Shifts in U.S. Merchandise Trade 2002

July 2003
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United States International Trade Commission

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PREFACE

On August 27, 1993, on its own motion and pursuant to section 332(b) of the Tariff Act of 1930 (19 U.S.C. 1332(b)), the U.S. International Trade Commission (USITC or the Commission) instituted investigation No. 332-345, *Annual Reports on U.S. Trade Shifts in Selected Industries*. The report format was developed by the USITC in response to Congressional interest in establishing a systematic means of examining and reporting on the significance of major trade shifts, by product and with leading U.S. trade partners in all natural-resource, agricultural, and manufacturing industries.

On December 20, 1994, the Commission on its own motion expanded the scope of this study to include selected service industries. Under the expanded scope, the Commission publishes two separate reports annually: *Shifts in U.S. Merchandise Trade* and *Recent Trends in U.S. Services Trade*. A separate report covering services trade was instituted to provide more comprehensive coverage of U.S. trade performance and overall economic competitiveness.

A significant amount of the work in this recurring report is basic research required to maintain a proficient level of trade expertise that the Commission has found essential in its statutory investigations and in apprising its varied customers of global industry trends and competition issues. The information compiled in this report, such as export, import, trade balance, and industry profile data (establishments, employees, capacity utilization, and production or shipments) for over 250 major industry/commodity groups, is not replicated elsewhere in the U.S. Government.

The information and analysis in this report are for the purpose of this report only. Nothing in this report should be construed to indicate how the Commission would find in an investigation conducted under other statutory authority.

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GLOSSARY of Frequently Used Abbreviations

AD	antidumping
AGOA	African Growth and Opportunity Act
ADB	Asian Development Bank
ASEAN	Association of Southeast Asian Nations
ATC	Agreement on Textiles and Clothing
BEA	Bureau of Economic Analysis
bld	barrels per day
BOP	balance of payments
CBERA	Caribbean Basin Economic Recovery Act
cc	cubic centimeters
CD	compact disc
CEMs	contract electronic manufacturers
CFTA	U.S.-Canada Free-Trade Agreement
CITA	Committee for the Implementation of Textile Agreements
CVD	countervailing duty
DSB	WTO Dispute Settlement Body
DSU	WTO Understanding on Rules and Procedures Governing Settlement of Disputes (or Dispute Settlement Understanding)
DVD	digital versatile disk
EIU	Economist Intelligence Unit
EMU	European Monetary Union
EU or EU-15	European Union
FACT	Food, Agriculture, Conservation, and Trade (Act)
FAIR	Federal Agriculture Improvement and Reform (Act)
FAS	Foreign Agricultural Service
FDI	foreign direct investment
F.R.	*Federal Register*
GAO	U.S. General Accounting Office
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
HTS	Harmonized Tariff Schedule
ICs	integrated circuits
IMF	International Monetary Fund
ITA	International Trade Administration
ITC	U.S. International Trade Commission
IER	*International Economic Review*
ITTR	*Industry Trade and Technology Review*
kg	kilograms
kN	kilonewtons
LCA	large civil aircraft
MFA	Multifiber Arrangement

GLOSSARY of Frequently Used Abbreviations—*Continued*

mmt	million metric tons
NAFTA	North American Free-Trade Agreement
OE	original equipment
OECD	Organization for Economic Cooperation and Development
OPEC	Organization of Petroleum Exporting Countries
PC	personal computer
PL	Public Law
SMEs	square meter equivalents
SPS	Sanitary-Phytosanitary
SSA	sub-Saharan Africa
TBT	Technical Barriers to Trade
TMB	Textiles Monitoring Body
TRIMS	trade-related investment measures
TRIPS	trade-related aspects of intellectual property rights
TRQs	tariff-rate quotas
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
URA	Uruguay Round Agreements
U.S.C.	U.S. Code
USDA	U.S. Department of Agriculture
USDOC	U.S. Department of Commerce
USITC	U.S. International Trade Commission
USTR	Office of the United States Representative
WTO	World Trade Organization
Y2K	Year-2000

CHAPTER 1
Introduction

The international trade analysts of the U.S. International Trade Commission (USITC or the Commission), Office of Industries, routinely monitor trade developments in all natural resource, agricultural, and manufacturing industries, and in the services sector, which enables the USITC to better anticipate and address issues of concern in its various roles under U.S. trade statutes.[1] Trade monitoring at the industry/commodity sector and subsector levels (the latter referred to as industry/ commodity groups and subgroups[2] in this report) is a facet of the research and analysis undertaken by the Office of Industries as part of its responsibility to provide advice and technical information on industry and trade issues. This annual report analyzes significant merchandise trade shifts on an aggregate basis, on a bilateral basis, and at the industry/commodity-group or -subgroup level.[3]

For trade-monitoring purposes, the USITC assigns U.S. Harmonized Tariff Schedule (HTS) import headings/subheadings, and the corresponding Schedule B export categories, to industry/ commodity groups and subgroups. These groups are aggregated into 10 sectors. Appendix A lists these sectors and the industry/commodity groups and subgroups included in each sector. Appendix B provides the HTS 8-digit subheading ranges included in each industry/commodity group and subgroup.

U.S. trade shifts in services are the subject of a separate USITC annual report.[4] Thus, throughout this report, unless otherwise specified, references to trade balances represent U.S. merchandise trade only. In assessing the U.S. merchandise trade deficit in 2002, it is important to note that the United States recorded a trade surplus in services of $48.8 billion,[5] which, when added to the $525.2-billion merchandise trade deficit, reduced the combined trade deficit (merchandise plus services) to $476.4 billion.

Chapter 1 of the report is the general introduction. Chapter 2 summarizes U.S. merchandise trade for 2002, in comparison with such trade for 2001. Coverage of the individual merchandise sectors includes data showing U.S. export, import, and trade balance shifts by industry/commodity groups (and in some cases subgroups), and shifts in trade with U.S. trade partners. In addition, the chapter also discusses the significance of international trade in the gross domestic product of the United States compared with its major trade partners.

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[1] Major roles include determining whether U.S. industries are materially injured or threatened with material injury by unfair imports, conducting studies on the international competitiveness of U.S. industries, and advising the President and the Congress on the likely effects of trade-policy changes and proposals.

[2] In some cases, industry/commodity groups have been further broken down into subgroups to create more meaningful data sets.

[3] This report analyzes changes in U.S. merchandise trade on a value basis chiefly because aggregating trade data by quantity is typically not possible because of mixed units of measure. Consequently, it is possible (if prices change significantly) for the value of trade to change considerably, but for the quantity of trade to remain the same. Where appropriate, this report also provides trade data on a quantity basis.

[4] See USITC, *Recent Trends in U.S. Services Trade*, investigation No. 332-345, USITC publication 3599, May 2003.

[5] Official statistics of the U.S. Department of Commerce (USDOC) Bureau of Economic Analysis, U.S. International Transactions Accounts Data, Table 1: U.S. International Transactions, found at *http://www.bea.doc.gov/bea/international/bp_web/simple.cfm*, retrieved Apr. 2, 2003.

Chapter 3 analyzes the shifts in U.S. trade with each of the top five U.S. trade partners–Canada, China, the European Union, Japan, and Mexico. Summary tables detail the important shifts in U.S. bilateral trade and highlight leading changes in industry/commodity groups for each of the five major trade partners. This chapter also examines the 10-year trade trends for five selected industry/commodity groups—cut flowers, medical goods, medicinal chemicals, wine, and motor vehicles—chosen on the basis of their general widespread attention among the industry, trade, and business community as well as important global developments influencing their trade.

Chapters 4 through 13 address specific industry/commodity groups, with each chapter providing a general sector overview and identifying significant shifts in merchandise trade within the sector. In most cases, these chapters identify significant shifts in specific industry/commodity groups or subgroups. Finally, a statistical summary table of industry/commodity groups or subgroups concludes each sector analysis chapter, showing absolute and percent changes in a year-to-year comparison for 2001 and 2002.

Appendix C provides official and estimated data (1998-2002) for domestic consumption, production, employment, trade, and import penetration for most of the industry/commodity groups and subgroups covered in this report.[6] USITC international trade analysts have estimated certain components of these data, based on publicly available primary and secondary government and industry sources. The estimated data are subject to change as information from these sources is updated. Appendix D ranks the industry/commodity groups exhibiting the most significant annual growth and decline in U.S. exports, imports, and trade balances in 2002, and includes additional statistical trade data. Appendix E lists the political entities included in the country groups shown in this report.

Appendix F discusses the effect of exchange rate shifts on trade flows and summarizes the major shifts in exchange rates that occurred during 2002, highlighting the depreciation of the Japanese yen and the appreciation of the European Monetary Union euro against the U.S. dollar.

Finally, as part of the trade monitoring effort, the Commission also keeps track of U.S. trade disputes that are referred to the World Trade Organization (WTO). Appendix G lists the current status of existing WTO dispute settlement cases involving the United States.

[6] Appendix C does not include certain industry/commodity groups that cover a wide variety of products or a miscellaneous group of products because data in these cases are of limited value. In some cases, certain subgroups have been included in place of the related aggregate group.

TRADE DATA NOTE

Although all import and export data presented in this report are official statistics of the USDOC, these data may be different from the data presented by other government agencies and private institutions that cite Commerce as the source for trade data. Possible reasons for these discrepancies are as follows:

- Data in this report include merchandise trade only; other reported data may include services.
- Data are not seasonally adjusted; the values of other reported data may be so adjusted.
- Data are not adjusted on a balance of payments (BOP) basis; the values of other reported data may be so adjusted in line with the concepts and definitions used to prepare national and international accounts.
- Exports are on a domestic export/f.a.s. basis; other reported export data may be on a total export/f.a.s. basis, which include re-exports of foreign merchandise.
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- Data in this report may be adjusted for errors that are not of sufficient magnitude to be changed in Commerce data.
- There are no adjustments for carryover (exports and imports received late or not processed for any reason and then subsequently included in a later month's data are reassigned to the month of exportation/entry), and trade is reported as originally released by Commerce. Other reported data may adjust export/import trade for carryover.
- The industry/commodity groups contained in this report are developed by the USITC and may differ from similarly labeled groups from other sources.

CHAPTER 2
U.S. Merchandise Trade Performance

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This chapter presents merchandise trade performance in 2002, along with an overview of wider U.S. macroeconomic conditions. Analyses of key trade shifts in industry/commodity groups and sectors, and among bilateral and multilateral trade partners, follow. Material in this chapter is compiled from more detailed analyses presented in subsequent chapters, including important bilateral trade and multilateral economic developments as well as long-term economic developments for selected industry/commodity groups (chapter 3), and product-specific developments in the industry/commodity sectors affecting U.S. merchandise trade (chapters 4-13).

During 2002, U.S. total merchandise trade (exports plus imports) decreased by $14 billion (less than 1 percent) to $1.8 trillion, representing 77 percent of total U.S. combined trade (exports plus imports of merchandise and services)[1] and 17 percent of nominal U.S. gross domestic product. Also during the year, the U.S. merchandise trade deficit expanded from $466.6 billion in 2001 to $525.2 billion in 2002 as exports dropped and imports rose.[2]

Moderate but inconsistent U.S. economic growth last year combined with comparably slower economic recovery for most major trading partners exerted a mixed influence on U.S. merchandise trade performance in 2002.[3] Despite a U.S. economic downturn for 2001, economic growth rebounded late in the year and became apparent in the early months of 2002 as U.S. businesses curtailed inventory runoff with

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[1] Total U.S. combined trade increased by $27.8 billion (1 percent) during 2002 to $2.3 trillion, according to statistics of the U.S. Department of Commerce (USDOC).

[2] The causes and implications of trade deficits are a subject of ongoing debate. Recent articles that discuss this issue are *The U.S. Trade Deficit: Causes, Consequences, and Recommendations for Action,* Washington, DC: U.S. Trade Deficit Review Commission, Nov. 14, 2000; Daniel T. Griswold, "The U.S. Trade Deficit and Jobs: The Real Story," *Cato Institute Center for Trade Policy Studies Free Trade Bulletin*, No. 3, Feb. 2003, found at *http://www.freetrade.org/pubs/FTBs/FTB-003.pdf*, retrieved May 12, 2003; and Robert A. Rogowsky, Linda A. Linkins, and Karl S. Tsuji, *Trade Liberalization: Fears and Facts* (ch. 4, Trade Deficits), The Washington Papers/179, Center for Strategic and International Studies, Washington, DC, May 2001. Additional information on trade deficits is available at Pingean Hong, "Global Implications of the U.S. Trade Deficit Adjustment," UN/DESA Discussion Paper No. 17, Feb. 2001 and Stefan Papaioannou and Kei-Mu Yi, "The Effects of a Booming Economy on the U.S. Trade Deficit," *Current Issues in Economics and Finance*, Federal Reserve Bank of New York, Vol. 7, No. 2, Feb. 2001, found at *http://www.newyorkfed.org/rmaghome/curr_iss/html/Clv7n2.html*, retrieved May 16, 2002.

[3] Information on the economic background for U.S. merchandise trade performance in 2002 was principally derived from USDOC, BEA, *Survey of Current Business*, Apr. 2003, pp. D-2 to D-7; Council of Economic Advisors, *Economic Report of the President,* together with the *Annual Report of the Council of Economic Advisers*, "Macroeconomic Performance in 2002," Feb. 2003, pp. 27-58; Federal Reserve Board of Governors, *Monetary Policy Report Submitted to Congress*, Feb. 11, 2003; and OECD, "General Assessment of the Macroeconomic Situation," and "United States," *OECD Economic Outlook* (Paris: OECD, Dec. 2002), pp. 1-40.

increased production and began to make investments in high-technology equipment. About midyear, however, signs of another economic slowdown emerged and the economy lost momentum although there was a 2.4-percent increase in real gross domestic product for the year.

Higher real disposable income and lower interest rates contributed to an increase in consumer spending, which was an important source of economic growth. Lower fixed mortgage interest rates, reportedly the lowest in 35 years, by the third quarter, spurred household spending as well as residential investment as many home owners took the opportunity to refinance mortgages and use the extra equity to support other purchases. As in the previous year, household equipment and motor vehicle consumption continued to be strong. Additional factors supporting this pattern of spending included the phase-in of rebates from tax cuts implemented in 2001 and competitive financing incentives offered by automotive manufacturers for the purchase of new vehicles. However, consumer spending was limited by another year of lower household wealth as equity investments continued to decline.

Manufacturers began to curtail investments and the restocking of inventories as the upward momentum began to weaken and financing conditions worsened.[4] Increased concerns about corporate governance undermined investor confidence and geopolitical issues— the situation in Iraq, civil strife in Venezuela that curtailed crude petroleum production, and tensions on the Korean peninsula— elevated concerns about the economic outlook. During the same time frame, a combination of the continued strength of the U.S. dollar against the currencies of many U.S. trade partners and their relatively slower economic growth hampered the competitiveness of U.S. merchandise in foreign markets.[5]

U.S. TRADE BY INDUSTRY/COMMODITY GROUPS AND SECTORS

U.S. Trade Balance

Expansion of the U.S. merchandise trade deficit during 2002 reflects significant shifts in exports and imports of key industry/commodity groups shown in tables D-1 through D-8 in appendix D. Decreased exports (table D-2) contributed to the larger deficit, primarily computers, peripherals, and parts followed by telephone and telegraph apparatus. Higher imports (table D-3) also contributed to the larger deficit, primarily medicinal chemicals, motor vehicles, crude petroleum, and certain motor vehicle parts. Counter shifts somewhat tempered the deficit expansion during this period, particularly increased exports (table D-1) of motor vehicles and decreased imports (table D-4) of natural gas and components, semiconductors and integrated circuits, and petroleum products.

Natural gas and components, followed by petroleum products, recorded the largest increases in the trade balance (table D-5), whereas the predominant industry/commodity groups reporting declines in the trade balance were computers, peripherals, and parts; medicinal chemicals; and crude petroleum (table D-6). Decreases in the trade positions of these three groups together accounted for $21 billion, or about 36 percent of the overall increase in the U.S. merchandise trade deficit in 2002. In terms of the overall trade balance in 2002, motor vehicles recorded the largest deficit ($107 billion) and aircraft, spacecraft, and related equipment recorded the largest surplus ($23.8 billion); see tables D-7 and D-8, respectively.

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[4] The declining financing conditions in 2002 included lower equity prices, fewer initial public offerings, wider credit market spreads, and a tightening of bank credit standards. See The Federal Reserve Board, *Monetary Policy Report Submitted to the Congress, Feb. 11, 2003*, sec. 2 *Economic and Financial Developments in 2002 and Early 2003*, p. 6.

[5] See app. F for a more detailed discussion about how exchange rate shifts and other macroeconomic factors affect trade flows.

Each of the major industry/commodity sectors covered in this report registered trade deficits in 2002 (table 2-1)[6] with the exception of agricultural products, which recorded a smaller trade surplus. The most significant change for the year was the sizeable increase in the trade deficit of electronic products. Although the trade deficit for energy-related products narrowed in 2002, other sectors recorded increased trade deficits culminating in a shift in the overall trade deficit movement from contraction in 2001 to expansion in 2002. Accordingly, the trade deficit resumed the 1991-2000 expansionary trend, reaching a record high of $525 billion in 2002.

U.S. Exports

U.S. merchandise exports decreased in 2002 for each industry/commodity sector except chemicals and related products and transportation equipment (see table 2-1). The most significant drop was in electronic products, which recorded a $20.2-billion decrease in exports and accounted for 55 percent of the net decrease of total U.S. merchandise exports in 2002. Further analyses of the underlying factors and the leading products responsible for export shifts in these and other industry/commodity sectors are provided in chapters 4-13.

U.S. Imports

U.S. merchandise imports rose in 2002 for most industry/commodity sectors (see table 2-1), the exceptions being energy-related products and electronic products. Chemicals and related products registered the largest rise in imports, accounting for $8.4 billion (38 percent) of the net increase in total merchandise imports. Further analyses of the underlying factors and the leading products responsible for import shifts in these and other industry/commodity sectors are provided in chapters 4-13.

