0.0	0.0
	Employees (thousands)-----	160	160	160	160	160	0.0	0.0
	Capacity utilization (percent)-----	94	96	95	95	90	(5.3)	(1.0)
	U.S. shipments (million dollars)-----	35,000	38,000	42,000	49,000	49,000	0.0	9.7
	U.S. exports (million dollars)-----	1,587	1,942	2,258	2,412	2,813	16.6	14.6
	U.S. imports (million dollars)-----	607	750	848	1,028	946	(8.0)	12.8
	Apparent U.S. consumption (million dollars)-----	34,020	36,808	40,590	47,616	47,133	(1.0)	9.5
	Trade balance (million dollars)-----	980	1,192	1,410	1,384	1,867	-	-
	Ratio of imports to apparent consumption (percent)-----	1.8	2.0	2.1	2.2	2.0	(7.0)	3.0
	Ratio of exports to shipments (percent)-----	4.5	5.1	5.4	4.9	5.7	16.6	4.4

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG064	Newsprint and other printing and writing papers:							
	Establishments (number)-----	150	150	150	150	150	0.0	0.0
	Employees (thousands)-----	140	140	140	143	143	0.0	0.6
	Capacity utilization (percent)-----	97	94	95	93	93	(0.5)	(1.1)
	U.S. shipments (million dollars)-----	15,500	16,250	19,500	23,750	24,750	4.2	14.1
	U.S. exports (million dollars)-----	374	443	595	832	982	18.0	29.2
	U.S. imports (million dollars)-----	4,883	5,574	6,414	6,570	6,530	(0.6)	7.7
	Apparent U.S. consumption (million dollars)-----	20,009	21,381	25,319	29,488	30,298	2.7	12.2
	Trade balance (million dollars)-----	(4,509)	(5,131)	(5,819)	(5,738)	(5,548)	-	-
	Ratio of imports to apparent consumption (percent)-----	24.4	26.1	25.3	22.3	21.6	(3.3)	(4.0)
	Ratio of exports to shipments (percent)-----	2.4	2.7	3.1	3.5	4.0	13.3	13.3
AG065	Certain specialty papers:							
	Establishments (number)-----	350	350	350	350	2/	-	-
	Employees (thousands)-----	41	42	44	41	41	0.0	(0.2)
	Capacity utilization (percent)-----	95	94	95	93	91	(1.5)	(1.0)
	U.S. shipments (million dollars)-----	4,500	4,700	4,550	4,825	4,800	(0.5)	1.6
	U.S. exports (million dollars)-----	163	202	261	216	332	53.7	16.1
	U.S. imports (million dollars)-----	343	407	436	419	450	7.4	5.9
	Apparent U.S. consumption (million dollars)-----	4,680	4,905	4,725	5,028	4,918	(2.2)	1.2
	Trade balance (million dollars)-----	(180)	(205)	(175)	(203)	(118)	-	-
	Ratio of imports to apparent consumption (percent)-----	7.3	8.3	9.2	8.3	9.2	9.8	4.6
	Ratio of exports to shipments (percent)-----	3.6	4.3	5.7	4.5	6.9	54.5	14.3
AG066	Miscellaneous paper products:							
	Establishments (number)-----	2550	2600	2600	2,600	2/	-	-
	Employees (thousands)-----	184	186	188	190	192	1.1	1.1
	Capacity utilization (percent)-----	87	85	2/	92	91	(1.1)	1.7
	U.S. shipments (million dollars)-----	16,700	18,000	19,000	20,500	20,850	1.7	5.9
	U.S. exports (million dollars)-----	303	366	450	442	478	8.1	11.6
	U.S. imports (million dollars)-----	278	328	367	328	q	(100.0)	-
	Apparent U.S. consumption (million dollars)-----	16,675	17,962	18,917	20,386	20,372	(0.1)	5.4
	Trade balance (million dollars)-----	25	38	83	114	478	-	-
	Ratio of imports to apparent consumption (percent)-----	1.7	1.8	1.9	1.6	0.0	(100.0)	-
	Ratio of exports to shipments (percent)-----	1.8	2.0	2.4	2.2	2.3	6.3	5.4

Table B-1

Agricultural, animal, and vegetable products sector and forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
AG067	Printed matter:							
	Establishments (number)-----	53,000	53,000	53,000	53,000	60,000	13.2	2.5
	Employees (thousands)-----	1,400	1,450	1,400	1,400	1,500	7.1	1.0
	Capacity utilization (percent)-----	87	87	3/	3/	3/	-	-
	U.S. shipments (million dollars)-----	120,000	129,000	140,000	153,700	161,500	5.1	8.0
	U.S. exports (million dollars)-----	1,310	1,527	1,867	2,569	3,072	19.6	24.9
	U.S. imports (million dollars)-----	1,356	1,457	1,544	1,566	1,616	3.2	4.3
	Apparent U.S. consumption (million dollars)-----	120,046	128,930	139,677	152,697	160,044	4.8	7.7
	Trade balance (million dollars)-----	(46)	70	323	1,003	1,456	-	-
	Ratio of imports to apparent consumption (percent)-----	1.1	1.1	1.1	1.0	1.0	(1.5)	(3.2)
	Ratio of exports to shipments (percent)-----	1.1	1.2	1.3	1.7	1.9	13.8	15.7

1/ The figure shown represents the compound rate of change of a trend line plotted through 1986-1990 data using linear regression.

2/ Not available.

3/ Capacity utilization is not meaningful in this agricultural industry.

4/ Less than \$0.5 million.

5/ Does not reflect changes in inventory.

Table B-2

Fibers, textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
	Textiles, apparel, and footwear:							
TX001	Textile fibers and waste: 2/							
	Establishments (number)-----	2/	2/	2/	2/	2/	-	-
	Employees (thousands)-----	2/	2/	2/	2/	2/	-	-
	Capacity utilization (percent)-----	2/	2/	2/	2/	2/	-	-
	U.S. shipments (million dollars)-----	7,885	6,996	9,325	8,850	10,267	16.0	7.9
	U.S. exports (million dollars)-----	1,230	2,162	2,588	3,091	3,641	17.8	28.8
	U.S. imports (million dollars)-----	404	476	580	634	597	(5.8)	11.3
	Apparent U.S. consumption (million dollars)-----	7,059	5,310	7,317	6,393	7,223	13.0	2.3
	Trade balance (million dollars)-----	6,655	4,834	2,008	2,457	3,044	-	-
	Ratio of imports to apparent consumption (percent)-----	5.7	9.0	7.9	9.9	8.3	(16.7)	8.7
	Ratio of exports to shipments (percent)-----	15.6	30.9	27.8	34.9	35.5	1.5	19.3
TX002	Spun yarns:							
	Establishments (number)-----	392	414	432	470	470	0.0	5.0
	Employees (thousands)-----	74	78	77	75	72	(4.0)	(0.9)
	Capacity utilization (percent)-----	84	85	86	85	83	(2.4)	(0.2)
	U.S. shipments (million dollars)-----	5,958	7,111	7,626	7,707	7,553	(2.0)	5.7
	U.S. exports (million dollars)-----	114	168	230	242	306	26.4	26.4
	U.S. imports (million dollars)-----	325	372	312	309	248	(19.7)	(7.0)
	Apparent U.S. consumption (million dollars)-----	6,169	7,315	7,708	7,774	7,495	(3.6)	4.6
	Trade balance (million dollars)-----	(211)	(204)	(82)	(67)	58	-	-
	Ratio of imports to apparent consumption (percent)-----	5.3	5.1	4.0	4.0	3.3	(16.8)	(11.1)
	Ratio of exports to shipments (percent)-----	1.9	2.4	3.0	3.1	4.1	29.0	19.5
TX003	Filament yarns:							
	Establishments (number)-----	205	209	217	217	216	(0.5)	1.4
	Employees (thousands)-----	49	56	56	56	55	(1.8)	2.3
	Capacity utilization (percent)-----	78	93	93	86	80	(7.0)	(0.3)
	U.S. shipments (million dollars)-----	6,835	7,332	7,672	8,063	8,228	2.0	4.8
	U.S. exports (million dollars)-----	538	558	748	647	776	19.9	9.2
	U.S. imports (million dollars)-----	244	229	250	332	335	0.9	10.6
	Apparent U.S. consumption (million dollars)-----	6,541	7,003	7,174	7,748	7,787	0.5	4.6
	Trade balance (million dollars)-----	294	329	498	315	441	-	-
	Ratio of imports to apparent consumption (percent)-----	3.7	3.3	3.5	4.3	4.3	0.4	5.7
	Ratio of exports to shipments (percent)-----	7.9	7.6	9.7	8.0	9.4	17.5	4.2

Table B-2

Fibers, textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
TX004	Miscellaneous yarns:							
	Establishments (number) 3/-----	62	59	59	61	58	(4.9)	(1.0)
	Employees (thousands) 3/-----	6	7	7	7	7	0.0	3.1
	Capacity utilization (percent) 3/-----	73	84	88	85	88	3.5	3.9
	U.S. shipments (million dollars)-----	668	775	888	880	890	1.1	7.3
	U.S. exports (million dollars)-----	69	78	103	77	107	39.0	9.0
	U.S. imports (million dollars)-----	33	39	37	42	48	14.3	8.6
	Apparent U.S. consumption (million dollars)-----	632	736	822	845	831	(1.7)	7.1
	Trade balance (million dollars)-----	36	39	66	35	59	-	-
	Ratio of imports to apparent consumption (percent)-----	5.2	5.3	4.5	5.0	5.8	16.2	1.4
	Ratio of exports to shipments (percent)-----	10.3	10.1	11.6	8.8	12.0	37.4	1.6
TX005	Broadwoven fabrics:							
	Establishments (number)-----	1,008	1,063	1,107	1,082	1,039	(4.0)	0.8
	Employees (thousands)-----	209	211	211	203	195	(3.9)	(1.8)
	Capacity utilization (percent)-----	87	91	85	89	89	0.0	0.2
	U.S. shipments (million dollars)-----	12,185	12,839	12,904	12,730	13,132	3.2	1.4
	U.S. exports (million dollars)-----	692	752	833	993	1,236	24.5	15.5
	U.S. imports (million dollars)-----	2,406	2,729	2,486	2,608	2,657	1.9	1.5
	Apparent U.S. consumption (million dollars)-----	13,899	14,816	14,557	14,345	14,553	1.4	0.6
	Trade balance (million dollars)-----	(1,714)	(1,977)	(1,653)	(1,615)	(1,421)	-	-
	Ratio of imports to apparent consumption (percent)-----	17.3	18.4	17.1	18.2	18.3	0.4	0.9
	Ratio of exports to shipments (percent)-----	5.7	5.9	6.5	7.8	9.4	20.7	13.8
TX006	Knit fabrics:							
	Establishments (number)-----	484	467	536	525	4/	-	-
	Employees (thousands)-----	38	41	44	43	44	2.3	3.5
	Capacity utilization (percent)-----	73	71	74	75	72	(4.0)	0.3
	U.S. shipments (million dollars)-----	4,096	5,502	5,492	5,679	5,792	2.0	7.5
	U.S. exports (million dollars)-----	99	102	74	121	218	80.2	19.1
	U.S. imports (million dollars)-----	78	99	102	117	144	23.1	14.9
	Apparent U.S. consumption (million dollars)-----	4,075	5,499	5,520	5,675	5,718	0.8	7.3
	Trade balance (million dollars)-----	21	3	(28)	4	74	-	-
	Ratio of imports to apparent consumption (percent)-----	1.9	1.8	1.8	2.1	2.5	22.2	7.1
	Ratio of exports to shipments (percent)-----	2.4	1.9	1.3	2.1	3.8	76.7	10.8

Table B-2

Fibers, textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
TX007	Miscellaneous fabrics:							
	Establishments (number) 5/-----	369	363	372	377	375	(0.5)	0.7
	Employees (thousands) 5/-----	22	23	24	25	24	(4.0)	2.6
	Capacity utilization (percent) 5/-----	67	75	75	76	77	1.3	3.0
	U.S. shipments (million dollars) 5/-----	599	691	730	766	790	3.1	6.8
	U.S. exports (million dollars)-----	54	63	87	117	147	25.6	30.0
	U.S. imports (million dollars)-----	57	65	69	91	90	(1.1)	13.3
	Apparent U.S. consumption (million dollars)-----	602	693	712	740	733	(0.9)	4.7
	Trade balance (million dollars)-----	(3)	(2)	18	26	57	-	-
	Ratio of imports to apparent consumption (percent)-----	9.5	9.4	9.7	12.3	12.3	(0.2)	8.2
	Ratio of exports to shipments (percent)-----	9.0	9.1	11.9	15.3	18.6	21.8	21.7
TX008	Coated, covered, impregnated or laminated textile fabrics:							
	Establishments (number)-----	380	380	390	392	395	0.8	1.1
	Employees (thousands)-----	22	22	22	19	20	5.3	(3.3)
	Capacity utilization (percent)-----	46	50	50	50	50	0.0	1.7
	U.S. shipments (million dollars)-----	2,091	2,125	2,200	2,300	2,400	4.3	3.6
	U.S. exports (million dollars)-----	218	248	321	239	287	20.1	5.3
	U.S. imports (million dollars)-----	115	145	151	172	185	7.6	11.9
	Apparent U.S. consumption (million dollars)-----	1,988	2,022	2,030	2,233	2,298	2.9	4.0
	Trade balance (million dollars)-----	103	103	170	67	102	-	-
	Ratio of imports to apparent consumption (percent)-----	5.8	7.2	7.4	7.7	8.1	4.5	7.6
	Ratio of exports to shipments (percent)-----	10.4	11.7	14.6	10.4	12.0	15.1	1.6
TX009	Nonwoven fabrics:							
	Establishments (number)-----	51	50	52	52	52	0.0	0.8
	Employees (thousands)-----	6	6	6	6	6	0.0	0.0
	Capacity utilization (percent)-----	69	75	80	80	80	0.0	3.7
	U.S. shipments (million dollars)-----	1,600	2,000	2,152	2,260	2,373	5.0	9.5
	U.S. exports (million dollars)-----	76	82	107	243	357	46.9	51.9
	U.S. imports (million dollars)-----	38	47	70	142	161	13.4	49.1
	Apparent U.S. consumption (million dollars)-----	1,562	1,965	2,115	2,159	2,177	0.8	7.9
	Trade balance (million dollars)-----	38	35	37	101	196	-	-
	Ratio of imports to apparent consumption (percent)-----	2.4	2.4	3.3	6.6	7.4	12.4	38.2
	Ratio of exports to shipments (percent)-----	4.8	4.1	5.0	10.8	15.0	39.9	38.7

Table B-2

Fibers, textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
TX010	Cordage, nets, and netting:							
	Establishments (number)-----	187	191	193	205	200	(2.4)	2.1
	Employees (thousands)-----	8	8	8	8	8	0.0	0.0
	Capacity utilization (percent)-----	62	60	60	60	60	0.0	(0.7)
	U.S. shipments (million dollars)-----	378	370	400	410	400	(2.4)	2.2
	U.S. exports (million dollars)-----	15	15	20	32	44	37.5	33.8
	U.S. imports (million dollars)-----	102	116	138	127	137	7.9	7.0
	Apparent U.S. consumption (million dollars)-----	465	471	518	505	493	(2.4)	1.9
	Trade balance (million dollars)-----	(87)	(101)	(118)	(95)	(93)	-	-
	Ratio of imports to apparent consumption (percent)-----	21.9	24.6	26.6	25.1	27.8	10.5	5.1
	Ratio of exports to shipments (percent)-----	4.0	4.1	5.0	7.8	11.0	40.9	30.9
TX011	Certain textile articles and fabrics suitable for industrial use:							
	Establishments (number)-----	214	215	210	212	205	(3.3)	(1.0)
	Employees (thousands)-----	19	19	19	20	19	(5.0)	0.5
	Capacity utilization (percent)-----	62	62	60	60	60	0.0	(1.0)
	U.S. shipments (million dollars)-----	2,685	2,800	2,915	3,100	3,050	(1.6)	3.6
	U.S. exports (million dollars)-----	152	171	163	153	184	20.3	2.7
	U.S. imports (million dollars)-----	60	68	86	112	135	20.5	23.6
	Apparent U.S. consumption (million dollars)-----	2,593	2,697	2,838	3,059	3,001	(1.9)	4.3
	Trade balance (million dollars)-----	92	103	77	41	49	-	-
	Ratio of imports to apparent consumption (percent)-----	2.3	2.5	3.0	3.7	4.5	22.9	18.6
	Ratio of exports to shipments (percent)-----	5.7	6.1	5.6	4.9	6.0	22.2	(0.9)
TX012	Miscellaneous textiles and articles:							
	Establishments (number)-----	2,449	2,462	2,660	2,660	4/	-	-
	Employees (thousands)-----	57	57	57	56	4/	-	-
	Capacity utilization (percent)-----	4/	4/	4/	4/	4/	-	-
	U.S. shipments (million dollars)-----	3,479	3,464	3,724	3,687	4/	-	-
	U.S. exports (million dollars)-----	423	486	547	463	526	13.6	3.9
	U.S. imports (million dollars)-----	564	620	645	525	700	33.3	2.7
	Apparent U.S. consumption (million dollars)-----	3,620	3,598	3,822	62	4/	-	-
	Trade balance (million dollars)-----	(141)	(134)	(98)	(62)	(174)	-	-
	Ratio of imports to apparent consumption (percent)-----	15.6	17.2	16.9	846.8	4/	-	-
	Ratio of exports to shipments (percent)-----	12.2	14.0	14.7	12.6	4/	-	-

Table B-2

Fibers, textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
TX013	Sacks and bags of textile materials:							
	Establishments (number)-----	114	119	125	122	125	2.5	2.1
	Employees (thousands)-----	4	4	5	5	5	0.0	6.9
	Capacity utilization (percent)-----	74	70	70	70	70	0.0	(1.1)
	U.S. shipments (million dollars)-----	250	260	280	290	280	(3.4)	3.4
	U.S. exports (million dollars)-----	10	12	18	12	15	25.0	8.4
	U.S. imports (million dollars)-----	13	17	27	30	41	36.7	33.2
	Apparent U.S. consumption (million dollars)-----	253	265	289	308	306	(0.6)	5.5
	Trade balance (million dollars)-----	(3)	(5)	(9)	(18)	(26)	-	-
	Ratio of imports to apparent consumption (percent)-----	5.1	6.4	9.3	9.7	13.4	37.6	26.3
	Ratio of exports to shipments (percent)-----	4.0	4.6	6.4	4.1	5.4	29.5	4.9
TX014	Carpets and rugs:							
	Establishments (number)-----	556	550	570	580	580	0.0	1.4
	Employees (thousands)-----	55	54	59	57	59	3.5	2.0
	Capacity utilization (percent)-----	77	81	81	81	81	0.0	1.0
	U.S. shipments (million dollars)-----	8,371	8,807	9,247	10,666	10,911	2.3	7.5
	U.S. exports (million dollars)-----	181	217	332	383	551	43.9	32.2
	U.S. imports (million dollars)-----	614	689	609	613	598	(2.4)	(1.7)
	Apparent U.S. consumption (million dollars)-----	8,804	9,279	9,524	10,896	10,958	0.6	6.2
	Trade balance (million dollars)-----	(433)	(472)	(277)	(230)	(47)	-	-
	Ratio of imports to apparent consumption (percent)-----	7.0	7.4	6.4	5.6	5.5	(3.0)	(7.4)
	Ratio of exports to shipments (percent)-----	2.2	2.5	3.6	3.6	5.0	40.6	23.0
TX015	Curtains and draperies:							
	Establishments (number)-----	984	1,011	1,027	1,003	1,003	0.0	0.3
	Employees (thousands)-----	25	26	25	26	26	0.0	0.8
	Capacity utilization (percent)-----	71	78	78	78	75	(3.8)	1.1
	U.S. shipments (million dollars)-----	1,287	1,307	1,326	1,500	1,400	(6.7)	3.1
	U.S. exports (million dollars)-----	7	8	9	7	14	100.0	13.3
	U.S. imports (million dollars)-----	41	42	47	63	58	(7.9)	11.6
	Apparent U.S. consumption (million dollars)-----	1,321	1,341	1,364	1,556	1,444	(7.2)	3.3
	Trade balance (million dollars)-----	(34)	(34)	(38)	(56)	(44)	-	-
	Ratio of imports to apparent consumption (percent)-----	3.1	3.1	3.4	4.0	4.0	(0.8)	8.0
	Ratio of exports to shipments (percent)-----	0.5	0.6	0.7	0.5	1.0	114.3	9.9

Table B-2

Fibers, textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
TX016	Bedding, linens, and miscellaneous furnishings:							
	Establishments (number)-----	1,228	1,228	1,065	1,025	1,025	0.0	(5.3)
	Employees (thousands)-----	69	68	69	66	66	0.0	(1.2)
	Capacity utilization (percent)-----	71	78	78	78	78	0.0	1.9
	U.S. shipments (million dollars)-----	7,864	8,471	8,979	7,402	7,778	5.1	(1.6)
	U.S. exports (million dollars)-----	79	89	120	139	182	30.9	23.6
	U.S. imports (million dollars)-----	521	584	606	667	695	4.2	7.3
	Apparent U.S. consumption (million dollars)-----	8,306	8,966	9,465	7,930	8,291	4.6	(1.3)
	Trade balance (million dollars)-----	(442)	(495)	(486)	(528)	(513)	-	-
	Ratio of imports to apparent consumption (percent)-----	6.3	6.5	6.4	8.4	8.4	(0.3)	8.7
	Ratio of exports to shipments (percent)-----	1.0	1.1	1.3	1.9	2.3	24.6	25.5
TX017	Men's and boys' suits and sport coats:							
	Establishments (number)-----	400	398	393	355	317	(10.7)	(5.6)
	Employees (thousands)-----	56	55	55	52	49	(5.8)	(3.2)
	Capacity utilization (percent)-----	78	89	82	82	76	(7.3)	(1.3)
	U.S. shipments (million dollars)-----	2,412	2,310	2,521	2,496	2,396	(4.0)	0.6
	U.S. exports (million dollars)-----	24	42	53	51	73	43.1	27.4
	U.S. imports (million dollars)-----	421	462	524	576	508	(11.8)	6.1
	Apparent U.S. consumption (million dollars)-----	2,809	2,730	2,992	3,021	2,831	(6.3)	1.2
	Trade balance (million dollars)-----	(397)	(420)	(471)	(525)	(435)	-	-
	Ratio of imports to apparent consumption (percent)-----	15.0	16.9	17.5	19.1	17.9	(5.9)	4.9
	Ratio of exports to shipments (percent)-----	1.0	1.8	2.1	2.0	3.0	49.1	26.6
TX018	Men's and boys' coats and jackets:							
	Establishments (number)-----	427	427	424	423	402	(5.0)	(1.3)
	Employees (thousands)-----	29	29	29	29	28	(3.4)	(0.7)
	Capacity utilization (percent)-----	78	89	82	79	73	(7.6)	(2.5)
	U.S. shipments (million dollars)-----	1,057	1,184	1,234	1,002	952	(5.0)	(3.7)
	U.S. exports (million dollars)-----	17	33	45	31	51	64.5	23.8
	U.S. imports (million dollars)-----	614	711	851	917	1,062	15.8	14.5
	Apparent U.S. consumption (million dollars)-----	1,654	1,862	2,040	1,888	1,963	4.0	3.6
	Trade balance (million dollars)-----	(597)	(678)	(806)	(886)	(1,011)	-	-
	Ratio of imports to apparent consumption (percent)-----	37.1	38.2	41.7	48.6	54.1	11.4	10.5
	Ratio of exports to shipments (percent)-----	1.6	2.8	3.6	3.1	5.4	73.2	28.5

Table B-2

Fibers, textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
TX019	Trousers:							
	Establishments (number)-----	3,358	3,534	3,640	3,604	3,424	(5.0)	0.6
	Employees (thousands)-----	223	225	225	221	210	(5.0)	(1.4)
	Capacity utilization (percent)-----	77	83	87	83	79	(4.8)	0.5
	U.S. shipments (million dollars)-----	8,755	8,989	9,809	9,760	9,272	(5.0)	2.0
	U.S. exports (million dollars)-----	147	216	321	563	685	21.7	49.7
	U.S. imports (million dollars)-----	2,627	3,174	3,504	4,334	4,674	7.8	15.8
	Apparent U.S. consumption (million dollars)-----	11,235	11,947	12,992	13,531	13,261	(2.0)	4.7
	Trade balance (million dollars)-----	(2,480)	(2,958)	(3,183)	(3,771)	(3,989)	-	-
	Ratio of imports to apparent consumption (percent)-----	23.4	26.6	27.0	32.0	35.2	10.0	10.6
	Ratio of exports to shipments (percent)-----	1.7	2.4	3.3	5.8	7.4	28.1	46.8
TX020	Shirts and blouses:							
	Establishments (number)-----	1,900	1,839	1,690	1,651	1,568	(5.0)	(4.8)
	Employees (thousands)-----	145	141	126	121	115	(5.0)	(6.0)
	Capacity utilization (percent)-----	87	91	92	87	79	(9.2)	(2.4)
	U.S. shipments (million dollars)-----	7,257	7,737	8,685	8,607	8,435	(2.0)	4.2
	U.S. exports (million dollars)-----	139	197	247	330	410	24.2	30.7
	U.S. imports (million dollars)-----	5,024	5,956	5,849	6,781	7,135	5.2	8.7
	Apparent U.S. consumption (million dollars)-----	12,142	13,496	14,287	15,058	15,160	0.7	5.7
	Trade balance (million dollars)-----	(4,885)	(5,759)	(5,602)	(6,451)	(6,725)	-	-
	Ratio of imports to apparent consumption (percent)-----	41.4	44.1	40.9	45.0	47.1	4.5	2.8
	Ratio of exports to shipments (percent)-----	1.9	2.5	2.8	3.8	4.9	26.8	25.5
TX021	Sweaters:							
	Establishments (number)-----	427	443	454	415	394	(5.1)	(2.2)
	Employees (thousands)-----	28	29	29	23	22	(4.3)	(6.9)
	Capacity utilization (percent)-----	93	77	82	73	68	(6.8)	(6.6)
	U.S. shipments (million dollars)-----	1,226	1,303	1,113	1,019	968	(5.0)	(6.9)
	U.S. exports (million dollars)-----	4	7	9	15	19	26.7	47.4
	U.S. imports (million dollars)-----	2,531	2,761	2,296	2,675	2,111	(21.1)	(3.9)
	Apparent U.S. consumption (million dollars)-----	3,753	4,057	3,400	3,679	3,060	(16.8)	(4.9)
	Trade balance (million dollars)-----	(2,527)	(2,754)	(2,287)	(2,660)	(2,092)	-	-
	Ratio of imports to apparent consumption (percent)-----	67.4	68.1	67.5	72.7	69.0	(5.1)	1.1
	Ratio of exports to shipments (percent)-----	0.3	0.5	0.8	1.5	2.0	33.3	58.3

Table B-2

Fibers, textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
TX022	Women's and girls' suits, skirts, and coats:							
	Establishments (number)-----	1,143	1,086	1,062	1,376	1,307	(5.0)	5.2
	Employees (thousands)-----	54	51	49	55	52	(5.5)	0.0
	Capacity utilization (percent)-----	60	73	60	60	56	(6.7)	(3.3)
	U.S. shipments (million dollars)-----	3,469	3,569	3,542	3,507	3,401	(3.0)	(0.6)
	U.S. exports (million dollars)-----	50	59	83	120	164	36.7	36.1
	U.S. imports (million dollars)-----	1,739	2,184	2,123	2,203	2,560	16.2	8.1
	Apparent U.S. consumption (million dollars)-----	5,158	5,694	5,582	5,590	5,797	3.7	2.2
	Trade balance (million dollars)-----	(1,689)	(2,125)	(2,040)	(2,083)	(2,396)	-	-
	Ratio of imports to apparent consumption (percent)-----	33.7	38.4	38.0	39.4	44.2	12.0	5.8
	Ratio of exports to shipments (percent)-----	1.4	1.7	2.3	3.4	4.8	40.9	36.9
TX023	Women's and girls' dresses:							
	Establishments (number)-----	3,285	3,170	3,040	3,009	2,859	(5.0)	(3.2)
	Employees (thousands)-----	107	101	100	104	99	(4.8)	(1.3)
	Capacity utilization (percent)-----	70	73	73	71	66	(7.0)	(1.4)
	U.S. shipments (million dollars)-----	3,867	4,572	4,324	4,384	4,296	(2.0)	1.7
	U.S. exports (million dollars)-----	36	34	51	42	51	21.4	9.5
	U.S. imports (million dollars)-----	664	773	826	882	965	9.4	9.2
	Apparent U.S. consumption (million dollars)-----	4,495	5,311	5,099	5,224	5,210	(0.3)	2.8
	Trade balance (million dollars)-----	(628)	(739)	(775)	(840)	(914)	-	-
	Ratio of imports to apparent consumption (percent)-----	14.8	14.6	16.2	16.9	18.5	9.7	6.2
	Ratio of exports to shipments (percent)-----	0.9	0.7	1.2	1.0	1.2	23.9	7.7
TX024	Robes: 6/							
	Establishments (number)-----	101	88	87	88	84	(4.5)	(3.6)
	Employees (thousands)-----	8	7	7	7	7	0.0	(2.6)
	Capacity utilization (percent)-----	70	73	70	70	65	(7.1)	(1.9)
	U.S. shipments (million dollars)-----	422	545	422	418	395	(5.4)	(3.9)
	U.S. exports (million dollars)-----	14	12	18	12	11	(8.3)	(4.7)
	U.S. imports (million dollars)-----	103	113	141	157	176	12.1	15.0
	Apparent U.S. consumption (million dollars)-----	511	646	545	563	560	(0.5)	0.4
	Trade balance (million dollars)-----	(89)	(101)	(123)	(145)	(165)	-	-
	Ratio of imports to apparent consumption (percent)-----	20.2	17.5	25.9	27.9	31.4	12.6	14.5
	Ratio of exports to shipments (percent)-----	3.3	2.2	4.3	2.9	2.8	(3.1)	(0.8)