U.S. BILATERAL/MULTILATERAL TRADE

Significant Bilateral/Multilateral Shifts

The expansion of the U.S. merchandise trade deficit during 2002 also reflected significant shifts with certain key trade partners. Table 2-2 shows U.S. bilateral merchandise trade with its 10 largest partners (ranked by total trade) and U.S. multilateral merchandise trade with selected country groups[7] during 2002. The U.S. trade deficit showed mixed movement with its five major partners—Canada, China, the European Union (EU), Japan, and Mexico.[8] Although the deficit with Canada contracted, it expanded with the other major partners, with China recording the largest expansion of $20.1 billion and accounting for 34 percent of the net increase. Analyses of the underlying factors and the leading products responsible for trade shifts for each of these five major partners are provided in chapter 3.

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[6] Discussion of U.S. merchandise trade by industry/commodity sectors excludes products covered by special provisions of the HTS (import schedule) in chs. 98-99.

[7] See app. E for a list of countries/political entities included in the selected country groupings of table 2-2.

[8] In recent years, although these countries consistently appeared as the top five U.S. partners in terms of total trade, it should be noted that the United States may not be a top trading partner for these countries. The 15-member countries of the EU are considered together as a single U.S. trade partner, although no individual EU country was consistently ranked among the top 5 U.S. trade partners from year to year.

Table 2-1
U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major industry/commodity sectors, 2001 and 2002[1]

Item	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
Agricultural products	60,109	58,345	-1,764	-2.9
Forest products	23,743	22,825	-918	-3.9
Chemicals and related products	91,274	91,702	428	0.5
Energy-related products	15,073	14,431	-643	-4.3
Textiles and apparel	18,118	17,298	-820	-4.5
Footwear	638	520	-118	-18.6
Minerals and metals	43,507	39,924	-3,583	-8.2
Machinery	69,552	63,262	-6,290	-9.0
Transportation equipment	144,325	144,655	330	0.2
Electronic products	160,610	140,428	-20,182	-12.6
Miscellaneous manufactures	16,428	15,004	-1,424	-8.7
Special provisions	22,644	21,205	-1,438	-6.4
Total	666,021	629,599	-36,422	-5.5
U.S. imports of merchandise for consumption:				
Agricultural products	52,599	55,591	2,993	5.7
Forest products	36,678	37,048	370	1.0
Chemicals and related products	98,564	106,924	8,359	8.5
Energy-related products	114,226	109,800	-4,426	-3.9
Textiles and apparel	79,946	81,585	1,640	2.1
Footwear	15,249	15,379	130	0.9
Minerals and metals	83,847	85,616	1,768	2.1
Machinery	84,867	85,181	314	0.4
Transportation equipment	221,907	227,147	5,240	2.4
Electronic products	229,571	229,245	-326	-0.1
Miscellaneous manufactures	66,575	72,129	5,554	8.3
Special provisions	48,605	49,165	560	1.2
Total	1,132,635	1,154,811	22,176	2.0
U.S. merchandise trade balance:				
Agricultural products	7,511	2,754	-4,757	-63.3
Forest products	-12,935	-14,223	-1,288	-10.0
Chemicals and related products	-7,290	-15,222	-7,932	-108.8
Energy-related products	-99,153	-95,369	3,783	3.8
Textiles and apparel	-61,828	-64,288	-2,460	-4.0
Footwear	-14,611	-14,860	-248	-1.7
Minerals and metals	-40,341	-45,692	-5,352	-13.3
Machinery	-15,315	-21,919	-6,604	-43.1
Transportation equipment	-77,583	-82,492	-4,909	-6.3
Electronic products	-68,962	-88,817	-19,856	-28.8
Miscellaneous manufactures	-50,147	-57,124	-6,978	-13.9
Special provisions	-25,961	-27,960	-1,999	-7.7
Total	-466,614	-525,212	-58,598	-12.6

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

Note.—Calculations based on unrounded data.

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

Table 2-2
All merchandise sectors: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001 and 2002[1]

Item	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
Canada	144,621	142,543	-2,078	-1.4
Mexico	90,537	86,076	-4,461	-4.9
Japan	53,546	48,273	-5,273	-9.8
China	17,959	20,553	2,594	14.4
Germany	28,068	24,870	-3,198	-11.4
United Kingdom	37,097	30,243	-6,854	-18.5
Korea	20,900	21,151	251	1.2
Taiwan	16,626	16,786	160	1.0
France	18,626	17,522	-1,104	-5.9
Italy	9,021	9,369	348	3.9
All Other	229,020	212,212	-16,808	-7.3
Total	666,021	629,599	-36,422	-5.5
EU-15	147,327	132,563	-14,765	-10.0
OPEC	18,934	17,664	-1,270	-6.7
Latin America	145,252	134,284	-10,968	-7.6
CBERA	20,117	20,702	585	2.9
Asia	165,879	160,628	-5,251	-3.2
Sub-Saharan Africa	6,750	5,892	-858	-12.7
Central and Eastern Europe	2,888	2,575	-313	-10.8
U.S. imports of merchandise for consumption:				
Canada	216,836	210,518	-6,318	-2.9
Mexico	130,509	134,121	3,612	2.8
Japan	126,139	121,262	-4,877	-3.9
China	102,069	124,796	22,726	22.3
Germany	58,939	60,985	2,046	3.5
United Kingdom	41,118	40,429	-690	-1.7
Korea	34,917	35,284	367	1.0
Taiwan	33,262	32,054	-1,207	-3.6
France	30,024	28,232	-1,791	-6.0
Italy	23,707	24,212	504	2.1
All Other	335,115	342,918	7,804	2.3
Total	1,132,635	1,154,811	22,176	2.0
EU-15	218,911	223,732	4,821	2.2
OPEC	55,728	50,649	-5,079	-9.1
Latin America	196,096	202,149	6,053	3.1
CBERA	20,679	21,255	576	2.8
Asia	399,750	419,909	20,159	5.0
Sub-Saharan Africa	21,060	18,208	-2,852	-13.5
Central and Eastern Europe	6,696	6,822	126	1.9
U.S. merchandise trade balance:				
Canada	-72,215	-67,975	4,241	5.9
Mexico	-39,971	-48,045	-8,074	-20.2
Japan	-72,593	-72,989	-396	-0.5
China	-84,110	-104,243	-20,132	-23.9
Germany	-30,871	-36,115	-5,244	-17.0
United Kingdom	-4,021	-10,186	-6,164	-153.3
Korea	-14,018	-14,133	-115	-0.8
Taiwan	-16,636	-15,268	1,368	8.2
France	-11,398	-10,710	688	6.0
Italy	-14,686	-14,842	-157	-1.1
All Other	-106,094	-130,706	-24,612	-23.2
Total	-466,614	-525,212	-58,598	-12.6
EU-15	-71,584	-91,169	-19,586	-27.4
OPEC	-36,794	-32,985	3,809	10.4
Latin America	-50,844	-67,865	-17,021	-33.5
CBERA	-562	-552	9	1.7
Asia	-233,871	-259,281	-25,410	-10.9
Sub-Saharan Africa	-14,310	-12,316	1,994	13.9
Central and Eastern Europe	-3,808	-4,247	-439	-11.5

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

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2002.

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

Significance of International Trade in the Gross Domestic Product

To provide perspective on the significance of international trade in the U.S. economy, merchandise trade values are compared with various economic measures. For the United States and its five major trade partners, the relative sizes of their economies, U.S. bilateral merchandise trade flows, and the ratios of such balances to U.S. gross domestic product (GDP) are compared in table 2-3.[9] The ratio of the total U.S. merchandise trade deficit compared to nominal U.S. GDP in 2002 was 5.0 percent; this ratio was 3.2 percent in 1998 and has increased every year since then except for 2001. In 2002, U.S. merchandise trade deficits with its five major trade partners accounted for a combined 3.7 percent of nominal U.S. GDP compared with 3.3 percent the previous year. During 1998-2000, imports of merchandise (goods) became a larger component of the U.S. economy; by 2001, the measure dropped by about 1 percentage point and remained near that level in 2002. Exports of U.S. goods relative to the economy fluctuated over the same period to represent a smaller share of GDP in 2002 compared with previous years (table 2-4).

Comparing U.S. global merchandise imports and exports as shares of GDP with such ratios for two of its major trade partners—Canada and Japan— indicates that during 1998-2002, global merchandise trade accounted for a smaller portion of GDP for the United States and Japan (the world's two largest economies) than for Canada (table 2-5).[10] From 2001 to 2002, however, an estimated 2-percent increase in exports appear to have been Japan's only strong element of its GDP as deflation, weak labor market, and lackluster business investments weighed heavily on the economy's domestic demand.[11] Although the ratio of merchandise imports to GDP was higher for the United States than for Japan over the 5-year period, it was roughly one-third the ratio for Canada. Of the three trading partners—Canada, Japan, and the United States—Japan was the only one that recorded growth in its ratio of total merchandise trade to nominal GDP during 2002.[12]

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[9] The trade balance to GDP ratio indicates the relative importance of imports in the U.S. market.

[10] Countries with larger internal markets tend to have lower ratios of trade to GDP than countries with relatively smaller markets.

[11] Although Japan's exports to the United States decreased by nearly 4 percent (table 2-2), Japan's merchandise exports to foreign markets overall are estimated to have increased from $383.8 to $393.1 billion during 2001-2002. See OECD, *OECD Economic Outlook*, Dec. 2002, pp. 41-44.

[12] See ch. 3 for more information about significant shifts with all five leading trade partners.

Table 2-3
U.S. bilateral merchandise trade balances with major partners, in U.S. dollars and as a ratio to nominal U.S. gross domestic product (GDP), 2002

Partner	U.S. exports	U.S. imports	U.S. merchandise trade balance	Ratio of the merchandise trade balance to U.S. GDP
		Million dollars		Percent
European Union (EU)	132,563	223,732	-91,169	0.9
Japan	48,273	121,262	-72,989	0.7
China	20,553	124.796	-104,243	1.0
Canada	142,543	210,518	-67,975	0.7
Mexico	86,076	134,121	-48,045	0.5
World	629,599	1,154,811	-525,212	5.0

Note.--Calculations based on rounded data.

Source: U.S. trade data compiled from official statistics of the U.S. Department of Commerce (USDOC). U.S. GDP is from USDOC, Bureau of Economic Analysis, *Survey of Current Business*, Table 1.1, Gross Domestic Product, Apr. 2003, p. D-3. Estimated GDP data for Canada, Japan, Mexico, and EU, are calculated by multiplying 2001 nominal GDP rates by estimated nominal rates of growth; 2001 nominal GDP rates are from U.S. Department of State, *Country Reports on Economic Policy and Trade Practices*, 2001, found at *http://www.state.gov/e/eb/rls/rpts/eptp/2001*, retrieved Mar. 22, 2002 and estimated nominal GDP rates of growth for 2002 are from OECD, *OECD Economic Outlook*, Dec. 2002, Annex Table 2, p. 182. Estimated GDP for China is from U.S. Department of State, Background Note: China, Mar. 2003, found at *http://www.state.gov/r/pa/ei/bgn/18902.htm*, retrieved Apr. 17, 2003.

Table 2-4
Components of U.S. gross domestic product (GDP) and trade as a share of GDP, 1998-2002

Component	1998	1999	2000	2001	2002
	Billion current dollars				
Personal consumption expenditures:					
Goods	2,407.1	2,601.7	2,809.2	2,877.2	2,986.9
Services	3,441.5	3,655.6	3,919.2	4,109.9	4,316.8
Gross private domestic investment	1,531.2	1,622.7	1,767.5	1,586.0	1,593.2
Exports:					
Goods	634.7	642.2	712.3	666.0	629.6
Services	285.1	299.3	317.3	300.6	311.3
Imports:					
Goods	907.6	1,017.4	1,205.3	1,132.6	1,154.8
Services	185.5	203.1	221.9	215.8	246.4
Government consumption expenditures and gross investment	1,529.7	1,630.1	1,741.0	1,858.0	1,972.9
Gross Domestic Product	**8,759.9**	**9,299.2**	**9,872.9**	**10,082.2**	**10,446.2**
	Percent				
Exports as a share of GDP:					
Goods	7.2	6.9	7.2	6.6	6.0
Services	3.3	3.2	3.2	3.0	3.0
Imports as a share of GDP:					
Goods	10.4	11.0	12.2	11.2	11.1
Services	2.1	2.2	2.3	2.1	2.4

Note.--Calculations based on rounded data. Components of U.S. GDP may not sum to total, as merchandise trade data are consistent with other trade statistics cited in this report.

Source: Merchandise trade data are compiled from official statistics of the U.S. Department of Commerce (USDOC). All other data (balance-of-payments basis) are from USDOC, Bureau of Economic Analysis, *Survey of Current Business*, Table 1.1, Gross Domestic Product, Apr. 2003, p. D-3.

Table 2-5
Total merchandise trade (exports and imports) as a share of gross domestic product (GDP) for the United States and major partners, 1998-2002

(Percent)

Country	1998	1999	2000	2001	2002	Change 1998-2002
Merchandise exports as a share of GDP:						
United States	7.2	6.9	7.2	6.6	6.0	-1.2
Japan	9.9	9.4	9.1	4.4	9.7	-0.2
China	19.1	19.5	23.1	23.2	N/A	N/A
Canada	36.0	37.4	40.0	38.3	34.7	-1.3
Mexico	28.3	29.2	30.8	13.6	N/A	N/A
Germany	25.8	28.9	29.4	13.5	N/A	N/A
Merchandise imports as a share of GDP:						
United States	10.4	11.0	12.2	11.2	11.1	0.7
Japan	6.7	6.3	7.2	4.5	7.3	0.6
China	14.6	15.3	19.9	20.8	N/A	N/A
Canada	33.9	34.4	34.4	32.7	30.0	-3.9
Mexico	30.2	30.4	32.3	14.3	N/A	N/A
Germany	22.0	27.8	26.5	15.4	N/A	N/A

Notes.--Calculations based on rounded data, U.S. dollars. Because EU trade data were not available in previous years, German data were used for comparison purposes. However, 2002 trade data for China, Mexico, and Germany were not available at time of publishing.

Source: U.S. trade data compiled from official statistics of the U.S. Department of Commerce (USDOC). GDP data for the United States are from USDOC, Bureau of Economic Analysis, *Survey of Current Business*, Table 1.1, Gross Domestic Product, Apr. 2003, p. D-3. Estimated GDP data for Canada and Japan are calculated by multiplying 2001 nominal GDP rates by estimated nominal rates of growth; 2001 nominal GDP rates are from U.S. Department of State, *Country Reports on Economic Policy and Trade Practices*, 2001, found at *http://www.state.gov/e/eb/rls/rpts/eptp/2001*, retrieved Mar. 22, 2002 and estimated nominal GDP rates of growth for 2002 are from OECD, *OECD Economic Outlook*, Dec. 2002, Annex Table 2, p. 182. Estimated trade data for Japan and Canada are from OECD, *OECD Economic Outlook*, Dec. 2002, pp. 44 and 64, respectively.

CHAPTER 3
Significant Shifts With Leading Partners and Factors Affecting Trends in Selected Industry/Commodity Groups

This chapter examines noteworthy economic and trade developments among major U.S. trade partners during 2002 and selected industries during 1992-2002. Significant shifts in U.S. trade with each of the top five U.S. trade partners are discussed, including highlights of trade-related developments and analyses of trade trends. Long-term trade trends are analyzed for five selected industry/commodity groups.

SIGNIFICANT SHIFTS WITH LEADING PARTNERS

The following sections summarize key shifts in U.S. merchandise trade with each of its top five trade partners –Canada, China, the European Union, Japan, and Mexico– in terms of U.S. total trade (exports plus imports). For each partner, U.S. trade flows are discussed for the relevant industry/commodity groups and subgroups. Tables showing significant shifts in trade are included in the discussions for each partner.

Canada

Change in 2002 from 2001:

U.S. trade deficit: Decreased by $4.2 billion (6 percent) to $68.0 billion
U.S. exports: Decreased by $2.1 billion (1 percent) to $142.5 billion
U.S. imports: Decreased by $6.3 billion (3 percent) to $210.5 billion

- Total trade (exports plus imports) with Canada decreased in 2002 by $8.4 billion (2 percent) to $353.1 billion (table 3-1) despite a modest U.S. economic upturn reflected by the real GDP growth of 2.75 percent in 2002 over 2001. Observers noted that the pace of activity was uneven over the course of the year, however, as concerns about emerging economic and political developments weighed heavily on the U.S. economy, already adjusting to a succession of shocks from previous years.[1] Canada's macroeconomic policy framework reportedly focused on maintaining low, stable inflation and sound public finances,[2] whereas strong job gains have helped fuel the purchasing power of Canadian households, along with the flow-through from prior income-tax relief, very low borrowing costs, and rising equity values (homes and commercial properties).[3]

- Canada remained the largest market for U.S. exports and the principal source of U.S. imports in 2002. Bilateral trade with Canada is strongly influenced by the highly integrated nature of North American manufacturing, facilitated by shared infrastructure and markets, and high levels of foreign direct investment.

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[1] The Federal Reserve Board, *Monetary Policy Report to the Congress*, Feb. 11, 2003, p. 1.
[2] Bank of Canada, *Annual Report 2002*, p. 6, retrieved Apr. 6, 2003.
[3] The Scotia Bank, *Economic Commentary*, p. 2, found at *www.scotiabank.com*, retrieved Dec. 6, 2002.

Table 3-1
Leading changes in U.S. exports to and U.S. imports from Canada, 2001 and 2002

Sector/commodity	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. EXPORTS:				
Increases:				
Transportation equipment:				
Motor vehicles (ET009)	12,846	15,486	2,640	20.5
Certain motor-vehicle parts (ET010)	14,096	15,460	1,364	9.7
Other:				
Certain specialty papers (AG064)	336	685	349	104.0
Decreases:				
Electronic products:				
Computers, peripherals, and parts (ET035)	4,987	3,948	-1,039	-20.8
Semiconductors and integrated circuits (ET033)	1,834	1,294	-539	-29.4
Telephone and telegraph apparatus (ET017)	2,048	1,571	-476	-23.3
Other:				
Electrical energy (CH001)	1,258	304	-955	-75.9
Aircraft, spacecraft, and related equipment (ET013)	2,262	1,727	-534	-23.6
Printing and writing papers (AG063)	639	247	-392	-61.4
All other	104,316	101,820	-2,495	-2.4
TOTAL	144,621	142,543	-2,078	-1.4
U.S. IMPORTS:				
Increases:				
Transportation equipment:				
Certain motor-vehicle parts (ET010)	8,592	9,685	1,094	12.7
Motor vehicles (ET009)	41,159	41,589	430	1.0
Other:				
Crude petroleum (CH004)	10,121	11,196	1,074	10.6
Steel mill products (MM025)	2,222	2,784	562	25.3
Decreases:				
Energy-related products:				
Natural gas and components (CH006)	16,817	12,647	-4,170	-24.8
Electrical energy (CH001)	2,681	1,160	-1,520	-56.7
Electronic products:				
Computers, peripherals, and parts (ET035)	2,836	1,745	-1,090	-38.5
Telephone and telegraph apparatus (ET017)	3,902	2,975	-927	-23.8
Semiconductors and integrated circuits (ET033)	1,761	1,068	-692	-39.3
Other:				
Aircraft, spacecraft, and related equipment (ET013)	6,094	5,268	-826	-13.6
Newsprint (AG062)	3,494	2,956	-538	-15.4
All other	117,159	117,445	286	0.2
TOTAL	216,836	210,518	-6,318	-2.9

Note.-Calculations based on unrounded data.

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

- Incentives offered by North American car manufacturers along with modest economic growth resulted in a steady increase in two-way trade in motor vehicles and parts in 2002. Low inventories in 2002[4] prompted automakers to raise North American vehicle output to 16.4 million units in 2002.[5] U.S. exports of motor vehicles and parts to Canada grew by $4.0 billion (15 percent) in 2002 to $30.9 billion, while imports from Canada rose by $1.5 billion (3 percent) to $51.3 billion.

[4] The Scotia Bank, *Global Outlook,* p. 9, found at *www.scotiabank.com*, retrieved Apr. 3, 2003.
[5] *Ward's Automotive Reports,* Jan. 27, 2003, Vol. 78, No. 4, pg. 8.

- Significant declines in bilateral trade between the United States and Canada in 2002 were registered in computers, peripherals, and parts, semiconductors and integrated circuits, and telephone and telegraph apparatus. These decreases were attributable to lingering recessionary forces and persistent weakness in the U.S. technology sector, which dampened U.S. demand.[6] Growth in the electronics industry was further hindered by declines in prices and continued movement of electronics manufacturing to the Asia/Pacific region. The decline in demand for telephone and telegraph equipment on both sides of the border was primarily due to slow economic growth and reduced capital expenditures by telecommunications providers. Collectively, U.S. exports of computer equipment, semiconductors, and telephone equipment to Canada dropped by $2.1 billion (23 percent) in 2002 to $6.8 billion, while such imports from Canada fell by $2.7 billion (32 percent) to $5.8 billion. U.S. exports of aircraft declined by $534 million (24 percent) to $1.7 billion, while imports were down by $826 million (14 percent) to $5.3 billion.

- The reduced value of bilateral trade in electrical energy was the result of lower prices, as the quantity of trade with Canada remained stable.[7] The value of U.S. exports fell by $955 million (76 percent) to $304 million in 2002, while U.S. imports dropped by $1.5 billion (57 percent) to $1.2 billion.

U.S. exports

- Although U.S. exports of certain specialty papers to Canada grew sharply in 2002, exports of printing and writing papers fell by nearly an equivalent value. Exports of specialty papers increased by $349 million (104 percent) to $685 million, while exports of printing and writing papers declined by $392 million (61 percent) to $247 million. Other categories experiencing significant decreases in exports to Canada in 2002 were ships and boats, rail locomotives and rolling stock, optical fibers, and printed circuits.

U.S. imports

- The $1.1-billion (11 percent) increase in U.S. imports of crude petroleum from Canada to $11.2 billion was the result of rising prices in 2002. Similarly, although the quantity of U.S. imports of natural gas remained stable between 2001 and 2002, world prices declined, resulting in a lower value of trade, as the value of natural gas imports from Canada dropped by $4.2 billion (25 percent) to $12.6 billion.[8]

- The sluggish U.S. economy in 2002 was reflected in less newspaper advertising and reduced commercial use of paper. As a result, U.S. imports from Canada of newsprint, printing and writing papers, and wood pulp and wastepaper collectively fell by $1.3 billion (14 percent) to $7.6 billion. Other categories experiencing significant decreases in U.S. imports from Canada in 2002 were lumber, optical goods, and unwrought aluminum.

- U.S. imports of steel mill products from Canada rose significantly in 2002, advancing by $562 million (25 percent) to $2.8 billion. Canada was excluded from the temporary steel safeguard measures instituted in March 2002.[9]

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[6] The Scotia Bank, *Economic Commentary*, p. 1, found at *www.scotiabank.com*, retrieved Mar. 7, 2003.

[7] For additional information, see ch. 7.

[8] Ibid.

[9] President George W. Bush, Presidential Proclamation 7529, "To Facilitate Positive Adjustment to Competition from Imports of Certain Steel Products," 67 *Federal Register* (*FR*) 10555, Mar. 5, 2002.

- The price of gold often rises during times of political or economic uncertainty. Accordingly, the value of U.S. imports of gold from Canada rose by $364 million (33 percent) in 2002 to $1.5 billion.

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China

Change in 2002 from 2001:

U.S. trade deficit: Increased by $20.1 billion (24 percent) to $104.2 billion
U.S. exports: Increased by $2.6 billion (14 percent) to $20.6 billion
U.S. imports: Increased by $22.7 billion (22 percent) to $124.8 billion

- In 2002, China increased its share of the U.S. import market from 9 percent to 11 percent. Total trade (imports plus exports) grew by 21 percent, but imports were more than six times as large as exports. China surpassed Japan to become the third-leading source of U.S. imports.

- In most sectors where imports from China have made significant inroads into the U.S. market, industrial prices have fallen as producers in China reportedly compete with each other on the basis of price rather than differentiating their products.[10] Industry observers also attribute the low prices to a currency considered as much as 40 percent undervalued,[11] reportedly resulting in price suppression in markets where imports from China are competitive. U.S. sectors reportedly experiencing these effects range from traditionally low value-added goods such as toys, sporting goods, footwear, apparel and furniture to more advanced imports like telecommunications equipment and computers.[12]

- China was able to sustain strong growth in exports despite sluggish global demand because China exports predominantly cheaper goods that compete well in a weaker economic environment. Competitive pressure to lower product costs has increasingly driven multinationals to relocate plants to China.[13]

- In contrast to a downward trend for U.S. exports worldwide, U.S. exports to China increased to $20 billion (14 percent) in 2002. Much of the increase can be attributed to China's WTO accession in 2001,[14] which has resulted in, according to industry sources, more trade going directly from the United States to China rather than transiting through Hong Kong.[15]

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[10] "Is the Wakening Giant a Monster," *The Economist*, Feb. 13, 2003, p. 63.

[11] Frank Fargo, Vice President, National Association of Manufacturers, testimony to the U.S. House of Representatives, Committee on Appropriations, *Effects of Chinese Imports on U.S. Companies*: Hearing before the Subcommittee on Commerce, Justice, State, and the Judiciary, 108th Congress, 1st sess., May 22, 2003, p. 7.

[12] Ibid.

[13] Noah Smith, "China's Trade Volume Up 21.8%, Triggering 25.7% Annual Trade Surplus Surge in 2002," *Bureau of National Affairs (BNA) International Trade Daily*, Jan. 13, 2003.

[14] China's WTO accession has led to decreased tariffs and lower non-tariff barriers. John N. Paden, "The World Trade Organization and Rule-of-Law in China: A First-Year Assessment," *Virginia State Bar Journal*, Spring 2003.

[15] U.S. Department of State telegram No. 7670, "China in the WTO: July 24 to Sep. 10, 2002," prepared by U.S. Embassy, Beijing, Sep. 2002.

U.S. exports

- The largest increase in U.S. exports to China from 2001 to 2002 was in aircraft, spacecraft, and related equipment (hereafter aircraft equipment) (table 3-2), which rose to $3.4 billion, reflecting China's continuing effort to expand its civil aviation fleet to service growing demand[16] and its reliance on The Boeing Co. as a supplier.[17] In addition, a reduction in average Chinese tariffs from 10.5 percent to 7.2 percent from 2001 to 2002 on civil aircraft and related parts has likely stimulated U.S. exports.[18]

- U.S. exports of semiconductors and integrated circuits to China continued to grow in 2002, rising by $291 million (31 percent) to $1.2 billion. This increase is attributed to China's rapidly growing demand for these products in the manufacture of telecommunication equipment, computer hardware, and consumer electronics.[19] According to industry observers, about 95 percent of China's semiconductor demand is currently met by imports[20] because of difficulties related to protecting intellectual property rights and creating wholly owned foreign ventures; these difficulties reportedly create significant barriers to foreign firms wishing to establish semiconductor-manufacturing facilities in China.[21]

- However, the Chinese semiconductor industry is expanding. Relaxation of Government of Taiwan regulations in 2002, prohibiting Taiwanese manufacturers from operating semiconductor plants in China, contributed to the construction of new facilities in China and a surge in U.S. exports of capital equipment for these plants. The regulations had been established to stem the outflow of critical manufacturing technology from Taiwan.[22] As a result, U.S. exports of semiconductor manufacturing equipment to China rose 63 percent to $551 million.

- China has also been developing its own production capacity for computers, peripherals, and parts, spurred on, in part, by increased foreign investment. Investors from Taiwan, the United States, the EU, and Japan have been drawn to China both to reduce manufacturing costs and to supply the emerging domestic market in China. Manufacturers in China often have the advantage of a larger supplier base, lower energy costs, and tax incentives, in addition to lower cost labor.[23] This growth of the Chinese computer industry resulted in a decline in U.S. exports of computers, peripherals, and parts of $317 million, or 26 percent, to $892 million in 2002.

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[16] Factors contributing to this growth are the country's vast territory, rapid growth in hard currency tourism, expansion in air cargo volumes, and an increasingly affluent local population. U.S. & Foreign Commercial Service, U.S. Department of Commerce, "Aircraft, Air Traffic Control & Ground Support Equipment," *International Market Insights*, 2002.

[17] Boeing aircraft accounted for 72 percent of China's fleet of large jet aircraft (over 100 seats). Boeing Co., found at *http://www.boeing.com/companyoffices/aboutus/boechina.html#fleet*, retrieved Apr. 23, 2002.

[18] Department of Commerce, "Civil Aircraft," found at *http://www.mac.doc.gov/China/Docs/industryfactsheets/civair.htm*, retrieved on Mar. 28, 2003.

[19] U.S. producer Conexant Systems, for example, increased its supply of specialized semiconductors for communications applications to Legend Groups Ltd., a prominent Chinese computer company, in 2002. "Conexant V.92 Modems Now Shipping in Legend Computers, China's Premier PC Manufacturer; Customized V.92 Feature Development Support by Conexant Shanghai," *Business Wire*, Mar. 5, 2002.

[20] Editor, "A Wafer-Thin Argument: The Market and a High-Tech Dispute," *The Economist*, Apr. 13, 2002.

[21] U.S. Department of Commerce, "Semiconductors and Software," found at *http://www.buyusa.gov/china/en/semiconductors.html*, retrieved on Mar. 27, 2003.

[22] "The Greater China High-Tech Highway," *The McKinsey Quarterly*, 2002, No. 4, found at *http://www.forbes.com/2002/10/11/1011mckinsey.html*, retrieved May 7, 2003.

[23] Ralph Watkins, "Mexico Versus China: Factors Affecting Export and Investment Competition," *Industry Trade and Technology Review*, U.S. International Trade Commission, USITC publication 3534, July 2002, p. 19.

Table 3-2
Leading changes in U.S. exports to and U.S. imports from China, 2001 and 2002

Sector/commodity	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. EXPORTS:				
Increases:				
Aircraft, spacecraft, and related equipment (ET013)	2,429	3,367	938	38.6
Semiconductors and integrated circuits (ET033)	946	1,238	291	30.8
Fertilizers (CH016)	420	671	250	59.5
Semiconductor manufacturing machinery (MM087A)	338	551	213	63.1
Decreases:				
Computers, peripherals, and parts (ET035)	1,209	892	-317	-26.2
All other	12,617	13,835	1,218	9.7
TOTAL	17,959	20,553	2,594	14.4
U.S. IMPORTS:				
Increases:				
Electronic products:				
Computers, peripherals, and parts (ET035)	10,548	14,928	4,381	41.5
Consumer electronics (except televisions) (ET018)	6,229	8,168	1,939	31.1
Telephone and telegraph apparatus (ET017)	3,222	4,659	1,437	44.6
Miscellaneous manufactures:				
Furniture (MM054)	4,608	6,396	1,788	38.8
Games (MM060)	1,518	2,650	1,132	74.6
Decreases:				
Photographic cameras and equipment (ET039)	919	766	-153	-16.7
Leather apparel and accessories (CH049O)	1,436	1,304	-132	-9.2
All other	73,589	85,924	12,335	16.8
TOTAL	102,069	124,796	22,726	22.3

Note.-Calculations based on unrounded data.

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

U.S. imports

- Reflecting China's enhanced production capacity, U.S. imports of computer, peripherals, and parts from China rose sharply, advancing by $4.4 billion (42 percent) to $14.9 billion in 2002. Prior to 2001, Chinese companies chiefly sold parts and components such as monitors;[24] they now, however, offer downstream products such as computers.

- U.S. imports of consumer electronics (except televisions) increased by $1.9 billion (31 percent) to $8.2 billion in 2002, reflecting China's increasingly competitive position in the production and export of consumer electronics worldwide.[25] This increased competitiveness can be attributed in part to consumer electronics companies based in other Asian countries shifting existing manufacturing assets to China or selecting China as the best location for investing in new production capacity.[26]

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[24] "CBQ Confirms Plans to Import Computers from China Products to Include Personal Computers, Notebook Computers, and Handheld Devices," *Business Wire,* Aug. 16, 2001.

[25] The consumer electronics category includes articles such as radios, tape-recorders, loudspeakers, and magnetic heads.

[26] One-fifth of Japan's production of consumer electronics has reportedly been shifted to China. Japanese companies that have moved a considerable share of their manufacturing assets to China include NEC and Matsushita. "Chinese Exports: Japan's Phantom Menace,"*Business Week Online*, found at *http://www.businesweek.com/bwdaily/dnflash/jan2002/nf20022011...*, retrieved Apr. 2, 2003

- U.S. imports of furniture from China rose by $1.8 billion (39 percent) to $6.4 billion in 2002. Furniture producers in China, already highly competitive with low labor costs, have acquired state-of-the-art production facilities.[27] They have also, in many instances, partnered with U.S. furniture companies to complement U.S. production (e.g., stackable, knock-down furniture, as well as wood furniture and parts) or to supply labor-intensive parts (such as lathed table and chair legs). Producers in China also benefit from favorable freight rates on in-bound furniture inputs (lumber, metal furniture components, and finishes) because cargo ships going to China usually have significant amounts of excess capacity.

- U.S. imports of telephone apparatus expanded by $1.4 billion (45 percent) in 2002 to $4.7 billion. Many U.S. and European producers of telephone sets and cell phones have established production facilities in China to supply local and international markets.

- U.S. imports of games (mostly video games) from China nearly doubled in 2002, rising by $1.1 billion to $2.7 billion. Most of the increase was accounted for by the shift in production of video game consoles from Japan to China. U.S. imports of such consoles from China grew by $1.1 billion, while U.S. imports from Japan fell by $1.2 billion. The three dominant producers of video game consoles worldwide (two based in Japan and one based in the United States with assembly in Mexico) were engaged in intense competition in 2002, leading one producer in Japan to seek a price advantage by shifting production to China.

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Change in 2002 from 2001:

U.S. trade deficit: Increased by $19.6 billion (27 percent) to $91.2 billion
U.S. exports: Decreased by $14.8 billion (10 percent) to $132.6 billion
U.S. imports: Increased by $4.8 billion (2 percent) to $223.7 billion

- Slow growth in both the United States and the European Union (EU) in 2002, coupled with low consumer confidence,[28] continued to suppress trade between these partners. Decreased U.S. exports of computers, peripherals, and parts along with increased U.S. imports of medicinal chemicals accounted for most of the increase in the U.S. trade deficit with the EU (table 3-3). The U.S. trade deficit with the EU grew for the fifth consecutive year.

- Both imports from and exports to the EU of aircraft, spacecraft, and related equipment decreased in 2002, by 20 percent and 12 percent, respectively, as slow economic growth and broad implications of September 11, 2001 resulted in less business and other air travel. Likewise, U.S. imports of aircraft engines and gas turbines also decreased 22 percent in 2002.

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[27] For additional information, see Josephine Spalding, *Industry and Trade Summary: Furniture and Motor Vehicle Seats*, USITC publication 3382, Jan. 2001.

[28] The Conference Board, Consumer Confidence Index, found at *http://www.consumerresearchcenter.org/consumer_confidence/index.htm*, retrieved Apr. 2, 2003.

- In contrast, two-way trade with the EU in motor vehicles increased in 2002, by 11 percent for imports and by 31 percent for exports. The rise in U.S. imports of motor vehicles from the EU can be largely attributed to increased U.S. market demand for German- and United Kingdom- made passenger vehicles. The export increase is mainly accounted for by U.S. production of SUVs by German companies Mercedes-Benz and BMW, some of which is exported to Germany.[29]

U.S. exports

- The leading EU market for U.S. manufacturers in 2002 was the United Kingdom, accounting for 23 percent of total exports to the EU, followed by Germany with 19 percent. Both countries are major markets for U.S. aircraft and aircraft parts, pharmaceuticals, and computer hardware.

- The electronics sector has been greatly affected by the downturn in demand for high-tech products. In fact, the largest decrease in U.S. exports to the EU was in computer hardware, which fell 27 percent to $9.3 billion. Instead of buying sophisticated new hardware, companies reportedly are purchasing low-cost standardized products in an effort to cut costs.[30]

- U.S. exports of telephone and telegraph apparatus to the EU decreased by 25 percent in 2002, reflecting a decline across most major markets during 2000-02 and principally attributable to reduced capital spending by the major telecommunications carriers, who are the major customers for telecommunications equipment.[31] Capital spending by European telecommunications service providers decreased by 22 percent during 2001-02.

- Weakened demand for semiconductors contributed to the 46-percent decline in U.S. exports of semiconductor manufacturing equipment (SME) and robotics to the EU during 2002. The main countries affected by the decline were Austria, Sweden, the United Kingdom, and Finland.

U.S. imports

- U.S. imports from the European Union were mainly shipped from Germany and the United Kingdom, accounting for 27 percent and 18 percent of total EU shipments, respectively.