Table B-2

Fibers, textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
TX025	Underwear and nightwear:							
	Establishments (number)-----	775	760	766	729	693	(4.9)	(2.6)
	Employees (thousands)-----	107	107	110	108	103	(4.6)	(0.7)
	Capacity utilization (percent)-----	88	88	93	93	86	(7.5)	0.1
	U.S. shipments (million dollars)-----	3,445	3,774	3,994	3,915	3,719	(5.0)	1.9
	U.S. exports (million dollars)-----	54	67	94	125	169	35.2	33.7
	U.S. imports (million dollars)-----	399	493	591	745	854	14.6	21.3
	Apparent U.S. consumption (million dollars)-----	3,790	4,200	4,491	4,535	4,404	(2.9)	3.8
	Trade balance (million dollars)-----	(345)	(426)	(497)	(620)	(685)	-	-
	Ratio of imports to apparent consumption (percent)-----	10.5	11.7	13.2	16.4	19.4	18.0	16.9
	Ratio of exports to shipments (percent)-----	1.6	1.8	2.4	3.2	4.5	42.3	31.2
TX026	Hosiery:							
	Establishments (number)-----	634	630	649	412	391	(5.1)	(13.0)
	Employees (thousands)-----	72	72	70	70	67	(4.3)	(1.7)
	Capacity utilization (percent)-----	77	79	82	82	78	(4.9)	0.6
	U.S. shipments (million dollars)-----	3,301	3,449	3,517	3,800	3,610	(5.0)	2.8
	U.S. exports (million dollars)-----	35	41	52	59	73	23.7	20.1
	U.S. imports (million dollars)-----	76	81	90	148	186	25.7	27.0
	Apparent U.S. consumption (million dollars)-----	3,342	3,489	3,555	3,889	3,723	(4.3)	3.3
	Trade balance (million dollars)-----	(41)	(40)	(38)	(89)	(113)	-	-
	Ratio of imports to apparent consumption (percent)-----	2.3	2.3	2.5	3.8	5.0	31.3	23.0
	Ratio of exports to shipments (percent)-----	1.1	1.2	1.5	1.6	2.0	30.2	16.9
TX027	Body-supporting garments:							
	Establishments (number)-----	178	181	131	4/	4/	-	-
	Employees (thousands)-----	15	15	14	13	12	(7.7)	(5.7)
	Capacity utilization (percent)-----	71	81	81	4/	4/	-	-
	U.S. shipments (million dollars)-----	937	1,015	1,100	1,188	1,213	2.1	7.0
	U.S. exports (million dollars)-----	92	103	128	176	182	3.4	20.9
	U.S. imports (million dollars)-----	225	264	310	338	366	8.3	13.0
	Apparent U.S. consumption (million dollars)-----	1,070	1,176	1,282	1,350	1,397	3.5	6.9
	Trade balance (million dollars)-----	(133)	(161)	(182)	(162)	(184)	-	-
	Ratio of imports to apparent consumption (percent)-----	21.0	22.4	24.2	25.0	26.2	4.6	5.6
	Ratio of exports to shipments (percent)-----	9.8	10.1	11.6	14.8	15.0	1.3	13.0

Table B-2

Fibers, textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
TX028	Neckwear: 7/							
	Establishments (number)-----	174	175	176	165	160	(3.0)	(2.2)
	Employees (thousands)-----	7	8	8	8	7	(12.5)	0.0
	Capacity utilization (percent)-----	99	86	97	95	90	(5.3)	(0.9)
	U.S. shipments (million dollars)-----	342	476	500	568	570	0.4	12.7
	U.S. exports (million dollars)-----	4	6	8	14	16	14.3	43.6
	U.S. imports (million dollars)-----	179	233	369	407	282	(30.7)	15.8
	Apparent U.S. consumption (million dollars)-----	517	703	861	961	836	(13.0)	13.6
	Trade balance (million dollars)-----	(175)	(227)	(361)	(393)	(266)	-	-
	Ratio of imports to apparent consumption (percent)-----	34.6	33.1	42.9	42.4	33.7	(20.4)	1.9
	Ratio of exports to shipments (percent)-----	1.2	1.3	1.6	2.5	2.8	13.9	27.4
TX029	Gloves, including gloves for sports:							
	Establishments (number)-----	235	230	225	220	215	(2.3)	(2.2)
	Employees (thousands)-----	14	13	13	12	12	0.0	(3.8)
	Capacity utilization (percent)-----	87	87	85	78	75	(3.8)	(4.0)
	U.S. shipments (million dollars)-----	724	846	927	870	825	(5.2)	2.9
	U.S. exports (million dollars)-----	124	132	190	182	158	(13.2)	8.4
	U.S. imports (million dollars)-----	551	630	1,097	890	871	(2.1)	13.4
	Apparent U.S. consumption (million dollars)-----	1,151	1,344	1,834	1,578	1,538	(2.5)	7.7
	Trade balance (million dollars)-----	(427)	(498)	(907)	(708)	(713)	-	-
	Ratio of imports to apparent consumption (percent)-----	47.9	46.9	59.8	56.4	56.6	0.4	5.3
	Ratio of exports to shipments (percent)-----	17.1	15.6	20.5	20.9	19.2	(8.5)	5.3
TX030	Headwear							
	Establishments (number)-----	337	343	336	316	310	(1.9)	(2.5)
	Employees (thousands)-----	15	15	15	15	15	0.0	0.0
	Capacity utilization (percent)-----	43	41	45	65	75	15.4	17.0
	U.S. shipments (million dollars)-----	704	746	790	725	745	2.8	0.9
	U.S. exports (million dollars)-----	41	51	63	43	64	48.8	7.5
	U.S. imports (million dollars)-----	239	263	284	341	429	25.8	15.4
	Apparent U.S. consumption (million dollars)-----	902	958	1,011	1,023	1,110	8.5	4.9
	Trade balance (million dollars)-----	(198)	(212)	(221)	(298)	(365)	-	-
	Ratio of imports to apparent consumption (percent)-----	26.5	27.5	28.1	33.3	38.6	15.9	10.0
	Ratio of exports to shipments (percent)-----	5.8	6.8	8.0	5.9	8.6	44.8	6.6

Table B-2

Fibers, textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
TX031	Leather apparel and accessories:							
	Establishments (number)-----	477	486	504	492	470	(4.5)	(0.2)
	Employees (thousands)-----	12	13	14	15	14	(6.7)	4.6
	Capacity utilization (percent)-----	70	80	85	75	70	(6.7)	(0.6)
	U.S. shipments (million dollars)-----	437	527	530	520	516	(0.8)	3.2
	U.S. exports (million dollars)-----	25	37	52	63	75	19.0	31.4
	U.S. imports (million dollars)-----	464	699	938	1,310	1,354	3.4	31.9
	Apparent U.S. consumption (million dollars)-----	876	1,189	1,416	1,767	1,795	1.6	20.1
	Trade balance (million dollars)-----	(439)	(662)	(886)	(1,247)	(1,279)	-	-
	Ratio of imports to apparent consumption (percent)-----	53.0	58.8	66.2	74.1	75.4	1.7	9.8
	Ratio of exports to shipments (percent)-----	5.7	7.0	9.8	12.1	14.5	20.0	27.4
TX032	Fur apparel and other fur articles:							
	Establishments (number)-----	524	506	484	455	420	(7.7)	(5.3)
	Employees (thousands)-----	3	3	3	2	2	0.0	(11.5)
	Capacity utilization (percent)-----	70	75	70	68	65	(4.4)	(2.4)
	U.S. shipments (million dollars)-----	360	422	420	330	275	(16.7)	(7.5)
	U.S. exports (million dollars)-----	39	59	64	67	54	(19.4)	8.1
	U.S. imports (million dollars)-----	438	513	424	370	249	(32.7)	(13.6)
	Apparent U.S. consumption (million dollars)-----	759	876	780	633	470	(25.8)	(12.0)
	Trade balance (million dollars)-----	(399)	(454)	(360)	(303)	(195)	-	-
	Ratio of imports to apparent consumption (percent)-----	57.7	58.6	54.4	58.5	53.0	(9.4)	(1.7)
	Ratio of exports to shipments (percent)-----	10.8	14.0	15.2	20.3	19.6	(3.3)	16.9
TX033	Rubber, plastics, and coated-fabric apparel:							
	Establishments (number)-----	70	65	63	67	67	0.0	(0.6)
	Employees (thousands)-----	3	3	3	3	3	0.0	0.0
	Capacity utilization (percent)-----	60	60	60	65	65	0.0	2.4
	U.S. shipments (million dollars)-----	171	164	161	159	158	(0.6)	(1.9)
	U.S. exports (million dollars)-----	40	43	51	45	48	6.7	4.2
	U.S. imports (million dollars)-----	175	251	325	160	119	(25.6)	(11.5)
	Apparent U.S. consumption (million dollars)-----	306	372	435	274	229	(16.4)	(8.5)
	Trade balance (million dollars)-----	(135)	(208)	(274)	(115)	(71)	-	-
	Ratio of imports to apparent consumption (percent)-----	57.2	67.5	74.7	58.4	52.0	(11.0)	(3.3)
	Ratio of exports to shipments (percent)-----	23.4	26.2	31.7	28.3	30.4	7.3	6.2

Table B-2

Fibers, textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
TX034	Nonwoven, paper, and felt apparel and footwear:							
	Establishments (number)-----	25	25	25	25	25	0.0	0.0
	Employees (thousands)-----	1	1	1	1	1	0.0	0.0
	Capacity utilization (percent)-----	75	75	75	75	75	0.0	0.0
	U.S. shipments (million dollars)-----	54	68	73	78	83	6.4	10.5
	U.S. exports (million dollars)-----	2	4	4	9	12	33.3	55.2
	U.S. imports (million dollars)-----	46	60	67	49	154	214.3	24.8
	Apparent U.S. consumption (million dollars)-----	98	124	136	118	225	90.7	17.5
	Trade balance (million dollars)-----	(44)	(56)	(63)	(40)	(142)	-	-
	Ratio of imports to apparent consumption (percent)-----	46.9	48.4	49.3	41.5	68.4	64.8	6.2
	Ratio of exports to shipments (percent)-----	3.7	5.9	5.5	11.5	14.5	25.3	40.5
TX035	Other wearing apparel:							
	Establishments (number)-----	4/	4/	4/	4/	4/	-	-
	Employees (thousands)-----	4/	4/	4/	4/	4/	-	-
	Capacity utilization (percent)-----	4/	4/	4/	4/	4/	-	-
	U.S. shipments (million dollars)-----	4/	4/	4/	4/	4/	-	-
	U.S. exports (million dollars)-----	67	88	126	148	172	16.2	27.2
	U.S. imports (million dollars)-----	1,034	1,235	1,352	1,256	1,463	16.5	7.4
	Apparent U.S. consumption (million dollars)-----	4/	4/	4/	4/	4/	-	-
	Trade balance (million dollars)-----	(967)	(1,147)	(1,226)	(1,108)	(1,291)	-	-
	Ratio of imports to apparent consumption (percent)-----	4/	4/	4/	4/	4/	-	-
	Ratio of exports to shipments (percent)-----	4/	4/	4/	4/	4/	-	-
TX036	Nonrubber footwear and footwear parts:							
	Establishments (number)-----	245	240	224	225	220	(2.2)	(2.8)
	Employees (thousands)-----	93	89	83	77	74	(3.8)	(6.0)
	Capacity utilization (percent)-----	68	70	70	73	70	(4.1)	1.0
	U.S. shipments (million dollars)-----	3,573	3,486	3,710	3,823	4,393	14.9	5.2
	U.S. exports (million dollars)-----	168	221	288	325	417	28.3	24.7
	U.S. imports (million dollars)-----	6,435	7,160	7,915	7,815	8,831	13.0	7.5
	Apparent U.S. consumption (million dollars)-----	9,840	10,425	11,337	11,313	12,807	13.2	6.3
	Trade balance (million dollars)-----	(6,267)	(6,939)	(7,627)	(7,490)	(8,414)	-	-
	Ratio of imports to apparent consumption (percent)-----	65.4	68.7	69.8	69.1	69.0	(0.2)	1.1
	Ratio of exports to shipments (percent)-----	4.7	6.3	7.8	8.5	9.5	11.7	18.5

Table B-2

Fibers, textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
TX037	Rubber footwear:							
	Establishments (number)-----	65	65	64	4/	4/	-	-
	Employees (thousands)-----	11	12	12	11	11	(1.8)	(1.0)
	Capacity utilization (percent)-----	92	86	85	4/	4/	-	-
	U.S. shipments (million dollars)-----	440	488	555	561	536	(4.5)	5.5
	U.S. exports (million dollars)-----	36	48	54	40	60	50.0	8.8
	U.S. imports (million dollars)-----	291	366	463	560	707	26.3	24.6
	Apparent U.S. consumption (million dollars)-----	695	806	964	1,081	1,183	9.4	14.5
	Trade balance (million dollars)-----	(255)	(318)	(409)	(520)	(647)	-	-
	Ratio of imports to apparent consumption (percent)-----	41.9	45.4	48.0	51.8	59.8	15.4	8.8
	Ratio of exports to shipments (percent)-----	8.2	9.8	9.7	7.1	11.2	57.0	3.1

1/ The figure shown represents the compound rate of change of a trend line plotted through 1986-1990 data using linear regression.

2/ Not available owing to the diversity of products covered that include both agricultural and manufactured goods.

3/ Establishments primarily engaged in manufacturing thread.

4/ Not available.

5/ The data include only the narrow fabrics and lace and netting industries. These industries account for the vast majority of this grouping.

6/ Data include dressing gowns.

7/ Includes ties, mufflers, scarves, shawls, and veils.

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
Energy and chemicals:								
CH001	Electrical energy:							
	Establishments (number)-----	3,175	3,200	3,200	2/	2/	-	-
	Employees (thousands)-----	800	800	800	2/	2/	-	-
	Capacity utilization (percent)-----	82	82	82	2/	2/	-	-
	U.S. shipments (million dollars)-----	149,000	156,000	160,000	212,451	167,403	(21.2)	5.6
	U.S. exports (million dollars)-----	2/	2/	2/	180	491	172.8	-
	U.S. imports (million dollars)-----	2/	2/	2/	558	463	(17.0)	-
	Apparent U.S. consumption (million dollars)-----	149,000	156,000	160,000	212,829	167,375	(21.4)	5.6
	Trade balance (million dollars)-----	2/	2/	2/	(378)	28	-	-
	Ratio of imports to apparent consumption (percent)-----	2/	2/	2/	0.3	0.3	5.5	-
	Ratio of exports to shipments (percent)-----	2/	2/	2/	0.1	0.3	246.2	-
CH002	Nuclear materials:							
	Establishments (number)-----	44	40	37	45	45	0.0	1.6
	Employees (thousands)-----	31	31	31	32	32	0.0	1.0
	Capacity utilization (percent)-----	52	52	50	2/	2/	-	-
	U.S. shipments (million dollars)-----	4,027	4,027	3,800	4,200	4,200	0.0	1.3
	U.S. exports (million dollars)-----	1,312	1,027	877	1,308	1,068	(18.3)	(1.7)
	U.S. imports (million dollars)-----	1,384	1,012	1,099	945	1,015	7.4	(6.7)
	Apparent U.S. consumption (million dollars)-----	4,099	4,012	4,022	3,837	4,147	8.1	(0.2)
	Trade balance (million dollars)-----	(72)	15	(222)	363	53	-	-
	Ratio of imports to apparent consumption (percent)-----	33.8	25.2	27.3	24.6	24.5	(0.6)	(6.5)
	Ratio of exports to shipments (percent)-----	32.6	25.5	23.1	31.1	25.4	(18.3)	(2.9)
CH003	Coal and other carbonaceous materials:							
	Establishments (number)-----	4,500	4,500	4,600	500	500	0.0	(48.3)
	Employees (thousands)-----	170	163	170	135	135	0.0	(6.3)
	Capacity utilization (percent)-----	85	85	90	85	85	0.0	0.0
	U.S. production (million dollars)-----	21,652	21,248	30,400	22,297	23,000	3.2	1.7
	U.S. exports (million dollars)-----	4,036	3,459	4,139	4,395	4,608	4.8	5.2
	U.S. imports (million dollars)-----	200	193	282	415	288	(30.6)	16.1
	Apparent U.S. consumption (million dollars)-----	17,816	17,982	26,543	18,317	18,680	2.0	1.1
	Trade balance (million dollars)-----	3,836	3,266	3,857	3,980	4,320	-	-
	Ratio of imports to apparent consumption (percent)-----	1.1	1.1	1.1	2.3	1.5	(32.0)	14.8
	Ratio of exports to production (percent)-----	18.6	16.3	13.6	19.7	20.0	1.6	3.4

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
CH004	Coal chemicals:							
	Establishments (number)-----	30	28	28	26	2/	-	-
	Employees (thousands)-----	20	18	18	2/	2/	-	-
	Capacity utilization (percent)-----	80	80	80	2/	2/	-	-
	U.S. production (million dollars)-----	390	390	390	84	84	0.0	(36.9)
	U.S. exports (million dollars)-----	360	371	453	412	396	(3.9)	3.0
	U.S. imports (million dollars)-----	74	70	69	264	296	12.1	50.7
	Apparent U.S. consumption (million dollars)-----	104	89	6	(64)	(16)	(75.0)	-
	Trade balance (million dollars)-----	286	301	384	148	100	-	-
	Ratio of imports to apparent consumption (percent)-----	71.2	78.7	1150.0	(412.5)	(1,850.0)	348.5	-
	Ratio of exports to production (percent)-----	92.3	95.1	116.2	490.5	471.4	(3.9)	63.3
CH005	Crude petroleum:							
	Establishments (number)-----	19,000	19,000	19,000	18,000	18,000	0.0	(1.6)
	Employees (thousands)-----	200	200	200	204	204	0.0	0.6
	Capacity utilization (percent)-----	100	100	100	100	100	0.0	0.0
	U.S. production (million dollars)-----	40,109	46,747	37,376	44,031	46,904	6.5	2.6
	U.S. exports (million dollars)-----	117	126	77	62	183	195.2	1.9
	U.S. imports (million dollars)-----	22,608	29,130	25,654	34,041	43,833	28.8	16.0
	Apparent U.S. consumption (million dollars)-----	62,600	75,751	62,953	78,010	90,554	16.1	8.0
	Trade balance (million dollars)-----	(22,491)	(29,004)	(25,577)	(33,979)	(43,650)	-	-
	Ratio of imports to apparent consumption (percent)-----	36.1	38.5	40.8	43.6	48.4	10.9	7.4
	Ratio of exports to production (percent)-----	0.3	0.3	0.2	0.1	0.4	177.1	(0.7)
CH006	Petroleum products:							
	Establishments (number)-----	189	182	182	193	194	0.5	1.1
	Employees (thousands)-----	85	82	82	75	75	0.0	(3.3)
	Capacity utilization (percent)-----	95	95	95	85	85	0.0	(3.3)
	U.S. shipments (million dollars)-----	110,716	117,243	138,782	147,138	147,000	(0.1)	8.3
	U.S. exports (million dollars)-----	4,334	4,677	4,563	5,521	7,236	31.1	12.6
	U.S. imports (million dollars)-----	11,138	11,735	11,928	13,161	16,138	22.6	8.9
	Apparent U.S. consumption (million dollars)-----	117,520	124,301	146,147	154,778	155,902	0.7	8.2
	Trade balance (million dollars)-----	(6,804)	(7,058)	(7,365)	(7,640)	(8,902)	-	-
	Ratio of imports to apparent consumption (percent)-----	9.5	9.4	8.2	8.5	10.4	21.7	0.7
	Ratio of exports to shipments (percent)-----	3.9	4.0	3.3	3.8	4.9	31.2	4.0

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
CH007	Natural gas and components:							
	Establishments (number)-----	1,800	1,800	1,750	2/	2/	-	-
	Employees (thousands)-----	200	200	200	200	200	0.0	0.0
	Capacity utilization (percent)-----	80	80	80	80	80	0.0	0.0
	U.S. shipments (million dollars)-----	69,800	63,000	65,000	65,000	73,000	12.3	1.2
	U.S. exports (million dollars)-----	380	311	367	472	493	4.4	9.8
	U.S. imports (million dollars)-----	2,958	2,473	2,544	2,412	3,229	33.9	1.5
	Apparent U.S. consumption (million dollars)-----	72,378	65,162	67,177	66,940	75,736	13.1	1.2
	Trade balance (million dollars)-----	(2,578)	(2,162)	(2,177)	(1,940)	(2,736)	-	-
	Ratio of imports to apparent consumption (percent)-----	4.1	3.8	3.8	3.6	4.3	18.3	0.3
	Ratio of exports to shipments (percent)-----	0.5	0.5	0.6	0.7	0.7	(7.0)	8.5
CH008	Major primary olefins:							
	Firms (number)-----	37	38	39	38	37	(2.6)	0.0
	Employees (thousands)-----	5	5	6	5	5	0.0	2.3
	Capacity utilization (percent)-----	93	97	98	97	95	(2.1)	0.4
	U.S. production (million dollars)-----	7,179	9,036	13,752	13,200	13,300	0.8	17.5
	U.S. exports (million dollars)-----	90	93	124	157	209	33.1	24.7
	U.S. imports (million dollars)-----	142	199	237	250	265	6.0	15.9
	Apparent U.S. consumption (million dollars)-----	7,231	9,142	13,865	13,293	13,356	0.5	17.4
	Trade balance (million dollars)-----	(52)	(106)	(113)	(93)	(56)	-	-
	Ratio of imports to apparent consumption (percent)-----	2.0	2.2	1.7	1.9	2.0	5.5	(1.2)
	Ratio of exports to production (percent)-----	1.3	1.0	0.9	1.2	1.6	32.1	6.1
CH009	Other olefins:							
	Firms (number)-----	22	23	24	24	23	(4.2)	1.3
	Employees (thousands)-----	3/	3/	1	1	1	0.0	-
	Capacity utilization (percent)-----	90	88	90	90	85	(5.6)	(0.9)
	U.S. production (million dollars)-----	828	836	933	925	900	(2.7)	2.7
	U.S. exports (million dollars)-----	125	138	182	259	263	1.5	23.6
	U.S. imports (million dollars)-----	14	13	21	31	14	(54.8)	9.1
	Apparent U.S. consumption (million dollars)-----	717	711	772	697	651	(6.6)	(2.1)
	Trade balance (million dollars)-----	111	125	161	228	249	-	-
	Ratio of imports to apparent consumption (percent)-----	2.0	1.8	2.7	4.4	2.2	(51.6)	11.4
	Ratio of exports to production (percent)-----	15.1	16.5	19.5	28.0	29.2	4.4	20.3

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
CH010	Benzene, toluene, and mixed xylenes:							
	Firms (number)-----	32	31	31	31	31	0.0	(0.6)
	Employees (thousands)-----	2	2	2	2	2	0.0	4.3
	Capacity utilization (percent)-----	51	59	62	60	60	0.0	3.5
	U.S. production (million dollars)-----	2,292	3,331	3,310	3,400	3,300	(2.9)	7.8
	U.S. exports (million dollars)-----	64	190	205	182	276	51.6	33.4
	U.S. imports (million dollars)-----	284	292	258	115	124	7.8	(22.8)
	Apparent U.S. consumption (million dollars)-----	2,512	3,433	3,363	3,333	3,148	(5.6)	4.3
	Trade balance (million dollars)-----	(220)	(102)	(53)	67	152	-	-
	Ratio of imports to apparent consumption (percent)-----	11.3	8.5	7.7	3.5	3.9	14.2	(26.0)
	Ratio of exports to production (percent)-----	2.8	5.7	6.2	5.4	8.4	56.2	23.7
CH011	Benzenoid commodity chemicals:							
	Firms (number)-----	56	54	54	54	54	0.0	(0.7)
	Employees (thousands)-----	14	14	14	15	15	0.0	2.1
	Capacity utilization (percent)-----	90	92	90	89	90	1.1	(0.3)
	U.S. production (million dollars)-----	8,711	11,618	13,083	13,345	13,600	1.9	10.8
	U.S. exports (million dollars)-----	676	948	1,275	1,685	1,507	(10.6)	24.3
	U.S. imports (million dollars)-----	214	308	478	430	485	12.8	21.8
	Apparent U.S. consumption (million dollars)-----	8,249	10,978	12,286	12,090	12,578	4.0	9.9
	Trade balance (million dollars)-----	462	640	797	1,255	1,022	-	-
	Ratio of imports to apparent consumption (percent)-----	2.6	2.8	3.9	3.6	3.9	8.4	10.8
	Ratio of exports to production (percent)-----	7.8	8.2	9.7	12.6	11.1	(12.2)	12.2
CH012	Benzenoid specialty chemicals:							
	Firms (number)-----	250	250	248	250	250	0.0	0.0
	Employees (thousands)-----	97	96	95	95	95	0.0	(0.5)
	Capacity utilization (percent)-----	86	89	85	95	95	0.0	2.7
	U.S. production (million dollars)-----	7,693	8,740	7,359	7,550	7,700	2.0	(1.4)
	U.S. exports (million dollars)-----	1,809	2,069	2,513	2,811	2,862	1.8	13.0
	U.S. imports (million dollars)-----	1,070	1,177	1,503	1,630	1,839	12.8	15.1
	Apparent U.S. consumption (million dollars)-----	6,954	7,848	6,349	6,369	6,677	4.8	(2.9)
	Trade balance (million dollars)-----	739	892	1,010	1,181	1,023	-	-
	Ratio of imports to apparent consumption (percent)-----	15.4	15.0	23.7	25.6	27.5	7.6	18.5
	Ratio of exports to production (percent)-----	23.5	23.7	34.1	37.2	37.2	(0.2)	14.7

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
CH013	Miscellaneous organic chemicals:							
	Firms (number)-----	104	102	102	102	103	1.0	(0.2)
	Employees (thousands)-----	87	85	85	86	87	1.2	0.1
	Capacity utilization (percent)-----	82	82	82	85	83	(2.4)	0.6
	U.S. shipments (million dollars)-----	28,760	30,900	35,100	39,312	40,767	3.7	9.8
	U.S. exports (million dollars)-----	2,788	3,328	4,228	4,584	4,336	(5.4)	12.8
	U.S. imports (million dollars)-----	2,216	2,404	3,222	2,633	2,672	1.5	4.8
	Apparent U.S. consumption (million dollars)-----	28,188	29,976	34,094	37,361	39,103	4.7	9.1
	Trade balance (million dollars)-----	572	924	1,006	1,951	1,664	-	-
	Ratio of imports to apparent consumption (percent)-----	7.9	8.0	9.5	7.0	6.8	(3.0)	(4.0)
	Ratio of exports to shipments (percent)-----	9.7	10.8	12.0	11.7	10.6	(8.8)	2.7
CH014	Selected inorganic chemicals and elements:							
	Producers (number)-----	480	480	480	480	480	0.0	0.0
	Employees (thousands)-----	75	75	72	91	92	1.1	6.2
	Capacity utilization (percent)-----	60	66	63	60	2/	-	-
	U.S. shipments (million dollars)-----	1,311	1,523	2,183	2,594	2,314	(10.8)	18.2
	U.S. exports (million dollars)-----	410	548	683	899	858	(4.6)	21.8
	U.S. imports (million dollars)-----	926	971	1,317	1,694	1,738	2.6	19.9
	Apparent U.S. consumption (million dollars)-----	1,827	1,946	2,817	3,389	3,194	(5.8)	18.2
	Trade balance (million dollars)-----	(516)	(423)	(634)	(795)	(880)	-	-
	Ratio of imports to apparent consumption (percent)-----	50.7	49.9	46.8	50.0	54.4	8.9	1.4
	Ratio of exports to shipments (percent)-----	31.3	36.0	31.3	34.7	37.1	7.0	3.1
CH015	Inorganic acids:							
	Establishments (number)-----	145	145	145	145	145	0.0	0.0
	Employees (thousands)-----	9	9	9	9	9	0.0	0.0
	Capacity utilization (percent)-----	80	80	80	80	80	0.0	0.0
	U.S. shipments (million dollars)-----	2,186	2,335	2,550	2,668	2,721	2.0	5.9
	U.S. exports (million dollars)-----	423	498	556	104	109	4.8	(34.8)
	U.S. imports (million dollars)-----	165	153	172	180	179	(0.6)	3.3
	Apparent U.S. consumption (million dollars)-----	1,928	1,990	2,166	2,744	2,791	1.7	11.2
	Trade balance (million dollars)-----	258	345	384	(76)	(70)	-	-
	Ratio of imports to apparent consumption (percent)-----	8.6	7.7	7.9	6.6	6.4	(2.2)	(7.1)
	Ratio of exports to shipments (percent)-----	19.4	21.3	21.8	3.9	4.0	2.8	(38.4)

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
CH016	Salts and other inorganic chemicals:							
	Establishments (number)-----	630	630	630	600	600	0.0	(1.5)
	Employees (thousands)-----	87	84	87	91	91	0.0	1.7
	Capacity utilization (percent)-----	73	77	78	2/	2/	-	-
	U.S. shipments (million dollars)-----	14,360	14,800	16,052	17,600	18,000	2.3	6.5
	U.S. exports (million dollars)-----	1,077	1,256	1,548	1,828	2,083	13.9	18.5
	U.S. imports (million dollars)-----	856	954	1,157	1,210	1,313	8.5	11.6
	Apparent U.S. consumption (million dollars)-----	14,139	14,498	15,661	16,982	17,230	1.5	5.7
	Trade balance (million dollars)-----	221	302	391	618	770	-	-
	Ratio of imports to apparent consumption (percent)-----	6.1	6.6	7.4	7.1	7.6	7.0	5.5
	Ratio of exports to shipments (percent)-----	7.5	8.5	9.6	10.4	11.6	11.4	11.3
CH017	Chlor-alkali chemicals:							
	Firms (number)-----	35	27	27	27	27	0.0	(5.1)
	Employees (thousands)-----	7	5	7	14	14	0.7	26.4
	Capacity utilization (percent)-----	86	89	90	90	2/	-	-
	U.S. shipments (million dollars)-----	2,564	2,769	3,486	3,813	3,119	(18.2)	7.4
	U.S. exports (million dollars)-----	356	430	648	822	800	(2.7)	25.4
	U.S. imports (million dollars)-----	109	119	205	191	199	4.2	18.3
	Apparent U.S. consumption (million dollars)-----	2,317	2,458	3,043	3,182	2,518	(20.9)	4.3
	Trade balance (million dollars)-----	247	311	443	631	601	-	-
	Ratio of imports to apparent consumption (percent)-----	4.7	4.8	6.7	6.0	7.9	31.7	13.3
	Ratio of exports to shipments (percent)-----	13.9	15.5	18.6	21.6	25.6	19.0	16.8
CH018	Industrial gases:							
	Firms (number)-----	78	103	103	103	103	0.0	5.7
	Employees (thousands)-----	9	8	8	17	17	0.6	22.4
	Capacity utilization (percent)-----	76	76	75	75	2/	-	-
	U.S. shipments (million dollars)-----	2,265	2,403	2,446	2,561	2,740	7.0	4.5
	U.S. exports (million dollars)-----	111	139	170	169	165	(2.4)	10.4
	U.S. imports (million dollars)-----	16	18	21	29	32	10.3	20.5
	Apparent U.S. consumption (million dollars)-----	2,170	2,282	2,297	2,421	2,607	7.7	4.4
	Trade balance (million dollars)-----	95	121	149	140	133	-	-
	Ratio of imports to apparent consumption (percent)-----	0.7	0.8	0.9	1.2	1.2	2.5	15.5
	Ratio of exports to shipments (percent)-----	4.9	5.8	7.0	6.6	6.0	(8.7)	5.6

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
CH019	Fertilizers:							
	Establishments (number)-----	690	675	650	650	650	0.0	(1.6)
	Employees (thousands)-----	43	42	41	41	41	0.0	(1.2)
	Capacity utilization (percent)-----	74	70	75	80	80	0.0	2.9
	U.S. shipments (million dollars)-----	6,132	6,601	8,272	7,956	8,115	2.0	7.8
	U.S. exports (million dollars)-----	1,620	1,792	1,967	2,952	2,697	(8.6)	16.4
	U.S. imports (million dollars)-----	1,321	1,213	1,575	1,641	1,513	(7.8)	5.9
	Apparent U.S. consumption (million dollars)-----	5,833	6,022	7,880	6,645	6,931	4.3	4.5
	Trade balance (million dollars)-----	299	579	392	1,311	1,184	-	-
	Ratio of imports to apparent consumption (percent)-----	22.6	20.1	20.0	24.7	21.8	(11.6)	1.3
	Ratio of exports to shipments (percent)-----	26.4	27.1	23.8	37.1	33.2	(10.4)	8.0
CH020	Certain inorganic pigments:							
	Firms (number)-----	98	98	100	80	80	0.0	(5.9)
	Employees (thousands)-----	13	13	14	14	14	0.0	2.2
	Capacity utilization (percent)-----	75	75	75	90	90	0.0	5.6
	U.S. shipments (million dollars)-----	2,600	2,550	2,650	3,300	3,500	6.1	8.9
	U.S. exports (million dollars)-----	222	260	303	641	449	(30.0)	26.0
	U.S. imports (million dollars)-----	96	124	161	248	223	(10.1)	26.9
	Apparent U.S. consumption (million dollars)-----	2,474	2,414	2,508	2,907	3,274	12.6	7.7
	Trade balance (million dollars)-----	126	136	142	393	226	-	-
	Ratio of imports to apparent consumption (percent)-----	3.9	5.1	6.4	8.5	6.8	(20.2)	17.7
	Ratio of exports to shipments (percent)-----	8.5	10.2	11.4	19.4	12.8	(34.0)	15.7
CH021	Synthetic organic pigments:							
	Firms (number)-----	32	32	32	32	32	0.0	0.0
	Employees (thousands)-----	11	11	11	6	6	0.0	(16.6)
	Capacity utilization (percent)-----	85	85	85	85	85	0.0	0.0
	U.S. shipments (million dollars)-----	513	586	694	702	725	3.3	9.1
	U.S. exports (million dollars)-----	88	120	145	178	214	20.2	24.3
	U.S. imports (million dollars)-----	121	155	165	177	208	17.5	12.9
	Apparent U.S. consumption (million dollars)-----	546	621	714	701	719	2.6	6.9
	Trade balance (million dollars)-----	(33)	(35)	(20)	1	6	-	-
	Ratio of imports to apparent consumption (percent)-----	22.2	25.0	23.1	25.2	28.9	14.6	5.6
	Ratio of exports to shipments (percent)-----	17.2	20.5	20.9	25.4	29.5	16.4	13.9

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
CH022	Synthetic dyes and couplers:							
	Firms (number)-----	33	33	33	32	32	0.0	(0.9)
	Employees (thousands)-----	18	18	18	8	8	0.0	(21.6)
	Capacity utilization (percent)-----	85	85	85	85	85	0.0	0.0
	U.S. shipments (million dollars)-----	652	677	766	858	870	1.4	8.5
	U.S. exports (million dollars)-----	88	99	114	139	193	38.8	21.0
	U.S. imports (million dollars)-----	371	468	440	388	459	18.3	2.4
	Apparent U.S. consumption (million dollars)-----	935	1,046	1,092	1,107	1,136	2.6	4.6
	Trade balance (million dollars)-----	(283)	(369)	(326)	(249)	(266)	-	-
	Ratio of imports to apparent consumption (percent)-----	39.7	44.7	40.3	35.0	40.4	15.3	(2.1)
	Ratio of exports to shipments (percent)-----	13.5	14.6	14.9	16.2	22.2	36.9	11.6
CH023	Synthetic tanning agents:							
	Firms (number)-----	5	5	5	5	5	0.0	0.0
	Employees (thousands)-----	2	2	2	1	1	0.0	(18.8)
	Capacity utilization (percent)-----	85	85	85	85	85	0.0	0.0
	U.S. shipments (million dollars)-----	16	16	20	20	20	0.0	6.9
	U.S. exports (million dollars)-----	10	12	17	12	11	(8.3)	1.9
	U.S. imports (million dollars)-----	21	24	28	3	3	0.0	(45.0)
	Apparent U.S. consumption (million dollars)-----	27	28	31	11	12	9.1	(22.6)
	Trade balance (million dollars)-----	(11)	(12)	(11)	9	8	-	-
	Ratio of imports to apparent consumption (percent)-----	77.8	85.7	90.3	27.3	25.0	(8.3)	(28.9)
	Ratio of exports to shipments (percent)-----	62.5	75.0	85.0	60.0	55.0	(8.3)	(4.7)
CH024	Natural tanning and dyeing materials:							
	Firms (number)-----	5	5	5	10	10	0.0	23.1
	Employees (thousands)-----	2	2	2	1	1	0.0	(18.8)
	Capacity utilization (percent)-----	85	85	85	85	85	0.0	0.0
	U.S. shipments (million dollars)-----	20	20	20	10	10	0.0	(18.8)
	U.S. exports (million dollars)-----	3	4	5	14	11	(21.4)	47.0
	U.S. imports (million dollars)-----	36	40	57	61	51	(16.4)	11.8
	Apparent U.S. consumption (million dollars)-----	53	56	72	57	50	(12.3)	(1.0)
	Trade balance (million dollars)-----	(33)	(36)	(52)	(47)	(40)	-	-
	Ratio of imports to apparent consumption (percent)-----	67.9	71.4	79.2	107.0	102.0	(4.7)	12.9
	Ratio of exports to shipments (percent)-----	15.0	20.0	25.0	140.0	110.0	(21.4)	81.0

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
CH025	Photographic chemicals and preparations: 4/							
	Firms (number)-----	9	9	9	5	5	0.0	(16.2)
	Employees (thousands)-----	7	7	7	1	1	0.0	(44.2)
	Capacity utilization (percent)-----	85	85	85	85	85	0.0	0.0
	U.S. shipments (million dollars)-----	2/	2/	2/	2/	2/	-	-
	U.S. exports (million dollars)-----	118	116	123	198	245	23.7	22.1
	U.S. imports (million dollars)-----	21	32	196	355	370	4.2	125.8
	Apparent U.S. consumption (million dollars)-----	2/	2/	2/	2/	2/	-	-
	Trade balance (million dollars)-----	97	84	(73)	(157)	(125)	-	-
	Ratio of imports to apparent consumption (percent)-----	2/	2/	2/	2/	2/	-	-
	Ratio of exports to shipments (percent)-----	2/	2/	2/	2/	2/	-	-
CH026	Pesticide products and formulations:							
	Firms (number)-----	60	60	60	59	59	0.0	(0.5)
	Employees (thousands)-----	25	25	25	22	22	0.0	(3.8)
	Capacity utilization (percent)-----	85	85	85	85	85	0.0	0.0
	U.S. shipments (million dollars)-----	4,234	4,170	4,354	5,203	5,205	0.0	6.5
	U.S. exports (million dollars)-----	1,043	1,117	1,321	1,411	1,513	7.2	10.3
	U.S. imports (million dollars)-----	301	360	484	591	590	(0.2)	20.2
	Apparent U.S. consumption (million dollars)-----	3,492	3,413	3,517	4,383	4,282	(2.3)	6.8
	Trade balance (million dollars)-----	742	757	837	820	923	-	-
	Ratio of imports to apparent consumption (percent)-----	8.6	10.5	13.8	13.5	13.8	2.2	12.6
	Ratio of exports to shipments (percent)-----	24.6	26.8	30.3	27.1	29.1	7.2	3.5
CH027	Adhesives, glues, and gelatin:							
	Establishments (number)-----	643	648	653	658	663	0.8	0.8
	Employees (thousands)-----	16	18	20	18	19	5.6	3.5
	Capacity utilization (percent)-----	80	82	85	86	87	1.2	2.2
	U.S. shipments (million dollars)-----	3,048	3,626	3,925	4,315	4,685	8.6	10.9
	U.S. exports (million dollars)-----	122	142	176	163	210	28.8	13.0
	U.S. imports (million dollars)-----	129	158	162	139	156	12.2	2.6
	Apparent U.S. consumption (million dollars)-----	3,055	3,642	3,911	4,291	4,631	7.9	10.5
	Trade balance (million dollars)-----	(7)	(16)	14	24	54	-	-
	Ratio of imports to apparent consumption (percent)-----	4.2	4.3	4.1	3.2	3.4	4.0	(7.2)
	Ratio of exports to shipments (percent)-----	4.0	3.9	4.5	3.8	4.5	18.7	1.9

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
CH028	Medicinal chemicals, except antibiotics:							
	Firms (number)-----	75	75	75	75	75	0.0	0.0
	Employees (thousands)-----	165	165	167	165	164	(0.6)	(0.1)
	Capacity utilization (percent)-----	80	80	80	79	80	1.3	(0.1)
	U.S. shipments (million dollars)-----	30,800	33,200	34,200	35,400	36,600	3.4	4.2
	U.S. exports (million dollars)-----	2,256	2,382	2,938	3,249	3,909	20.3	15.1
	U.S. imports (million dollars)-----	1,609	1,856	2,277	3,016	3,207	6.3	20.5
	Apparent U.S. consumption (million dollars)-----	30,153	32,674	33,539	35,167	35,898	2.1	4.3
	Trade balance (million dollars)-----	647	526	661	233	702	-	-
	Ratio of imports to apparent consumption (percent)-----	5.3	5.7	6.8	8.6	8.9	4.2	15.5
	Ratio of exports to shipments (percent)-----	7.3	7.2	8.6	9.2	10.7	16.4	10.5
CH029	Antibiotics:							
	Firms (number)-----	20	20	20	20	20	0.0	0.0
	Employees (thousands)-----	123	123	124	123	123	0.0	0.0
	Capacity utilization (percent)-----	80	80	79	79	80	1.3	(0.1)
	U.S. shipments (million dollars)-----	2,000	2,200	3,300	4,300	5,300	23.3	29.9
	U.S. exports (million dollars)-----	940	949	1,124	1,192	1,262	5.9	8.5
	U.S. imports (million dollars)-----	366	520	593	558	738	32.3	15.9
	Apparent U.S. consumption (million dollars)-----	1,426	1,771	2,769	3,666	4,776	30.3	37.0
	Trade balance (million dollars)-----	574	429	531	634	524	-	-
	Ratio of imports to apparent consumption (percent)-----	25.7	29.4	21.4	15.2	15.5	1.5	(15.4)
	Ratio of exports to shipments (percent)-----	47.0	43.1	34.1	27.7	23.8	(14.1)	(16.5)
CH030	Essential oils and other flavoring materials:							
	Establishments (number)-----	58	58	58	58	58	0.0	0.0
	Employees (thousands)-----	55	54	54	53	53	0.0	(0.9)
	Capacity utilization (percent)-----	75	75	75	75	75	0.0	0.0
	U.S. shipments (million dollars)-----	1,450	1,440	1,500	2,440	2,880	18.0	20.9
	U.S. exports (million dollars)-----	355	408	479	488	582	19.3	12.4
	U.S. imports (million dollars)-----	415	435	481	415	476	14.7	2.3
	Apparent U.S. consumption (million dollars)-----	1,510	1,467	1,502	2,367	2,774	17.2	18.5
	Trade balance (million dollars)-----	(60)	(27)	(2)	73	106	-	-
	Ratio of imports to apparent consumption (percent)-----	27.5	29.7	32.0	17.5	17.2	(2.1)	(13.6)
	Ratio of exports to shipments (percent)-----	24.5	28.3	31.9	20.0	20.2	1.0	(7.1)

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
CH031	Perfumes, cosmetics, and toiletries:							
	Establishments (number)-----	647	647	650	648	650	0.3	0.1
	Employees (thousands)-----	57	55	57	55	56	1.8	(0.4)
	Capacity utilization (percent)-----	83	83	85	83	83	0.0	0.0
	U.S. shipments (million dollars)-----	13,470	14,040	15,000	15,100	15,800	4.6	4.0
	U.S. exports (million dollars)-----	286	343	451	653	852	30.5	32.7
	U.S. imports (million dollars)-----	388	446	518	598	638	6.7	13.7
	Apparent U.S. consumption (million dollars)-----	13,572	14,143	15,067	15,045	15,586	3.6	3.4
	Trade balance (million dollars)-----	(102)	(103)	(67)	55	214	-	-
	Ratio of imports to apparent consumption (percent)-----	2.9	3.2	3.4	4.0	4.1	3.0	10.0
	Ratio of exports to shipments (percent)-----	2.1	2.4	3.0	4.3	5.4	24.7	27.6
CH032	Soaps, detergents, and surface-active agents:							
	Establishments (number)-----	940	945	945	950	950	0.0	0.3
	Employees (thousands)-----	44	44	44	44	45	2.3	0.5
	Capacity utilization (percent)-----	82	83	84	83	83	0.0	0.2
	U.S. shipments (million dollars)-----	11,058	11,377	11,700	12,400	13,400	8.1	4.8
	U.S. exports (million dollars)-----	327	384	431	561	775	38.1	23.4
	U.S. imports (million dollars)-----	242	245	305	250	321	28.4	6.0
	Apparent U.S. consumption (million dollars)-----	10,973	11,238	11,574	12,089	12,946	7.1	4.1
	Trade balance (million dollars)-----	85	139	126	311	454	-	-
	Ratio of imports to apparent consumption (percent)-----	2.2	2.2	2.6	2.1	2.5	19.9	1.8
	Ratio of exports to shipments (percent)-----	3.0	3.4	3.7	4.5	5.8	27.8	17.8
CH033	Fatty chemicals:							
	Establishments (number)-----	12	12	12	13	13	0.0	2.4
	Employees (thousands)-----	2	2	2	2	2	0.0	0.0
	Capacity utilization (percent)-----	80	80	80	85	85	0.0	1.8
	U.S. shipments (million dollars)-----	400	400	400	380	400	5.3	(0.5)
	U.S. exports (million dollars)-----	77	91	106	186	202	8.6	30.3
	U.S. imports (million dollars)-----	36	44	52	71	74	4.2	21.2
	Apparent U.S. consumption (million dollars)-----	359	353	346	265	272	2.6	(8.1)
	Trade balance (million dollars)-----	41	47	54	115	128	-	-
	Ratio of imports to apparent consumption (percent)-----	10.0	12.5	15.0	26.8	27.2	1.5	31.8
	Ratio of exports to shipments (percent)-----	19.3	22.8	26.5	48.9	50.5	3.2	30.9

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
CH034	Miscellaneous chemicals specialties:							
	Establishments (number)-----	1,700	1,700	1,700	2/	2/	-	-
	Employees (thousands)-----	60	60	60	2/	2/	-	-
	Capacity utilization (percent)-----	85	85	85	2/	2/	-	-
	U.S. shipments (million dollars)-----	8,725	9,540	10,440	2/	2/	-	-
	U.S. exports (million dollars)-----	440	512	607	650	716	10.2	12.9
	U.S. imports (million dollars)-----	180	216	242	293	340	16.0	17.1
	Apparent U.S. consumption (million dollars)-----	8,465	9,244	10,075	2/	2/	-	-
	Trade balance (million dollars)-----	260	296	365	357	376	-	-
	Ratio of imports to apparent consumption (percent)-----	2.1	2.3	2.4	2/	2/	-	-
	Ratio of exports to shipments (percent)-----	5.0	5.4	5.8	2/	2/	-	-
CH035	Paints, inks, and related items:							
	Firms (number)-----	2,400	2,400	2,400	1,500	1,500	0.0	(13.2)
	Employees (thousands)-----	85	85	90	43	43	0.0	(18.5)
	Capacity utilization (percent)-----	80	80	80	80	80	0.0	0.0
	U.S. shipments (million dollars)-----	13,000	12,800	13,500	13,200	13,800	4.5	1.5
	U.S. exports (million dollars)-----	550	683	780	765	1,198	56.6	18.2
	U.S. imports (million dollars)-----	532	599	638	529	579	9.5	0.5
	Apparent U.S. consumption (million dollars)-----	12,982	12,716	13,358	12,964	13,181	1.7	0.5
	Trade balance (million dollars)-----	18	84	142	236	619	-	-
	Ratio of imports to apparent consumption (percent)-----	4.1	4.7	4.8	4.1	4.4	7.6	(0.0)
	Ratio of exports to shipments (percent)-----	4.2	5.3	5.8	5.8	8.7	49.8	16.4
CH036	Explosives and propellant powders:							
	Firms (number)-----	127	129	134	135	135	0.0	1.7
	Employees (thousands)-----	13	14	14	15	15	0.0	3.6
	Capacity utilization (percent)-----	70	70	70	90	90	0.0	7.8
	U.S. shipments (million dollars)-----	1,020	1,119	1,250	1,300	1,350	3.8	7.4
	U.S. exports (million dollars)-----	178	218	256	164	157	(4.3)	(5.2)
	U.S. imports (million dollars)-----	117	120	126	149	156	4.7	8.2
	Apparent U.S. consumption (million dollars)-----	959	1,021	1,120	1,285	1,349	5.0	9.6
	Trade balance (million dollars)-----	61	98	130	15	1	-	-
	Ratio of imports to apparent consumption (percent)-----	12.2	11.8	11.3	11.6	11.6	(0.3)	(1.2)
	Ratio of exports to shipments (percent)-----	17.5	19.5	20.5	12.6	11.6	(7.8)	(11.7)

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
CH037	Polyethylene resins in primary forms:							
	Establishments (number)-----	24	25	25	28	28	0.0	4.3
	Employees (thousands)-----	24	24	23	23	23	0.0	(1.3)
	Capacity utilization (percent)-----	93	98	95	83	85	2.4	(3.4)
	U.S. production (million dollars)-----	4,918	6,086	9,485	8,500	9,340	9.9	17.5
	U.S. exports (million dollars)-----	635	803	1,083	1,140	1,106	(3.0)	15.7
	U.S. imports (million dollars)-----	176	220	380	408	528	29.4	32.5
	Apparent U.S. consumption (million dollars)-----	4,459	5,503	8,782	7,768	8,762	12.8	18.5
	Trade balance (million dollars)-----	459	583	703	732	578	-	-
	Ratio of imports to apparent consumption (percent)-----	3.9	4.0	4.3	5.3	6.0	14.7	11.8
	Ratio of exports to production (percent)-----	12.9	13.2	11.4	13.4	11.8	(11.7)	(1.6)
CH038	Polypropylene resins in primary forms:							
	Establishments (number)-----	17	17	17	18	18	0.0	1.7
	Employees (thousands)-----	18	18	17	18	18	0.0	0.0
	Capacity utilization (percent)-----	95	97	88	81	83	2.5	(4.4)
	U.S. production (million dollars)-----	2,002	2,651	3,483	3,000	3,875	29.2	15.5
	U.S. exports (million dollars)-----	378	610	871	629	730	16.1	14.4
	U.S. imports (million dollars)-----	18	18	28	33	38	15.2	23.4
	Apparent U.S. consumption (million dollars)-----	1,642	2,059	2,640	2,404	3,183	32.4	15.9
	Trade balance (million dollars)-----	360	592	843	596	692	-	-
	Ratio of imports to apparent consumption (percent)-----	1.1	0.9	1.1	1.4	1.2	(13.0)	6.4
	Ratio of exports to production (percent)-----	18.9	23.0	25.0	21.0	18.8	(10.1)	(1.0)
CH039	PVC resins in primary forms:							
	Establishments (number)-----	31	29	26	26	26	0.0	(4.5)
	Employees (thousands)-----	9	8	7	8	8	0.0	(2.3)
	Capacity utilization (percent)-----	90	98	89	94	98	4.3	1.3
	U.S. production (million dollars)-----	2,185	3,252	3,521	3,800	4,060	6.8	15.0
	U.S. exports (million dollars)-----	148	198	288	388	419	8.0	31.7
	U.S. imports (million dollars)-----	61	50	63	45	67	48.9	0.8
	Apparent U.S. consumption (million dollars)-----	2,098	3,104	3,296	3,457	3,708	7.3	13.3
	Trade balance (million dollars)-----	87	148	225	343	352	-	-
	Ratio of imports to apparent consumption (percent)-----	2.9	1.6	1.9	1.3	1.8	38.8	(11.0)
	Ratio of exports to shipments (percent)-----	6.8	6.1	8.2	10.2	10.3	1.1	14.6

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
CH040	Styrene polymers in primary forms:							
	Establishments (number)-----	62	62	62	63	63	0.0	0.5
	Employees (thousands)-----	14	14	14	14	15	7.1	1.4
	Capacity utilization (percent)-----	93	95	94	85	85	0.0	(2.9)
	U.S. production (million dollars)-----	3,468	4,887	7,164	4,477	4,760	6.3	5.6
	U.S. exports (million dollars)-----	177	276	467	457	516	12.9	30.3
	U.S. imports (million dollars)-----	85	116	93	117	138	17.9	10.3
	Apparent U.S. consumption (million dollars)-----	3,376	4,727	6,790	4,137	4,382	5.9	4.0
	Trade balance (million dollars)-----	92	160	374	340	378	-	-
	Ratio of imports to apparent consumption (percent)-----	2.5	2.5	1.4	2.8	3.1	11.4	6.1
	Ratio of exports to production (percent)-----	5.1	5.6	6.5	10.2	10.8	6.2	23.3
CH041	PET and other polyester resins:							
	Establishments (number)-----	29	29	27	26	25	(3.8)	(4.0)
	Employees (thousands)-----	5	6	5	5	5	0.0	(1.8)
	Capacity utilization (percent)-----	87	94	88	90	90	0.0	0.2
	U.S. production (million dollars)-----	1,397	2,265	2,484	2,403	2,667	11.0	14.5
	U.S. exports (million dollars)-----	84	78	121	252	339	34.5	48.6
	U.S. imports (million dollars)-----	23	17	23	51	66	29.4	37.8
	Apparent U.S. consumption (million dollars)-----	1,336	2,204	2,386	2,202	2,394	8.7	12.4
	Trade balance (million dollars)-----	61	61	98	201	273	-	-
	Ratio of imports to apparent consumption (percent)-----	1.7	0.8	1.0	2.3	2.8	19.0	22.6
	Ratio of exports to production (percent)-----	6.0	3.4	4.9	10.5	12.7	21.2	29.8
CH042	Other plastics in primary forms:							
	Establishments (number)-----	277	280	283	280	285	1.8	0.6
	Employees (thousands)-----	101	101	103	103	101	(1.9)	0.2
	Capacity utilization (percent)-----	93	95	91	89	91	2.2	(1.1)
	U.S. production (million dollars)-----	9,631	11,194	12,620	20,800	23,200	11.5	26.8
	U.S. exports (million dollars)-----	1,643	2,002	2,582	2,743	3,174	15.7	17.7
	U.S. imports (million dollars)-----	498	553	614	917	1,009	10.0	21.1
	Apparent U.S. consumption (million dollars)-----	8,486	9,745	10,652	18,974	21,035	10.9	28.2
	Trade balance (million dollars)-----	1,145	1,449	1,968	1,826	2,165	-	-
	Ratio of imports to apparent consumption (percent)-----	5.9	5.7	5.8	4.8	4.8	(0.7)	(5.5)
	Ratio of exports to production (percent)-----	17.1	17.9	20.5	13.2	13.7	3.7	(7.2)

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
CH043	SBR rubber in primary forms:							
	Establishments (number)-----	16	14	15	12	11	(8.3)	(8.6)
	Employees (thousands)-----	4	4	4	4	4	0.0	0.0
	Capacity utilization (percent)-----	69	79	81	79	77	(2.5)	2.2
	U.S. production (million dollars)-----	757	870	1,030	642	680	5.9	(5.1)
	U.S. exports (million dollars)-----	95	143	148	203	206	1.5	20.9
	U.S. imports (million dollars)-----	67	72	78	98	94	(4.1)	10.4
	Apparent U.S. consumption (million dollars)-----	729	799	960	537	568	5.8	(8.6)
	Trade balance (million dollars)-----	28	71	70	105	112	-	-
	Ratio of imports to apparent consumption (percent)-----	9.2	9.0	8.1	18.2	16.5	(9.3)	20.7
	Ratio of exports to production (percent)-----	12.5	16.4	14.4	31.6	30.3	(4.2)	27.3
CH044	Natural rubber and other synthetic rubber:							
	Establishments (number)-----	35	34	33	33	34	3.0	(0.9)
	Employees (thousands)-----	7	7	7	7	8	14.3	2.7
	Capacity utilization (percent)-----	65	75	78	79	81	2.5	5.0
	U.S. production (million dollars)-----	2,875	3,123	3,287	2,859	2,945	3.0	(0.4)
	U.S. exports (million dollars)-----	671	793	930	702	822	17.1	2.9
	U.S. imports (million dollars)-----	897	1,080	1,403	1,385	1,130	(18.4)	7.4
	Apparent U.S. consumption (million dollars)-----	3,101	3,410	3,760	3,542	3,253	(8.2)	1.3
	Trade balance (million dollars)-----	(226)	(287)	(473)	(683)	(308)	-	-
	Ratio of imports to apparent consumption (percent)-----	28.9	31.7	37.3	39.1	34.7	(11.2)	5.9
	Ratio of exports to shipments (percent)-----	23.3	25.4	28.3	24.6	27.9	13.7	3.3
CH045	Pneumatic tires and tubes (new):							
	Establishments (number)-----	41	39	39	39	38	(2.6)	(1.5)
	Employees (thousands)-----	66	64	67	66	65	(1.5)	0.0
	Capacity utilization (percent)-----	97	101	99	98	96	(2.0)	(0.5)
	U.S. shipments (million dollars)-----	10,013	10,371	10,900	10,700	10,500	(1.9)	1.3
	U.S. exports (million dollars)-----	269	463	698	812	1,097	35.1	40.1
	U.S. imports (million dollars)-----	1,931	2,212	2,389	2,644	2,522	(4.6)	7.4
	Apparent U.S. consumption (million dollars)-----	11,675	12,120	12,591	12,532	11,925	(4.8)	0.8
	Trade balance (million dollars)-----	(1,662)	(1,749)	(1,691)	(1,832)	(1,425)	-	-
	Ratio of imports to apparent consumption (percent)-----	16.5	18.3	19.0	21.1	21.1	0.2	6.6
	Ratio of exports to shipments (percent)-----	2.7	4.5	6.4	7.6	10.4	37.7	38.4

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
CH046	Other tires:							
	Establishments (number)-----	2,419	2,248	2,225	2,210	1,970	(10.9)	(4.2)
	Employees (thousands)-----	8	8	8	8	7	(12.5)	(2.6)
	Capacity utilization (percent)-----	83	85	84	85	83	(2.4)	0.0
	U.S. shipments (million dollars)-----	1,958	1,955	1,988	2,000	2,100	5.0	1.6
	U.S. exports (million dollars)-----	46	51	74	51	49	(3.9)	1.3
	U.S. imports (million dollars)-----	54	58	56	77	67	(13.0)	7.4
	Apparent U.S. consumption (million dollars)-----	1,966	1,962	1,970	2,026	2,118	4.5	1.8
	Trade balance (million dollars)-----	(8)	(7)	18	(26)	(18)	-	-
	Ratio of imports to apparent consumption (percent)-----	2.7	3.0	2.8	3.8	3.2	(16.8)	5.5
	Ratio of exports to shipments (percent)-----	2.3	2.6	3.7	2.6	2.3	(8.5)	(0.4)
CH047	Plastic or rubber semifabricated forms:							
	Establishments (number)-----	13,200	13,300	13,300	13,300	13,300	0.0	0.2
	Employees (thousands)-----	640	660	660	665	665	0.0	0.8
	Capacity utilization (percent)-----	78	80	80	83	83	0.0	1.6
	U.S. shipments (million dollars)-----	63,670	70,050	71,200	17,180	18,900	10.0	(31.8)
	U.S. exports (million dollars)-----	1,003	1,226	1,524	1,594	1,933	21.3	17.1
	U.S. imports (million dollars)-----	832	928	1,130	1,232	1,307	6.1	12.6
	Apparent U.S. consumption (million dollars)-----	63,499	69,752	70,806	16,818	18,274	8.7	(32.4)
	Trade balance (million dollars)-----	171	298	394	362	626	-	-
	Ratio of imports to apparent consumption (percent)-----	1.3	1.3	1.6	7.3	7.2	(2.4)	66.5
	Ratio of exports to shipments (percent)-----	1.6	1.8	2.1	9.3	10.2	10.2	71.8
CH048	Plastic containers and closures:							
	Establishments (number)-----	1,590	1,680	1,750	1,845	1,882	2.0	4.4
	Employees (thousands)-----	113	122	126	134	135	0.7	4.6
	Capacity utilization (percent)-----	85	87	90	92	90	(2.2)	1.7
	U.S. shipments (million dollars)-----	7,000	7,500	7,900	8,390	8,560	2.0	5.3
	U.S. exports (million dollars)-----	210	261	357	413	565	36.8	27.6
	U.S. imports (million dollars)-----	343	404	538	640	683	6.7	20.2
	Apparent U.S. consumption (million dollars)-----	7,133	7,643	8,081	8,617	8,678	0.7	5.3
	Trade balance (million dollars)-----	(133)	(143)	(181)	(227)	(118)	-	-
	Ratio of imports to apparent consumption (percent)-----	4.8	5.3	6.7	7.4	7.9	6.0	14.2
	Ratio of exports to shipments (percent)-----	3.0	3.5	4.5	4.9	6.6	34.1	21.2

Table B-3

Energy and chemicals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
CH049	Hose, belting and plastic pipe:							
	Establishments (number)-----	250	250	245	245	245	0.0	(0.6)
	Employees (thousands)-----	40	40	39	40	40	0.0	0.0
	Capacity utilization (percent)-----	70	70	73	70	70	0.0	0.0
	U.S. shipments (million dollars)-----	4,125	4,350	4,500	4,700	4,800	2.1	3.9
	U.S. exports (million dollars)-----	268	331	338	528	634	20.1	24.5
	U.S. imports (million dollars)-----	358	419	512	533	587	10.1	13.1
	Apparent U.S. consumption (million dollars)-----	4,215	4,438	4,674	4,705	4,753	1.0	3.0
	Trade balance (million dollars)-----	(90)	(88)	(174)	(5)	47	-	-
	Ratio of imports to apparent consumption (percent)-----	8.5	9.4	11.0	11.3	12.4	9.0	9.8
	Ratio of exports to shipments (percent)-----	6.5	7.6	7.5	11.2	13.2	17.6	19.8
CH050	Miscellaneous rubber or plastics products:							
	Establishments (number)-----	13,200	13,300	13,300	13,200	13,100	(0.8)	(0.2)
	Employees (thousands)-----	650	670	680	672	665	(1.0)	0.5
	Capacity utilization (percent)-----	78	80	85	85	85	0.0	2.4
	U.S. shipments (million dollars)-----	63,670	70,044	75,500	73,500	71,500	(2.7)	2.8
	U.S. exports (million dollars)-----	900	1,106	1,410	1,737	2,366	36.2	26.9
	U.S. imports (million dollars)-----	2,274	2,778	3,131	3,103	3,284	5.8	8.8
	Apparent U.S. consumption (million dollars)-----	65,044	71,716	77,221	74,866	72,418	(3.3)	2.6
	Trade balance (million dollars)-----	(1,374)	(1,672)	(1,721)	(1,366)	(918)	-	-
	Ratio of imports to apparent consumption (percent)-----	3.5	3.9	4.1	4.1	4.5	9.4	6.1
	Ratio of exports to shipments (percent)-----	1.4	1.6	1.9	2.4	3.3	40.0	23.4

1/ The figure shown represents the compound rate of change of a trend line plotted through 1986-1990 data using linear regression.