- During 2002, there was a 21-percent increase in U.S. imports of medicinal chemicals from the EU, reflecting a corresponding 20-percent increase in worldwide U.S. pharmaceutical imports. Although U.S. imports of these products increased from all EU countries, most of this increase ($2.3 billion, or 19 percent) was from Ireland. U.S. companies continue to take advantage of Ireland's relatively low tax rates and production costs, as well as transfer pricing,[32] and are setting up additional facilities in that country.[33] A significant increase in overseas production of more advanced medical technology by European subsidiaries of several U.S.-based firms and dampened demand for medical

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[29] Both companies produce their respective SUV models solely in the United States.

[30] Nic Fildes, "The Bottom Line: Cost-Cutting to Dull European PC Market," *Dow Jones Newswires*, Nov. 15, 2002.

[31] Credit Suisse First Boston, *Global Sector Review: Wireline Telecommunications Equipment*, Mar. 14, 2003.

[32] Transfer pricing results in adding value to a product where taxes are lowest, so that the resulting high-value product is taxed at a lower rate. Clay Boswell and Feliza Mirasol, "Sourcing Pharmaceutical Manufacturing from Offshore Facilities," *Chemical Marketing Reporter*, Oct. 25, 1999, p. 28.

[33] Abbott Laboratories now has seven facilities in Ireland, including two that were added in mid-2001. Genzyme, a biotechnology company, is building a pharmaceutical plant in Ireland that will be operational in 2003. "Ireland: Business: Corporate Strategy: Round-Up of Recent Foreign Investments," *EIU Viewswire*, Mar. 4, 2002.

Table 3-3
Leading changes in U.S. exports to and U.S. imports from EU-15, 2001 and 2002

Sector/commodity	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. EXPORTS:				
Increases:				
Motor vehicles (ET009)	2,951	3,865	914	31.0
Decreases:				
Electronic products:				
Computers, peripherals, and parts (ET035)	12,730	9,298	-3,432	-27.0
Telephone and telegraph apparatus (ET017)	4,240	3,165	-1,075	-25.4
Other:				
Aircraft, spacecraft, and related equipment (ET013)	13,940	12,335	-1,606	-11.5
Semiconductor manufacturing equipment and robotics (MM087)	2,168	1,180	-989	-45.6
All other	111,298	102,721	-8,577	-7.7
TOTAL	147,327	132,563	-14,765	-10.0
U.S. IMPORTS:				
Increases:				
Medicinal chemicals (CH025)	26,353	31,761	5,408	20.5
Motor vehicles (ET009)	23,813	26,481	2,668	11.2
Medical goods (ET040)	4,854	5,916	1,061	21.9
Crude petroleum (CH004)	842	1,867	1,025	121.7
Decreases:				
Transportation equipment:				
Aircraft, spacecraft, and related equipment (ET013)	10,330	8,286	-2,044	-19.8
Aircraft engines and gas turbines (ET001)	8,997	7,065	-1,931	-21.5
All other	143,721	142,356	-1,365	-0.9
TOTAL	218,911	223,732	4,821	2.2

Note.-Calculations based on unrounded data.

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

goods in EU markets contributed to a $1.1 billion increase in U.S. imports of medical goods from the EU in 2002. One-third of this increase consisted of U.S. imports of cardiac pacemakers and defibrillators made by U.S. companies in Ireland.[34] Medical goods from Germany, France, and the United Kingdom together accounted for 43 percent of the increase, partly due to intracompany shipments. As national governments made conscious efforts to reduce escalating healthcare costs by reducing health care expenditures on equipment, companies in Germany, France, and the United Kingdom registered fewer sales in their home markets.[35] Accordingly, firms compensated by increasing their exports to the relatively more lucrative U.S. market, which continued to spend record amounts on health care.

- During 2002, U.S. imports of crude petroleum from the EU increased by $1.0 billion, to $1.9 billion, as the world price increased from $22 per barrel to more than $25 per barrel. In terms of quantity, U.S. imports from the United Kingdom accounted for more than 98 percent of U.S. imports from the EU and increased from 244,000 barrels per day during 2001 to 406,000 barrels per day in 2002. The

[34] SEC10-K filings by Medtronic Inc. and Guidant Corp., 2002; and U.S. industry representatives, telephone interviews by USITC staff, Sept. 16-20, 2002.

[35] U.S. and Foreign Commercial Service (US&FCS), "Industry Sector Analysis: Germany: Medical Goods," *Market Research Reports,* Aug. 14, 2002, p. 1; and US&FCS, "Industry Sector Analysis: France: Medical Goods," *Market Research Reports*, Aug. 22, 2002, pp. 3-4.

increase in imports of crude petroleum from the United Kingdom is the result of decreased imports from Venezuela, where civil unrest has caused a decline in production.[36]

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Japan

Change in 2002 from 2001:

U.S. trade deficit: Increased by $396 million (0.5 percent) to $73.0 billion
U.S. exports: Decreased by $5.3 billion (10 percent) to $48.3 billion
U.S. imports: Decreased by $4.9 billion (4 percent) to $121.3 billion

- Japan's trade surplus with the world increased for the first time in four years, despite unfavorable trends in the Japanese economy.[37] Japan's unemployment rate rose to a record post-World War II level in late 2002. During the last 5 years, retail prices and wages have declined approximately 1 percent annually. In nominal terms, Japan's GDP in 2002 was lower than in 1997, and government debt amounted to one-half of GDP. Since 1990, commercial property values dropped by 80 percent and the stock market by 75 percent.[38]

U.S. exports

- U.S. exports of aircraft, spacecraft, and related equipment to Japan increased by $1.1 billion (42 percent) to $3.8 billion in 2002 due to increased shipments of large civilian and military aircraft (table 3-4).[39] The United States supplies the majority of Japanese demand for aircraft, spacecraft, and related equipment.[40]

- U.S. exports of nuclear materials to Japan increased by $321 million (55 percent) to $900 million in 2002. Industry sources attribute this increase largely to Japanese nuclear fuel consumers (nuclear power plants) needing to replace nuclear fuel production that had been lost following a serious accident in late Fall 1999 in a nuclear fuel-processing facility in Tokaimura which reduced Japanese production capacity for nuclear fuel.

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[36] The British North Sea crude is similar to crude from Venezuela and is easily substitutable in refinery operations.

[37] "Trade Statistics," Customs and Tariff Bureau, Japanese Ministry of Finance, found at *http://www.jinjapan.org/stat/stats/08TRA31.html*, retrieved May 8, 2002.

[38] "Finance and Economics: The Only Way is Up," *The Economist*, Mar. 2003.

[39] In 2002, Japan took delivery of 2 Boeing 777s and 12 Boeing 767s as part of routine fleet renewal valued at approximately $1.6 billion. Military aerospace deliveries for fiscal year 2002 include the Boeing 767 air tanker and other related equipment valued at over $250 million. For additional information, see The Boeing Co., found at *http://active.Boeing.com/commercial/orders*, retrieved Apr. 18, 2003; DOC, Globus & NTDB, found at *http://www.stat-usa.gov/mrd.nsf/vwISA-Country*, retrieved Apr. 3, 2003.

[40] The United States accounted for about 80 percent of Japanese aerospace imports in 2002. USTR, *2003 National Trade Estimate Report on Foreign Trade Barriers*, Apr. 2003, p. 224.

Table 3-4
Leading changes in U.S. exports to and U.S. imports from Japan, 2001 and 2002

Sector/commodity	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. EXPORTS:				
Increases:				
Transportation equipment:				
Aircraft, spacecraft, and related equipment (ET013)	2,648	3,768	1,119	42.3
Internal combustion piston engines, other than for aircraft (ET002)	375	815	439	117.1
Other:				
Nuclear materials (CH002)	580	900	321	55.3
Decreases:				
Electronic products:				
Computers, peripherals, and parts (ET035)	3,780	2,498	-1,282	-33.9
Telephone and telegraph apparatus (ET017)	1,542	971	-571	-37.0
Semiconductors and integrated circuits (ET033)	2,558	2,055	-503	-19.7
Measuring, testing, and controlling instruments (ET043)	1,734	1,445	-290	-16.7
Other:				
Cattle and beef (AG002)	1,534	975	-559	-36.4
Semiconductor manufacturing machinery (MM087A)	1,440	1,166	-274	-19.0
All other	37,355	33,681	-3,674	-9.8
TOTAL	53,546	48,273	-5,273	-9.8
U.S. IMPORTS:				
Increases:				
Transportation equipment:				
Motor vehicles (ET009)	33,020	35,847	2,827	8.6
Certain motor-vehicle parts (ET010)	5,173	6,321	1,147	22.2
Electronic products:				
Television receivers and video monitors (ET022)	1,280	1,678	398	31.1
Consumer electronics (except televisions) (ET018)	4,165	4,486	321	7.7
Decreases:				
Electronic products:				
Semiconductors and integrated circuits (ET033)	4,531	2,809	-1,722	-38.0
Computers, peripherals, and parts (ET035)	10,200	8,734	-1,466	-14.4
Telephone and telegraph apparatus (ET017)	2,488	1,815	-672	-27.0
Other:				
Games (MM060)	3,264	2,084	-1,181	-36.2
Semiconductor manufacturing machinery (MM087A)	2,406	1,750	-656	-27.3
All other	59,612	55,739	-3,873	-6.5
TOTAL	126,139	121,262	-4,877	-3.9

Note.-Calculations based on unrounded data.

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

- Exports of internal combustion piston engines (other than for aircraft) to Japan increased by $439 million (117 percent) to $815 million, reflecting a parallel increase in automotive engine exports to Japan.[41] The globalization of the automotive industry, in particular the increased number of equity and partnership linkages between Japanese and U.S. automotive firms, and continued focus of the

[41] USDOC, US&FCS Market Research Reports, Stat-USA, found at *http://www.stat-usa.gov*, retrieved Apr. 6, 2003.

U.S. government on improving access to the Japanese automotive parts market, have contributed to the growth in U.S. exports of motor-vehicle parts to Japan.[42]

- Exports of information technology products, including computers, peripherals, and parts (hereafter computer hardware); telephone and telegraph apparatus; and semiconductors and integrated circuits collectively decreased by $2.4 billion (30 percent) to $5.5 billion in 2002. These products nonetheless accounted for 11 percent of all U.S. exports to Japan in 2002. Efforts to export semiconductors and semiconductor manufacturing equipment were complicated by reduced Japanese production of computer hardware and telecommunications equipment[43] that use semiconductors. In addition, the depressed business environment in Japan discouraged investment in new equipment (e.g., computers and telephones) by commercial customers.

- U.S. cattle and beef exports to Japan decreased by $559 billion (36 percent) to $975 million largely because of consumer concerns abroad regarding bovine spongiform encephalopathy or mad cow disease.[44] Exports of measuring, testing and controlling instruments to Japan fell by $290 million (17 percent) to $1.4 billion. The sluggish Japanese economy and the accompanying reduced investment in equipment contributed to this decline.

U.S. imports

- U.S. imports of Japanese motor vehicles increased by $2.8 billion (8.6 percent) to $35.8 billion in 2002 as consumer demand was sustained by low automobile financing rates and the popularity in the U.S. market of Japanese models. Similarly, an increase in the U.S. production of Japanese-branded motor vehicles contributed to the $1.1 billion (22 percent) increase in Japanese imports of motor-vehicle parts to $6.3 billion in 2002.

- Television receiver and video monitor imports from Japan increased by $398 million (31 percent) to $1.7 billion, and imports of consumer electronics (except television sets) increased by $321 million (8 percent) to $4.5 billion. Industry sources reported that the slowed U.S. economy did not affect the performance of consumer electronics as newer technology and intense price competition have driven down prices and made these products much more affordable to a wider customer base.[45]

- Imports of semiconductors and integrated circuits from Japan decreased by $1.7 billion (38 percent) to $2.8 billion, reflecting lower demand from computer hardware and telecommunications equipment manufacturers (heavy users of semiconductors) in the U.S. market.[46] These developments similarly affected imports of semiconductor manufacturing equipment and robotics from Japan, which

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[42] In Oct. 2001, the United States and Japan established an Automotive Consultative Group to address trading and regulatory issues as a followup to the comprehensive Framework Agreement signed Aug. 1995 to facilitate greater access to Japan's automotive sector for foreign business. Japan Automotive Manufacturers Association (JAMA), found at *http://www.jama.org/statistics*, retrieved Apr. 6, 2003, p. 7; USTR, *2003 National Trade Estimate Report on Foreign Trade Barriers*, Apr. 2003, p. 214.

[43] This is related to the move of Japanese manufacturing facilities to China and South East Asian countries.

[44] U.S. Meat Export Federation, press release, Oct. 18, 2001, found at *http://usmef.org/TradeLibrary/Archives/Releases*, retrieved Apr. 18, 2003.

[45] In 2002, global sales of digital cameras increased by 25 percent and shipments of DVD machines increased by 34 percent on a unit basis. "Consumer Electronics: A Brighter Picture," *BusinessWeek*, Jan. 13, 2003, p. 121.

[46] In 2002, sales of U.S. communication equipment decreased from the 2001 level by 21 percent to $77.2 billion. *BusinessWeek*, Jan. 13, 2003, pp. 85 and 120.

declined by $649 million (25 percent) to $2 billion.[47] Imports of telephone and telegraph apparatus decreased by $672 million (27 percent) to $1.8 billion, a result of the decline in demand for telephone and telegraph equipment due to slow economic growth and reduced capital expenditures by telecommunications providers.

- U.S. imports of computers, peripherals, and parts from Japan dropped by $1.4 billion (14 percent) to $8.7 billion. The sluggish U.S. economy, the shifting of some Japanese production to lower-cost locations (e.g., China and Southeast Asia), and outsourcing of personal computer production by Japanese producers to these Asian countries contributed to this decline.

- Likewise, imports of games (mostly video games) from Japan declined by $1.2 billion (36 percent) to $2.1 billion largely due to a shift in manufacturing to China by a top selling game console manufacturer.[48] U.S. imports of such consoles from China nearly quadrupled in 2002, advancing by $1.1 billion, nearly offsetting the reduced imports from Japan. Japanese production facilities reportedly have also shifted to other Asian locations, such as Indonesia and Taiwan, and Japanese companies are outsourcing more manufacturing to these locations, driven by the need to deliver lower cost products to consumers.[49]

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Mexico

Change in 2002 from 2001:

U.S. trade deficit: Increased by $8.1 billion (20 percent) to $48.0 billion
U.S. exports: Decreased by $4.5 billion (5 percent) to $86.1 billion
U.S. imports: Increased by $3.6 billion (3 percent) to $134.1 billion

- Merchandise trade between the United States and Mexico is linked closely to the performance of the manufacturing sector in the United States.[50] The majority of goods imported into the United States from Mexico comes from assembly plants that are either subsidiaries of U.S. manufacturers or have contracts with them. U.S. companies have established assembly facilities in Mexico to reduce manufacturing costs for products requiring labor-intensive production processes and/or to supply the Mexican market. As demand for U.S. manufactured goods weakens, imports from assembly plants in Mexico and U.S. exports of intermediate goods for these operations also fall. In this context, the decrease in U.S.-Mexico trade in 2002 mirrored the 1.5 percent-reduction in U.S. producers' shipments.

- In spite of weakened manufacturing activity and consumer confidence in the United States, imports from Mexico continued to increase in 2002 (by 3 percent), largely because of substantially rising petroleum import values. The increase in such imports reflects higher petroleum prices in 2002 compared with 2001, as well as the U.S. preference to secure supplies from the Americas than more

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[47] "Telecom: At Last the Depression is Lifting," *BusinessWeek*, Jan. 13, 2003, p. 120.
[48] For additional information, see ch. 7.
[49] "Demand is Strong, but Margins are Tight," *Consumer Electronics,* Mar. 10, 2003.
[50] The linkage between industrial production in the United States and Mexico's exports is discussed in Fernando Clavijo, "Wither Mexico,"*Poder*, Mar. 2003, p.18.

volatile sources in other parts of the world. Petroleum may also have been responsible for maintaining Mexican GDP at a level only slightly less than 1-percent lower than in 2001. Because of rising total U.S. imports from Mexico in 2002, two-way trade contracted by less than 1 percent ($849 million) to $220 billion, despite a 5-percent decline in U.S. exports to Mexico.[51]

- Electronic products experienced decreases in total trade with Mexico in 2002 (table 3-5), including telephone and telegraph apparatus (U.S. exports down $861 million, imports down $181 million); radio and television broadcasting equipment (exports down $222 million, imports down $794 million); and consumer electronics, except televisions (exports down $125 million, imports down $313 million). The reduced demand for these products was largely attributable to the continued slowdowns in both the U.S. and Mexican economies. Other major factors reported as influencing the downturn in exports of these products were increased domestic competition in key markets and excess capacity worldwide.[52]

- The other leading industry sector experiencing a decrease in two-way trade was apparel (exports down $192 million, imports down $397 million). The decline in U.S. apparel imports partly reflected China's entry into the WTO, which diminished demand for more expensive Mexican-made apparel. At the same time, decreased U.S. imports of finished apparel from Mexico led to reduced U.S. exports of fabric and apparel parts to assembly plants there.

- Internal combustion piston engines (other than for aircraft) was the leading industry sector in which two-way trade between the United States and Mexico increased. Demand for piston engines rose principally as a result of continued North American integration and increasing North American vehicle production.[53]

U.S. exports

- Product sectors experiencing a downturn in U.S. exports to Mexico in 2002 were semiconductors and integrated circuits, certain motor vehicle parts, and petroleum products, mostly production inputs typically destined for assembly plants in Mexico that rely on U.S. consumption for export demand. Reduced exports of refined petroleum products reflect Mexico's contracting economic activity, which is highly dependent on the U.S. economy for sustained expansion.

- U.S. exports to Mexico of computers, peripherals, and parts increased by 13 percent ($424 million) to $3.6 billion in 2002 as U.S. firms continued to establish or expand assembly operations in Mexico, especially for network servers and notebook computer equipment. Investments in this sector have made the North American computer equipment industry more competitive with producers in Asia.[54]

U.S. imports

- The value of U.S. imports of crude petroleum from Mexico increased by $2.5 billion (32 percent) to $10.5 billion in 2002 and accounted for approximately 8 percent of total imports. Increased reliance on petroleum from Mexico reflects political tensions in Venezuela and Nigeria that have reduced supplies from those countries.