2/ Not available.

3/ Less than 500.

4/ Production is based on value of active ingredients; trade is based on value of products formulated for immediate use, valued much higher than ingredient cost.

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
<b>Minerals and metals:</b>								
MM001	Clays and nonmetallic minerals and products, not elsewhere...:							
	Establishments (number)-----	430	340	330	315	315	0.0	(6.7)
	Employees (thousands)-----	16	14	14	14	14	0.0	(2.6)
	Capacity utilization (percent)-----	75	79	82	84	84	0.0	2.9
	U.S. shipments (million dollars)-----	1,853	1,961	2,284	2,472	2,569	3.9	9.3
	U.S. exports (million dollars)-----	435	576	633	634	701	10.6	11.1
	U.S. imports (million dollars)-----	80	83	97	76	122	60.5	7.9
	Apparent U.S. consumption (million dollars)-----	1,498	1,468	1,748	1,914	1,990	4.0	8.7
	Trade balance (million dollars)-----	355	493	536	558	579	-	-
	Ratio of imports to apparent consumption (percent)-----	5.3	5.7	5.5	4.0	6.1	54.4	(0.8)
	Ratio of exports to shipments (percent)-----	23.5	29.4	27.7	25.6	27.3	6.4	1.7
MM002	Certain miscellaneous mineral substances:							
	Establishments (number)-----	12	10	10	10	10	0.0	(3.6)
	Employees (thousands)-----	2	2	2	2	2	0.0	0.0
	Capacity utilization (percent)-----	92	92	90	87	85	(2.3)	(2.1)
	U.S. shipments (million dollars)-----	41	44	45	45	42	(6.7)	0.7
	U.S. exports (million dollars)-----	19	18	19	5	4	(20.0)	(35.6)
	U.S. imports (million dollars)-----	44	47	61	70	56	(20.0)	9.2
	Apparent U.S. consumption (million dollars)-----	66	73	87	110	94	(14.5)	11.8
	Trade balance (million dollars)-----	(25)	(29)	(42)	(65)	(52)	-	-
	Ratio of imports to apparent consumption (percent)-----	66.7	64.4	70.1	63.6	59.6	(6.4)	(2.3)
	Ratio of exports to shipments (percent)-----	46.3	40.9	42.2	11.1	9.5	(14.3)	(36.0)
MM003	Iron ores and concentrates:							
	Establishments (number)-----	19	19	21	21	23	9.5	4.9
	Employees (thousands)-----	6	6	7	7	8	4.1	7.3
	Capacity utilization (percent)-----	46	55	86	80	75	(6.3)	14.5
	U.S. shipments (million dollars)-----	2,077	1,503	1,717	1,901	1,800	(5.3)	(0.5)
	U.S. exports (million dollars)-----	205	199	195	193	123	(36.3)	(10.0)
	U.S. imports (million dollars)-----	464	407	481	520	560	7.7	6.4
	Apparent U.S. consumption (million dollars)-----	2,336	1,711	2,003	2,228	2,237	0.4	1.8
	Trade balance (million dollars)-----	(259)	(208)	(286)	(327)	(437)	-	-
	Ratio of imports to apparent consumption (percent)-----	19.9	23.8	24.0	23.3	25.0	7.3	4.5
	Ratio of exports to shipments (percent)-----	9.9	13.2	11.4	10.2	6.8	(32.7)	(9.5)

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
MM004	Copper ores and concentrates:							
	Establishments (number)-----	87	52	65	65	65	0.0	(3.5)
	Employees (thousands)-----	10	12	12	12	13	8.3	5.4
	Capacity utilization (percent)-----	80	82	84	89	92	3.4	3.7
	U.S. shipments (million dollars)-----	1,000	1,358	2,264	2,593	2,522	(2.7)	28.4
	U.S. exports (million dollars)-----	188	157	380	571	446	(21.9)	35.2
	U.S. imports (million dollars)-----	3	2	14	53	134	152.8	196.7
	Apparent U.S. consumption (million dollars)-----	815	1,203	1,898	2,075	2,210	6.5	28.9
	Trade balance (million dollars)-----	185	155	366	518	312	-	-
	Ratio of imports to apparent consumption (percent)-----	0.4	0.2	0.7	2.6	6.1	137.4	130.1
	Ratio of exports to shipments (percent)-----	18.8	11.6	16.8	22.0	17.7	(19.7)	5.4
MM005	Lead ores and residues:							
	Establishments (number)-----	15	16	12	15	15	0.0	(0.6)
	Employees (thousands)-----	2	1	1	2	2	0.0	7.2
	Capacity utilization (percent)-----	61	47	60	62	70	12.9	5.7
	U.S. shipments (million dollars)-----	95	138	178	201	271	34.8	28.1
	U.S. exports (million dollars)-----	6	6	19	30	62	106.7	87.4
	U.S. imports (million dollars)-----	7	3	15	4	4	0.0	(8.0)
	Apparent U.S. consumption (million dollars)-----	96	135	174	175	213	21.7	20.4
	Trade balance (million dollars)-----	(1)	3	4	26	58	-	-
	Ratio of imports to apparent consumption (percent)-----	7.3	2.2	8.6	2.3	1.9	(17.8)	(23.5)
	Ratio of exports to shipments (percent)-----	6.3	4.3	10.7	14.9	22.9	53.3	46.3
MM006	Zinc ores and residues:							
	Establishments (number)-----	25	25	25	25	26	4.0	0.8
	Employees (thousands)-----	2	2	2	2	3	50.0	8.4
	Capacity utilization (percent)-----	58	62	70	79	79	0.0	9.0
	U.S. shipments (million dollars)-----	145	166	255	394	601	52.5	44.9
	U.S. exports (million dollars)-----	4	12	23	75	269	258.7	178.7
	U.S. imports (million dollars)-----	26	22	36	32	24	(25.0)	2.2
	Apparent U.S. consumption (million dollars)-----	167	176	268	351	356	1.4	24.7
	Trade balance (million dollars)-----	(22)	(10)	(13)	43	245	-	-
	Ratio of imports to apparent consumption (percent)-----	15.6	12.5	13.4	9.1	6.7	(26.1)	(18.0)
	Ratio of exports to shipments (percent)-----	2.8	7.2	9.0	19.0	44.8	135.1	92.3

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
MM007	Certain ores, concentrates, ash, and residues:							
	Establishments (number)-----	55	55	55	50	50	0.0	(2.8)
	Employees (thousands)-----	3	3	3	3	3	0.0	0.0
	Capacity utilization (percent)-----	40	50	55	50	50	0.0	4.6
	U.S. shipments (million dollars)-----	800	790	820	800	780	(2.5)	(0.4)
	U.S. exports (million dollars)-----	255	308	380	550	362	(34.2)	13.7
	U.S. imports (million dollars)-----	276	321	444	633	495	(21.8)	20.3
	Apparent U.S. consumption (million dollars)-----	821	803	884	883	913	3.4	3.1
	Trade balance (million dollars)-----	(21)	(13)	(64)	(83)	(133)	-	-
	Ratio of imports to apparent consumption (percent)-----	33.6	40.0	50.2	71.7	54.2	(24.4)	16.6
	Ratio of exports to shipments (percent)-----	31.9	39.0	46.3	68.8	46.4	(32.5)	14.1
MM008	Precious metal ores and concentrates:							
	Establishments (number)-----	371	373	373	373	373	0.0	0.1
	Employees (thousands)-----	11	13	16	18	18	0.0	14.0
	Capacity utilization (percent)-----	80	80	89	94	94	0.0	5.0
	U.S. shipments (million dollars)-----	1,234	1,985	2,534	2,893	3,190	10.3	25.6
	U.S. exports (million dollars)-----	7	21	21	2	13	550.0	(10.5)
	U.S. imports (million dollars)-----	9	15	11	4	30	650.0	11.5
	Apparent U.S. consumption (million dollars)-----	1,236	1,979	2,524	2,895	3,207	10.8	25.7
	Trade balance (million dollars)-----	(2)	6	10	(2)	(17)	-	-
	Ratio of imports to apparent consumption (percent)-----	0.7	0.8	0.4	0.1	0.9	577.0	(11.3)
	Ratio of exports to shipments (percent)-----	0.6	1.1	0.8	0.1	0.4	489.5	(28.7)
MM009	Certain nonmetallic minerals and articles:							
	Establishments (number)-----	21,000	21,000	20,600	20,500	20,400	(0.5)	(0.8)
	Employees (thousands)-----	358	358	359	357	353	(1.1)	(0.3)
	Capacity utilization (percent)-----	2/	2/	2/	2/	2/	-	-
	U.S. shipments (million dollars)-----	36,600	41,500	42,000	41,900	42,300	1.0	3.0
	U.S. exports (million dollars)-----	550	621	759	820	982	19.8	15.5
	U.S. imports (million dollars)-----	1,852	1,599	1,778	1,845	1,923	4.2	2.2
	Apparent U.S. consumption (million dollars)-----	37,902	42,478	43,019	42,925	43,241	0.7	2.8
	Trade balance (million dollars)-----	(1,302)	(978)	(1,019)	(1,025)	(941)	-	-
	Ratio of imports to apparent consumption (percent)-----	4.9	3.8	4.1	4.3	4.4	3.5	(0.6)
	Ratio of exports to shipments (percent)-----	1.5	1.5	1.8	2.0	2.3	18.6	12.1

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
MM010	Refractory and heat-insulating articles:							
	Establishments (number)-----	150	145	140	130	130	0.0	(3.9)
	Employees (thousands)-----	12	11	11	10	10	0.0	(4.5)
	Capacity utilization (percent)-----	56	62	72	76	74	(2.6)	7.9
	U.S. shipments (million dollars)-----	1,521	1,682	1,950	2,056	2,000	(2.7)	7.8
	U.S. exports (million dollars)-----	129	166	216	208	251	20.7	16.8
	U.S. imports (million dollars)-----	96	111	131	137	136	(0.7)	9.5
	Apparent U.S. consumption (million dollars)-----	1,488	1,627	1,865	1,985	1,885	(5.0)	6.9
	Trade balance (million dollars)-----	33	55	85	71	115	-	-
	Ratio of imports to apparent consumption (percent)-----	6.5	6.8	7.0	6.9	7.2	4.5	2.4
	Ratio of exports to shipments (percent)-----	8.5	9.9	11.1	10.1	12.6	24.1	8.4
MM011	Ceramic bricks and miscellaneous ceramic construction articles:							
	Establishments (number)-----	356	357	360	326	326	0.0	(2.6)
	Employees (thousands)-----	21	21	21	20	20	0.0	(1.5)
	Capacity utilization (percent)-----	58	58	58	58	58	0.0	0.0
	U.S. shipments (million dollars)-----	1,520	1,301	1,279	1,190	1,223	2.8	(5.1)
	U.S. exports (million dollars)-----	11	12	13	12	18	50.0	10.4
	U.S. imports (million dollars)-----	29	29	28	27	22	(18.5)	(6.0)
	Apparent U.S. consumption (million dollars)-----	1,538	1,305	1,302	1,205	1,227	1.8	(5.2)
	Trade balance (million dollars)-----	(18)	(17)	(15)	(15)	(4)	-	-
	Ratio of imports to apparent consumption (percent)-----	1.9	2.2	2.2	2.2	1.8	(20.0)	(0.9)
	Ratio of exports to shipments (percent)-----	0.7	0.9	1.0	1.0	1.5	46.0	16.3
MM012	Ceramic floor and wall tiles:							
	Establishments (number)-----	112	117	129	118	118	0.0	1.1
	Employees (thousands)-----	10	10	10	10	10	0.0	0.0
	Capacity utilization (percent)-----	82	84	90	90	90	0.0	2.6
	U.S. shipments (million dollars)-----	556	608	624	707	670	(5.2)	5.4
	U.S. exports (million dollars)-----	7	8	12	18	21	16.7	35.1
	U.S. imports (million dollars)-----	315	378	411	431	421	(2.3)	7.4
	Apparent U.S. consumption (million dollars)-----	864	978	1,023	1,120	1,070	(4.5)	5.8
	Trade balance (million dollars)-----	(308)	(370)	(399)	(413)	(400)	-	-
	Ratio of imports to apparent consumption (percent)-----	36.5	38.7	40.2	38.5	39.3	2.2	1.5
	Ratio of exports to shipments (percent)-----	1.3	1.3	1.9	2.5	3.1	23.1	28.2

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
MM013	Ceramic sanitary fixtures:							
	Establishments (number)-----	78	77	73	72	72	0.0	(2.2)
	Employees (thousands)-----	11	10	10	9	9	0.0	(4.9)
	Capacity utilization (percent)-----	86	78	82	82	82	0.0	(0.5)
	U.S. shipments (million dollars)-----	681	719	758	822	876	6.6	6.6
	U.S. exports (million dollars)-----	12	14	28	41	54	31.7	50.4
	U.S. imports (million dollars)-----	64	60	65	73	72	(1.4)	4.4
	Apparent U.S. consumption (million dollars)-----	733	765	795	854	894	4.7	5.2
	Trade balance (million dollars)-----	(52)	(46)	(37)	(32)	(18)	-	-
	Ratio of imports to apparent consumption (percent)-----	8.7	7.8	8.2	8.5	8.1	(5.8)	(0.8)
	Ratio of exports to shipments (percent)-----	1.8	1.9	3.7	5.0	6.2	23.6	41.1
MM014	Ceramic table, toilet, and kitchen articles:							
	Establishments (number)-----	80	78	78	78	78	0.0	(0.5)
	Employees (thousands)-----	9	7	6	6	6	0.0	(9.2)
	Capacity utilization (percent)-----	2/	2/	330	2/	2/	-	-
	U.S. shipments (million dollars)-----	291	392	330	330	325	(1.5)	0.5
	U.S. exports (million dollars)-----	23	32	48	53	55	3.8	25.2
	U.S. imports (million dollars)-----	578	637	648	787	779	(1.0)	8.4
	Apparent U.S. consumption (million dollars)-----	846	997	930	1,064	1,049	(1.4)	5.1
	Trade balance (million dollars)-----	(555)	(605)	(600)	(734)	(724)	-	-
	Ratio of imports to apparent consumption (percent)-----	68.3	63.9	69.7	74.0	74.3	0.4	3.2
	Ratio of exports to shipments (percent)-----	7.9	8.2	2/	16.1	16.9	5.4	24.6
MM015	Miscellaneous ceramic articles:							
	Establishments (number)-----	686	726	785	823	823	0.0	5.0
	Employees (thousands)-----	10	11	13	13	13	0.0	7.2
	Capacity utilization (percent)-----	63	72	73	73	73	0.0	3.1
	U.S. shipments (million dollars)-----	378	494	518	559	550	(1.6)	9.1
	U.S. exports (million dollars)-----	42	49	56	123	135	9.8	38.5
	U.S. imports (million dollars)-----	583	714	730	565	526	(6.9)	(4.3)
	Apparent U.S. consumption (million dollars)-----	919	1,159	1,192	1,001	941	(6.0)	(1.0)
	Trade balance (million dollars)-----	(541)	(665)	(674)	(442)	(391)	-	-
	Ratio of imports to apparent consumption (percent)-----	63.4	61.6	61.2	56.4	55.9	(1.0)	(3.3)
	Ratio of exports to shipments (percent)-----	11.1	9.9	10.8	22.0	24.5	11.6	26.9

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
MM016	Flat glass and certain flat glass products:							
	Establishments (number)-----	430	450	525	525	525	0.0	5.7
	Employees (thousands)-----	44	45	45	45	45	0.0	0.5
	Capacity utilization (percent)-----	90	95	95	2/	2/	-	-
	U.S. shipments (million dollars)-----	5,300	5,600	6,200	6,820	6,750	(1.0)	7.0
	U.S. exports (million dollars)-----	283	381	458	533	751	40.9	25.7
	U.S. imports (million dollars)-----	527	614	619	632	614	(2.8)	3.4
	Apparent U.S. consumption (million dollars)-----	5,544	5,833	6,361	6,919	6,613	(4.4)	5.4
	Trade balance (million dollars)-----	(244)	(233)	(161)	(99)	137	-	-
	Ratio of imports to apparent consumption (percent)-----	9.5	10.5	9.7	9.1	9.3	1.6	(1.9)
	Ratio of exports to shipments (percent)-----	5.3	6.8	7.4	7.8	11.1	42.4	17.4
MM017	Glass containers:							
	Establishments (number)-----	115	105	105	105	105	0.0	(1.8)
	Employees (thousands)-----	44	40	40	38	38	0.0	(3.4)
	Capacity utilization (percent)-----	74	95	2/	2/	2/	-	-
	U.S. shipments (million dollars)-----	4,627	4,720	4,640	4,836	5,004	3.5	1.8
	U.S. exports (million dollars)-----	21	29	36	45	98	117.8	42.2
	U.S. imports (million dollars)-----	137	135	156	175	214	22.3	12.2
	Apparent U.S. consumption (million dollars)-----	4,743	4,826	4,760	4,966	5,120	3.1	1.8
	Trade balance (million dollars)-----	(116)	(106)	(120)	(130)	(116)	-	-
	Ratio of imports to apparent consumption (percent)-----	2.9	2.8	3.3	3.5	4.2	18.6	10.2
	Ratio of exports to shipments (percent)-----	0.5	0.6	0.8	0.9	2.0	110.5	39.6
MM018	Household glassware:							
	Establishments (number)-----	237	237	237	237	237	0.0	0.0
	Employees (thousands)-----	26	26	26	26	26	0.0	0.0
	Capacity utilization (percent)-----	2/	2/	2/	2/	2/	-	-
	U.S. shipments (million dollars)-----	1,263	1,300	1,362	1,382	1,400	1.3	2.7
	U.S. exports (million dollars)-----	45	58	65	86	123	43.0	27.2
	U.S. imports (million dollars)-----	430	445	480	513	524	2.1	5.5
	Apparent U.S. consumption (million dollars)-----	1,648	1,687	1,777	1,809	1,801	(0.4)	2.5
	Trade balance (million dollars)-----	(385)	(387)	(415)	(427)	(401)	-	-
	Ratio of imports to apparent consumption (percent)-----	26.1	26.4	27.0	28.4	29.1	2.6	2.9
	Ratio of exports to shipments (percent)-----	3.6	4.5	2/	6.2	8.8	41.2	23.8

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
MM019	Certain glass and glass products:							
	Establishments (number)-----	180	180	180	180	180	0.0	0.0
	Employees (thousands)-----	57	57	57	57	57	0.0	0.0
	Capacity utilization (percent)-----	83	90	90	2/	2/	-	-
	U.S. shipments (million dollars)-----	1,800	1,800	1,900	2,090	2,100	0.5	4.7
	U.S. exports (million dollars)-----	215	226	277	295	344	16.6	12.8
	U.S. imports (million dollars)-----	260	315	343	297	286	(3.7)	1.3
	Apparent U.S. consumption (million dollars)-----	1,845	1,889	1,966	2,092	2,042	(2.4)	3.1
	Trade balance (million dollars)-----	(45)	(89)	(66)	(2)	58	-	-
	Ratio of imports to apparent consumption (percent)-----	14.1	16.7	17.4	14.2	14.0	(1.3)	(1.7)
	Ratio of exports to shipments (percent)-----	11.9	12.6	14.6	14.1	16.4	16.1	7.8
MM020	Fiber glass products:							
	Establishments (number)-----	14	12	9	11	11	0.0	(5.5)
	Employees (thousands)-----	28	28	28	30	30	0.0	2.1
	Capacity utilization (percent)-----	78	85	88	2/	2/	-	-
	U.S. shipments (million dollars)-----	3,207	3,131	3,260	3,385	3,400	0.4	2.0
	U.S. exports (million dollars)-----	189	225	279	356	347	(2.5)	18.2
	U.S. imports (million dollars)-----	75	96	105	112	112	0.0	10.0
	Apparent U.S. consumption (million dollars)-----	3,093	3,002	3,086	3,141	3,165	0.8	0.9
	Trade balance (million dollars)-----	114	129	174	244	235	-	-
	Ratio of imports to apparent consumption (percent)-----	2.4	3.2	3.4	3.6	3.5	(0.8)	9.0
	Ratio of exports to shipments (percent)-----	5.9	7.2	8.6	10.5	10.2	(3.0)	15.9
MM021	Natural and synthetic gemstones:							
	Establishments (number)-----	453	453	457	457	457	0.0	0.3
	Employees (thousands)-----	7	7	7	7	7	0.0	0.0
	Capacity utilization (percent)-----	2/	2/	2/	2/	2/	-	-
	U.S. shipments (million dollars)-----	900	900	1,300	1,500	1,600	6.7	18.1
	U.S. exports (million dollars)-----	678	841	1,134	1,361	545	(60.0)	0.4
	U.S. imports (million dollars)-----	4,031	3,949	4,944	5,069	4,703	(7.2)	5.7
	Apparent U.S. consumption (million dollars)-----	4,253	4,008	5,110	5,208	5,758	10.6	9.1
	Trade balance (million dollars)-----	(3,353)	(3,108)	(3,810)	(3,708)	(4,158)	-	-
	Ratio of imports to apparent consumption (percent)-----	94.8	98.5	96.8	97.3	81.7	(16.1)	(3.1)
	Ratio of exports to shipments (percent)-----	75.3	93.4	87.2	90.7	34.1	(62.5)	(14.9)

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
MM022	Precious metals and related articles:							
	Establishments (number)-----	88	87	92	93	89	(4.3)	0.9
	Employees (thousands)-----	7	7	7	7	7	0.0	0.0
	Capacity utilization (percent)-----	75	75	78	80	85	6.3	3.2
	U.S. shipments (million dollars)-----	3,818	5,341	5,898	6,189	6,952	12.3	14.4
	U.S. exports (million dollars)-----	2,176	2,222	5,297	3,167	3,815	20.5	15.9
	U.S. imports (million dollars)-----	7,908	3,537	3,241	3,941	3,758	(4.6)	(12.9)
	Apparent U.S. consumption (million dollars)-----	9,550	6,656	3,842	6,963	6,895	(1.0)	(5.9)
	Trade balance (million dollars)-----	(5,732)	(1,315)	2,056	(774)	57	-	-
	Ratio of imports to apparent consumption (percent)-----	82.8	53.1	84.4	56.6	54.5	(3.7)	(7.4)
	Ratio of exports to shipments (percent)-----	57.0	41.6	89.8	51.2	54.9	7.2	1.3
MM023	Pig iron:							
	Establishments (number)-----	14	15	15	16	15	(6.3)	2.0
	Employees (thousands)-----	18	20	23	23	23	0.0	6.5
	Capacity utilization (percent)-----	54	63	65	65	65	0.0	4.1
	U.S. shipments (million dollars)-----	7,200	7,938	9,135	9,112	8,991	(1.3)	6.0
	U.S. exports (million dollars)-----	5	5	8	1	2	100.0	(29.1)
	U.S. imports (million dollars)-----	42	52	89	73	60	(17.8)	11.1
	Apparent U.S. consumption (million dollars)-----	7,237	7,985	9,216	9,184	9,049	(1.5)	6.0
	Trade balance (million dollars)-----	(37)	(47)	(81)	(72)	(58)	-	-
	Ratio of imports to apparent consumption (percent)-----	0.6	0.7	1.0	0.8	0.7	(16.6)	4.8
	Ratio of exports to shipments (percent)-----	0.1	0.1	0.1	0.0	0.0	102.7	(33.1)
MM024	Ferroalloys:							
	Establishments (number)-----	33	31	32	34	34	0.0	1.5
	Employees (thousands)-----	4	4	6	4	4	0.0	0.0
	Capacity utilization (percent)-----	36	35	70	90	75	(16.7)	27.3
	U.S. shipments (million dollars)-----	532	550	739	942	900	(4.5)	17.2
	U.S. exports (million dollars)-----	39	44	74	86	94	9.3	27.5
	U.S. imports (million dollars)-----	541	533	986	1,050	908	(13.5)	18.7
	Apparent U.S. consumption (million dollars)-----	1,034	1,039	1,651	1,906	1,714	(10.1)	17.6
	Trade balance (million dollars)-----	(502)	(489)	(912)	(964)	(814)	-	-
	Ratio of imports to apparent consumption (percent)-----	52.3	51.3	59.7	55.1	53.0	(3.8)	1.0
	Ratio of exports to shipments (percent)-----	7.3	8.0	10.0	9.1	10.4	14.4	8.8

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
MM025	Iron and steel waste and scrap:							
	Establishments (number)-----	1,200	1,260	1,210	1,220	1,220	0.0	0.0
	Employees (thousands)-----	21	22	23	23	23	0.0	2.3
	Capacity utilization (percent)-----	70	72	75	75	75	0.0	1.8
	U.S. shipments (million dollars)-----	5,557	5,191	5,753	5,508	5,566	1.1	0.6
	U.S. exports (million dollars)-----	1,095	1,031	1,416	1,755	1,642	(6.4)	14.4
	U.S. imports (million dollars)-----	59	92	140	173	180	4.0	33.1
	Apparent U.S. consumption (million dollars)-----	4,521	4,252	4,477	3,926	4,104	4.5	(2.7)
	Trade balance (million dollars)-----	1,036	939	1,276	1,582	1,462	-	-
	Ratio of imports to apparent consumption (percent)-----	1.3	2.2	3.1	4.4	4.4	(0.5)	36.8
	Ratio of exports to shipments (percent)-----	19.7	19.9	24.6	31.9	29.5	(7.4)	13.7
MM026	Direct reduced iron, ferrous powders, and grit and shot:							
	Establishments (number)-----	22	22	21	23	23	0.0	1.3
	Employees (thousands)-----	1	1	1	1	1	0.0	0.0
	Capacity utilization (percent)-----	53	64	77	64	76	18.8	7.5
	U.S. shipments (million dollars)-----	249	268	315	296	315	6.4	5.9
	U.S. exports (million dollars)-----	17	22	29	34	51	50.0	30.1
	U.S. imports (million dollars)-----	37	42	58	72	92	27.8	26.6
	Apparent U.S. consumption (million dollars)-----	269	288	344	334	356	6.6	7.3
	Trade balance (million dollars)-----	(20)	(20)	(29)	(38)	(41)	-	-
	Ratio of imports to apparent consumption (percent)-----	13.8	14.6	16.9	21.6	25.8	19.9	18.0
	Ratio of exports to shipments (percent)-----	6.8	8.2	9.2	11.5	16.2	41.0	22.9
MM027	Steel mill products, all grades:							
	Establishments (number)-----	202	205	875	875	850	(2.9)	54.1
	Employees (thousands)-----	202	205	213	212	206	(2.8)	0.7
	Capacity utilization (percent)-----	64	80	89	85	85	0.0	6.5
	U.S. shipments (million dollars)-----	40,099	46,215	54,277	53,463	49,720	(7.0)	5.9
	U.S. exports (million dollars)-----	767	949	1,661	2,809	2,784	(0.9)	44.2
	U.S. imports (million dollars)-----	7,821	8,178	9,921	8,958	8,385	(6.4)	2.3
	Apparent U.S. consumption (million dollars)-----	47,153	53,444	62,537	59,612	55,321	(7.2)	4.4
	Trade balance (million dollars)-----	(7,054)	(7,229)	(8,260)	(6,149)	(5,601)	-	-
	Ratio of imports to apparent consumption (percent)-----	16.6	15.3	15.9	15.0	15.2	0.9	(2.0)
	Ratio of exports to shipments (percent)-----	1.9	2.1	3.1	5.3	5.6	6.6	36.2