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[51] "The Mexican Economy: Recent Performance," *Mexico Consensus Economic Forecast,* found at *http://wpcarey.asu.educ/seid/eoc/mexico/,* retrieved Mar. 30, 2003.

[52] Telecommunications Industry Association, *2003 Telecommunications Market Review and Forecast,* Feb. 2003, p. 213.

[53] For additional information, see ch. 11 and "Motor Vehicles," a 10-year summary in ch. 3.

[54] Mexico Watch, *Business Moves,* Feb. 1, 2003, p.14.

Table 3-5
Leading changes in U.S. exports to and U.S. imports from Mexico, 2001 and 2002

Sector/commodity	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million dollars		
U.S. EXPORTS:				
Increases:				
Computers, peripherals, and parts (ET035)	3,188	3,612	424	13.3
Internal combustion piston engines, other than for aircraft (ET002)	1,917	2,095	178	9.3
Decreases:				
Electronic products:				
Telephone and telegraph apparatus (ET017)	2,189	1,328	-861	-39.3
Radio and television broadcasting equipment (ET023)	503	281	-222	-44.1
Petroleum products (CH005)	2,677	2,346	-331	-12.4
Apparel (CH049)	1,908	1,716	-192	-10.1
All other	78,155	74,698	-3,457	-4.4
TOTAL	90,537	86,076	-4,461	-4.9
U.S. IMPORTS:				
Increases:				
Crude petroleum (CH004)	7,957	10,490	2,533	31.8
Machinery:				
Wiring harnesses for motor vehicles (MM068)	3,824	4,384	560	14.7
Household appliances, including commercial applications (MM073)	1,839	1,991	152	8.3
Internal combustion piston engines, other than for aircraft (ET002)	2,403	2,633	229	9.5
Decreases:				
Electronic products:				
Computers, peripherals, and parts (ET035)	10,365	8,913	-1,452	-14.0
Radio and television broadcasting equipment (ET023)	3,157	2,364	-794	-25.1
Consumer electronics (except televisions) (ET018)	2,813	2,501	-313	-11.1
Apparel (CH049)	8,129	7,732	-397	-4.9
All other	90,021	93,113	3,092	3.4
TOTAL	130,509	134,121	3,612	2.8

Note.-Calculations based on unrounded data.

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

- Increased vehicle sales in the U.S. market, prompted by manufacturer and dealer incentives to customers such as zero-percent interest financing, bolstered demand for parts from Mexico for use in the U.S. auto assembly plants.[55] As a result, a $571-million (15-percent) increase in U.S. imports of certain motor-vehicle parts, a $566-million (13-percent) rise in seats for motor vehicles and aircraft, and a $560-million (27-percent) growth in wiring harnesses for motor vehicles contributed to imports of these products rising by a total of $1.7 billion (16 percent) to $12.2 billion in 2002. Together, these three categories of automotive products accounted for 9 percent of total imports from Mexico in 2002.

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[55] In addition, the depreciation of the Mexican peso as compared with the U.S. dollar in 2002 and increased demand for replacement parts boosted U.S. imports from Mexico. For additional information, see "Certain Motor Vehicle Parts" in ch. 11.

TEN-YEAR TRENDS IN SELECTED INDUSTRY/COMMODITY GROUPS

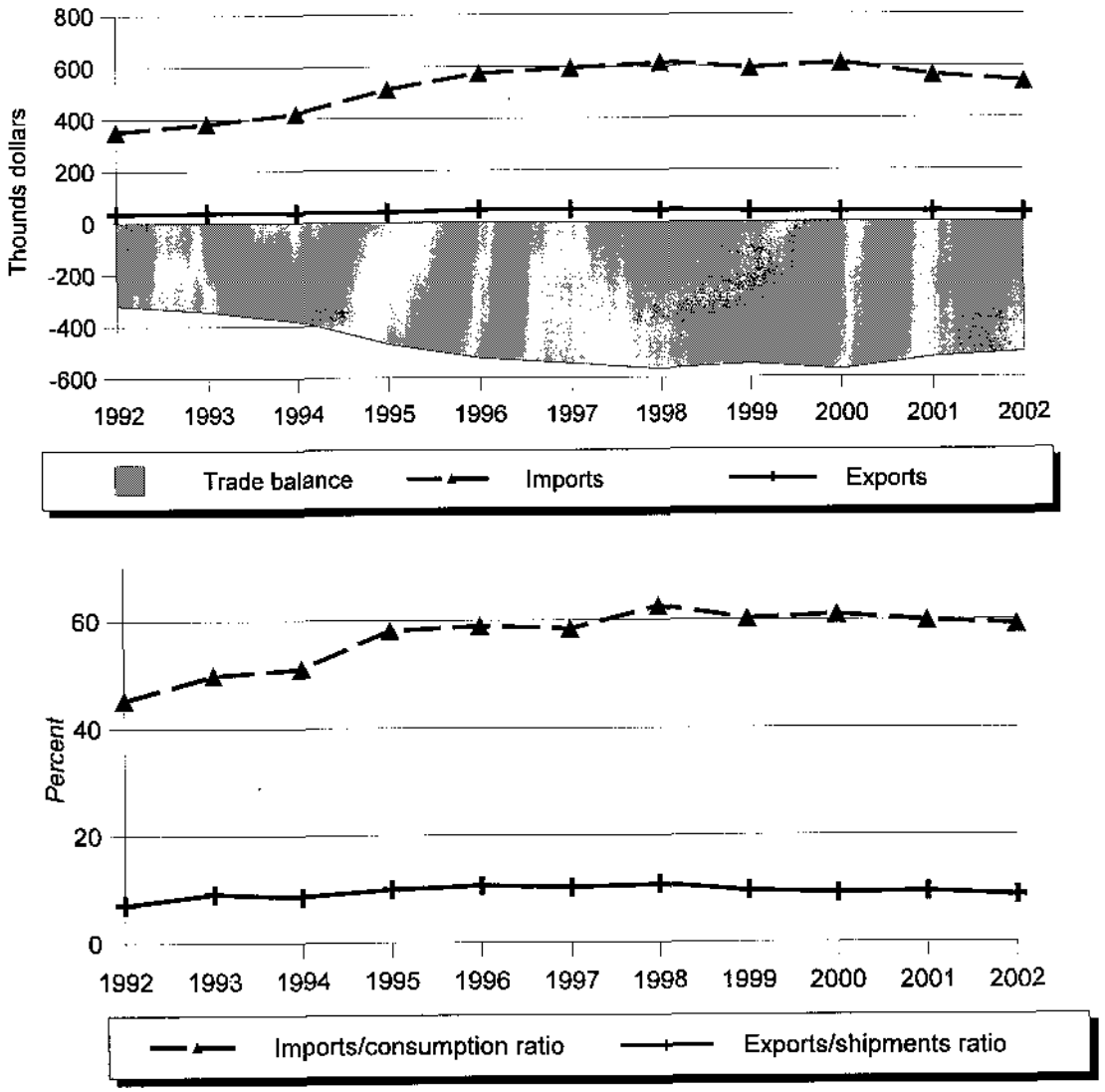
This section provides added perspective on trade shifts in five industry/commodity groups by examining longer term trends in exports, imports, and trade balances for the period 1992-2002. The selected groups were chosen because U.S. and world trade of the products of these groups have been influenced by important global developments.

Summary

The decade of 1992-2002 was characterized by slow economic growth for the world at the start and end, with a rapid expansion in the middle years. However, the U.S. economy experienced strong growth over the entire period, growing by more than 65 percent.[56] This affected the selected industries in different manners. The U.S. trade deficit in cut flowers widened during 1992-2002, as domestic production of cut flowers shifted to specialty cut flowers away from the rising low-priced imports. U.S. trade in wine expanded rapidly during 1992-2002, as reported health benefits, income growth, and demographic changes enabled a moderate increase in U.S. production volume despite a growing trade deficit. During 1992-2002, motor vehicle transplant production has steadily gained U.S. market share at the expense of major U.S. brands during the period and the trade deficit with respect to motor vehicles increased every year except for 2001. In medicinal chemicals, the United States ran a neutral trade balance during 1992-94, which developed into a deficit from 1995-2002 as imports increased faster than exports. However, the United States maintained a trade surplus in medical goods throughout the 1992-2002 period, although it declined gradually each year from 1998 to 2001 when U.S. companies increasingly moved equipment assembly operations to lower wage countries.

[56] This figure is real GDP growth in current U.S. dollars. Calculated from Bureau of Economic Analysis National Accounts Data, found at *http://www.bea.doc.gov/bea/dn/gdplev.xls*, retrieved May 8, 2003.

Figure 3-1
Fresh cut flowers: Imports, exports, trade balance, and trade ratios, 1992-2002



Note--Negative trade balance indicates a deficit. Positive trade balance indicates a surplus.

Source: Compiled by the U.S. International Trade Commission.

- The U.S. trade deficit in cut flowers widened from $320 million to $505 million during 1992- 2002 as production of cut flowers for the U.S. market increasingly took place abroad. The vast majority of U.S. cut flower imports are from Colombia and Ecuador, which have a competitive advantage over the United States because of their relatively low wage rates, need for smaller climate control investments, and weaker currencies. Strong U.S. demand for cut flowers and high disposable incomes have also encouraged South American growers to increase shipments to the U.S. market. In addition to Latin America, governments in Africa and Asia have encouraged the development of

cut flower export industries in their countries, mainly as a mechanism to employ large numbers of semiskilled workers and to attract U.S. dollars to their economies.

- Increased global supply of fresh cut flowers, especially roses, has caused cut flower import prices to fall significantly. The overall volume of U.S. cut flower imports continued its upward trend in 2002, increasing by 6.1 percent over the previous year,[57] while the value of such imports decreased by 4.2 percent.[58] The top two suppliers of roses, Colombia and Ecuador, shipped about 120 million more stems in 2002 than in 2001. Both countries accounted for 92 percent of the total value of U.S. rose imports in both years.

U.S. imports

- During the last decade, the value of U.S. imports exceeded the value of U.S. production of cut flowers for the first time. The U.S. cut flower industry has responded to the rise in low-priced imports by shifting production from the major flowers (carnations, roses, and chrysanthemums) to specialty cut flowers that are not imported in significant volumes. The value of domestic production of the major cut flowers decreased by 65 percent during 1992-2002, while imports of these same categories increased by 49 percent. For all cut flower types, the value of imports in 2002 was 54 percent higher than in 1992. Import penetration in the United States grew from 43.5 percent in 1992 to 59.2 percent in 2002.

- In 2002, Colombia, Ecuador, the Netherlands, and Mexico were the main suppliers to the U.S. market. The Netherlands, Colombia, and Ecuador are the largest exporters of cut flowers to the world; however, Eastern and Southern African countries such as Kenya, South Africa, and Zimbabwe are becoming important players in the global cut flower export market. With help from national and local governments, African and Asian growers have been able to improve product quality and transportation networks, and their shipments to the EU are rising. As a result, South American exporters may increasingly rely on the U.S. market for their vast exports.

- Roses represent the largest import category at 39 percent of the total cut flower import volume in 2002.[59] The value of rose imports from Colombia and Ecuador increased by 83 percent and by 600 percent, respectively, between 1992 and 2002. U.S. rose production fell by 68 percent during that time.

- Prices of cut flower imports in 2002 were 36 percent below their 1992 levels. The tremendous volume of low-priced U.S. imports has affected the prices of domestically grown cut flowers[60] by keeping the rate of increase of the domestic price lower than the rate of increase in the consumer price index.[61]

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[57] Ornamental Crop Import Report, U.S. Department of Agriculture, Agriculture Marketing Service, Fruit, Vegetables, and Specialty Crops, found at *www.ams.usda.gov/mnarchive/2002/dec/12%2D31%2D2002/wa%5Ffv281.txt*, retrieved Apr. 3, 2003.

[58] Based on data compiled from the U.S. Department of Commerce, the U.S. Treasury, and the U.S. International Trade Commission.

[59] *Ornamental Crop Import Report*, U.S. Department of Agriculture, Agriculture Marketing Service, Fruit, Vegetables, and Specialty Crops, found at *www.ams.usda.gov/mnarchive/2002/dec/12%2D31%2D2002/wa%5Ffv281.txt*, retrieved Apr. 3, 2003.

[60] *Floriculture and Nursery Crops Outlook*, Economic Research Service, USDA, September 2002.

[61] Ibid.

U.S. exports

- U.S. cut flower exports represent a small portion of total U.S. production value because of the intense price competition faced from low-cost suppliers in the world market. Exports of cut flowers increased at an average annual rate of 1.5 percent between 1992 and 2002 due to small but steady increases in exports to Canada, which offset the drop to other export markets. Imports increased at a faster rate of 4.7 percent annually during the same period.

- Canada is the most important market for U.S. exports of fresh cut flowers, especially fresh cut specialty flowers and bouquet arrangements. The North American Free-Trade Agreement (NAFTA), modern transportation methods which ensure fresh deliveries, and a trend toward harmonizing plant health regulations encourage U.S. fresh cut flower exports to Canada.

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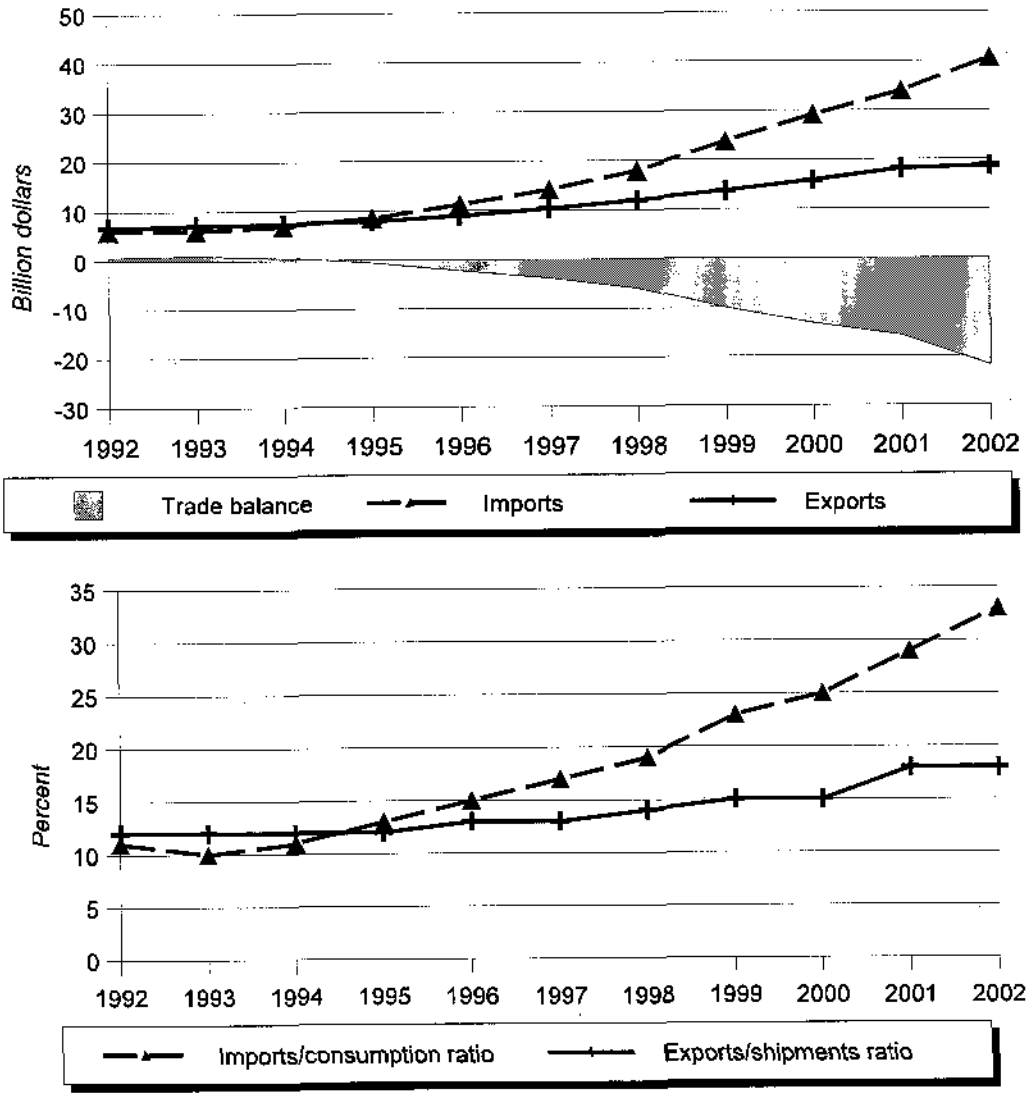
Figure 3-2
Medicinal chemicals: Imports, exports, trade balance, and trade ratios, 1992-2002



Note--Negative trade balance indicates a deficit. Positive trade balance indicates a surplus.

Source: Compiled by the U.S. International Trade Commission.

- From 1992 – 1994, the United States ran a neutral trade balance, with exports and imports of medicinal chemicals almost equal at just under $10 billion each. Beginning in 1995, global trade in the medicinal chemicals (pharmaceuticals) industry increased substantially,[62] following the elimination of duties on most medicinal chemical products under the Uruguay Round Agreement.

[62] Total U.S. exports and imports increased by 268 percent during this period.

Furthermore, a trend which started in the early 1990s, outsourcing[63] the production of bulk active ingredients and chemical intermediates used in the production of drugs to facilities in countries with low production costs, also contributed to increased trade.

- The U.S. trade deficit in pharmaceuticals increased by $2.7 billion (23 percent), based on a larger increase in U.S. imports (particularly from Europe) than in U.S. exports.[64] In 2002, several new and innovative medicines were introduced into the market as 24 new drugs and 8 new biologicals were approved for use in the United States by the Food and Drug Administration.[65] The products introduced in 2002 commanded "high" sales prices, likely accounting for the increase in imports.

U.S. exports

- In 2002, the United States exported over a billion dollars of pharmaceuticals to each of six countries, accounting for 61 percent of total exports. Four of the top markets for U.S. pharmaceutical exports in 2002 were the United Kingdom, Canada, France, and Japan, which together accounted for 44 percent of total exports. The remaining two countries were Belgium and the Netherlands, each of which imports products that are then transshipped to other countries in Europe.

- Combined U.S. exports to the EU-15, Canada, and Japan accounted for approximately 65 percent of total medicinal exports. Since the major pharmaceutical companies have a strong presence in these countries, exports are in part intracompany transfers, which are from U.S. subsidiaries of foreign multinationals. In addition, these countries have high per capita incomes and established health care industries.

- Overall, the combination of higher drug prices, increasing demand by aging populations, and an industry environment conducive to trade led to the continued rise in U.S. exports in 2002, albeit not at the rate exhibited in 2001. In terms of value, U.S. exports of medicinal products to the following countries increased the most in 2002: Belgium ($668 million), Netherlands ($389 million), and France ($158 million).

U.S. imports

- From 1992 until 1994, U.S. imports originated from the largest industrialized countries in which multinational companies are headquartered. In fact, the large multinational research-based companies (as opposed to companies that just produce pharmaceuticals) are traditionally located in the wealthier countries. From 1995 through 2002, total U.S. imports of pharmaceuticals from the world increased rapidly from $8.5 billion in 1995 to $40.7 billion in 2002. The import growth was particularly noticeable from Ireland. EU membership, a strong growth rate, and tax incentives have

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[63] Outsourcing benefits pharmaceutical companies that need a timely and flexible source of these chemicals, which is often the situation for firms looking to speed their products through clinical trials and, after regulatory approval, benefit as long as possible from patent protection. Because of the importance of getting new pharmaceutical products to the market as quickly as possible, companies are typically willing to use either domestic or foreign production facilities. However, the location of the outsourcing country is determined by a number of factors, including domestic taxes, workforce, infrastructure, environmental regulation, and wage rates. Charles W. Thurston, "Branded Offshore Manufacturing Finds a Home in Ireland and Singapore," *Chemical Marketing Reporter*, June 8, 1998, p. FR 12.

[64] Total U.S. imports from the EU increased by $3.7 billion in 2001, while U.S. exports to the EU increased $1.9 billion in the same period.

[65] This was compared to 27 new drugs approved in 2001 and 35 in 1999.

been key reasons for an increase in production in Ireland.[66] As a result, 17 of the 20 leading multinational drug companies worldwide have established manufacturing facilities in Ireland; and, in addition, "two of the most prestigious pharmaceutical products are now primarily manufactured in Ireland, i.e., Viagra and Lipitor."[67] Because its production costs are relatively low and there are no price controls on pharmaceuticals in the United States, foreign multinational companies can take advantage of transfer pricing and keep Ireland's pharmaceuticals highly price-competitive in the U.S. market, which has led to a rise in imports through 2002.

- The top three suppliers of pharmaceuticals to the United States in 2002 were the same as they have been since 1999: Ireland, the United Kingdom, and Germany. These three countries increased their shipments by 19 percent to $14.3 billion, 18 percent to $5.4 billion, and 27 percent to $4.3 billion, respectively. Their combined $23.9 billion of exports to the United States accounted for 59 percent of total U.S. imports of these products.

- Germany, Ireland, and the United Kingdom have benefitted from the trend toward outsourcing to selected locations throughout the world in the pharmaceutical industry. Because of the large number of prominent multinational pharmaceutical companies that are active in these three countries (e.g., Glaxo SmithKline and Aventis) and their reputations for well-trained organic chemists, all three countries are attractive sites for contract manufacturing.[68] An increasing amount of U.S. imports from Germany and the United Kingdom can be attributed to outsourced production by U.S. firms, in addition to intracompany trade. Finally, the merger of Britain's Glaxo Wellcome and the United States' Smith Kline Beecham added to international pharmaceutical trade between the United States and the United Kingdom.

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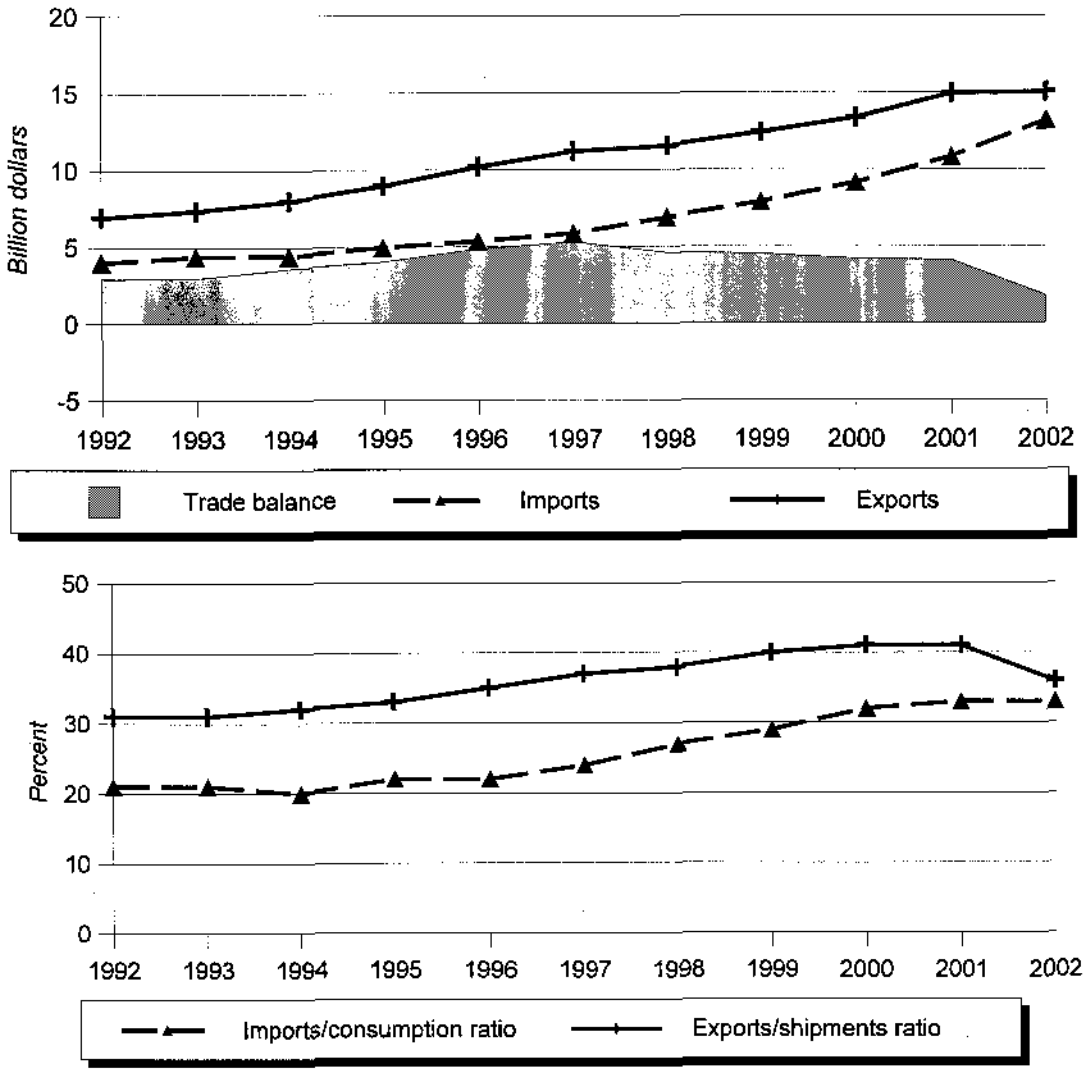
[66] Tax incentives include a 10-percent tax rate, which lends itself to transfer pricing. Transfer pricing results in adding value to a product where taxes are lowest, so that the resulting high-value product is taxed at a lower rate. Clay Boswell and Feliza Mirasol, "Sourcing Pharmaceutical Manufacturing from Offshore Facilities," *Chemical Marketing Reporter*, Oct. 25, 1999, p. 28.

[67] According to the Industrial Development Agency of Ireland (IDA), "over 120 overseas companies employ 15,000 people and export $12 billion annually, making Ireland one of the largest exporters of pharmaceuticals and fine chemicals in the world." Found at *www.corporateinformation.com/iesector*, retrieved Mar. 20, 2002.

[68] Sean Milmo, "Europe in Contract Mode," *Chemical Marketing Reporter*, July 19, 2000, p. FR11.

Figure 3-3
Medical goods: Imports, exports, trade balance and trade ratios, 1992-2002



Note--Negative trade balance indicates a deficit. Positive trade balance indicates a surplus.

Source: Compiled by the U.S. International Trade Commission.

- The United States is the world's largest producer and consumer of medical goods and maintained a trade surplus in these products throughout the 1992-2002 period. However, after increasing every year through 1997, when it reached its peak of $5.3 billion, the U.S. trade surplus declined gradually each year from 1998 to 2001. The decline resulted as imports rose faster than exports when U.S. companies increasingly moved assembly of high-volume but low-margin hospital supplies to several Latin American countries to take advantage of lower wage rates.

- The U.S. surplus declined even more sharply in 2002, dropping by 56 percent to $1.8 billion. Some reasons for the decline were a substantial slowdown in the growth of U.S. exports with the transfer of the production of certain high-technology medical equipment to Europe by several major U.S.-

headquartered firms and a general weakening of demand for medical goods in Europe and Japan.[69] The precipitous drop in 2002 resulted in a trade surplus that was substantially less than the surplus the medical goods industry enjoyed in 1992.

- Despite the decline in the U.S. trade surplus by the end of the period, the increasing importance of overall trade to the medical goods industry was reflected in generally rising imports-to-consumption and exports-to-shipments ratios over the period. Contributing to the increased trade was a Uruguay Round "zero-for-zero" agreement for medical goods concluded during the period that eliminated duties by the United States, the EU, Japan, and certain other important trading partners. Further, a mutual recognition agreement signed by the United States and Europe in 1998 to facilitate the certification of medical goods in one another's markets also likely had a positive effect on overall trade levels.

U.S. exports

- U.S. exports of medical goods increased every year during 1992-2002. Although Japan and the EU were important U.S. markets throughout the period, the most rapid growth in U.S. exports was to emerging East Asian markets. Sales to some of these markets declined in 1998 due to the 1997-98 Asian financial crisis, but rebounded by 1999.[70] Exports, especially of medical parts and components, also increased significantly to Mexico, the Dominican Republic, and Costa Rica as U.S.-based firms engaged in offshore assembly with those countries to reduce costs.

- U.S. exports increased at an average annual rate of 8 percent during 1992-2001. However, in 2002 exports rose by less than 1 percent to $15.1 billion. The sluggish growth in 2002 was largely due to declines in exports to traditionally important markets, including Japan, Canada, and several major EU countries. Reasons for these declines included conscious efforts by governments in those countries to reduce escalating healthcare costs in weakening economies by reducing expenditures on advanced medical technology, an area of U.S. strength.[71]

- Another reason for the decline in U.S. export growth in 2002 was investment by leading U.S.-based medical technology firms in European manufacturing facilities, particularly in Ireland and Switzerland. Over the past decade, the Irish Government implemented a series of national economic programs designed among other things to increase labor force skills and to promote foreign investment.[72] As a result of these efforts, Ireland has rapidly grown to become a leader in medical device manufacturing.[73] Meanwhile, a marked increase in production of cardiac pacemakers in 2002

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[69] SEC 10-K filings by Medtronic Inc. and Guidant Corp., 2002; and "Debut of MEDTEC Ireland Trade Show to Bring World's Leading Medical Suppliers to Galway," *Canon Communications News Release*, Apr. 9, 2001, p. 1, found at *http://www.devicelink.com*, retrieved Feb. 26, 2003.

[70] U.S. industry representatives, interviews by USITC staff, Sept. 16-20, 2002.

[71] U.S. and Foreign Commercial Service (US&FCS), "Industry Sector Analysis: Japan: Medical Goods," and "Industry Sector Analysis: Germany: Medical Goods," *Market Research Reports*, Jan. 22, 2002, p. 1; and US&FCS, "Industry Sector Analysis: Canada: Medical Goods," and "Industry Sector Analysis: France: Medical Goods," *Market Research Reports*, Aug. 22, 2002, p. 3.

[72] U.S. Central Intelligence Agency, "Ireland," *CIA World Factbook 2002*, found at *http://cia.gov*, retrieved Feb. 28, 2002.

[73] "Medical Device Project to Bring 518 New Jobs to Clonmel," *Business Ireland*, vol. 12, No. 3, Autumn 1998, p. 2; and U.S. industry representatives, interviews by USITC staff, Sept. 16-20, 2002.

by a U.S.-based firm in Switzerland that exports to other European countries displaced a portion of previous U.S. exports of such devices.[74]

- Despite the overall slowdown in U.S. export growth in 2002, U.S. exports rose significantly to the Netherlands, Ireland, and Mexico, each of which registered gains of at least 20 percent. Exports to the Netherlands comprised U.S.-made radiological and other medical parts and components used by Dutch firms in manufacturing medical imaging devices and other electromedical products, a core Dutch strength. U.S. exports to Ireland to a large extent represented intracompany shipments of parts and components by U.S.-based medical goods companies to their Irish manufacturing subsidiaries for final assembly. Finally, U.S. exports to Mexico represented shipments of parts and components from U.S. suppliers of large volume, price-sensitive, hospital products for final assembly.

U.S. imports

- Although U.S. imports of medical goods also rose every year during 1992-2002, their growth accelerated from 1998 through the end of the period, eventually leading to the declining U.S. surplus. After increasing by 34 percent from 1992 to 1996, U.S. imports more than doubled from 1997-2002 to $13.2 billion.

- At the beginning of the period, Japan and Germany were, by far, the leading suppliers of U.S. imports of medical goods. However, by 2002, Mexico had surpassed both Japan and Germany as the leading source of U.S. imports, as U.S.-based companies increased their use of offshore assembly and contract manufacturing facilities in Mexico. Meanwhile Ireland, which had been an insignificant factor in the supply of medical goods to the United States at the beginning of the period, passed Japan to become the third leading source of U.S. imports as Ireland rapidly became a major European leader in medical goods production.[75] Other countries that significantly increased their exports to the United States over the decade included China, the Dominican Republic, and Costa Rica. Products imported from these countries consisted primarily of high volume, price-sensitive hospital products, such as intravenous and blood administration sets, assembled for large U.S. hospital supply companies.

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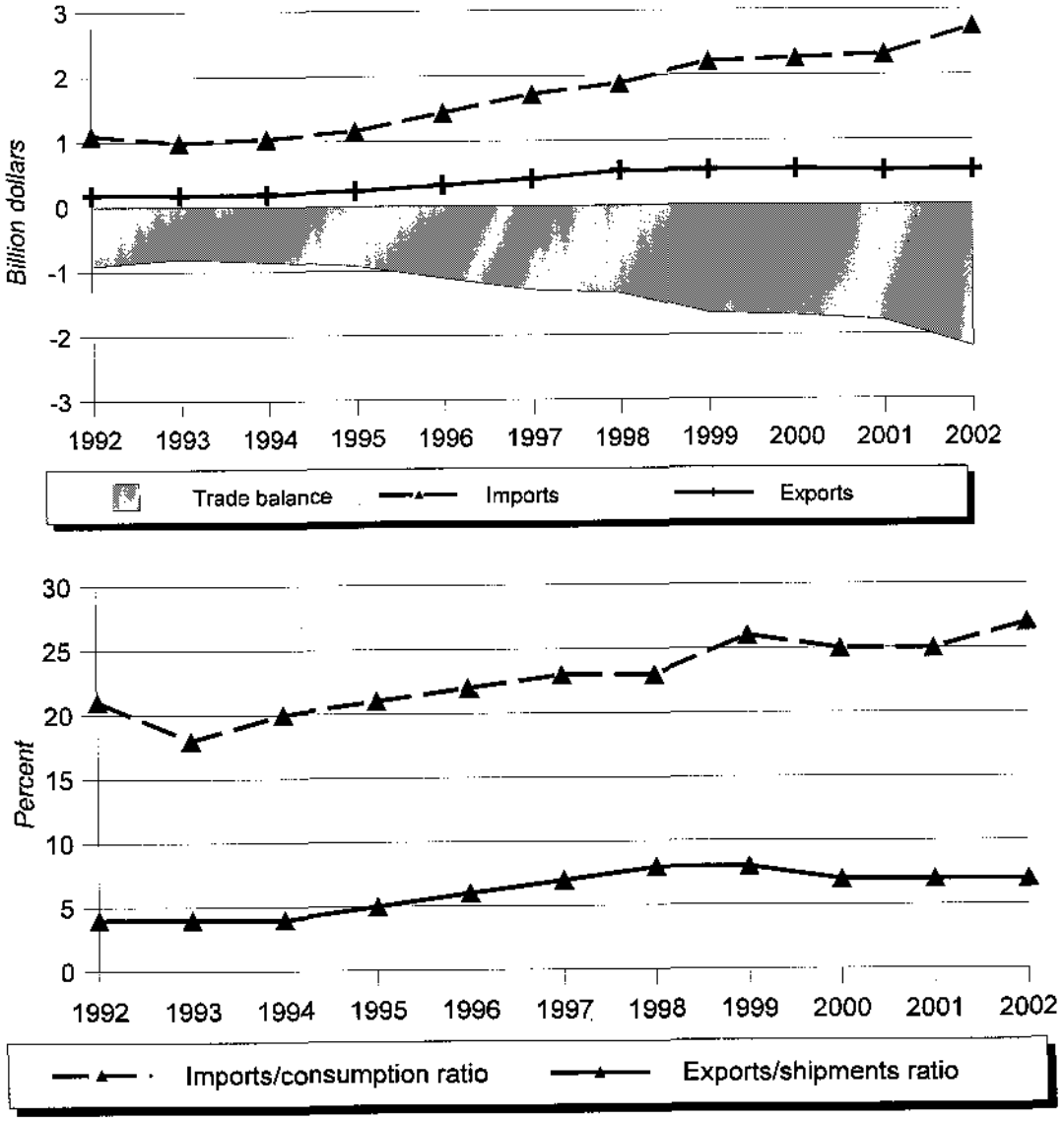
[74] "Medtronic Europe: High-Tech, High-Touch Location," reprinted by Medtronic with permission of Swiss *Plants Sites & Parks Magazine*, Aug./Sept. 2000, pp. 1-5; 10-K filing by Medtronic Inc., 2002; and U.S. industry representatives, telephone interviews by USITC staff, Sept. 16-20, 2002.

[75] "Medical Device Project to Bring 518 New Jobs," p. 2; U.S. industry representatives, interviews by USITC staff, Sept. 16-20, 2002; and U.S. Central Intelligence Agency, "Ireland."