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
MM028	Steel pipe and tube fittings, and certain cast products:							
	Establishments (number)-----	294	294	288	275	265	(3.6)	(2.7)
	Employees (thousands)-----	170	177	170	169	169	0.0	(0.6)
	Capacity utilization (percent)-----	65	70	70	75	80	6.7	5.0
	U.S. shipments (million dollars)-----	10,411	11,331	11,892	12,130	12,373	2.0	4.2
	U.S. exports (million dollars)-----	208	218	297	326	422	29.4	19.9
	U.S. imports (million dollars)-----	236	219	313	368	364	(1.1)	14.9
	Apparent U.S. consumption (million dollars)-----	10,439	11,332	11,908	12,172	12,315	1.2	4.1
	Trade balance (million dollars)-----	(28)	(1)	(16)	(42)	58	-	-
	Ratio of imports to apparent consumption (percent)-----	2.3	1.9	2.6	3.0	3.0	(2.2)	10.3
	Ratio of exports to shipments (percent)-----	2.0	1.9	2.5	2.7	3.4	26.9	15.1
MM029	Fabricated structurals:							
	Establishments (number)-----	2,550	2,500	2,420	2,420	2,365	(2.3)	(1.8)
	Employees (thousands)-----	87	83	80	85	84	(1.2)	(0.5)
	Capacity utilization (percent)-----	66	65	65	65	65	0.0	(0.3)
	U.S. shipments (million dollars)-----	8,530	8,360	8,380	8,434	8,070	(4.3)	(1.0)
	U.S. exports (million dollars)-----	67	74	102	58	84	44.8	2.1
	U.S. imports (million dollars)-----	186	146	116	79	72	(8.9)	(22.2)
	Apparent U.S. consumption (million dollars)-----	8,649	8,432	8,394	8,455	8,058	(4.7)	(1.4)
	Trade balance (million dollars)-----	(119)	(72)	(14)	(21)	12	-	-
	Ratio of imports to apparent consumption (percent)-----	2.2	1.7	1.4	0.9	0.9	(4.4)	(21.1)
	Ratio of exports to shipments (percent)-----	0.8	0.9	1.2	0.7	1.0	51.4	3.2
MM030	Metal construction components:							
	Establishments (number)-----	3,580	3,800	3,800	3,800	3,750	(1.3)	0.9
	Employees (thousands)-----	123	147	145	155	153	(1.3)	5.0
	Capacity utilization (percent)-----	75	75	75	75	75	0.0	0.0
	U.S. shipments (million dollars)-----	10,700	10,200	10,000	10,600	10,300	(2.8)	(0.4)
	U.S. exports (million dollars)-----	114	141	173	292	335	14.7	33.4
	U.S. imports (million dollars)-----	151	162	160	182	150	(17.6)	1.0
	Apparent U.S. consumption (million dollars)-----	10,737	10,221	9,987	10,490	10,115	(3.6)	(0.9)
	Trade balance (million dollars)-----	(37)	(21)	13	110	185	-	-
	Ratio of imports to apparent consumption (percent)-----	1.4	1.6	1.6	1.7	1.5	(14.5)	2.0
	Ratio of exports to shipments (percent)-----	1.1	1.4	1.7	2.8	3.3	18.1	33.9

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
MM031	Metallic containers:							
	Establishments (number)-----	680	612	620	590 3/	590 3/	0.0	(3.2)
	Employees (thousands)-----	72	71	69	70 3/	70 3/	0.0	(0.7)
	Capacity utilization (percent)-----	59	56	60	70 3/	75 3/	7.1	7.3
	U.S. shipments (million dollars)-----	14,742	14,811	15,526	16,548 3/	17,326 3/	4.7	4.4
	U.S. exports (million dollars)-----	166	183	275	308	401	30.2	25.7
	U.S. imports (million dollars)-----	189	214	277	269	257	(4.5)	8.8
	Apparent U.S. consumption (million dollars)-----	14,765	14,842	15,528	16,509	17,182	4.1	4.2
	Trade balance (million dollars)-----	(23)	(31)	(2)	39	144	-	-
	Ratio of imports to apparent consumption (percent)-----	1.3	1.4	1.8	1.6	1.5	(8.2)	4.4
	Ratio of exports to shipments (percent)-----	1.1	1.2	1.8	1.9	2.3	24.3	20.3
MM032	Wire products of iron, steel, aluminum, copper, and nickel:							
	Establishments (number)-----	1,434	1,462	1,462	1,450	1,450	0.0	0.1
	Employees (thousands)-----	65	68	68	65	65	0.0	(0.5)
	Capacity utilization (percent)-----	70	80	85	80	80	0.0	2.7
	U.S. shipments (million dollars)-----	6,860	8,150	8,150	10,164	8,602	(15.4)	7.0
	U.S. exports (million dollars)-----	134	152	178	190	249	31.1	15.7
	U.S. imports (million dollars)-----	546	573	700	772	638	(17.4)	6.3
	Apparent U.S. consumption (million dollars)-----	7,272	8,571	8,672	10,746	8,991	(16.3)	6.7
	Trade balance (million dollars)-----	(412)	(421)	(522)	(582)	(389)	-	-
	Ratio of imports to apparent consumption (percent)-----	7.5	6.7	8.1	7.2	7.1	(1.2)	(0.4)
	Ratio of exports to shipments (percent)-----	2.0	1.9	2.2	1.9	2.9	54.8	8.2
MM033	Chain:							
	Establishments (number)-----	38	35	33	33	33	0.0	(3.4)
	Employees (thousands)-----	7	7	7	7	7	0.0	0.0
	Capacity utilization (percent)-----	75	75	75	70	70	0.0	(2.0)
	U.S. shipments (million dollars)-----	647	645	635	635	625	(1.6)	(0.8)
	U.S. exports (million dollars)-----	170	199	283	326	312	(4.3)	18.6
	U.S. imports (million dollars)-----	308	353	390	427	476	11.5	11.2
	Apparent U.S. consumption (million dollars)-----	785	799	742	736	789	7.2	(0.7)
	Trade balance (million dollars)-----	(138)	(154)	(107)	(101)	(164)	-	-
	Ratio of imports to apparent consumption (percent)-----	39.2	44.2	52.6	58.0	60.3	4.0	12.0
	Ratio of exports to shipments (percent)-----	26.3	30.9	44.6	51.3	49.9	(2.8)	19.6

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
MM034	Industrial fasteners of base metal:							
	Establishments (number)-----	625	625	625	625	625	0.0	0.0
	Employees (thousands)-----	31	31	31	30	30	0.0	(1.0)
	Capacity utilization (percent)-----	70	70	70	70	75	7.1	1.4
	U.S. shipments (million dollars)-----	3,869	4,024	4,185	4,352	4,483	3.0	3.8
	U.S. exports (million dollars)-----	312	377	412	383	651	70.0	16.0
	U.S. imports (million dollars)-----	1,116	1,298	1,469	1,490	1,486	(0.3)	7.4
	Apparent U.S. consumption (million dollars)-----	4,673	4,945	5,242	5,459	5,318	(2.6)	3.6
	Trade balance (million dollars)-----	(804)	(921)	(1,057)	(1,107)	(835)	-	-
	Ratio of imports to apparent consumption (percent)-----	23.9	26.2	28.0	27.3	27.9	2.4	3.6
	Ratio of exports to shipments (percent)-----	8.1	9.4	9.8	8.8	14.5	65.0	11.8
MM035	Cooking and kitchen ware:							
	Establishments (number)-----	20	20	18	18	18	0.0	(3.1)
	Employees (thousands)-----	4	4	4	4	4	0.0	0.0
	Capacity utilization (percent)-----	65	65	70	70	70	0.0	2.2
	U.S. shipments (million dollars)-----	570	568	626	625	620	(0.8)	2.7
	U.S. exports (million dollars)-----	148	208	201	138	170	23.2	(1.3)
	U.S. imports (million dollars)-----	632	711	782	735	725	(1.4)	3.1
	Apparent U.S. consumption (million dollars)-----	1,054	1,071	1,207	1,222	1,175	(3.8)	3.6
	Trade balance (million dollars)-----	(484)	(503)	(581)	(597)	(555)	-	-
	Ratio of imports to apparent consumption (percent)-----	60.0	66.4	64.8	60.1	61.7	2.6	(0.4)
	Ratio of exports to shipments (percent)-----	26.0	36.6	32.1	22.1	27.4	24.2	(3.9)
MM036	Metal sanitary ware:							
	Establishments (number)-----	190	190	190	190	190	0.0	0.0
	Employees (thousands)-----	18	18	18	18	17	(5.6)	(1.1)
	Capacity utilization (percent)-----	75	80	80	80	75	(6.3)	0.0
	U.S. shipments (million dollars)-----	2,180	3,150	3,000	3,000	2,750	(8.3)	4.2
	U.S. exports (million dollars)-----	30	37	50	51	71	39.2	22.7
	U.S. imports (million dollars)-----	75	98	96	107	101	(5.6)	7.1
	Apparent U.S. consumption (million dollars)-----	2,225	3,211	3,046	3,056	2,780	(9.0)	4.0
	Trade balance (million dollars)-----	(45)	(61)	(46)	(56)	(30)	-	-
	Ratio of imports to apparent consumption (percent)-----	3.4	3.1	3.2	3.5	3.6	3.8	2.9
	Ratio of exports to shipments (percent)-----	1.4	1.2	1.7	1.7	2.6	51.9	17.7

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
MM037	Iron construction castings and other nonmalleable cast-iron articles:							
	Establishments (number)-----	30	29	29	29	29	0.0	(0.7)
	Employees (thousands)-----	2	2	2	2	2	0.0	0.0
	Capacity utilization (percent)-----	81	87	86	85	85	0.0	0.7
	U.S. shipments (million dollars)-----	128	139	146	145	143	(1.4)	2.7
	U.S. exports (million dollars)-----	21	28	35	50	31	(38.0)	14.6
	U.S. imports (million dollars)-----	60	70	67	65	58	(10.8)	(1.4)
	Apparent U.S. consumption (million dollars)-----	167	181	178	160	170	6.3	(0.9)
	Trade balance (million dollars)-----	(39)	(42)	(32)	(15)	(27)	-	-
	Ratio of imports to apparent consumption (percent)-----	35.9	38.7	37.6	40.6	34.1	(16.0)	(0.5)
	Ratio of exports to shipments (percent)-----	16.4	20.1	24.0	34.5	21.7	(37.1)	11.6
MM038	Copper and related articles:							
	Establishments (number)-----	1,082	1,080	1,085	1,085	838	(22.8)	(4.9)
	Employees (thousands)-----	37	40	41	40	40	0.0	1.6
	Capacity utilization (percent)-----	73	78	90	90	91	1.1	6.0
	U.S. shipments (million dollars)-----	7,692	9,374	12,112	12,697	12,229	(3.7)	13.1
	U.S. exports (million dollars)-----	646	785	1,307	1,539	1,833	19.1	31.8
	U.S. imports (million dollars)-----	1,548	1,673	2,172	2,327	1,966	(15.5)	8.4
	Apparent U.S. consumption (million dollars)-----	8,594	10,262	12,977	13,485	12,362	(8.3)	10.5
	Trade balance (million dollars)-----	(902)	(888)	(865)	(788)	(133)	-	-
	Ratio of imports to apparent consumption (percent)-----	18.0	16.3	16.7	17.3	15.9	(7.8)	(1.9)
	Ratio of exports to shipments (percent)-----	8.4	8.4	10.8	12.1	15.0	23.7	16.5
MM039	Unwrought aluminum:							
	Establishments (number)-----	94	96	96	21	21	0.0	(36.3)
	Employees (thousands)-----	22	21	21	21	20	(4.8)	(1.9)
	Capacity utilization (percent)-----	75	82	95	97	97	0.0	7.1
	U.S. shipments (million dollars)-----	4,175	5,895	10,313	8,480	7,200	(15.1)	15.6
	U.S. exports (million dollars)-----	644	873	1,714	2,044	1,898	(7.1)	35.2
	U.S. imports (million dollars)-----	2,041	2,315	2,801	2,561	2,252	(12.1)	3.0
	Apparent U.S. consumption (million dollars)-----	5,572	7,337	11,400	8,997	7,554	(16.0)	8.5
	Trade balance (million dollars)-----	(1,397)	(1,442)	(1,087)	(517)	(354)	-	-
	Ratio of imports to apparent consumption (percent)-----	36.6	31.6	24.6	28.5	29.8	4.7	(5.0)
	Ratio of exports to shipments (percent)-----	15.4	14.8	16.6	24.1	26.4	9.4	16.9

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
MM040	Aluminum mill products:							
	Establishments (number)-----	436	436	436	436	436	0.0	0.0
	Employees (thousands)-----	54	54	54	54	54	0.0	0.0
	Capacity utilization (percent)-----	75	80	85	2/	2/	-	-
	U.S. shipments (million dollars)-----	12,683	15,339	20,025	16,500	14,100	(14.5)	2.9
	U.S. exports (million dollars)-----	535	788	1,206	1,386	1,512	9.1	30.2
	U.S. imports (million dollars)-----	1,067	1,009	1,246	1,253	1,227	(2.1)	5.1
	Apparent U.S. consumption (million dollars)-----	13,215	15,560	20,065	16,367	13,815	(15.6)	1.4
	Trade balance (million dollars)-----	(532)	(221)	(40)	133	285	-	-
	Ratio of imports to apparent consumption (percent)-----	8.1	6.5	6.2	7.7	8.9	16.0	3.6
	Ratio of exports to shipments (percent)-----	4.2	5.1	6.0	8.4	10.7	27.7	26.6
MM041	Lead and related articles:							
	Establishments (number)-----	60	54	53	54	55	1.9	(1.7)
	Employees (thousands)-----	3	3	3	3	3	0.0	0.0
	Capacity utilization (percent)-----	63	86	82	82	84	2.4	5.4
	U.S. shipments (million dollars)-----	769	1,162	1,224	1,339	1,538	14.9	16.5
	U.S. exports (million dollars)-----	51	56	71	66	107	62.1	17.9
	U.S. imports (million dollars)-----	69	148	127	97	91	(6.2)	1.3
	Apparent U.S. consumption (million dollars)-----	787	1,254	1,280	1,370	1,522	11.1	15.1
	Trade balance (million dollars)-----	(18)	(92)	(56)	(31)	16	-	-
	Ratio of imports to apparent consumption (percent)-----	8.8	11.8	9.9	7.1	6.0	(15.6)	(12.0)
	Ratio of exports to shipments (percent)-----	6.6	4.8	5.8	4.9	7.0	41.1	1.2
MM042	Zinc and related articles:							
	Establishments (number)-----	42	40	37	37	40	8.1	(1.7)
	Employees (thousands)-----	4	4	4	4	4	0.0	0.0
	Capacity utilization (percent)-----	68	72	87	96	98	2.1	10.7
	U.S. shipments (million dollars)-----	379	450	622	809	772	(4.6)	22.3
	U.S. exports (million dollars)-----	41	55	84	118	118	0.0	33.3
	U.S. imports (million dollars)-----	497	588	848	1,214	1,034	(14.8)	24.5
	Apparent U.S. consumption (million dollars)-----	835	983	1,386	1,905	1,688	(11.4)	23.0
	Trade balance (million dollars)-----	(456)	(533)	(764)	(1,096)	(916)	-	-
	Ratio of imports to apparent consumption (percent)-----	59.5	59.8	61.2	63.7	61.3	(3.9)	1.2
	Ratio of exports to shipments (percent)-----	10.8	12.2	13.5	14.6	15.3	4.8	9.1

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
MM043	Certain base metals and chemical elements:							
	Establishments (number)-----	72	70	70	70	70	0.0	(0.6)
	Employees (thousands)-----	7	6	6	6	6	0.0	(3.0)
	Capacity utilization (percent)-----	81	80	80	78	75	(3.8)	(1.8)
	U.S. shipments (million dollars)-----	1,600	1,550	1,575	1,580	1,550	(1.9)	(0.4)
	U.S. exports (million dollars)-----	648	702	900	1,009	1,048	3.9	14.2
	U.S. imports (million dollars)-----	1,112	1,292	2,136	2,447	1,925	(21.3)	19.0
	Apparent U.S. consumption (million dollars)-----	2,064	2,140	2,811	3,018	2,427	(19.6)	6.9
	Trade balance (million dollars)-----	(464)	(590)	(1,236)	(1,438)	(877)	-	-
	Ratio of imports to apparent consumption (percent)-----	53.9	60.4	76.0	81.1	79.3	(2.2)	11.3
	Ratio of exports to shipments (percent)-----	40.5	45.3	57.1	63.9	67.6	5.9	14.7
MM044	Nonpowered handtools:							
	Establishments (number)-----	1,255	1,255	1,255	1,255	1,252	(0.2)	(0.0)
	Employees (thousands)-----	110	110	110	110	110	0.0	0.0
	Capacity utilization (percent)-----	75	75	75	75	75	0.0	0.0
	U.S. shipments (million dollars)-----	12,585	13,214	13,874	14,289	15,003	5.0	4.4
	U.S. exports (million dollars)-----	539	608	720	850	1,063	25.1	18.5
	U.S. imports (million dollars)-----	950	1,156	1,299	1,383	1,378	(0.4)	9.7
	Apparent U.S. consumption (million dollars)-----	12,996	13,762	14,453	14,822	15,318	3.3	4.1
	Trade balance (million dollars)-----	(411)	(548)	(579)	(533)	(315)	-	-
	Ratio of imports to apparent consumption (percent)-----	7.3	8.4	9.0	9.3	9.0	(3.6)	5.3
	Ratio of exports to shipments (percent)-----	4.3	4.6	5.2	5.9	7.1	19.1	13.5
MM045	Cutlery other than tableware, certain sewing implements, and related...:							
	Establishments (number)-----	67	53	50	52	55	5.8	(4.1)
	Employees (thousands)-----	9	8	8	8	8	0.0	(2.3)
	Capacity utilization (percent)-----	80	82	85	85	85	0.0	1.6
	U.S. shipments (million dollars)-----	1,366	1,380	1,457	1,459	1,445	(1.0)	1.7
	U.S. exports (million dollars)-----	68	72	95	159	223	40.3	37.3
	U.S. imports (million dollars)-----	316	322	352	393	415	5.6	7.7
	Apparent U.S. consumption (million dollars)-----	1,614	1,630	1,714	1,693	1,637	(3.3)	0.7
	Trade balance (million dollars)-----	(248)	(250)	(257)	(234)	(192)	-	-
	Ratio of imports to apparent consumption (percent)-----	19.6	19.8	20.5	23.2	25.4	9.2	7.0
	Ratio of exports to shipments (percent)-----	5.0	5.2	6.5	10.9	15.4	41.6	35.0

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
MM046	Table flatware and related products:							
	Establishments (number)-----	11	6	6	6	6	0.0	(11.4)
	Employees (thousands)-----	6	5	5	5	5	0.0	(3.6)
	Capacity utilization (percent)-----	85	90	90	90	90	0.0	1.1
	U.S. shipments (million dollars)-----	152	228	228	235	233	(0.9)	9.2
	U.S. exports (million dollars)-----	19	19	23	17	43	152.9	16.4
	U.S. imports (million dollars)-----	164	169	191	185	172	(7.0)	1.9
	Apparent U.S. consumption (million dollars)-----	297	378	396	403	362	(10.2)	4.7
	Trade balance (million dollars)-----	(145)	(150)	(168)	(168)	(129)	-	-
	Ratio of imports to apparent consumption (percent)-----	55.2	44.7	48.2	45.9	47.5	3.5	(2.7)
	Ratio of exports to shipments (percent)-----	12.5	8.3	10.1	7.2	18.5	155.1	6.6
MM047	Certain builders' hardware:							
	Establishments (number)-----	795	795	795	795	790	(0.6)	(0.1)
	Employees (thousands)-----	50	50	50	50	50	0.0	0.0
	Capacity utilization (percent)-----	80	80	80	80	75	(6.3)	(1.3)
	U.S. shipments (million dollars)-----	3,042	3,255	3,385	3,554	3,625	2.0	4.5
	U.S. exports (million dollars)-----	218	261	326	417	554	32.9	26.3
	U.S. imports (million dollars)-----	605	738	854	829	843	1.7	8.1
	Apparent U.S. consumption (million dollars)-----	3,429	3,732	3,913	3,966	3,914	(1.3)	3.3
	Trade balance (million dollars)-----	(387)	(477)	(528)	(412)	(289)	-	-
	Ratio of imports to apparent consumption (percent)-----	17.6	19.8	21.8	20.9	21.5	3.0	4.6
	Ratio of exports to shipments (percent)-----	7.2	8.0	9.6	11.7	15.3	30.3	20.9

Table B-4

Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
MM048	Miscellaneous products of base metal:							
	Establishments (number)-----	2,035	2,035	2,035	2,035	2,035	0.0	0.0
	Employees (thousands)-----	105	105	105	105	106	1.0	0.2
	Capacity utilization (percent)-----	70	70	70	70	70	0.0	0.0
	U.S. shipments (million dollars)-----	21,580	22,600	24,860	25,357	26,118	3.0	5.1
	U.S. exports (million dollars)-----	617	804	956	1,112	1,410	26.8	21.9
	U.S. imports (million dollars)-----	1,486	1,744	1,987	2,053	2,123	3.4	9.2
	Apparent U.S. consumption (million dollars)-----	22,449	23,540	25,891	26,298	26,831	2.0	4.8
	Trade balance (million dollars)-----	(869)	(940)	(1,031)	(941)	(713)	-	-
	Ratio of imports to apparent consumption (percent)-----	6.6	7.4	7.7	7.8	7.9	1.4	4.2
	Ratio of exports to shipments (percent)-----	2.9	3.6	3.8	4.4	5.4	23.1	16.0

1/ The figure shown represents the compound rate of change of a trend line plotted through 1986-1990 data using linear regression.

2/ Not available.

3/ Estimated.

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
	Machinery and equipment:							
ME001	Aircraft engines and gas turbines:							
	Establishments (number)-----	42	26	26	26	26	0.0	(9.1)
	Employees (thousands)-----	150	157	145	157	156	(0.6)	0.8
	Capacity utilization (percent)-----	76	78	87	85	81	(4.7)	2.2
	U.S. shipments (million dollars)-----	12,642	14,882	17,881	15,429	16,012	3.8	5.2
	U.S. exports (million dollars)-----	4,096	4,757	6,057	7,426	7,829	5.4	19.0
	U.S. imports (million dollars)-----	2,898	2,841	2,993	4,119	5,083	23.4	16.1
	Apparent U.S. consumption (million dollars)-----	11,444	12,966	14,817	12,122	13,266	9.4	2.3
	Trade balance (million dollars)-----	1,198	1,916	3,064	3,307	2,746	-	-
	Ratio of imports to apparent consumption (percent)-----	25.3	21.9	20.2	34.0	38.3	12.8	13.5
	Ratio of exports to shipments (percent)-----	32.4	32.0	33.9	48.1	48.9	1.6	13.1
ME002	Internal combustion piston engines, other than for aircraft:							
	Establishments (number)-----	58	60	58	55	55	0.0	(1.9)
	Employees (thousands)-----	134	135	135	136	132	(2.9)	(0.2)
	Capacity utilization (percent)-----	74	72	72	72	71	(1.4)	(0.8)
	U.S. shipments (million dollars)-----	28,543	28,250	28,815	30,054	30,100	0.2	1.7
	U.S. exports (million dollars)-----	3,752	4,022	4,923	4,611	5,596	21.4	9.8
	U.S. imports (million dollars)-----	4,613	5,269	6,064	5,824	5,731	(1.6)	5.5
	Apparent U.S. consumption (million dollars)-----	29,404	29,497	29,956	31,267	30,235	(3.3)	1.1
	Trade balance (million dollars)-----	(861)	(1,247)	(1,141)	(1,213)	(135)	-	-
	Ratio of imports to apparent consumption (percent)-----	15.7	17.9	20.2	18.6	19.0	1.8	4.3
	Ratio of exports to shipments (percent)-----	13.1	14.2	17.1	15.3	18.6	21.2	8.0
ME003	Pumps for liquids:							
	Establishments (number)-----	610	613	613	608	602	(1.0)	(0.3)
	Employees (thousands)-----	55	56	57	62	58	(6.5)	2.1
	Capacity utilization (percent)-----	52	55	55	58	62	6.9	4.1
	U.S. shipments (million dollars)-----	5,453	5,780	6,196	6,598	6,928	5.0	6.3
	U.S. exports (million dollars)-----	849	928	1,110	1,375	1,542	12.1	17.2
	U.S. imports (million dollars)-----	767	885	1,155	1,173	1,155	(1.5)	11.6
	Apparent U.S. consumption (million dollars)-----	5,371	5,737	6,241	6,396	6,541	2.3	5.2
	Trade balance (million dollars)-----	82	43	(45)	202	387	-	-
	Ratio of imports to apparent consumption (percent)-----	14.3	15.4	18.5	18.3	17.7	(3.7)	6.2
	Ratio of exports to shipments (percent)-----	15.6	16.1	17.9	20.8	22.3	6.8	10.2

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME004	Fans, blowers, compressors, air and vacuum pumps....:							
	Establishments (number)-----	1,205	1,205	1,205	1,190	1,179	(0.9)	(0.6)
	Employees (thousands)-----	174	172	172	164	158	(3.7)	(2.4)
	Capacity utilization (percent)-----	70	72	72	78	80	2.6	3.5
	U.S. shipments (million dollars)-----	17,585	18,640	18,994	19,122	20,267	6.0	3.1
	U.S. exports (million dollars)-----	1,402	1,657	2,137	2,544	3,049	19.9	21.9
	U.S. imports (million dollars)-----	2,048	2,466	2,807	3,085	2,892	(6.3)	9.6
	Apparent U.S. consumption (million dollars)-----	18,231	19,449	19,664	19,663	20,110	2.3	2.1
	Trade balance (million dollars)-----	(646)	(809)	(670)	(541)	157	-	-
	Ratio of imports to apparent consumption (percent)-----	11.2	12.7	14.3	15.7	14.4	(8.3)	7.3
	Ratio of exports to shipments (percent)-----	8.0	8.9	11.3	13.3	15.0	13.1	18.2
ME005	Certain industrial thermal-processing equipment and certain....:							
	Establishments (number)-----	307	308	308	315	305	(3.2)	0.1
	Employees (thousands)-----	33	34	34	34	33	(2.9)	0.0
	Capacity utilization (percent)-----	67	65	65	67	65	(3.0)	(0.3)
	U.S. shipments (million dollars)-----	2,948	3,096	3,155	3,375	3,390	0.4	3.7
	U.S. exports (million dollars)-----	569	597	772	991	1,116	12.6	20.4
	U.S. imports (million dollars)-----	325	366	405	563	645	14.6	19.7
	Apparent U.S. consumption (million dollars)-----	2,704	2,865	2,788	2,947	2,919	(1.0)	1.8
	Trade balance (million dollars)-----	244	231	367	428	471	-	-
	Ratio of imports to apparent consumption (percent)-----	12.0	12.8	14.5	19.1	22.1	15.7	17.6
	Ratio of exports to shipments (percent)-----	19.3	19.3	24.5	29.4	32.9	12.1	16.0
ME006	Commercial machinery:							
	Establishments (number)-----	564	564	564	564	564	0.0	0.0
	Employees (thousands)-----	50	43	43	42	42	0.0	(3.7)
	Capacity utilization (percent)-----	80	87	85	85	85	0.0	1.0
	U.S. shipments (million dollars)-----	5,850	6,456	6,498	6,650	6,849	3.0	3.5
	U.S. exports (million dollars)-----	781	1,017	1,435	1,320	1,464	10.9	16.4
	U.S. imports (million dollars)-----	1,224	1,392	1,533	991	974	(1.7)	(7.7)
	Apparent U.S. consumption (million dollars)-----	6,293	6,831	6,596	6,321	6,359	0.6	(0.6)
	Trade balance (million dollars)-----	(443)	(375)	(98)	329	490	-	-
	Ratio of imports to apparent consumption (percent)-----	19.5	20.4	23.2	15.7	15.3	(2.3)	(7.1)
	Ratio of exports to shipments (percent)-----	13.4	15.8	22.1	19.8	21.4	7.7	12.4

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME007	Electrical household appliances and certain heating equipment:							
	Establishments (number)-----	481	481	481	481	480	(0.2)	(0.0)
	Employees (thousands)-----	105	100	98	93	93	0.9	(3.1)
	Capacity utilization (percent)-----	75	86	85	85	85	0.0	2.4
	U.S. shipments (million dollars)-----	15,220	15,501	16,140	17,247	17,764	3.0	4.2
	U.S. exports (million dollars)-----	423	554	773	1,153	1,523	32.1	39.0
	U.S. imports (million dollars)-----	1,758	1,841	1,998	2,556	2,478	(3.1)	10.7
	Apparent U.S. consumption (million dollars)-----	16,555	16,788	17,365	18,650	18,719	0.4	3.6
	Trade balance (million dollars)-----	(1,335)	(1,287)	(1,225)	(1,403)	(955)	-	-
	Ratio of imports to apparent consumption (percent)-----	10.6	11.0	11.5	13.7	13.2	(3.4)	6.9
	Ratio of exports to shipments (percent)-----	2.8	3.6	4.8	6.7	8.6	28.2	33.4
ME008	Centrifuges and filtering and purifying equipment:							
	Establishments (number)-----	250	245	245	255	265	3.9	1.6
	Employees (thousands)-----	27	24	26	29	32	10.3	5.4
	Capacity utilization (percent)-----	56	55	57	70	75	7.1	8.6
	U.S. shipments (million dollars)-----	1,850	1,560	1,795	2,050	2,350	14.6	7.8
	U.S. exports (million dollars)-----	458	575	871	1,027	1,351	31.5	31.6
	U.S. imports (million dollars)-----	228	304	368	459	586	27.7	25.9
	Apparent U.S. consumption (million dollars)-----	1,620	1,289	1,292	1,482	1,585	7.0	1.0
	Trade balance (million dollars)-----	230	271	503	568	765	-	-
	Ratio of imports to apparent consumption (percent)-----	14.1	23.6	28.5	31.0	37.0	19.4	24.7
	Ratio of exports to shipments (percent)-----	24.8	36.9	48.5	50.1	57.5	14.8	22.0
ME009	Wrapping, packaging, and can-sealing machinery:							
	Establishments (number)-----	350	350	340	350	340	(2.9)	(0.6)
	Employees (thousands)-----	23	23	21	21	21	0.0	(2.7)
	Capacity utilization (percent)-----	79	79	80	85	85	0.0	2.2
	U.S. shipments (million dollars)-----	1,980	2,040	2,098	2,472	2,516	1.8	6.9
	U.S. exports (million dollars)-----	260	283	382	486	579	19.1	23.9
	U.S. imports (million dollars)-----	432	466	517	597	621	4.0	10.2
	Apparent U.S. consumption (million dollars)-----	2,152	2,223	2,233	2,583	2,558	(1.0)	5.1
	Trade balance (million dollars)-----	(172)	(183)	(135)	(111)	(42)	-	-
	Ratio of imports to apparent consumption (percent)-----	20.1	21.0	23.2	23.1	24.3	5.0	4.9
	Ratio of exports to shipments (percent)-----	13.1	13.9	18.2	19.7	23.0	17.1	15.8