Figure 3-4
Wine and certain other fermented beverages: Imports, exports, trade balance, and trade ratios, 1992-2002



Note--Negative trade balance indicates a deficit. Positive trade balance indicates a surplus.

Source: Compiled by the U.S. International Trade Commission.

- U.S. trade in wine expanded rapidly during 1992-2002. U.S. exports more than doubled to $541 million, while imports surged to $2.7 billion, creating a $2.2 billion trade deficit in 2002 (Figure 3-4). Two factors transformed the U.S. wine market during the decade. First, favorable reports on the health benefits of moderate wine consumption contributed to an increase in U.S. demand that reversed a trend of declining consumption during much of the 1980s. Second, strong income growth during the 1990s, combined with demographic changes, including the aging of the baby-boom generation, fostered interest and demand for higher quality and value wine. These factors led to strong growth in the U.S. wine sector and spurred historical levels of U.S. wine imports.

- During 1992-2002, U.S. wine production rose by 83 percent to $7.7 billion. This growth in value occurred as the U.S. wine industry continued to transform itself from producing primarily jug wine made from such high yielding grapes as French Colombard and Thompson's seedless to higher quality production. During much of the period, there were substantial new plantings of lower yield classic European vinifera grape varieties such as Cabernet Sauvignon, Chardonnay, and Merlot. California, the source of roughly 90 percent of U.S. wine output, experienced the largest growth in new vineyard plantings. Consequently, although the value of shipments nearly doubled, the volume of U.S. production increased only moderately, averaging about 20 million hectoliters.[76] However, grape and wine prices declined during 2001-2002 reflecting an increase in wine grape supply (new plantings) and weakness in the U.S. economy.

- During 1992-2002, the U.S. wine industry faced strong competition in its home market and foreign markets from traditional EU wine producing giants –Italy, France, and Spain– and from fellow New World Wine Producers (NWWP) Australia, Chile, New Zealand and others. Among NWWP countries, trade was dominated by a handful of large corporations that marketed a limited number of competitively priced branded products. These wines are generally varietal based, of consistent quality, and designated by appellations of origin.[77] The significant rise of NWWP exports (Australian wine exports rose by over 300 percent, Chile by over 500 percent)[78] changed the international wine trade landscape. Declining export market shares for traditional European suppliers compelled the EU to restructure its wine agricultural policies to focus on wine quality, rather than quantity.[79]

U.S. exports

- U.S. wine exports increased by 214 percent during 1992-2000, before leveling off in 2001-2002 at over $500 million. The exports-to-shipments ratio reached 7 percent, up from 4 percent in 1992. U.S. export markets were highly concentrated. The three leading markets, the EU, Canada, and Japan, accounted for 88 percent of U.S. exports in 2002. The United Kingdom was the largest single market by far, posting steady increases throughout the period as consumers increasingly selected imported wine over domestically produced beer[80] (per capita wine consumption rose by 40 percent during the decade).[81] In 2002, the United Kingdom imported over one-third ($189 million) of total U.S. wine

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[76] NTC Publications Ltd., Productschap Voor Gedistilleerde Dranken, *World Drink Trends 2002*.

[77] Appellations of origin are geographic indications. In the United States and other NWWP countries, appellations refer primarily to the geographic area where the wine grapes were sourced. In the EU, in addition to geography, appellation of origin rules may also include limitations on the types of grapes that may be used, labeling restrictions (the grape variety may not appear on the label), and production techniques.

[78] USDA, FAS Global Agricultural Trade System using data from the United Nations Statistical Office.

[79] For example, in France, the bulk of production is dominated by hundreds of relatively small producers and cooperatives that do not produce enough volume to compete with U.S. and Australian global branded products in large U.S. and United Kingdom retail outlets. Moreover, these small producers are, in many cases, subject to restrictive production and marketing requirements. EU producers not subject to traditional and restrictive appellation of origin rules operate similarly to NWWP country producers and are among the most competitive international suppliers. Examples include Italian producers of "Super Tuscan" wines in Tuscany and vintners in the Languedoc region of Southern France.

[80] British beer consumption declined by 16 percent in per capita volume during the decade. *World Drink Trends 2002*.

[81] The United Kingdom has virtually no commercial wine-producing industry owing to its climate; imports account for 99.9 percent of domestic wine consumption. USDA, FAS, *United Kingdom Wine Marketing Annual 2002*, Gain Report # UK202, Dec. 13, 2002.

exports.[82] Canada and Japan also increased imports of U.S. wine, more than doubling purchases during the period.

- The trend towards quality wine has been the driving force behind the expansion of U.S. wine exports during 1992-2002. Although U.S. wine is generally higher priced, on average, than similar products from certain EU suppliers, Australia and Chile, U.S. producers (primarily California wineries that accounted for 95 percent of U.S. exports) have been successful in differentiating their products through building a reputation for high and consistent quality. For example, U.S. wines in the premium categories, the over $7.50 per bottle range, are increasing their market share in the United Kingdom and were the fastest growing segment of U.S. exports during 2001-2002.[83]

U.S. imports

- The United States was the world's fastest growing wine import market and the leading destination for relatively high-valued bottled wine imports during 1992-2002.[84] U.S. wine imports increased at an average annual rate of 15 percent, posting the largest single year increase, nearly $500 million, in 2002. Imports as a ratio of domestic consumption similarly increased, accounting for over one in four bottles consumed. This can be attributed to strong income growth during the period and aggressive marketing by foreign suppliers, particularly Australia, which experienced the largest increase in shipments during the period.

- U.S. imports of wine were also highly concentrated as $2.6 billion, or 93 percent of imports, in 2002 were provided by three suppliers, the EU (72 percent), Australia (17 percent), and Chile (5 percent). During the 10-year period, the sources of U.S. wine imports began to shift; NWWP suppliers Australia and Chile accounted for nearly one-quarter of the value of shipments in 2002 up from 7 percent in 1992. Morever, in 2002, Australia became the second-leading supplier by volume to the U.S. market, eclipsing France. NWWP market share is expected to continue to increase as a result of aggressive marketing and superior product placement.

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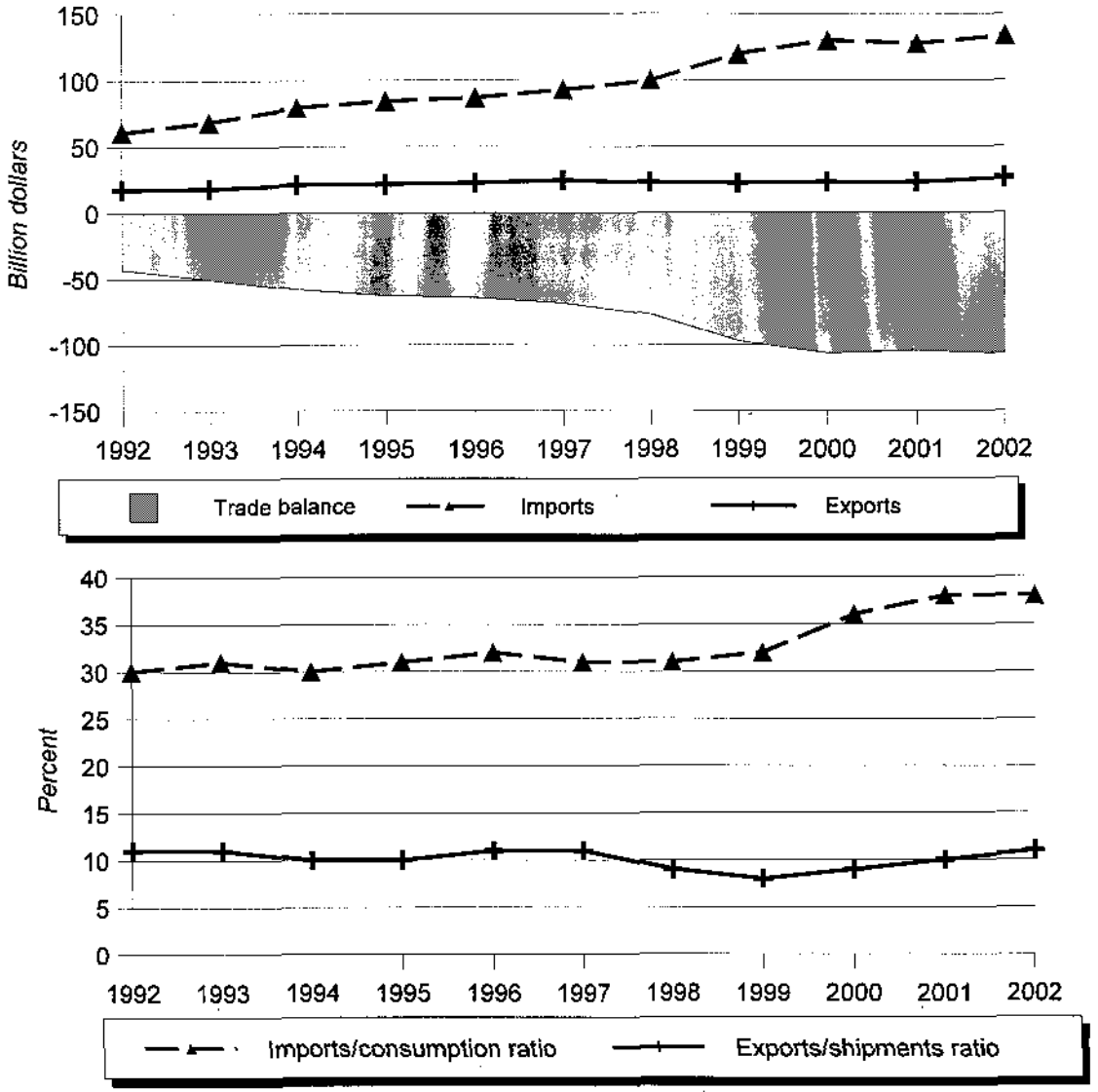
[82] Major United Kingdom supermarket chains are the dominant wine merchants in the United Kingdom, accounting for almost 70 percent of nonbar or restaurant wine sales in 2001. These outlets require large volumes of branded, consistent quality, products that can only be supplied by very large wineries. The United States and Australia, with the world's largest wine makers, are the leading wine suppliers to these retailers.

[83] USDA, FAS, *United Kingdom Wine Marketing Annual 2002*, Gain Report # UK202, Dec. 13, 2002.

[84] In 2002, British wine imports totaled $2.6 billion, compared to $2.4 billion in U.S. wine imports. However, the unit values of U.S. wine imports were double that of British imports. USDA, FAS Global Agricultural Trade System using data from the United Nations Statistical Office.

Figure 3-5
Motor vehicles: Imports, exports, trade balance, and trade ratios, 1992-2002



Note--Negative trade balance indicates a deficit. Positive trade balance indicates a surplus.

Source: Compiled by the U.S. International Trade Commission.

- During the 1992-2002 period, passenger vehicles – passenger cars and light trucks – accounted for approximately 97 percent of the production, sales, and trade in the U.S. motor vehicle sector, with medium- and heavy-duty trucks and buses accounting for the remaining 3 percent.

- The U.S. motor vehicle-manufacturing industry is highly concentrated. Although the 1998 merger of Chrysler and Daimler-Benz of Germany to form DaimlerChrysler reduced the number of U.S.-based passenger vehicle makers to two, the motor vehicle industry continued to become increasingly global during the past decade, with the Big Three (GM, Ford, and the Chrysler division of DaimlerChrysler) expanding linkages with foreign partners. The increased incidence of international

joint ventures and equity stakes has stimulated global motor vehicle trade through production rationalization, a strategy whereby vehicle models are produced in a single or reduced number of locations for distribution throughout a wide region. In addition, automakers will use production from offshore partners to round out product offerings in certain markets.

- The structure of the U.S. passenger vehicle market changed considerably during 1992-2002. Light trucks – pickup trucks, minivans, and sport-utility vehicles (SUVs) – have set consecutive new sales records every year since 1992;[85] the most recent sales record for passenger car sales was set in 1986. In 2001, sales of light trucks surpassed sales of passenger cars for the first time. The Big Three import a substantial number of light trucks from NAFTA partners Canada and Mexico.

- U.S. market share for the Big Three eroded during the period. In 1992, Big Three brands claimed 72 percent of U.S. passenger vehicle sales, with imported passenger vehicles accounting for 19 percent of the market versus 9 percent for transplants.[86] By 2002, Big Three brands accounted for 63 percent of U.S. passenger vehicle sales, with transplant share almost equal to that of imports, at 18 percent and 19 percent, respectively. Japan-based passenger vehicle makers increased their manufacturing capacity in the United States during 1992-2002, and German automakers began auto assembly in the United States during the period as well. Although U.S. imports from Japan grew significantly throughout the period, the growth in U.S. market share by Japanese transplant production indicates that imports might have grown even more in the absence of increased U.S. production by the transplant companies.

- During 1992-2002, the trade deficit with respect to motor vehicles increased every year except for 2001. The United States runs a persistent trade deficit largely due to the strategy of U.S. automakers to manufacture overseas for local markets. Owing to its strong international presence, the U.S. motor vehicle industry does not rely heavily on exports. Local production strategies have developed for a variety of reasons, including significant trade barriers in foreign markets,[87] lower wage rates in many countries, and improved ability to respond to local consumer preferences.

- In 2002, the U.S. trade deficit in motor vehicles increased by $2.4 billion (2 percent) to $107.1 billion. Exports increased by $3.6 billion (16 percent) to $26.2 billion; however, this increase was eclipsed by imports, which increased by $6.0 billion (5 percent) to $133.3 billion. The $2.2 billion improvement in the deficit with Canada was surpassed by increased deficits with Japan ($3.0 billion), the United Kingdom ($1.4 billion), and Germany ($1.0 billion).

U.S. exports

- The value of U.S. motor vehicle exports increased steadily during 1992-97, from $17.3 billion to $24.4 billion, before declining in 1998 and 1999. An increase in 2000 was followed by a decline in

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[85] *2001 Ward's Motor Vehicle Facts and Figures* (Southfield, MI: Ward's Communications, 2001), pp. 26-27.

[86] Transplant production refers to passenger vehicles assembled in the U.S. production facilities of foreign-based automakers. Automotive News, *Automotive News Market Data Book 1993* (Detroit: Crain Communications, 1993, pp. 19, 21, and 23.

[87] These barriers include tariffs, domestic content requirements, investment requirements, etc. For more information on nontariff barriers, for additional information see Office of Automotive Affairs, U.S. Department of Commerce, "World Motor Vehicle Import Requirements," Aug. 2001, found at *http://www.ita.doc.gov/td/auto/impreq.html*.

2001 and a sharp increase in 2002. The value of U.S. motor vehicle exports in 2002 totaled $26.2 billion, a 52-percent increase over 1992 and an average annual increase of 4 percent.

- During 1992-2002, Canada was the leading market for U.S. exports of motor vehicles, accounting for 48 percent of such exports in 1992, rising to 65 percent in 1999, and then declining slightly to account for 59 percent in 2002. The U.S. and Canadian automotive industries are highly integrated as a result of the Automotive Products Trade Act of 1965, which established a conditional free-trade zone between the United States and Canada for motor vehicles and original equipment parts. This integration has led to high volumes of two-way automotive trade, as U.S. automakers have long considered the United States and Canada as one region for production planning purposes. The U.S.-Canada Free-Trade Agreement and NAFTA furthered the integration of these two industries.

- U.S. motor vehicle exports to Mexico grew from $213 million in 1992 to $3.7 billion in 2002, as the gradual removal of Mexican import barriers under NAFTA prompted U.S. automakers and parts producers to rationalize production by exporting to Mexico vehicles and parts that are more efficiently produced in the United States or Canada. This rationalization has allowed U.S. automakers and parts producers in Mexico to invest in modernizing their existing operations and focus on core competencies to improve economies of scale and ultimately increase competitiveness. U.S., Japanese, and European automakers and parts producers have in recent years invested considerably in new and existing assembly plants throughout North America, which they view as an integrated market and manufacturing base.[88]

- The countries that ranked as other important export markets changed during the decade. At the beginning of the period, Taiwan and Saudi Arabia were the second- and third-leading markets for U.S. motor vehicle exports; they were replaced by Mexico and Germany by 2002. Japan, the fourth-leading market in 1992, moved to the second-leading spot in 1994. U.S. motor vehicle exports to Japan continued to increase until 1996, when they began a trend of annual declines, largely due to depressed demand in the Japanese market. By 2002, Japan was the fifth-leading market for U.S. motor vehicle exports.

- U.S. exports to Germany declined during 1992-95, increased significantly in 1996, then fluctuated around the 1996 level before rising significantly in 2001 and 2002. These changes coincide with the establishment of U.S. production facilities by German automakers BMW and Mercedes-Benz in 1994 and 1997, respectively. During the latter part of the period, the two automakers introduced production of SUVs that are exclusively assembled in the United States for sale in the United States and for export to other markets, including Germany.

U.S. imports

- The value of U.S. imports of motor vehicles increased every year during 1992-2002 except for a small decline in 2001. Imports were valued at $60.3 billion in 1992, and reached $133.3 billion in 2002. The percentage change over the period was 121 percent, an 8-percent average annual increase.

- During 1992-2002, Canada and Japan were the leading sources of U.S. imports of motor vehicles. While Japan began the 10-year period as the leading supplier, Canada emerged in the lead position in 1995 and remained there throughout the rest of the period. Local production by Japanese

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[88] For additional information, see Deborah McNay and Laura Polly, "Mexico's Emergence as a Global Automotive Production Center Drives Trade and Investment," *Industry Trade and Technology Review*, USITC publication 3363, Oct. 2000, pp. 19-33.

automakers displaced some motor vehicle imports from Japan, while the production rationalization strategies of the Big Three led to increased imports of motor vehicles from Canada.[89] Together, the two markets accounted for 79 percent of total U.S. motor vehicle imports in 1992; this percentage dropped steadily during the next 10 years to reach 58 percent in 2002, largely attributable to increased imports from Mexico and Germany, as well as from the United Kingdom and Korea.

- Mexico and Germany, and to a lesser extent, Korea and the United Kingdom grew in importance as import sources during the period. Imports from Mexico increased largely as a result of NAFTA, and German vehicles have gained in popularity in the U.S. market during the period. Quality improvements and competitive pricing have helped Korean automakers, Hyundai Motor Co. Ltd. and Kia Motors Corp., make significant inroads in the U.S. market in recent years, and U.S. imports of a variety of vehicles assembled in the United Kingdom increased considerably, as these models have expanded their market penetration.