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME010	Scales and weighing machinery:							
	Establishments (number)-----	115	115	110	105	108	2.9	(2.1)
	Employees (thousands)-----	7	7	7	7	7	0.0	0.0
	Capacity utilization (percent)-----	73	75	77	77	78	1.3	1.6
	U.S. shipments (million dollars)-----	539	593	663	670	730	9.0	7.6
	U.S. exports (million dollars)-----	56	59	74	83	91	9.6	14.0
	U.S. imports (million dollars)-----	114	120	137	147	153	4.1	8.2
	Apparent U.S. consumption (million dollars)-----	597	654	726	734	792	7.9	7.0
	Trade balance (million dollars)-----	(58)	(61)	(63)	(64)	(62)	-	-
	Ratio of imports to apparent consumption (percent)-----	19.1	18.3	18.9	20.0	19.3	(3.5)	1.1
	Ratio of exports to shipments (percent)-----	10.4	9.9	11.2	12.4	12.5	0.6	6.0
ME011	Forklift trucks and similar industrial vehicles:							
	Establishments (number)-----	411	400	402	403	400	(0.7)	(0.5)
	Employees (thousands)-----	25	25	25	25	25	0.0	0.0
	Capacity utilization (percent)-----	75	75	75	75	75	0.0	0.0
	U.S. shipments (million dollars)-----	2,546	2,572	2,750	3,030	2,730	(9.9)	3.1
	U.S. exports (million dollars)-----	263	301	398	511	551	7.8	22.2
	U.S. imports (million dollars)-----	674	733	851	982	817	(16.8)	7.0
	Apparent U.S. consumption (million dollars)-----	2,957	3,004	3,203	3,501	2,996	(14.4)	1.8
	Trade balance (million dollars)-----	(411)	(432)	(453)	(471)	(266)	-	-
	Ratio of imports to apparent consumption (percent)-----	22.8	24.4	26.6	28.0	27.3	(2.8)	5.1
	Ratio of exports to shipments (percent)-----	10.3	11.7	14.5	16.9	20.2	19.7	18.6
ME012	Construction and mining equipment:							
	Establishments (number)-----	1,390	1,400	1,403	1,405	1,406	0.1	0.3
	Employees (thousands)-----	112	115	118	119	122	2.5	2.1
	Capacity utilization (percent)-----	65	58	68	70	72	2.9	4.0
	U.S. shipments (million dollars)-----	16,000	16,300	17,000	19,040	20,180	6.0	6.4
	U.S. exports (million dollars)-----	1,974	1,872	2,425	2,591	3,111	20.1	13.1
	U.S. imports (million dollars)-----	2,128	2,221	2,392	2,268	2,263	(0.2)	1.4
	Apparent U.S. consumption (million dollars)-----	16,154	16,649	16,967	18,717	19,332	3.3	4.9
	Trade balance (million dollars)-----	(154)	(349)	33	323	848	-	-
	Ratio of imports to apparent consumption (percent)-----	13.2	13.3	14.1	12.1	11.7	(3.4)	(3.3)
	Ratio of exports to shipments (percent)-----	12.3	11.5	14.3	13.6	15.4	13.3	6.3

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME013	Mineral processing machinery:							
	Establishments (number)-----	100	100	100	100	100	0.0	0.0
	Employees (thousands)-----	15	15	15	7	7	0.0	(20.4)
	Capacity utilization (percent)-----	57	57	57	57	57	0.0	0.0
	U.S. shipments (million dollars)-----	575	580	608	650	697	7.2	5.1
	U.S. exports (million dollars)-----	191	231	269	344	431	25.3	22.5
	U.S. imports (million dollars)-----	186	218	234	287	240	(16.4)	8.2
	Apparent U.S. consumption (million dollars)-----	570	567	573	593	506	(14.7)	(1.9)
	Trade balance (million dollars)-----	5	13	35	57	191	-	-
	Ratio of imports to apparent consumption (percent)-----	32.6	38.4	40.8	48.4	47.4	(2.0)	10.3
	Ratio of exports to shipments (percent)-----	33.2	39.8	44.2	52.9	61.8	16.8	16.5
ME014	Farm and garden machinery and equipment:							
	Establishments (number)-----	2,100	2,100	2,150	2,130	2,110	(0.9)	0.2
	Employees (thousands)-----	79	107	110	111	111	0.0	7.4
	Capacity utilization (percent)-----	29	65	65	63	62	(1.6)	16.0
	U.S. shipments (million dollars)-----	7,750	8,150	8,300	9,100	9,800	7.7	6.0
	U.S. exports (million dollars)-----	2,369	2,574	3,306	3,274	3,412	4.2	10.2
	U.S. imports (million dollars)-----	1,920	2,212	2,572	2,528	2,783	10.1	9.2
	Apparent U.S. consumption (million dollars)-----	7,301	7,788	7,566	8,354	9,171	9.8	5.4
	Trade balance (million dollars)-----	449	362	734	746	629	-	-
	Ratio of imports to apparent consumption (percent)-----	26.3	28.4	34.0	30.3	30.3	0.3	3.6
	Ratio of exports to shipments (percent)-----	30.6	31.6	39.8	36.0	34.8	(3.2)	4.0
ME015	Industrial food-processing and related machinery:							
	Establishments (number)-----	512	512	512	512	512	0.0	0.0
	Employees (thousands)-----	10	12	12	12	12	0.0	3.5
	Capacity utilization (percent)-----	85	85	88	88	88	0.0	1.0
	U.S. shipments (million dollars)-----	1,683	1,735	1,841	1,951	2,068	6.0	5.4
	U.S. exports (million dollars)-----	277	343	408	452	480	6.2	14.7
	U.S. imports (million dollars)-----	331	359	397	340	405	19.1	3.6
	Apparent U.S. consumption (million dollars)-----	1,737	1,751	1,830	1,839	1,993	8.4	3.3
	Trade balance (million dollars)-----	(54)	(16)	11	112	75	-	-
	Ratio of imports to apparent consumption (percent)-----	19.1	20.5	21.7	18.5	20.3	9.9	0.2
	Ratio of exports to shipments (percent)-----	16.5	19.8	22.2	23.2	23.2	0.2	8.8

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME016	Pulp, paper, and paperboard machinery:							
	Establishments (number)-----	250	250	255	260	265	1.9	1.6
	Employees (thousands)-----	15	17	17	18	18	0.0	4.3
	Capacity utilization (percent)-----	65	65	70	78	80	2.6	6.2
	U.S. shipments (million dollars)-----	1,296	1,581	1,832	2,215	2,457	10.9	17.5
	U.S. exports (million dollars)-----	283	325	449	497	605	21.7	21.5
	U.S. imports (million dollars)-----	532	517	726	962	880	(8.5)	17.7
	Apparent U.S. consumption (million dollars)-----	1,545	1,773	2,109	2,680	2,732	1.9	16.8
	Trade balance (million dollars)-----	(249)	(192)	(277)	(465)	(275)	-	-
	Ratio of imports to apparent consumption (percent)-----	34.4	29.2	34.4	35.9	32.2	(10.3)	0.7
	Ratio of exports to shipments (percent)-----	21.8	20.6	24.5	22.4	24.6	9.7	3.3
ME017	Printing, typesetting, and bookbinding machinery and printing plates:							
	Establishments (number)-----	1,790	1,790	1,805	1,810	1,790	(1.1)	0.1
	Employees (thousands)-----	58	59	61	61	61	0.0	1.4
	Capacity utilization (percent)-----	86	86	88	88	85	(3.4)	(0.0)
	U.S. shipments (million dollars)-----	4,757	5,266	6,300	6,550	6,750	3.1	9.6
	U.S. exports (million dollars)-----	487	629	806	906	1,139	25.7	22.9
	U.S. imports (million dollars)-----	1,074	1,132	1,125	1,245	1,192	(4.3)	3.1
	Apparent U.S. consumption (million dollars)-----	5,344	5,769	6,619	6,889	6,803	(1.2)	6.8
	Trade balance (million dollars)-----	(587)	(503)	(319)	(339)	(53)	-	-
	Ratio of imports to apparent consumption (percent)-----	20.1	19.6	17.0	18.1	17.5	(3.0)	(3.5)
	Ratio of exports to shipments (percent)-----	10.2	11.9	12.8	13.8	16.9	22.0	12.1
ME018	Textile machinery and parts:							
	Establishments (number)-----	550	550	550	500	500	0.0	(2.8)
	Employees (thousands)-----	16	17	18	17	17	0.0	1.2
	Capacity utilization (percent)-----	58	58	58	58	58	0.0	0.0
	U.S. shipments (million dollars)-----	1,132	1,226	1,342	1,583	1,740	9.9	11.8
	U.S. exports (million dollars)-----	320	369	492	630	716	13.7	23.9
	U.S. imports (million dollars)-----	955	1,212	1,461	1,439	1,499	4.2	11.3
	Apparent U.S. consumption (million dollars)-----	1,767	2,069	2,311	2,392	2,523	5.5	9.0
	Trade balance (million dollars)-----	(635)	(843)	(969)	(809)	(783)	-	-
	Ratio of imports to apparent consumption (percent)-----	54.0	58.6	63.2	60.2	59.4	(1.2)	2.2
	Ratio of exports to shipments (percent)-----	28.3	30.1	36.7	39.8	41.1	3.4	10.9

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME019	Metal rolling mills and parts thereof:							
	Establishments (number)-----	24	20	20	20	20	0.0	(3.6)
	Employees (thousands)-----	4	4	4	4	4	0.0	0.0
	Capacity utilization (percent)-----	71	65	73	70	68	(2.9)	(0.1)
	U.S. shipments (million dollars)-----	264	367	340	345	340	(1.4)	4.5
	U.S. exports (million dollars)-----	139	95	126	242	252	4.1	23.7
	U.S. imports (million dollars)-----	112	142	261	142	169	19.0	8.6
	Apparent U.S. consumption (million dollars)-----	237	414	475	245	257	4.9	(3.6)
	Trade balance (million dollars)-----	27	(47)	(135)	100	83	-	-
	Ratio of imports to apparent consumption (percent)-----	47.3	34.3	54.9	58.0	65.8	13.5	12.6
	Ratio of exports to shipments (percent)-----	52.7	25.9	37.1	70.1	74.1	5.7	18.3
ME020	Machine tools for cutting metal and parts; tool holders,....:							
	Establishments (number)-----	950	920	880	870	860	(1.1)	(2.5)
	Employees (thousands)-----	49	46	42	45	44	(2.2)	(2.3)
	Capacity utilization (percent)-----	50	70	70	72	71	(1.4)	7.6
	U.S. shipments (million dollars)-----	3,884	4,128	3,632	4,282	4,398	2.7	2.9
	U.S. exports (million dollars)-----	769	832	980	1,044	1,151	10.2	10.9
	U.S. imports (million dollars)-----	2,176	1,953	2,100	2,429	2,269	(6.6)	3.1
	Apparent U.S. consumption (million dollars)-----	5,291	5,249	4,752	5,667	5,516	(2.7)	1.6
	Trade balance (million dollars)-----	(1,407)	(1,121)	(1,120)	(1,385)	(1,118)	-	-
	Ratio of imports to apparent consumption (percent)-----	41.1	37.2	44.2	42.9	41.1	(4.0)	1.4
	Ratio of exports to shipments (percent)-----	19.8	20.2	27.0	24.4	26.2	7.3	7.8
ME021	Machine tools for metal forming and parts thereof:							
	Establishments (number)-----	390	380	380	375	370	(1.3)	(1.2)
	Employees (thousands)-----	16	17	18	19	19	0.0	4.7
	Capacity utilization (percent)-----	61	65	70	70	71	1.4	3.8
	U.S. shipments (million dollars)-----	1,430	1,403	1,360	2,438	2,944	20.8	22.1
	U.S. exports (million dollars)-----	372	458	584	662	664	0.3	16.5
	U.S. imports (million dollars)-----	606	545	514	668	642	(3.9)	3.2
	Apparent U.S. consumption (million dollars)-----	1,664	1,490	1,290	2,444	2,922	19.6	17.6
	Trade balance (million dollars)-----	(234)	(87)	70	(6)	22	-	-
	Ratio of imports to apparent consumption (percent)-----	36.4	36.6	39.8	27.3	22.0	(19.6)	(12.2)
	Ratio of exports to shipments (percent)-----	26.0	32.6	42.9	27.2	22.6	(16.9)	(4.6)

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME022	Non-metalworking machine tools and parts thereof:							
	Establishments (number)-----	350	350	340	345	345	0.0	(0.4)
	Employees (thousands)-----	13	13	14	14	13	(7.1)	0.7
	Capacity utilization (percent)-----	72	80	85	82	80	(2.4)	2.4
	U.S. shipments (million dollars)-----	1,101	1,211	1,332	1,461	1,535	5.1	8.9
	U.S. exports (million dollars)-----	232	288	395	367	375	2.2	12.8
	U.S. imports (million dollars)-----	407	488	607	603	590	(2.2)	10.0
	Apparent U.S. consumption (million dollars)-----	1,276	1,411	1,544	1,697	1,750	3.1	8.5
	Trade balance (million dollars)-----	(175)	(200)	(212)	(236)	(215)	-	-
	Ratio of imports to apparent consumption (percent)-----	31.9	34.6	39.3	35.5	33.7	(5.1)	1.4
	Ratio of exports to shipments (percent)-----	21.1	23.8	29.7	25.1	24.4	(2.7)	3.6
ME023	Office machines:							
	Establishments (number)-----	4,300	4,350	4,300	4,350	4,100	(5.7)	(0.9)
	Employees (thousands)-----	616	642	713	676	668	(1.2)	2.2
	Capacity utilization (percent)-----	62	65	70	65	63	(3.1)	0.3
	U.S. shipments (million dollars)-----	76,435	80,199	91,944	91,311	92,163	0.9	5.2
	U.S. exports (million dollars)-----	15,426	18,634	23,066	23,184	24,726	6.7	12.3
	U.S. imports (million dollars)-----	14,441	18,296	22,424	25,625	26,871	4.9	17.1
	Apparent U.S. consumption (million dollars)-----	75,450	79,861	91,302	93,752	94,308	0.6	6.3
	Trade balance (million dollars)-----	985	338	642	(2,441)	(2,145)	-	-
	Ratio of imports to apparent consumption (percent)-----	19.1	22.9	24.6	27.3	28.5	4.2	10.2
	Ratio of exports to shipments (percent)-----	20.2	23.2	25.1	25.4	26.8	5.7	6.8
ME024	Miscellaneous industrial machinery:							
	Establishments (number)-----	5,845	5,845	5,800	5,900	5,800	(1.7)	(0.1)
	Employees (thousands)-----	300	295	290	300	280	(6.7)	(1.2)
	Capacity utilization (percent)-----	70	70	72	75	70	(6.7)	0.7
	U.S. shipments (million dollars)-----	23,050	24,550	27,000	28,900	29,050	0.5	6.5
	U.S. exports (million dollars)-----	5,173	5,016	6,449	8,141	8,942	9.8	17.1
	U.S. imports (million dollars)-----	4,142	4,791	5,577	5,860	5,639	(3.8)	8.5
	Apparent U.S. consumption (million dollars)-----	22,019	24,325	26,128	26,619	25,747	(3.3)	4.1
	Trade balance (million dollars)-----	1,031	225	872	2,281	3,303	-	-
	Ratio of imports to apparent consumption (percent)-----	18.8	19.7	21.3	22.0	21.9	(0.5)	4.2
	Ratio of exports to shipments (percent)-----	22.4	20.4	23.9	28.2	30.8	9.3	10.0

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME025	Taps, cocks, valves, and similar devices:							
	Establishments (number)-----	900	910	910	908	904	(0.4)	0.1
	Employees (thousands)-----	88	90	98	100	98	(2.0)	3.3
	Capacity utilization (percent)-----	55	57	57	66	70	6.1	6.5
	U.S. shipments (million dollars)-----	8,874	9,140	10,182	10,569	10,992	4.0	5.9
	U.S. exports (million dollars)-----	609	711	798	982	1,231	25.4	18.9
	U.S. imports (million dollars)-----	1,024	1,166	1,413	1,437	1,635	13.8	12.1
	Apparent U.S. consumption (million dollars)-----	9,289	9,595	10,797	11,024	11,396	3.4	5.6
	Trade balance (million dollars)-----	(415)	(455)	(615)	(455)	(404)	-	-
	Ratio of imports to apparent consumption (percent)-----	11.0	12.2	13.1	13.0	14.3	10.1	6.2
	Ratio of exports to shipments (percent)-----	6.9	7.8	7.8	9.3	11.2	20.5	12.3
ME026	Ball and roller bearings:							
	Establishments (number)-----	147	140	142	143	143	0.0	(0.3)
	Employees (thousands)-----	42	41	41	42	42	0.0	0.2
	Capacity utilization (percent)-----	59	59	61	63	64	1.6	2.3
	U.S. shipments (million dollars)-----	3,841	3,840	3,975	4,135	4,105	(0.7)	2.1
	U.S. exports (million dollars)-----	318	386	446	511	738	44.4	21.7
	U.S. imports (million dollars)-----	672	715	908	995	968	(2.7)	11.2
	Apparent U.S. consumption (million dollars)-----	4,195	4,169	4,437	4,619	4,335	(6.1)	1.7
	Trade balance (million dollars)-----	(354)	(329)	(462)	(484)	(230)	-	-
	Ratio of imports to apparent consumption (percent)-----	16.0	17.2	20.5	21.5	22.3	3.7	9.3
	Ratio of exports to shipments (percent)-----	8.3	10.1	11.2	12.4	18.0	45.5	19.2
ME027	Gear boxes and other speed changers; torque converters....:							
	Establishments (number)-----	285	270	260	260	255	(1.9)	(2.6)
	Employees (thousands)-----	36	36	34	34	34	0.0	(1.7)
	Capacity utilization (percent)-----	75	80	85	85	80	(5.9)	1.9
	U.S. shipments (million dollars)-----	3,300	3,800	4,100	4,100	4,100	0.0	5.2
	U.S. exports (million dollars)-----	200	213	248	395	544	37.7	29.9
	U.S. imports (million dollars)-----	351	441	559	737	832	12.9	25.1
	Apparent U.S. consumption (million dollars)-----	3,451	4,028	4,411	4,442	4,388	(1.2)	6.0
	Trade balance (million dollars)-----	(151)	(228)	(311)	(342)	(288)	-	-
	Ratio of imports to apparent consumption (percent)-----	10.2	10.9	12.7	16.6	19.0	14.3	18.1
	Ratio of exports to shipments (percent)-----	6.1	5.6	6.0	9.6	13.3	37.7	23.5

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USIT code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME028	Boilers, turbines, and related machinery:							
	Establishments (number)-----	40	40	40	40	39	(2.5)	(0.5)
	Employees (thousands)-----	40	40	38	38	37	(2.6)	(2.1)
	Capacity utilization (percent)-----	62	58	55	56	58	3.6	(1.7)
	U.S. shipments (million dollars)-----	3,800	2,841	2,900	3,390	3,540	4.4	0.3
	U.S. exports (million dollars)-----	513	559	615	742	632	(14.8)	7.3
	U.S. imports (million dollars)-----	236	273	282	337	332	(1.5)	9.3
	Apparent U.S. consumption (million dollars)-----	3,523	2,555	2,567	2,985	3,240	8.5	(0.1)
	Trade balance (million dollars)-----	277	286	333	405	300	-	-
	Ratio of imports to apparent consumption (percent)-----	6.7	10.7	11.0	11.3	10.2	(9.2)	9.5
	Ratio of exports to shipments (percent)-----	13.5	19.7	21.2	21.9	17.9	(18.4)	6.9
ME029	Electric motors, generators, and related equipment:							
	Establishments (number)-----	324	316	316	310	305	(1.6)	(1.4)
	Employees (thousands)-----	91	90	91	90	90	0.0	(0.2)
	Capacity utilization (percent)-----	63	62	65	68	69	1.5	2.8
	U.S. shipments (million dollars)-----	7,460	7,550	8,300	8,600	8,950	4.1	5.1
	U.S. exports (million dollars)-----	859	955	1,349	1,719	1,862	8.3	23.8
	U.S. imports (million dollars)-----	1,395	1,523	1,962	2,115	2,249	6.3	13.7
	Apparent U.S. consumption (million dollars)-----	7,996	8,118	8,913	8,996	9,337	3.8	4.2
	Trade balance (million dollars)-----	(536)	(568)	(613)	(396)	(387)	-	-
	Ratio of imports to apparent consumption (percent)-----	17.4	18.8	22.0	23.5	24.1	2.5	9.1
	Ratio of exports to shipments (percent)-----	11.5	12.6	16.3	20.0	20.8	4.1	17.8
ME030	Electrical transformers, static converters, and inductors:							
	Establishments (number)-----	315	310	305	300	295	(1.7)	(1.6)
	Employees (thousands)-----	51	49	48	49	48	(2.0)	(1.2)
	Capacity utilization (percent)-----	73	71	68	69	72	4.3	(0.6)
	U.S. shipments (million dollars)-----	4,820	4,645	4,570	4,840	4,980	2.9	1.1
	U.S. exports (million dollars)-----	411	451	596	862	1,058	22.7	28.9
	U.S. imports (million dollars)-----	1,253	1,611	2,127	1,506	1,643	9.1	4.9
	Apparent U.S. consumption (million dollars)-----	5,662	5,805	6,101	5,484	5,565	1.5	(0.9)
	Trade balance (million dollars)-----	(842)	(1,160)	(1,531)	(644)	(585)	-	-
	Ratio of imports to apparent consumption (percent)-----	22.1	27.8	34.9	27.5	29.5	7.5	5.8
	Ratio of exports to shipments (percent)-----	8.5	9.7	13.0	17.8	21.2	19.3	27.5

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME031	Primary cells and batteries and electric storage batteries:							
	Establishments (number)-----	250	250	250	250	251	0.4	0.1
	Employees (thousands)-----	35	36	36	36	36	0.0	0.6
	Capacity utilization (percent)-----	80	84	82	82	82	0.0	0.3
	U.S. shipments (million dollars)-----	4,462	4,795	5,131	5,202	5,264	1.2	4.2
	U.S. exports (million dollars)-----	253	332	406	479	590	23.2	22.9
	U.S. imports (million dollars)-----	475	611	779	701	719	2.6	10.1
	Apparent U.S. consumption (million dollars)-----	4,684	5,074	5,504	5,424	5,393	(0.6)	3.5
	Trade balance (million dollars)-----	(222)	(279)	(373)	(222)	(129)	-	-
	Ratio of imports to apparent consumption (percent)-----	10.1	12.0	14.2	12.9	13.3	3.2	6.4
	Ratio of exports to shipments (percent)-----	5.7	6.9	7.9	9.2	11.2	21.7	17.9
ME032	Portable electric handtools:							
	Establishments (number)-----	34	30	30	30	29	(3.3)	(3.1)
	Employees (thousands)-----	8	8	8	8	8	0.0	0.0
	Capacity utilization (percent)-----	56	62	67	68	67	(1.5)	4.6
	U.S. shipments (million dollars)-----	920	1,070	1,115	1,160	1,200	3.4	6.3
	U.S. exports (million dollars)-----	79	102	161	190	224	17.9	31.1
	U.S. imports (million dollars)-----	331	388	419	393	356	(9.4)	1.6
	Apparent U.S. consumption (million dollars)-----	1,172	1,356	1,373	1,363	1,332	(2.3)	2.6
	Trade balance (million dollars)-----	(252)	(286)	(258)	(203)	(132)	-	-
	Ratio of imports to apparent consumption (percent)-----	28.2	28.6	30.5	28.8	26.7	(7.3)	(1.0)
	Ratio of exports to shipments (percent)-----	8.6	9.5	14.4	16.4	18.7	14.0	23.3
ME033	Nonelectrically powered hand tools and parts thereof:							
	Establishments (number)-----	50	50	50	50	49	(2.0)	(0.4)
	Employees (thousands)-----	9	10	11	11	12	9.1	6.9
	Capacity utilization (percent)-----	56	75	80	78	82	5.1	8.3
	U.S. shipments (million dollars)-----	1,052	1,157	1,260	1,314	1,390	5.8	7.1
	U.S. exports (million dollars)-----	225	271	344	334	341	2.1	11.0
	U.S. imports (million dollars)-----	416	467	477	459	435	(5.2)	0.7
	Apparent U.S. consumption (million dollars)-----	1,243	1,353	1,393	1,439	1,484	3.1	4.2
	Trade balance (million dollars)-----	(191)	(196)	(133)	(125)	(94)	-	-
	Ratio of imports to apparent consumption (percent)-----	33.5	34.5	34.2	31.9	29.3	(8.1)	(3.4)
	Ratio of exports to shipments (percent)-----	21.4	23.4	27.3	25.4	24.5	(3.5)	3.6

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME034	Ignition, starting, lighting, and other electrical equipment:							
	Establishments (number)-----	522	525	525	526	510	(3.0)	(0.4)
	Employees (thousands)-----	67	67	68	68	66	(2.9)	(0.2)
	Capacity utilization (percent)-----	78	78	78	78	77	(1.3)	(0.3)
	U.S. shipments (million dollars)-----	7,801	8,191	8,682	9,055	9,091	0.4	4.1
	U.S. exports (million dollars)-----	558	719	796	614	860	40.1	7.3
	U.S. imports (million dollars)-----	825	1,046	1,133	1,340	1,240	(7.5)	11.2
	Apparent U.S. consumption (million dollars)-----	8,068	8,518	9,019	9,781	9,471	(3.2)	4.7
	Trade balance (million dollars)-----	(267)	(327)	(337)	(726)	(380)	-	-
	Ratio of imports to apparent consumption (percent)-----	10.2	12.3	12.6	13.7	13.1	(4.4)	6.2
	Ratio of exports to shipments (percent)-----	7.2	8.8	9.2	6.8	9.5	39.5	3.1
ME035	Flashlights and other similar electric lights, light bulbs....:							
	Establishments (number)-----	377	376	380	375	370	(1.3)	(0.4)
	Employees (thousands)-----	35	34	35	34	34	0.0	(0.6)
	Capacity utilization (percent)-----	65	63	65	63	62	(1.6)	(0.9)
	U.S. shipments (million dollars)-----	4,467	4,826	4,815	4,720	4,625	(2.0)	0.5
	U.S. exports (million dollars)-----	166	195	250	316	439	38.9	27.5
	U.S. imports (million dollars)-----	449	497	613	578	627	8.5	8.5
	Apparent U.S. consumption (million dollars)-----	4,750	5,128	5,178	4,982	4,813	(3.4)	(0.0)
	Trade balance (million dollars)-----	(283)	(302)	(363)	(262)	(188)	-	-
	Ratio of imports to apparent consumption (percent)-----	9.5	9.7	11.8	11.6	13.0	12.3	8.6
	Ratio of exports to shipments (percent)-----	3.7	4.0	5.2	6.7	9.5	41.8	26.9
ME036	Electric and gas welding and soldering equipment:							
	Establishments (number)-----	170	185	190	184	176	(4.3)	0.6
	Employees (thousands)-----	15	17	17	19	17	(10.5)	3.7
	Capacity utilization (percent)-----	55	60	65	68	70	2.9	6.3
	U.S. shipments (million dollars)-----	1,550	1,700	1,800	2,498	2,995	19.9	18.6
	U.S. exports (million dollars)-----	536	658	877	410	482	17.6	(6.6)
	U.S. imports (million dollars)-----	285	316	381	461	345	(25.2)	7.9
	Apparent U.S. consumption (million dollars)-----	1,299	1,358	1,304	2,549	2,858	12.1	24.7
	Trade balance (million dollars)-----	251	342	496	(51)	137	-	-
	Ratio of imports to apparent consumption (percent)-----	21.9	23.3	29.2	18.1	12.1	(33.3)	(13.5)
	Ratio of exports to shipments (percent)-----	34.6	38.7	48.7	16.4	16.1	(1.9)	(21.2)

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME037	Telephone and telegraph apparatus:							
	Establishments (number)-----	161	158	157	155	155	0.0	(0.9)
	Employees (thousands)-----	111	103	92	87	82	(5.7)	(7.5)
	Capacity utilization (percent)-----	68	68	67	68	67	(1.5)	(0.3)
	U.S. shipments (million dollars)-----	15,133	15,523	15,969	14,758	15,200	3.0	(0.4)
	U.S. exports (million dollars)-----	1,120	1,264	1,685	2,200	2,520	14.5	24.3
	U.S. imports (million dollars)-----	2,797	3,347	4,130	4,321	4,144	(4.1)	11.0
	Apparent U.S. consumption (million dollars)-----	16,810	17,606	18,414	16,879	16,824	(0.3)	(0.4)
	Trade balance (million dollars)-----	(1,677)	(2,083)	(2,445)	(2,121)	(1,624)	-	-
	Ratio of imports to apparent consumption (percent)-----	16.6	19.0	22.4	25.6	24.6	(3.8)	11.4
	Ratio of exports to shipments (percent)-----	7.4	8.1	10.6	14.9	16.6	11.2	24.8
ME038	Microphones, loudspeakers, audio amplifiers and combinations....:							
	Establishments (number)-----	130	130	128	130	130	0.0	0.0
	Employees (thousands)-----	5	6	6	6	6	0.0	3.7
	Capacity utilization (percent)-----	70	70	71	71	72	1.4	0.7
	U.S. shipments (million dollars)-----	833	966	1,154	1,203	1,142	(5.1)	8.9
	U.S. exports (million dollars)-----	181	234	339	463	582	25.7	35.2
	U.S. imports (million dollars)-----	921	1,044	1,171	1,121	1,121	0.0	4.8
	Apparent U.S. consumption (million dollars)-----	1,573	1,776	1,986	1,861	1,681	(9.7)	1.8
	Trade balance (million dollars)-----	(740)	(810)	(832)	(658)	(539)	-	-
	Ratio of imports to apparent consumption (percent)-----	58.6	58.8	59.0	60.2	66.7	10.7	2.9
	Ratio of exports to shipments (percent)-----	21.7	24.2	29.4	38.5	51.0	32.4	24.2
ME039	Tape recorders, tape players, video cassette recorders, turntables,...:							
	Establishments (number)-----	49	45	56	58	59	1.7	6.5
	Employees (thousands)-----	6	5	6	7	7	0.0	6.7
	Capacity utilization (percent)-----	61	61	65	70	72	2.9	4.8
	U.S. shipments (million dollars)-----	135	271	341	370	395	6.8	27.9
	U.S. exports (million dollars)-----	260	310	400	604	678	12.3	29.5
	U.S. imports (million dollars)-----	6,481	4,769	4,393	5,016	4,543	(9.4)	(6.4)
	Apparent U.S. consumption (million dollars)-----	6,356	4,730	4,334	4,782	4,260	(10.9)	(7.6)
	Trade balance (million dollars)-----	(6,221)	(4,459)	(3,993)	(4,412)	(3,865)	-	-
	Ratio of imports to apparent consumption (percent)-----	102.0	100.8	101.4	104.9	106.6	1.7	1.3
	Ratio of exports to shipments (percent)-----	192.6	114.4	117.3	163.2	171.6	5.1	1.3

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME040	Unrecorded magnetic tapes, discs, and other media:							
	Establishments (number)-----	65	65	67	67	67	0.0	0.9
	Employees (thousands)-----	18	19	19	20	20	0.0	2.7
	Capacity utilization (percent)-----	78	76	75	78	77	(1.3)	0.0
	U.S. shipments (million dollars)-----	3,000	2,750	2,850	3,075	3,260	6.0	2.8
	U.S. exports (million dollars)-----	579	773	1,172	1,292	1,706	32.0	30.7
	U.S. imports (million dollars)-----	1,374	1,301	1,347	1,381	1,474	6.7	2.0
	Apparent U.S. consumption (million dollars)-----	3,795	3,278	3,025	3,164	3,028	(4.3)	(4.8)
	Trade balance (million dollars)-----	(795)	(528)	(175)	(89)	232	-	-
	Ratio of imports to apparent consumption (percent)-----	36.2	39.7	44.5	43.6	48.7	11.5	7.1
	Ratio of exports to shipments (percent)-----	19.3	28.1	41.1	42.0	52.3	24.6	27.1
ME041	Records, tapes, compact discs, computer software, and other...:							
	Establishments (number)-----	16,250	16,600	17,000	16,750	17,100	2.1	1.1
	Employees (thousands)-----	77	75	72	74	75	1.4	(0.7)
	Capacity utilization (percent)-----	84	85	87	85	86	1.2	0.5
	U.S. shipments (million dollars)-----	6,209	7,835	8,300	8,750	9,250	5.7	9.5
	U.S. exports (million dollars)-----	413	539	784	1,126	1,872	66.3	45.6
	U.S. imports (million dollars)-----	358	334	258	266	316	18.8	(4.7)
	Apparent U.S. consumption (million dollars)-----	6,154	7,630	7,774	7,890	7,694	(2.5)	4.9
	Trade balance (million dollars)-----	55	205	526	860	1,556	-	-
	Ratio of imports to apparent consumption (percent)-----	5.8	4.4	3.3	3.4	4.1	21.8	(9.1)
	Ratio of exports to shipments (percent)-----	6.7	6.9	9.4	12.9	20.2	57.3	33.0
ME042	Radio transmission and reception apparatus, including cellular...:							
	Establishments (number)-----	318	318	318	318	318	0.0	0.0
	Employees (thousands)-----	130	113	115	117	119	1.7	(1.4)
	Capacity utilization (percent)-----	85	87	87	87	87	0.0	0.5
	U.S. shipments (million dollars)-----	11,827	11,793	13,000	12,200	13,000	6.6	2.3
	U.S. exports (million dollars)-----	1,375	1,578	1,902	2,763	3,799	37.5	29.6
	U.S. imports (million dollars)-----	5,042	5,839	6,935	5,592	5,395	(3.5)	0.9
	Apparent U.S. consumption (million dollars)-----	15,494	16,054	18,033	15,029	14,596	(2.9)	(1.8)
	Trade balance (million dollars)-----	(3,667)	(4,261)	(5,033)	(2,829)	(1,596)	-	-
	Ratio of imports to apparent consumption (percent)-----	32.5	36.4	38.5	37.2	37.0	(0.7)	2.8
	Ratio of exports to shipments (percent)-----	11.6	13.4	14.6	22.6	29.2	29.0	26.7

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME043	Radio navigational aid, radar, and remote control apparatus:							
	Establishments (number)-----	130	120	120	115	110	(4.3)	(3.7)
	Employees (thousands)-----	161	159	161	155	150	(3.2)	(1.7)
	Capacity utilization (percent)-----	74	73	75	73	72	(1.4)	(0.5)
	U.S. shipments (million dollars)-----	14,465	14,647	14,800	14,000	13,800	(1.4)	(1.4)
	U.S. exports (million dollars)-----	883	1,046	1,300	1,193	1,218	2.1	8.1
	U.S. imports (million dollars)-----	336	421	423	460	488	6.1	8.7
	Apparent U.S. consumption (million dollars)-----	13,918	14,022	13,923	13,267	13,070	(1.5)	(1.8)
	Trade balance (million dollars)-----	547	625	877	733	730	-	-
	Ratio of imports to apparent consumption (percent)-----	2.4	3.0	3.0	3.5	3.7	7.7	10.7
	Ratio of exports to shipments (percent)-----	6.1	7.1	8.8	8.5	8.8	3.6	9.6
ME044	Television receivers and video monitors and combinations including...:							
	Establishments (number)-----	35	34	34	34	34	0.0	(0.6)
	Employees (thousands)-----	27	26	26	26	26	0.0	(0.8)
	Capacity utilization (percent)-----	79	70	70	70	70	0.0	(2.4)
	U.S. shipments (million dollars)-----	4,000	3,800	3,800	3,900	3,900	0.0	(0.2)
	U.S. exports (million dollars)-----	432	483	740	926	1,025	10.7	26.9
	U.S. imports (million dollars)-----	3,621	3,396	3,172	3,405	3,174	(6.8)	(2.6)
	Apparent U.S. consumption (million dollars)-----	7,189	6,713	6,232	6,379	6,049	(5.2)	(3.9)
	Trade balance (million dollars)-----	(3,189)	(2,913)	(2,432)	(2,479)	(2,149)	-	-
	Ratio of imports to apparent consumption (percent)-----	50.4	50.6	50.9	53.4	52.5	(1.7)	1.4
	Ratio of exports to shipments (percent)-----	10.8	12.7	19.5	23.7	26.3	10.7	27.2
ME045	Television apparatus (except receivers and monitors)....:							
	Establishments (number)-----	135	130	130	130	130	0.0	(0.8)
	Employees (thousands)-----	13	13	13	13	13	0.0	0.0
	Capacity utilization (percent)-----	77	77	77	77	77	0.0	0.0
	U.S. shipments (million dollars)-----	1,174	1,150	1,150	1,200	1,300	8.3	2.5
	U.S. exports (million dollars)-----	221	263	330	156	206	32.1	(6.4)
	U.S. imports (million dollars)-----	935	1,019	909	2,428	2,569	5.8	33.5
	Apparent U.S. consumption (million dollars)-----	1,888	1,906	1,729	3,472	3,663	5.5	21.2
	Trade balance (million dollars)-----	(714)	(756)	(579)	(2,272)	(2,363)	-	-
	Ratio of imports to apparent consumption (percent)-----	49.5	53.5	52.6	69.9	70.1	0.3	10.1
	Ratio of exports to shipments (percent)-----	18.8	22.9	28.7	13.0	15.8	21.9	(8.7)

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME046	Electric sound and visual signaling apparatus:							
	Establishments (number)-----	224	227	230	232	232	0.0	0.9
	Employees (thousands)-----	31	32	32	32	32	0.0	0.6
	Capacity utilization (percent)-----	71	71	71	71	72	1.4	0.3
	U.S. shipments (million dollars)-----	2,725	2,838	2,859	2,570	2,706	5.3	(1.1)
	U.S. exports (million dollars)-----	226	240	294	378	455	20.4	20.4
	U.S. imports (million dollars)-----	659	784	913	1,007	961	(4.6)	10.6
	Apparent U.S. consumption (million dollars)-----	3,158	3,382	3,478	3,199	3,212	0.4	(0.2)
	Trade balance (million dollars)-----	(433)	(544)	(619)	(629)	(506)	-	-
	Ratio of imports to apparent consumption (percent)-----	20.9	23.2	26.3	31.5	29.9	(5.0)	10.8
	Ratio of exports to shipments (percent)-----	8.3	8.5	10.3	14.7	16.8	14.3	21.7
ME047	Electrical capacitors and resistors:							
	Establishments (number)-----	170	170	170	183	180	(1.6)	1.9
	Employees (thousands)-----	30	30	33	38	36	(5.3)	6.2
	Capacity utilization (percent)-----	65	71	73	70	70	0.0	1.3
	U.S. shipments (million dollars)-----	2,260	2,350	2,485	2,280	2,336	2.5	0.4
	U.S. exports (million dollars)-----	475	551	654	762	766	0.5	13.7
	U.S. imports (million dollars)-----	611	736	848	885	879	(0.7)	9.5
	Apparent U.S. consumption (million dollars)-----	2,396	2,535	2,679	2,403	2,449	1.9	(0.1)
	Trade balance (million dollars)-----	(136)	(185)	(194)	(123)	(113)	-	-
	Ratio of imports to apparent consumption (percent)-----	25.5	29.0	31.7	36.8	35.9	(2.5)	9.7
	Ratio of exports to shipments (percent)-----	21.0	23.4	26.3	33.4	32.8	(1.9)	13.2
ME048	Apparatus for making, breaking, protecting, or connecting electrical...:							
	Establishments (number)-----	1,337	1,498	1,717	1,715	1,743	1.6	6.9
	Employees (thousands)-----	226	239	274	274	278	1.5	5.7
	Capacity utilization (percent)-----	74	79	83	82	80	(2.4)	2.0
	U.S. shipments (million dollars)-----	17,366	19,464	22,303	22,284	22,648	1.6	6.9
	U.S. exports (million dollars)-----	2,191	2,553	3,350	3,781	5,280	39.6	24.0
	U.S. imports (million dollars)-----	2,334	2,992	3,858	4,409	5,452	23.7	23.2
	Apparent U.S. consumption (million dollars)-----	17,509	19,903	22,811	22,912	22,820	(0.4)	6.9
	Trade balance (million dollars)-----	(143)	(439)	(508)	(628)	(172)	-	-
	Ratio of imports to apparent consumption (percent)-----	13.3	15.0	16.9	19.2	23.9	24.2	15.2
	Ratio of exports to shipments (percent)-----	12.6	13.1	15.0	17.0	23.3	37.4	16.0

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME049	Television picture tubes and other cathode ray tubes:							
	Establishments (number)-----	19	19	19	19	19	0.0	0.0
	Employees (thousands)-----	13	12	12	11	11	0.0	(4.1)
	Capacity utilization (percent)-----	69	70	73	80	80	(0.9)	4.3
	U.S. shipments (million dollars)-----	1,677	1,736	1,649	1,946	2,002	2.9	4.8
	U.S. exports (million dollars)-----	184	170	276	352	430	22.2	27.4
	U.S. imports (million dollars)-----	362	293	385	664	648	(2.4)	21.9
	Apparent U.S. consumption (million dollars)-----	1,855	1,859	1,758	2,258	2,220	(1.7)	5.7
	Trade balance (million dollars)-----	(178)	(123)	(109)	(312)	(218)	-	-
	Ratio of imports to apparent consumption (percent)-----	19.5	15.8	21.9	29.4	29.2	(0.7)	15.4
	Ratio of exports to shipments (percent)-----	11.0	9.8	16.7	18.1	21.5	18.7	21.6
ME050	Special-purpose tubes:							
	Establishments (number)-----	40	40	40	40	40	0.0	0.0
	Employees (thousands)-----	13	13	13	12	12	0.0	(2.4)
	Capacity utilization (percent)-----	82	82	82	80	80	(0.9)	(0.8)
	U.S. shipments (million dollars)-----	1,766	1,736	1,649	888	914	2.9	(18.0)
	U.S. exports (million dollars)-----	206	179	223	185	211	14.1	0.8
	U.S. imports (million dollars)-----	103	142	142	154	133	(13.6)	6.1
	Apparent U.S. consumption (million dollars)-----	1,663	1,699	1,568	857	836	(2.5)	(18.6)
	Trade balance (million dollars)-----	103	37	81	31	78	-	-
	Ratio of imports to apparent consumption (percent)-----	6.2	8.4	9.1	18.0	15.9	(11.5)	30.4
	Ratio of exports to shipments (percent)-----	11.7	10.3	13.5	20.8	23.1	10.8	23.0
ME051	Diodes, transistors, integrated circuits and similar semiconductor...:							
	Establishments (number)-----	441	437	493	483	483	0.0	2.9
	Employees (thousands)-----	173	185	177	175	171	(2.3)	(0.8)
	Capacity utilization (percent)-----	70	77	75	80	78	(2.5)	2.6
	U.S. shipments (million dollars)-----	14,599	16,820	19,793	22,410	22,962	2.5	12.7
	U.S. exports (million dollars)-----	4,899	6,271	8,081	9,657	10,857	12.4	22.4
	U.S. imports (million dollars)-----	6,028	7,699	10,862	12,320	12,169	(1.2)	20.6
	Apparent U.S. consumption (million dollars)-----	15,728	18,248	22,574	25,073	24,274	(3.2)	12.6
	Trade balance (million dollars)-----	(1,129)	(1,428)	(2,781)	(2,663)	(1,312)	-	-
	Ratio of imports to apparent consumption (percent)-----	38.3	42.2	48.1	49.1	50.1	2.0	7.1
	Ratio of exports to shipments (percent)-----	33.6	37.3	40.8	43.1	47.3	9.7	8.7

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME052	Insulated electrical wire and cable, and conduit; glass and ceramic...							
	Establishments (number)-----	380	375	380	375	375	0.0	(0.3)
	Employees (thousands)-----	79	80	82	81	80	(1.2)	0.4
	Capacity utilization (percent)-----	73	76	80	78	79	1.3	1.9
	U.S. shipments (million dollars)-----	9,640	10,430	12,120	12,800	13,300	3.9	8.9
	U.S. exports (million dollars)-----	885	1,147	1,449	1,695	1,861	9.8	20.6
	U.S. imports (million dollars)-----	1,461	1,765	2,282	2,668	2,728	2.2	18.1
	Apparent U.S. consumption (million dollars)-----	10,216	11,048	12,953	13,773	14,167	2.9	9.1
	Trade balance (million dollars)-----	(576)	(618)	(833)	(973)	(867)	-	-
	Ratio of imports to apparent consumption (percent)-----	14.3	16.0	17.6	19.4	19.3	(0.6)	8.2
	Ratio of exports to shipments (percent)-----	9.2	11.0	12.0	13.2	14.0	5.7	10.8
ME053	Rail locomotive and rolling stock:							
	Establishments (number)-----	120	120	125	123	120	(2.4)	0.2
	Employees (thousands)-----	24	24	25	24	23	(4.2)	(0.8)
	Capacity utilization (percent)-----	49	49	55	50	50	0.0	0.6
	U.S. shipments (million dollars)-----	2,341	2,388	2,550	2,700	2,800	3.7	4.9
	U.S. exports (million dollars)-----	560	373	344	433	518	19.6	(0.1)
	U.S. imports (million dollars)-----	478	593	450	791	701	(11.4)	11.1
	Apparent U.S. consumption (million dollars)-----	2,259	2,608	2,656	3,058	2,983	(2.5)	7.4
	Trade balance (million dollars)-----	82	(220)	(106)	(358)	(183)	-	-
	Ratio of imports to apparent consumption (percent)-----	21.2	22.7	16.9	25.9	23.5	(9.1)	3.4
	Ratio of exports to shipments (percent)-----	23.9	15.6	13.5	16.0	18.5	15.4	(4.8)
ME054	Automobiles, trucks, buses, and bodies and chassis of the foregoing:							
	Establishments (number)-----	1,125	1,130	1,074	1,042	1,052	1.0	(2.1)
	Employees (thousands)-----	311	318	312	315	313	(0.6)	0.0
	Capacity utilization (percent)-----	87	86	85	84	72	(14.3)	(3.9)
	U.S. shipments (million dollars)-----	98,980	97,975	95,275	91,464	81,403	(11.0)	(4.5)
	U.S. exports (million dollars)-----	9,186	10,234	12,332	12,892	13,259	2.8	10.1
	U.S. imports (million dollars)-----	58,806	61,737	61,584	58,760	59,504	1.3	(0.3)
	Apparent U.S. consumption (million dollars)-----	148,600	149,478	144,527	137,332	127,648	(7.1)	(3.8)
	Trade balance (million dollars)-----	(49,620)	(51,503)	(49,252)	(45,868)	(46,245)	-	-
	Ratio of imports to apparent consumption (percent)-----	39.6	41.3	42.6	42.8	46.6	8.9	3.7
	Ratio of exports to shipments (percent)-----	9.3	10.4	12.9	14.1	16.3	15.6	15.3

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME055	Certain motor-vehicle parts:							
	Establishments (number)-----	2,700	2,747	2,800	2,785	2,765	(0.7)	0.6
	Employees (thousands)-----	372	380	385	389	384	(1.3)	0.9
	Capacity utilization (percent)-----	76	75	76	79	81	2.5	1.8
	U.S. shipments (million dollars)-----	57,393	60,696	63,731	65,000	69,000	6.2	4.5
	U.S. exports (million dollars)-----	5,977	6,765	7,987	10,754	13,886	29.1	24.0
	U.S. imports (million dollars)-----	8,977	10,172	11,897	12,783	12,618	(1.3)	9.5
	Apparent U.S. consumption (million dollars)-----	60,393	64,103	67,641	67,029	67,732	1.0	2.8
	Trade balance (million dollars)-----	(3,000)	(3,407)	(3,910)	(2,029)	1,268	-	-
	Ratio of imports to apparent consumption (percent)-----	14.9	15.9	17.6	19.1	18.6	(2.3)	6.6
	Ratio of exports to shipments (percent)-----	10.4	11.1	12.5	16.5	20.1	21.6	18.7
ME056	Motorcycles, mopeds, and parts:							
	Establishments (number)-----	60	60	58	58	58	0.0	(1.0)
	Employees (thousands)-----	4	4	4	4	4	0.0	0.0
	Capacity utilization (percent)-----	80	78	78	78	78	0.0	(0.5)
	U.S. shipments (million dollars)-----	525	525	500	545	560	2.8	1.7
	U.S. exports (million dollars)-----	75	124	220	199	306	53.8	38.9
	U.S. imports (million dollars)-----	887	610	658	637	449	(29.5)	(12.4)
	Apparent U.S. consumption (million dollars)-----	1,337	1,011	938	983	703	(28.5)	(12.3)
	Trade balance (million dollars)-----	(812)	(486)	(438)	(438)	(143)	-	-
	Ratio of imports to apparent consumption (percent)-----	66.3	60.3	70.1	64.8	63.9	(1.4)	(0.0)
	Ratio of exports to shipments (percent)-----	14.3	23.6	44.0	36.5	54.6	49.7	36.6
ME057	Miscellaneous vehicles and transportation-related equipment:							
	Establishments (number)-----	1,210	1,212	1,214	1,200	1,204	0.3	(0.2)
	Employees (thousands)-----	74	74	75	70	72	2.9	(1.1)
	Capacity utilization (percent)-----	54	54	56	56	58	3.6	1.8
	U.S. shipments (million dollars)-----	7,455	9,470	9,825	6,230	7,165	15.0	(4.9)
	U.S. exports (million dollars)-----	3,159	3,430	4,111	1,620	1,739	7.3	(17.7)
	U.S. imports (million dollars)-----	1,104	1,034	876	708	1,078	52.3	(4.2)
	Apparent U.S. consumption (million dollars)-----	5,400	7,074	6,590	5,318	6,504	22.3	0.9
	Trade balance (million dollars)-----	2,055	2,396	3,235	912	661	-	-
	Ratio of imports to apparent consumption (percent)-----	20.4	14.6	13.3	13.3	16.6	24.5	(5.0)
	Ratio of exports to shipments (percent)-----	42.4	36.2	41.8	26.0	24.3	(6.7)	(13.5)

Table B-5

Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME058	Aircraft, spacecraft, and related equipment:							
	Establishments (number)-----	320	340	350	340	340	0.0	1.2
	Employees (thousands)-----	524	544	549	575	545	(5.2)	1.3
	Capacity utilization (percent)-----	82	88	85	74	83	12.2	(1.5)
	U.S. shipments (million dollars)-----	43,691	47,443	46,035	47,710	50,096	5.0	2.8
	U.S. exports (million dollars)-----	15,101	16,881	19,949	23,290	29,439	26.4	18.0
	U.S. imports (million dollars)-----	4,420	4,570	5,230	5,728	6,369	11.2	10.0
	Apparent U.S. consumption (million dollars)-----	33,010	35,132	31,316	30,148	27,026	(10.4)	(5.4)
	Trade balance (million dollars)-----	10,681	12,311	14,719	17,562	23,070	-	-
	Ratio of imports to apparent consumption (percent)-----	13.4	13.0	16.7	19.0	23.6	24.0	16.3
	Ratio of exports to shipments (percent)-----	34.6	35.6	43.3	48.8	58.8	20.4	14.8
ME059	Ships, tugs, pleasure boats, and similar vessels:							
	Establishments (number)-----	2,515	2,500	2,600	2,550	2,525	(1.0)	0.3
	Employees (thousands)-----	155	152	160	158	155	(1.9)	0.4
	Capacity utilization (percent)-----	52	55	60	57	55	(3.5)	1.5
	U.S. shipments (million dollars)-----	13,729	13,584	14,900	14,400	13,900	(3.5)	0.8
	U.S. exports (million dollars)-----	429	494	854	1,011	1,291	27.7	33.9
	U.S. imports (million dollars)-----	430	488	587	600	348	(42.0)	(2.1)
	Apparent U.S. consumption (million dollars)-----	13,730	13,578	14,633	13,989	12,957	(7.4)	(0.9)
	Trade balance (million dollars)-----	(1)	6	267	411	943	-	-
	Ratio of imports to apparent consumption (percent)-----	3.1	3.6	4.0	4.3	2.7	(37.4)	(1.3)
	Ratio of exports to shipments (percent)-----	3.1	3.6	5.7	7.0	9.3	32.3	32.8
ME060	Telecommunications products:							
	Establishments (number)-----	716	767	825	850	890	4.7	5.5
	Employees (thousands)-----	220	216	214	211	208	(1.4)	(1.3)
	Capacity utilization (percent)-----	68	68	67	68	67	(1.5)	(0.3)
	U.S. shipments (million dollars)-----	26,633	27,953	29,464	31,085	32,790	5.5	5.4
	U.S. exports (million dollars)-----	2,383	2,675	3,383	4,754	5,993	26.1	27.4
	U.S. imports (million dollars)-----	3,474	4,421	5,816	5,957	6,011	0.9	15.0
	Apparent U.S. consumption (million dollars)-----	27,738	29,722	31,977	32,288	32,808	1.6	4.3
	Trade balance (million dollars)-----	(1,105)	(1,769)	(2,513)	(1,203)	(18)	-	-
	Ratio of imports to apparent consumption (percent)-----	12.5	14.9	18.2	18.4	18.3	(0.7)	10.3
	Ratio of exports to shipments (percent)-----	8.9	9.6	11.5	15.3	18.3	19.5	20.9

Table B-5  
Machinery and equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change, 1990 over 1989	Annual rate of change 1/ 1986-1990
ME061	Electrical and electronic articles, apparatus, and parts...:							
	Establishments (number)-----	9,950	10,400	10,750	11,250	11,000	(2.2)	2.8
	Employees (thousands)-----	92	94	95	99	98	(1.0)	1.8
	Capacity utilization (percent)-----	81	82	84	85	85	0.0	1.3
	U.S. shipments (million dollars)-----	9,620	10,300	11,000	11,500	12,200	6.1	6.0
	U.S. exports (million dollars)-----	440	512	679	1,162	1,163	0.1	31.8
	U.S. imports (million dollars)-----	1,035	1,183	1,295	890	977	9.8	(3.9)
	Apparent U.S. consumption (million dollars)-----	10,215	10,971	11,616	11,228	12,014	7.0	3.5
	Trade balance (million dollars)-----	(595)	(671)	(616)	272	186	-	-
	Ratio of imports to apparent consumption (percent)-----	10.1	10.8	11.1	7.9	8.1	2.6	(7.2)
	Ratio of exports to shipments (percent)-----	4.6	5.0	6.2	10.1	9.5	(5.7)	24.3
ME062	Motors and engines, except internal combustion, aircraft, or electric:							
	Establishments (number)-----	40	42	42	43	44	2.3	2.2
	Employees (thousands)-----	9	9	9	9	9	0.0	0.0
	Capacity utilization (percent)-----	82	84	82	83	84	1.2	0.4
	U.S. shipments (million dollars)-----	3,567	3,571	3,625	3,806	3,993	4.9	2.9
	U.S. exports (million dollars)-----	69	54	87	62	105	69.4	10.3
	U.S. imports (million dollars)-----	129	139	167	71	78	9.9	(15.4)
	Apparent U.S. consumption (million dollars)-----	3,627	3,656	3,705	3,815	3,966	4.0	2.2
	Trade balance (million dollars)-----	(60)	(85)	(80)	(9)	27	-	-
	Ratio of imports to apparent consumption (percent)-----	3.6	3.8	4.5	1.9	2.0	5.7	(17.3)
	Ratio of exports to shipments (percent)-----	1.9	1.5	2.4	1.6	2.6	61.4	7.1

1/ The figure shown represents the compound rate of change of a trend line plotted through 1986-1990 data using linear regression.

Table B-6

Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
GM001	Photographic supplies:							
	Establishments (number)-----	117	118	118	115	115	0.0	(0.6)
	Employees (thousands)-----	37	38	38	36	35	(2.8)	(1.6)
	Capacity utilization (percent)-----	71	73	73	73	73	0.0	0.6
	U.S. shipments (million dollars)-----	5,475	5,585	5,716	6,360	7,300	14.8	7.3
	U.S. exports (million dollars)-----	1,268	1,317	1,429	1,499	1,719	14.7	7.7
	U.S. imports (million dollars)-----	1,032	1,152	1,270	1,330	1,409	5.9	8.0
	Apparent U.S. consumption (million dollars)-----	5,239	5,420	5,557	6,191	6,990	12.9	7.4
	Trade balance (million dollars)-----	236.0	165.0	159.0	169	310	-	-
	Ratio of imports to apparent consumption (percent)-----	19.7	21.3	22.9	21.5	20.2	(6.2)	0.6
	Ratio of exports to shipments (percent)-----	23.2	23.6	25.0	23.6	23.5	(0.1)	0.3
GM002	Exposed photographic plates, film, and paper:							
	Establishments (number)-----	180	200	200	200	200	0.0	2.1
	Employees (thousands)-----	219	231	231	230	240	4.3	1.8
	Capacity utilization (percent)-----	2/	2/	2/	2/	2/	-	-
	U.S. shipments (million dollars)-----	3,463	4,033	4,200	4,200 3/	5,350 3/	27.4	9.5
	U.S. exports (million dollars)-----	76	82	81	85	110	29.4	8.1
	U.S. imports (million dollars)-----	89	67	63	91	88	(3.3)	2.9
	Apparent U.S. consumption (million dollars)-----	3,476	4,018	4,182	4,206	5,328	26.7	9.4
	Trade balance (million dollars)-----	(13)	15	18	(6)	22	-	-
	Ratio of imports to apparent consumption (percent)-----	2.6	1.7	1.5	2.2	1.7	(23.7)	(6.0)
	Ratio of exports to shipments (percent)-----	2.2	2.0	1.9	2.0	2.1	1.6	(1.3)
GM003	Luggage, handbags, and flat goods:							
	Establishments (number)-----	820	771	775	750	745	(0.7)	(2.2)
	Employees (thousands)-----	27	27	28	28	27	(3.6)	0.4
	Capacity utilization (percent)-----	70	70	85	80	80	0.0	4.1
	U.S. shipments (million dollars)-----	1,277	1,698	1,715	1,892	1,915	1.2	9.6
	U.S. exports (million dollars)-----	72	97	125	103	133	29.1	13.7
	U.S. imports (million dollars)-----	1,510	1,864	1,921	2,078	2,171	4.5	8.7
	Apparent U.S. consumption (million dollars)-----	2,715	3,465	3,511	3,867	3,953	2.2	9.0
	Trade balance (million dollars)-----	(1,438)	(1,767)	(1,796)	(1,975)	(2,038)	-	-
	Ratio of imports to apparent consumption (percent)-----	55.6	53.8	54.7	53.7	54.9	2.2	(0.3)
	Ratio of exports to shipments (percent)-----	5.6	5.7	7.3	5.4	6.9	27.6	3.8

Table B-6

Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
GM004	Certain other leather goods:							
	Establishments (number)-----	415	396	395	405	405	0.0	(0.3)
	Employees (thousands)-----	6	7	7	8	8	0.0	7.3
	Capacity utilization (percent)-----	61	64	65	70	70	0.0	3.7
	U.S. shipments (million dollars)-----	302	383	385	430	460	7.0	10.0
	U.S. exports (million dollars)-----	21	28	33	48	44	(8.3)	22.4
	U.S. imports (million dollars)-----	94	116	128	138	148	7.2	11.4
	Apparent U.S. consumption (million dollars)-----	375	471	480	520	564	8.5	9.6
	Trade balance (million dollars)-----	(73)	(88)	(95)	(90)	(104)	-	-
	Ratio of imports to apparent consumption (percent)-----	25.1	24.6	26.7	26.5	26.2	(1.1)	1.7
	Ratio of exports to shipments (percent)-----	7.0	7.3	8.6	11.2	9.6	(14.3)	11.2
GM005	Musical instruments and accessories:							
	Firms (number)-----	440	470	485	475	475	0.0	1.7
	Employees (thousands)-----	16	16	16	15	14	(6.7)	(3.3)
	Capacity utilization (percent)-----	49	52	50	52	50	(3.8)	0.4
	U.S. shipments (million dollars)-----	800	890	915	900	875	(2.8)	1.9
	U.S. exports (million dollars)-----	127	187	240	250	293	17.2	21.7
	U.S. imports (million dollars)-----	663	892	947	750	727	(3.1)	0.1
	Apparent U.S. consumption (million dollars)-----	1,336	1,595	1,622	1,400	1,309	(6.5)	(1.7)
	Trade balance (million dollars)-----	(536)	(705)	(707)	(500)	(434)	-	-
	Ratio of imports to apparent consumption (percent)-----	49.6	55.9	58.4	53.6	55.5	3.7	1.8
	Ratio of exports to shipments (percent)-----	15.9	21.0	26.2	27.8	33.5	20.5	19.4
GM006	Umbrellas, whips, riding crops, and canes:							
	Establishments (number)-----	12	12	12	12	12	0.0	0.0
	Employees (thousands)-----	1	1	1	1	1	0.0	0.0
	Capacity utilization (percent)-----	55	55	55	60	60	0.0	2.6
	U.S. shipments (million dollars)-----	32	49	78	120	190	58.3	56.1
	U.S. exports (million dollars)-----	1	2	3	6	8	33.3	69.2
	U.S. imports (million dollars)-----	103	127	133	136	146	7.4	8.0
	Apparent U.S. consumption (million dollars)-----	134	174	208	250	328	31.2	24.0
	Trade balance (million dollars)-----	(102)	(125)	(130)	(130)	(138)	-	-
	Ratio of imports to apparent consumption (percent)-----	76.9	72.8	63.9	54.4	44.5	(18.2)	(12.9)
	Ratio of exports to shipments (percent)-----	3.1	4.0	3.8	5.0	4.2	(15.8)	8.4

Table B-6

Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
GM007	Silverware and certain other articles of precious metal:							
	Establishments (number)-----	47	47	46	46	46	0.0	(0.6)
	Employees (thousands)-----	2	2	2	2	2	0.0	0.0
	Capacity utilization (percent)-----	71	71	71	71	72	1.4	0.3
	U.S. shipments (million dollars)-----	168	170	167	170	175	2.9	0.8
	U.S. exports (million dollars)-----	38	61	71	63	85	34.9	17.8
	U.S. imports (million dollars)-----	49	66	64	61	50	(18.0)	(0.4)
	Apparent U.S. consumption (million dollars)-----	179	175	160	168	140	(16.7)	(5.2)
	Trade balance (million dollars)-----	(11)	(5)	7	2	35	-	-
	Ratio of imports to apparent consumption (percent)-----	27.4	37.7	40.0	36.3	35.7	(1.6)	5.1
	Ratio of exports to shipments (percent)-----	22.6	35.9	42.5	37.1	48.6	31.1	16.9
GM008	Precious jewelry and related articles:							
	Firms (number)-----	2,000	2,150	2,200	2,200	2,200	0.0	2.2
	Employees (thousands)-----	36	36	36	38	37	(2.6)	1.1
	Capacity utilization (percent)-----	50	48	48	49	48	(2.0)	(0.6)
	U.S. shipments (million dollars)-----	3,476	3,500	3,580	3,750	3,625	(3.3)	1.5
	U.S. exports (million dollars)-----	177	225	323	424	428	0.9	27.1
	U.S. imports (million dollars)-----	2,218	2,384	2,548	2,761	2,608	(5.5)	4.8
	Apparent U.S. consumption (million dollars)-----	5,517	5,659	5,805	6,087	5,805	(4.6)	1.8
	Trade balance (million dollars)-----	(2,041)	(2,159)	(2,225)	(2,337)	(2,180)	-	-
	Ratio of imports to apparent consumption (percent)-----	40.2	42.1	43.9	45.4	44.9	(1.0)	3.0
	Ratio of exports to shipments (percent)-----	5.1	6.4	9.0	11.3	11.8	4.4	25.2
GM009	Costume jewelry and related articles:							
	Firms (number)-----	890	950	940	940	930	(1.1)	0.8
	Employees (thousands)-----	19	19	18	19	18	(5.3)	(1.1)
	Capacity utilization (percent)-----	59	60	58	55	60	9.1	(0.5)
	U.S. shipments (million dollars)-----	1,265	1,320	1,280	1,375	1,425	3.6	2.8
	U.S. exports (million dollars)-----	42	48	65	89	110	23.6	29.0
	U.S. imports (million dollars)-----	363	369	376	437	461	5.5	6.7
	Apparent U.S. consumption (million dollars)-----	1,586	1,641	1,591	1,723	1,776	3.1	2.8
	Trade balance (million dollars)-----	(321)	(321)	(311)	(348)	(351)	-	-
	Ratio of imports to apparent consumption (percent)-----	22.9	22.5	23.6	25.4	26.0	2.3	3.8
	Ratio of exports to shipments (percent)-----	3.3	3.6	5.1	6.5	7.7	19.3	25.4

Table B-6

Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
GM010	Bicycles:							
	Establishments (number)-----	35	35	30	30	30	0.0	(4.5)
	Employees (thousands)-----	6	6	5	6	6	0.0	0.0
	Capacity utilization (percent)-----	52	55	50	65	70	7.7	7.9
	U.S. shipments (million dollars)-----	560	560	505	630	725	15.1	6.5
	U.S. exports (million dollars)-----	19	13	21	46	114	147.8	62.4
	U.S. imports (million dollars)-----	618	734	640	681	750	10.1	3.2
	Apparent U.S. consumption (million dollars)-----	1,159	1,281	1,124	1,265	1,361	7.6	3.1
	Trade balance (million dollars)-----	(599)	(721)	(619)	(635)	(636)	-	-
	Ratio of imports to apparent consumption (percent)-----	53.3	57.3	56.9	53.8	55.1	2.4	0.0
	Ratio of exports to shipments (percent)-----	3.4	2.3	4.2	7.3	15.7	115.4	52.4
GM011	Optical fibers, optical fiber bundles and cables:							
	Establishments (number)-----	35	50	48	50	50	0.0	7.4
	Employees (thousands)-----	4	5	5	5	6	20.0	8.4
	Capacity utilization (percent)-----	75	75	85	85	87	2.4	4.3
	U.S. shipments (million dollars)-----	658	640	660	964	1,100	14.1	15.5
	U.S. exports (million dollars)-----	68	65	73	143	172	20.3	30.3
	U.S. imports (million dollars)-----	72	21	33	40	62	55.0	3.5
	Apparent U.S. consumption (million dollars)-----	662	596	620	861	990	15.0	12.4
	Trade balance (million dollars)-----	(4)	44	40	103	110	-	-
	Ratio of imports to apparent consumption (percent)-----	10.9	3.5	5.3	4.6	6.3	34.8	(7.9)
	Ratio of exports to shipments (percent)-----	10.3	10.2	11.1	14.8	15.6	5.4	12.8
GM012	Optical goods, including ophthalmic goods:							
	Establishments (number)-----	900	900	900	900	900	0.0	0.0
	Employees (thousands)-----	55	58	58	58	59	1.7	1.4
	Capacity utilization (percent)-----	74	76	77	78	78	0.0	1.3
	U.S. shipments (million dollars)-----	3,300	3,600	3,800	4,000	4,200	5.0	6.1
	U.S. exports (million dollars)-----	606	630	657	933	985	5.6	14.6
	U.S. imports (million dollars)-----	1,500	1,609	1,707	1,811	1,872	3.4	5.8
	Apparent U.S. consumption (million dollars)-----	4,194	4,579	4,850	4,878	5,087	4.3	4.6
	Trade balance (million dollars)-----	(894)	(979)	(1,050)	(878)	(887)	-	-
	Ratio of imports to apparent consumption (percent)-----	35.8	35.1	35.2	37.1	36.8	(0.9)	1.1
	Ratio of exports to shipments (percent)-----	18.4	17.5	17.3	23.3	23.5	0.5	8.1

Table B-6

Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
GM013	Photographic cameras and equipment:							
	Establishments (number)-----	663	667	667	650	640	(1.5)	(1.0)
	Employees (thousands)-----	14	14	14	13	13	0.0	(2.2)
	Capacity utilization (percent)-----	71	73	73	73	73	0.0	0.6
	U.S. shipments (million dollars)-----	1,671	1,704	2,270	1,620	1,595	(1.5)	(1.4)
	U.S. exports (million dollars)-----	800	803	1,035	759	764	0.7	(1.5)
	U.S. imports (million dollars)-----	1,474	1,472	1,463	1,686	1,560	(7.5)	2.5
	Apparent U.S. consumption (million dollars)-----	2,345	2,373	2,698	2,547	2,391	(6.1)	1.1
	Trade balance (million dollars)-----	(674)	(669)	(428)	(927)	(796)	-	-
	Ratio of imports to apparent consumption (percent)-----	62.9	62.0	54.2	66.2	65.2	(1.4)	1.4
	Ratio of exports to shipments (percent)-----	47.9	47.1	45.6	46.9	47.9	2.2	(0.0)
GM014	Medical goods:							
	Establishments (number)-----	2,280	2,290	2,290	2,295	2,300	0.2	0.2
	Employees (thousands)-----	165	160	162	163	163	0.0	(0.1)
	Capacity utilization (percent)-----	75	77	81	81	82	1.2	2.3
	U.S. shipments (million dollars)-----	13,400	14,000	15,580	17,500	19,200	9.7	9.9
	U.S. exports (million dollars)-----	2,596	3,034	3,895	4,493	5,317	18.3	20.0
	U.S. imports (million dollars)-----	2,053	2,321	2,761	2,799	3,292	17.6	12.0
	Apparent U.S. consumption (million dollars)-----	12,857	13,287	14,446	15,806	17,175	8.7	7.8
	Trade balance (million dollars)-----	543	713	1,134	1,694	2,025	-	-
	Ratio of imports to apparent consumption (percent)-----	16.0	17.5	19.1	17.7	19.2	8.2	3.9
	Ratio of exports to shipments (percent)-----	19.4	21.7	25.0	25.7	27.7	7.9	9.2
GM015	Scientific instruments:							
	Establishments (number)-----	1,810	1,770	1,750	1,730	1,710	(1.2)	(1.4)
	Employees (thousands)-----	328	325	310	315	317	0.6	(1.0)
	Capacity utilization (percent)-----	76	76	77	78	78	0.0	0.8
	U.S. shipments (million dollars)-----	25,200	25,750	28,000	30,500	33,400	9.5	7.6
	U.S. exports (million dollars)-----	5,294	5,820	7,051	7,971	8,763	9.9	14.1
	U.S. imports (million dollars)-----	2,726	3,181	3,599	3,837	4,059	5.8	10.3
	Apparent U.S. consumption (million dollars)-----	22,632	23,111	24,548	26,366	28,696	8.8	6.3
	Trade balance (million dollars)-----	2,568	2,639	3,452	4,134	4,704	-	-
	Ratio of imports to apparent consumption (percent)-----	12.0	13.8	14.7	14.6	14.1	(2.8)	3.8
	Ratio of exports to shipments (percent)-----	21.0	22.6	25.2	26.1	26.2	0.4	6.1

Table B-6

Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
GM016	Watches:							
	Establishments (number)-----	9	9	9	9	9	0.0	0.0
	Employees (thousands)-----	1	1	1	1	1	0.0	0.0
	Capacity utilization (percent)-----	46	53	57	59	59	0.0	6.2
	U.S. shipments (million dollars)-----	129	147	151	184	205	11.4	12.2
	U.S. exports (million dollars)-----	45	52	71	96	120	25.0	29.4
	U.S. imports (million dollars)-----	1,262	1,470	1,682	749	1,443	92.7	(4.0)
	Apparent U.S. consumption (million dollars)-----	1,346	1,565	1,762	837	1,528	82.6	(3.7)
	Trade balance (million dollars)-----	(1,217)	(1,418)	(1,611)	(653)	(1,323)	-	-
	Ratio of imports to apparent consumption (percent)-----	93.8	93.9	95.5	89.5	94.4	5.5	(0.3)
	Ratio of exports to shipments (percent)-----	34.9	35.4	47.0	52.2	58.5	12.2	15.3
GM017	Clocks and timing devices:							
	Establishments (number)-----	60	60	50	50	50	0.0	(5.3)
	Employees (thousands)-----	3	3	2	2	2	0.0	(11.5)
	Capacity utilization (percent)-----	65	65	65	65	65	0.0	0.0
	U.S. shipments (million dollars)-----	461	480	475	455	545	19.8	2.9
	U.S. exports (million dollars)-----	44	50	64	69	89	29.0	18.9
	U.S. imports (million dollars)-----	318	293	303	128	233	82.0	(13.5)
	Apparent U.S. consumption (million dollars)-----	735	723	714	514	689	34.0	(4.6)
	Trade balance (million dollars)-----	(274)	(243)	(239)	(59)	(144)	-	-
	Ratio of imports to apparent consumption (percent)-----	43.3	40.5	42.4	24.9	33.8	35.8	(9.3)
	Ratio of exports to shipments (percent)-----	9.5	10.4	13.5	15.2	16.3	7.7	15.6
GM018	Arms and ammunition:							
	Establishments (number) 4/-----	368	371	375	385	390	1.3	1.5
	Employees (thousands) 4/-----	85	88	90	92	95	3.3	2.7
	Capacity utilization (percent) 4/-----	60	70	75	75	80	6.7	6.7
	U.S. shipments (million dollars) 4/-----	4,300	4,800	5,200	6,000	6,200	3.3	10.0
	U.S. exports (million dollars) 4/-----	1,434	1,529	1,718	1,859	2,336	25.7	12.4
	U.S. imports (million dollars) 4/-----	352	382	435	486	463	(4.7)	8.2
	Apparent U.S. consumption (million dollars) 4/-----	3,218	3,653	3,917	4,627	4,327	(6.5)	8.6
	Trade balance (million dollars) 4/-----	1,082	1,147	1,283	1,373	1,873	-	-
	Ratio of imports to apparent consumption (percent) 4/-----	10.9	10.5	11.1	10.5	10.7	1.9	(0.4)
	Ratio of exports to shipments (percent) 4/-----	33.3	31.9	33.0	31.0	37.7	21.6	2.2

Table B-6

Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
GM019	Furniture and selected furnishings:							
	Establishments (number)-----	10,000	10,200	10,200	10,100	10,100	0.0	0.1
	Employees (thousands)-----	375	375	375	375	375	0.0	0.0
	Capacity utilization (percent)-----	72	73	73	73	72	(1.4)	0.0
	U.S. shipments (million dollars)-----	30,800	34,900	36,500	37,600	38,000	1.1	5.1
	U.S. exports (million dollars)-----	543	633	847	1,098	1,731	57.7	33.2
	U.S. imports (million dollars)-----	4,056	4,535	4,741	4,962	5,050	1.8	5.4
	Apparent U.S. consumption (million dollars)-----	34,313	38,802	40,394	41,464	41,319	(0.3)	4.5
	Trade balance (million dollars)-----	(3,513)	(3,902)	(3,894)	(3,864)	(3,319)	-	-
	Ratio of imports to apparent consumption (percent)-----	11.8	11.7	11.7	12.0	12.2	2.1	0.9
	Ratio of exports to shipments (percent)-----	1.8	1.8	2.3	2.9	4.6	56.0	26.8
GM020	Writing instruments and related articles:							
	Establishments (number)-----	254	254	254	265	270	1.9	1.7
	Employees (thousands)-----	15	15	15	15	15	0.0	0.0
	Capacity utilization (percent)-----	82	82	82	85	85	0.0	1.1
	U.S. shipments (million dollars)-----	1,212	1,260	1,300	1,500	1,660	10.7	8.4
	U.S. exports (million dollars)-----	106	131	167	168	193	14.9	15.6
	U.S. imports (million dollars)-----	246	279	345	387	447	15.5	16.4
	Apparent U.S. consumption (million dollars)-----	1,352	1,408	1,478	1,719	1,914	11.3	9.4
	Trade balance (million dollars)-----	(140)	(148)	(178)	(219)	(254)	-	-
	Ratio of imports to apparent consumption (percent)-----	18.2	19.8	23.3	22.5	23.4	3.7	6.5
	Ratio of exports to shipments (percent)-----	8.7	10.4	12.8	11.2	11.6	3.8	6.7
GM021	Certain office and cosmetic supplies:							
	Establishments (number)-----	740	740	740	740	750	1.4	0.3
	Employees (thousands)-----	12	14	14	13	14	7.7	2.4
	Capacity utilization (percent)-----	67	70	71	70	70	0.0	0.9
	U.S. shipments (million dollars)-----	860	1,010	1,030	1,000	1,000	0.0	3.0
	U.S. exports (million dollars)-----	69	78	102	94	116	23.4	13.0
	U.S. imports (million dollars)-----	216	107	125	144	178	23.6	(0.9)
	Apparent U.S. consumption (million dollars)-----	1,007	1,039	1,053	1,050	1,062	1.1	1.2
	Trade balance (million dollars)-----	(147)	(29)	(23)	(50)	(62)	-	-
	Ratio of imports to apparent consumption (percent)-----	21.4	10.3	11.9	13.7	16.8	22.2	(2.0)
	Ratio of exports to shipments (percent)-----	8.0	7.7	9.9	9.4	11.6	23.4	9.8

Table B-6

Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
GM022	Lamps and lighting fittings:							
	Establishments (number)-----	1,660	1,655	1,650	2,040	1,970	(3.4)	5.7
	Employees (thousands)-----	84	84	84	92	89	(3.3)	2.1
	Capacity utilization (percent)-----	63	65	67	85	84	(1.2)	8.8
	U.S. shipments (million dollars)-----	7,800	7,900	8,100	8,600	8,300	(3.5)	2.1
	U.S. exports (million dollars)-----	139	157	203	246	315	28.0	23.2
	U.S. imports (million dollars)-----	674	838	1,020	1,243	1,311	5.5	18.8
	Apparent U.S. consumption (million dollars)-----	8,335	8,581	8,917	9,597	9,296	(3.1)	3.4
	Trade balance (million dollars)-----	(535)	(681)	(817)	(997)	(996)	-	-
	Ratio of imports to apparent consumption (percent)-----	8.1	9.8	11.4	13.0	14.1	8.9	15.0
	Ratio of exports to shipments (percent)-----	1.8	2.0	2.5	2.9	3.8	32.7	20.6
GM023	Prefabricated buildings:							
	Establishments (number)-----	1,200	1,200	1,200	1,200	1,300	8.3	1.6
	Employees (thousands)-----	63	65	66	66	66	0.0	1.1
	Capacity utilization (percent)-----	63	60	60	60	60	0.0	(1.0)
	U.S. shipments (million dollars)-----	8,600	9,200	9,400	9,600	9,700	1.0	2.9
	U.S. exports (million dollars)-----	81	92	114	154	171	11.0	22.3
	U.S. imports (million dollars)-----	37	43	32	47	34	(27.7)	(0.8)
	Apparent U.S. consumption (million dollars)-----	8,556	9,151	9,318	9,493	9,563	0.7	2.6
	Trade balance (million dollars)-----	44	49	82	107	137	-	-
	Ratio of imports to apparent consumption (percent)-----	0.4	0.5	0.3	0.5	0.4	(28.2)	(3.3)
	Ratio of exports to shipments (percent)-----	0.9	1.0	1.2	1.6	1.8	9.9	18.8
GM024	Children's vehicles:							
	Establishments (number)-----	45	45	45	45	45	0.0	0.0
	Employees (thousands)-----	3	3	3	3	3	0.0	0.0
	Capacity utilization (percent)-----	68	70	70	65	65	0.0	(1.6)
	U.S. shipments (million dollars)-----	254	260	255	280	280	0.0	2.7
	U.S. exports (million dollars)-----	3	10	14	15	23	53.3	56.5
	U.S. imports (million dollars)-----	120	257	190	183	179	(2.2)	4.7
	Apparent U.S. consumption (million dollars)-----	371	507	431	448	436	(2.7)	2.0
	Trade balance (million dollars)-----	(117)	(247)	(176)	(168)	(156)	-	-
	Ratio of imports to apparent consumption (percent)-----	32.3	50.7	44.1	40.8	41.1	0.5	2.6
	Ratio of exports to shipments (percent)-----	1.2	3.8	5.5	5.4	8.2	53.3	52.4

Table B-6

Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
GM025	Dolls:							
	Establishments (number)-----	215	195	180	180	180	0.0	(4.3)
	Employees (thousands)-----	6	5	4	4	4	0.0	(9.8)
	Capacity utilization (percent)-----	70	70	70	70	70	0.0	0.0
	U.S. shipments (million dollars)-----	179	160	140	145	155	6.9	(3.8)
	U.S. exports (million dollars)-----	5	5	8	19	17	(10.5)	46.0
	U.S. imports (million dollars)-----	543	513	559	616	772	25.3	9.3
	Apparent U.S. consumption (million dollars)-----	717	668	691	742	910	22.6	6.0
	Trade balance (million dollars)-----	(538)	(508)	(551)	(597)	(755)	-	-
	Ratio of imports to apparent consumption (percent)-----	75.7	76.8	80.9	83.0	84.8	2.2	3.1
	Ratio of exports to shipments (percent)-----	2.8	3.1	5.7	13.1	11.0	(16.3)	51.7
GM026	Toys and models:							
	Establishments (number)-----	400	380	350	340	320	(5.9)	(5.4)
	Employees (thousands)-----	20	19	17	16	13	(18.8)	(9.8)
	Capacity utilization (percent)-----	63	69	71	71	72	1.4	3.0
	U.S. shipments (million dollars)-----	1710	1695	1510	1,500	1,475	(1.7)	(4.1)
	U.S. exports (million dollars)-----	165	216	307	294	382	29.9	22.0
	U.S. imports (million dollars)-----	2077	2533	2389	2,694	2,716	0.8	6.2
	Apparent U.S. consumption (million dollars)-----	3,622	4,012	3,592	3,900	3,809	(2.3)	0.7
	Trade balance (million dollars)-----	(1,912)	(2,317)	(2,082)	(2,400)	(2,334)	-	-
	Ratio of imports to apparent consumption (percent)-----	57.3	63.1	66.5	69.1	71.3	3.2	5.4
	Ratio of exports to shipments (percent)-----	9.6	12.7	20.3	19.6	25.9	32.1	27.2
GM027	Games and fairground amusements:							
	Establishments (number)-----	240	315	325	75	75	0.0	(31.3)
	Employees (thousands)-----	60	65	68	65	68	4.6	2.5
	Capacity utilization (percent)-----	55	60	65	70	70	0.0	6.6
	U.S. shipments (million dollars)-----	865	925	960	1,350	1,500	11.1	15.9
	U.S. exports (million dollars)-----	159	232	316	375	547	45.9	34.3
	U.S. imports (million dollars)-----	435	889	1706	2,413	2,818	16.8	60.6
	Apparent U.S. consumption (million dollars)-----	1,141	1,582	2,350	3,388	3,771	11.3	37.1
	Trade balance (million dollars)-----	(276)	(657)	(1,390)	(2,038)	(2,271)	-	-
	Ratio of imports to apparent consumption (percent)-----	38.1	56.2	72.6	71.2	74.7	4.9	17.2
	Ratio of exports to shipments (percent)-----	18.4	25.1	32.9	27.8	36.5	31.3	15.9

Table B-6

Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
GM028	Sporting goods:							
	Establishments (number)-----	1595	1645	1675	1,900	1,950	2.6	5.6
	Employees (thousands)-----	43	46	50	60	65	8.3	11.5
	Capacity utilization (percent)-----	70	70	75	75	75	0.0	2.1
	U.S. shipments (million dollars)-----	3212	3500	4000	5,200	5,500	5.8	15.9
	U.S. exports (million dollars)-----	261	366	558	795	828	4.2	36.1
	U.S. imports (million dollars)-----	1173	1366	1494	1,613	1,644	1.9	8.8
	Apparent U.S. consumption (million dollars)-----	4,124	4,500	4,936	6,018	6,316	5.0	12.1
	Trade balance (million dollars)-----	(912)	(1,000)	(936)	(818)	(816)	-	-
	Ratio of imports to apparent consumption (percent)-----	28.4	30.4	30.3	26.8	26.0	(2.9)	(3.0)
	Ratio of exports to shipments (percent)-----	8.1	10.5	14.0	15.3	15.1	(1.5)	17.5
GM029	Smokers' articles:							
	Establishments (number)-----	22	18	18	18	17	(5.6)	(5.0)
	Employees (thousands)-----	1	1	1	1	1	0.0	0.0
	Capacity utilization (percent)-----	65	65	64	64	64	0.0	(0.5)
	U.S. shipments (million dollars)-----	150	155	160	162	164	1.2	2.3
	U.S. exports (million dollars)-----	14	20	27	48	59	22.9	45.5
	U.S. imports (million dollars)-----	117	111	109	105	130	23.8	1.6
	Apparent U.S. consumption (million dollars)-----	253	246	242	219	235	7.3	(2.6)
	Trade balance (million dollars)-----	(103)	(91)	(82)	(57)	(71)	-	-
	Ratio of imports to apparent consumption (percent)-----	46.2	45.1	45.0	47.9	55.3	15.4	4.3
	Ratio of exports to shipments (percent)-----	9.3	12.9	16.9	29.6	36.0	21.4	42.3
GM030	Works of art, collectors' pieces, and antiques:							
	Establishments (number)-----	579	695	750	750	750	0.0	6.1
	Employees (thousands)-----	6	7	8	8	8	0.0	7.3
	Capacity utilization (percent)-----	45	45	45	45	45	0.0	0.0
	U.S. shipments (million dollars)-----	5503	11048	15000	18,750	22,500	20.0	39.7
	U.S. exports (million dollars)-----	480	671	911	1,620	2,267	39.9	49.0
	U.S. imports (million dollars)-----	1988	1806	1929	2,153	2,313	7.4	4.9
	Apparent U.S. consumption (million dollars)-----	7,011	12,183	16,018	19,283	22,546	16.9	32.3
	Trade balance (million dollars)-----	(1,508)	(1,135)	(1,018)	(533)	(46)	-	-
	Ratio of imports to apparent consumption (percent)-----	28.4	14.8	12.0	11.2	10.3	(8.1)	(20.7)
	Ratio of exports to shipments (percent)-----	8.7	6.1	6.1	8.6	10.1	16.6	6.6

Table B-6

Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
GM031	Brooms, brushes, and hair grooming articles:							
	Establishments (number)-----	370	370	370	300	300	0.0	(6.1)
	Employees (thousands)-----	17	17	17	13	13	0.0	(7.7)
	Capacity utilization (percent)-----	64	65	65	60	60	0.0	(2.1)
	U.S. shipments (million dollars)-----	805	837	850	1,000	1,000	0.0	6.3
	U.S. exports (million dollars)-----	50	64	90	57	74	29.8	6.9
	U.S. imports (million dollars)-----	216	299	337	436	423	(3.0)	18.8
	Apparent U.S. consumption (million dollars)-----	971	1,072	1,097	1,379	1,349	(2.2)	9.5
	Trade balance (million dollars)-----	(166)	(235)	(247)	(379)	(349)	-	-
	Ratio of imports to apparent consumption (percent)-----	22.2	27.9	30.7	31.6	31.4	(0.8)	8.5
	Ratio of exports to shipments (percent)-----	6.2	7.6	10.6	5.7	7.4	29.8	0.6
GM032	Apparel fasteners:							
	Establishments (number)-----	280	230	225	250	250	0.0	(1.4)
	Employees (thousands)-----	12	9	9	9	9	0.0	(5.6)
	Capacity utilization (percent)-----	60	61	64	65	65	0.0	2.3
	U.S. shipments (million dollars)-----	870	650	680	690	686	(0.6)	(4.1)
	U.S. exports (million dollars)-----	22	22	26	44	51	15.9	26.8
	U.S. imports (million dollars)-----	48	57	57	79	90	13.9	17.2
	Apparent U.S. consumption (million dollars)-----	896	685	711	725	725	0.0	(3.6)
	Trade balance (million dollars)-----	(26)	(35)	(31)	(35)	(39)	-	-
	Ratio of imports to apparent consumption (percent)-----	5.4	8.3	8.0	10.9	12.4	13.9	21.5
	Ratio of exports to shipments (percent)-----	2.5	3.4	3.8	6.4	7.4	16.6	32.2

Table B-6

Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1986-90--Continued

USITC code	Commodity group	1986	1987	1988	1989	1990	Percentage change 1990 over 1989	Annual rate of change 1/ 1986-1990
GM033	Miscellaneous articles:							
	Establishments (number)-----	989	970	961	960	960	0.0	(0.7)
	Employees (thousands)-----	14	14	14	14	14	0.0	0.0
	Capacity utilization (percent)-----	70	70	70	70	70	0.0	0.0
	U.S. shipments (million dollars)-----	992	1,056	1,098	1,186	1,281	8.0	6.5
	U.S. exports (million dollars)-----	330	449	617	122	110	(9.8)	(29.5)
	U.S. imports (million dollars)-----	530	679	779	1,013	1,030	1.7	18.9
	Apparent U.S. consumption (million dollars)-----	1,192	1,286	1,260	2,077	2,201	6.0	18.6
	Trade balance (million dollars)-----	(200)	(230)	(162)	(891)	(920)	-	-
	Ratio of imports to apparent consumption (percent)-----	44.5	52.8	61.8	48.8	46.8	(4.1)	0.2
	Ratio of exports to shipments (percent)-----	33.3	42.5	56.2	10.3	8.6	(16.5)	(33.8)

1/ The figure shown represents the compound rate of change of a trend line plotted through 1986-1990 data using linear regression.

2/ Not available.

3/ Estimated based on industry statistics<sup>1</sup>; reflects value of both raw stock and rentals.

4/ Data do not include those for guided missiles and parts.