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[89] Production rationalization is a strategy whereby vehicle models are produced in a single or reduced number of locations for distribution throughout a wide region.

CHAPTER 4
Agricultural Products

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Change in 2002 from 2001:

U.S. trade surplus: Decreased by $4.8 billion (63 percent) to $2.8 billion
U.S. exports: Decreased by $1.8 billion (3 percent) to $58.3 billion
U.S. imports: Increased by $3.0 billion (6 percent) to $55.6 billion

Much of the reduction in the U.S. trade surplus in agriculture products was driven by significant declines in U.S. exports of cigarettes, poultry, and cattle and beef (table 4-1). At the same time, imports of some luxury food items such as wines, distilled spirits, chocolate, and bakery products rose.[1]

The largest shift in trade in agricultural products in 2002 was in cigarettes, which experienced an export decline of $655 million (31 percent) to $1.5 billion (table 4-2). Although the quantity of U.S. cigarette exports fell slightly, most of the reduction occurred because the major U.S. cigarette companies discounted their prices to many of their foreign customers in 2002.[2] Another trend driving down prices was a tendency to use cheaper foreign leaf in U.S. cigarettes sold overseas. At the same time that the value of U.S. cigarette exports has been steadily declining, U.S. cigarette imports have been steadily increasing, jumping 22 percent in 2002 alone to $230 million. However, imported cigarettes accounted for less than one-half of one percent of U.S. consumption.

Poultry exports declined sharply, down 23 percent, from $2.4 billion to $1.8 billion, as the largest buyer of U.S. poultry meat, Russia, instituted a trade ban in March of 2002 based on alleged Russian concerns about sanitary conditions at U.S. poultry plants. In spite of negotiations to lift the ban in 2002, trade continued to be restricted as protective duties were added amid an investigation into losses suffered by Russian poultry producers because of foreign competition. More recently, Russia has instituted quotas on poultry imports.

U.S. wine imports increased by 18 percent, from $2.3 billion in 2001 to $2.7 billion in 2002.[3] Higher imports from the three main suppliers, France, Italy, and Australia, as well as higher wine prices and higher sales of premium wines, contributed to the trade shift. The quantity of wine imports from Australia surged by 51 percent because of an exceptionally good year for wine production in Australia. The U.S. market for relatively inexpensive wines, those selling for less than $6 a bottle, was soft, but the market for wines in the $6 to $12 a bottle range was exceptionally strong, indicating a shift in consumer preference towards wines in the high priced categories. For additional statistical detail on major import suppliers and export markets, see table 4-5.

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[1] For additional information, see "Wine and Certain Other Fermented Beverages" and "Cut Flowers" in ch. 3.
[2] Based on unit value of exports from official statistics of the U.S. Department of Commerce.
[3] For additional information, see "Wine" in ch. 3.

Table 4-1
Agricultural products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001 and 2002[1]

Item	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
Canada	8,694	9,121	426	4.9
Mexico	7,645	7,534	-111	-1.5
Japan	11,342	10,416	-926	-8.2
China	2,101	2,128	27	1.3
Korea	3,085	3,085	(2)	(3)
Netherlands	1,420	1,262	-157	-11.1
Italy	719	666	-53	-7.3
France	450	477	28	6.2
Thailand	606	634	28	4.7
Taiwan	2,150	2,101	-48	-2.3
All other	21,899	20,921	-978	-4.5
Total	60,109	58,345	-1,764	-2.9
EU-15	7,290	6,963	-327	-4.5
OPEC	2,880	2,658	-222	-7.7
Latin America	12,119	12,133	14	0.1
CBERA	2,687	2,630	-57	-2.1
Asia	23,912	22,636	-1,276	-5.3
Sub-Saharan Africa	657	933	276	42.0
Central and Eastern Europe	263	227	-37	-13.9
U.S. imports of merchandise for consumption:				
Canada	12,373	12,953	580	4.7
Mexico	6,157	6,378	221	3.6
Japan	441	461	21	4.7
China	1,489	1,896	407	27.3
Korea	230	254	24	10.4
Netherlands	1,714	1,876	162	9.5
Italy	1,933	2,150	217	11.2
France	2,014	2,260	245	12.2
Thailand	2,155	1,914	-241	-11.2
Taiwan	371	306	-65	-17.4
All other	23,721	25,142	1,421	6.0
Total	52,599	55,591	2,993	5.7
EU-15	10,316	11,187	871	8.4
OPEC	1,147	1,187	39	3.4
Latin America	15,441	16,101	660	4.3
CBERA	3,218	3,294	76	2.4
Asia	8,303	8,818	515	6.2
Sub-Saharan Africa	836	912	76	9.1
Central and Eastern Europe	329	391	62	18.8
U.S. merchandise trade balance:				
Canada	-3,679	-3,833	-154	-4.2
Mexico	1,488	1,155	-333	-22.3
Japan	10,901	9,955	-946	-8.7
China	612	232	-380	-62.1
Korea	2,855	2,831	-24	-0.8
Netherlands	-294	-614	-319	-108.6
Italy	-1,214	-1,484	-270	-22.2
France	-1,565	-1,782	-218	-13.9
Thailand	-1,549	-1,280	269	17.4
Taiwan	1,779	1,795	16	0.9
All other	-1,823	-4,221	-2,399	-131.6
Total	7,511	2,754	-4,757	-63.3
EU-15	-3,027	-4,224	-1,197	-39.6
OPEC	1,732	1,471	-261	-15.1
Latin America	-3,322	-3,968	-646	-19.4
CBERA	-530	-664	-133	-25.1
Asia	15,610	13,818	-1,791	-11.5
Sub-Saharan Africa	-179	21	200	(4)
Central and Eastern Europe	-65	-164	-98	-150.7

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]Less than $500,000.
[3]Less than 0.05 percent.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2002.

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

Table 4-2
Leading changes in U.S. exports and imports of agricultural products, 2001 and 2002

Sector/commodity	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. EXPORTS:				
Increases:				
Cereals (AG030)	9,397	9,929	532	5.7
Animal or vegetable fats and oils (AG033)	1,405	1,917	512	36.4
Decreases:				
Cigarettes (AG045)	2,118	1,463	-655	-30.9
Poultry (AG005)	2,376	1,817	-559	-23.5
Cattle and beef (AG002)	3,335	2,952	-382	-11.5
Animal feeds (AG013)	4,508	4,189	-319	-7.1
All other	36,971	36,077	-893	-2.4
TOTAL	60,109	58,345	-1,764	-2.9
U.S. IMPORTS:				
Increases:				
Wine and certain other fermented beverages (AG041)	2,316	2,740	424	18.3
Cocoa, chocolate, and confectionery (AG037)	2,301	2,662	361	15.7
Decreases:				
Swine and pork (AG003)	1,129	1,026	-103	-9.1
All other	46,852	49,162	2,310	4.9
TOTAL	52,599	55,591	2,993	5.7

Note.-Calculations based on unrounded data.

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

U.S. BILATERAL TRADE

Largest trade balance shifts in 2002 from 2001:

Japan: U.S. surplus decreased by $946 million (9 percent) to $10 billion
China: U.S. surplus decreased by $380 million (62 percent) to $232 million
Mexico: U.S. surplus decreased by $333 million (22 percent) to $1.2 billion

In 2002, U.S. exports to Japan fell by 8 percent while U.S. imports from Japan increased by 5 percent. U.S. exports to China increased by 1.3 percent, but imports from China increased by 27 percent. U.S. exports to Mexico fell 2 percent while imports from Mexico rose by 4 percent.

Japan purchased more U.S. agricultural products in 2002 than any other country and, because Japan is a relatively small exporter of agricultural products, accounted for the bulk of the U.S. trade surplus in agricultural products. U.S. exports to Japan fell from $11.3 billion in 2001 to $10.4 billion in 2002, a decline of $926 million, much of which can be explained by declines in the value of shipments of beef and cigarettes. Exports to Japan of U.S. cattle and beef fell by $559 million, from about $1.5 billion in 2001 to $975 million in 2002, a decline of 36 percent, as Japanese consumers curtailed their consumption of both domestic and imported beef because of fears of BSE[4] which was found in some Japanese beef. U.S. cigarette exports to Japan fell from about $1.2 billion in 2001 to about $904 million, a decline of about $270 million in 2002, or 23 percent, even though the quantity of cigarette exports to Japan rose slightly. Japan is by far the largest

[4] Bovine spongiform encephalopathy (commonly called BSE or mad cow disease).

market for U.S. cigarette exports, accounting for about 62 percent of the value of U.S. cigarette exports in 2002.

China is the fifth-largest buyer of U.S. agricultural exports after Japan, Canada, Mexico, and Korea. It is the fifth-largest source of U.S. agricultural imports after Canada, Mexico, France, and Italy. Nearly one-half of U.S. agricultural exports to China consists of oilseeds, mainly soybeans, with a value of about $890 million in 2002 and over $1 billion in 2001. U.S. soybean exports to China fell, in part because of the strong U.S. dollar and in part because of low prices for soybeans in 2002. The most important U.S. agricultural import from China in 2002 was shellfish, which increased from $361 million in 2001 to $452 million in 2002. Fresh and frozen fish imports increased from $265 million in 2001 to $370 million in 2002, and, together with shellfish, accounted for about 43 percent of the value of U.S. imports from China in 2002. U.S. consumers bought more luxury food items in 2002 such as lobster, crab, and shrimp, and other seafood products.

Mexico, which is the third-largest buyer of U.S. agricultural products, and the second largest supplier of U.S. agricultural imports, exported slightly more and purchased slightly less from the United States in 2002. Frozen vegetables and beer were the principal U.S. imports from Mexico. Imports of frozen vegetables rose slightly in 2002 to about $1.8 billion, while beer imports rose more substantially, from about $877 million in 2001 to over $1 billion in 2002. Total U.S. imports of beer rose by about 10 percent in 2002, nearly 40 percent of which came from Mexico.[5] This was part of an ongoing trend of higher U.S. consumption of luxury items such as imported beer in 2002.

Agricultural Products 5-year Review[6]

Change in 2002 from 1997:

U.S. trade surplus: Decreased by $16.9 billion (86 percent) to $2.8 billion
U.S. exports: Decreased by $7.1 billion (11 percent) to $58.3 billion
U.S. imports: Increased by $9.7 billion (21 percent) to $55.6 billion

The U.S. trade balance for agricultural products declined substantially during 1997-2002, caused by both an increase in imports and a decrease in exports (table 4-3). Imports rose at twice the rate that exports declined. General factors affecting the balance during the period include low commodity prices, ample domestic and global supplies of bulk commodities, an expanding U.S. economy (which contributed to increasing demand for agricultural products), a strong U.S. dollar, NAFTA tariff preferences, Japanese economic stagnation, and the recovery of emerging Asian nations from financial difficulties. High-value products increased in importance for both imports and exports, as opposed to traditional bulk commodities.

The largest absolute improvements in the balance of trade during 1997-2002 were registered by coffee and tea ($2.2-billion reduction in the deficit) and sugar and other sweeteners ($365-million reduction in the deficit) (table 4-4). The largest absolute erosions in the trade balance during the period were accounted for by cigarettes ($3.1-billion reduction in the surplus) and oilseeds ($1.6-billion drop in the surplus, although it improved since 1999).

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[5] At the end of 2001, imported beer represented 11 percent of the U.S. beer market, with the Mexican brand "Corona Especial" the leading import. "The Next Beer War," *Modern Brewery Age*, Mar. 25, 2002, p. 8.

[6] The analysis in this section is based mainly on data and other information obtained from the U.S. Department of Commerce, the U.S. Department of Agriculture, the Food and Agriculture Organization of the United Nations, the World Bank, and the International Monetary Fund.

Table 4-3

Agricultural products (5-year review): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1997 and 2002[1]

Item	1997	2002	Change, 2002 from 1997 Absolute	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
Canada	7,224	9,121	1,896	26.3
Mexico	5,367	7,534	2,167	40.4
Japan	13,426	10,416	-3,010	-22.4
China	1,745	2,128	383	21.9
Korea	3,228	3,085	-144	-4.5
Netherlands	2,072	1,262	-810	-39.1
Italy	829	666	-163	-19.7
France	629	477	-151	-24.1
Thailand	583	634	51	8.8
Taiwan	2,801	2,101	-700	-25.0
All other	27,579	20,921	-6,658	-24.1
Total	65,485	58,345	-7,139	-10.9
EU-15	10,535	6,963	-3,572	-33.9
OPEC	2,954	2,658	-296	-10.0
Latin America	10,804	12,133	1,329	12.3
CBERA	2,608	2,630	22	0.8
Asia	27,178	22,636	-4,542	-16.7
Sub-Saharan Africa	756	933	177	23.4
Central and Eastern Europe	355	227	-128	-36.1
U.S. imports of merchandise for consumption:				
Canada	9,345	12,953	3,608	38.6
Mexico	4,825	6,378	1,553	32.2
Japan	458	461	4	0.8
China	1,009	1,896	888	88.0
Korea	189	254	65	34.1
Netherlands	1,267	1,876	609	48.1
Italy	1,649	2,150	501	30.4
France	1,682	2,260	578	34.4
Thailand	1,767	1,914	147	8.3
Taiwan	369	306	-63	-17.2
All other	23,282	25,142	1,860	8.0
Total	45,842	55,591	9,750	21.3
EU-15	8,644	11,187	2,542	29.4
OPEC	1,330	1,187	-143	-10.8
Latin America	15,651	16,101	450	2.9
CBERA	3,739	3,294	-445	-11.9
Asia	7,332	8,818	1,485	20.3
Sub-Saharan Africa	915	912	-3	-0.4
Central and Eastern Europe	228	391	162	71.0
U.S. merchandise trade balance:				
Canada	-2,121	-3,833	-1,712	-80.7
Mexico	542	1,155	613	113.1
Japan	12,969	9,955	-3,014	-23.2
China	737	232	-505	-68.5
Korea	3,039	2,831	-208	-6.9
Netherlands	805	-614	-1,419	(2)
Italy	-820	-1,484	-665	-81.1
France	-1,053	-1,782	-729	-69.3
Thailand	-1,184	-1,280	-96	-8.1
Taiwan	2,432	1,795	-637	-26.2
All other	4,297	-4,221	-8,519	(2)
Total	19,643	2,754	-16,889	-86.0
EU-15	1,891	-4,224	-6,114	(2)
OPEC	1,625	1,471	-153	-9.4
Latin America	-4,847	-3,968	879	18.1
CBERA	-1,131	-664	467	41.3
Asia	19,845	13,818	-6,027	-30.4
Sub-Saharan Africa	-159	21	180	(2)
Central and Eastern Europe	126	-164	-290	(2)

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2002.

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

Table 4-4
Leading changes in U.S. exports and imports of agricultural products (5-year review), 1997 and 2002

Sector/commodity	1997	2002	Change, 2002 from 1997 Absolute	Percent
	Million dollars			
U.S. EXPORTS:				
Increases:				
Fresh or frozen fish (AG006)	1,609	1,947	338	21.0
Sauces, condiments, and soups (AG035)	530	761	231	43.5
Swine and pork (AG003)	1,061	1,286	225	21.2
Decreases:				
Cigarettes (AG045)	4,409	1,463	-2,946	-66.8
Oilseeds (AG032)	7,567	5,790	-1,777	-23.5
Cereals (AG030)	11,105	9,929	-1,176	-10.6
Poultry (AG005)	2,515	1,817	-698	-27.8
All other	36,687	35,351	-1,336	-3.6
TOTAL	65,485	58,345	-7,139	-10.9
U.S. IMPORTS:				
Increases:				
Cattle and beef (AG002)	2,589	4,038	1,449	56.0
Shellfish (AG009)	4,473	5,910	1,437	32.1
Distilled spirits (AG042)	1,968	3,111	1,142	58.0
Malt beverages (AG040)	1,480	2,566	1,085	73.3
Wine and certain other fermented beverages (AG041)	1,716	2,740	1,025	59.7
Decreases:				
Coffee and tea (AG028)	4,071	1,942	-2,129	-52.3
Unmanufactured tobacco (AG043)	1,089	716	-374	-34.3
Sugar and other sweeteners (AG012)	1,321	961	-359	-27.2
All other	27,135	33,608	6,473	23.9
TOTAL	45,842	55,591	9,750	21.3

Note.-Calculations based on unrounded data.

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

U.S. imports

U.S. imports of agricultural products continued a long-term rise, reaching $55.6 billion in 2002 (see table 4-3). The greatest absolute increase during the period was in imports of cattle and beef ($1.4 billion). Most of this was accounted for by increased imports of beef from Canada, Australia, and New Zealand, and live cattle from Canada and Mexico, as U.S. production was in a cyclical decline. Closely following was shellfish, imports of which increased by $1.4 billion during the period under review. Canada, Vietnam, China, and India supplied most of the increase, which mainly consisted of shrimp and scallops. Limited domestic supplies, increasing demand, and a strong U.S. economy across the period fueled the increase in such imports. Alcoholic beverages (distilled spirits, malt beverages, and wine and certain other fermented beverages) were another major component in the rise in U.S. imports during 1997-2002, registering an increase of $3.3 billion. Major suppliers of this rise included the EU, Mexico, Australia, and Sweden. Increasing demand, particularly for premium, imported brands, was aided by a strong U.S. economy during the period.

Despite the overall rise in U.S. imports of agricultural products, substantial decreases in value were registered by some product categories. U.S. imports of coffee and tea fell by $2.1 billion during 1997-2002, primarily the result of global oversupply and falling prices. Mexico, Colombia, Brazil, and Guatemala suffered the greatest declines. U.S. imports of unmanufactured tobacco fell by $374 million during the period, mainly due to a fall in U.S. production of cigarettes caused by a drop in domestic demand and a shift to overseas production in European export markets. Imports from Turkey and the Dominican Republic

experienced the largest declines. U.S. imports of sugar fell $359 million during the period under review, resulting from a contraction in the tariff rate quota for raw sugar in response to increased U.S. production.[7] The Dominican Republic, the Philippines, Argentina, Brazil, and Australia accounted for the bulk of the decline.

In general, U.S. imports of agricultural products rose from NAFTA sources, Australia, China, the EU, and Chile, prompted by tariff preferences, exchange rates, and a strong U.S. economy. Imports fell from Central and South American suppliers (not including Mexico), mainly the result of economic and social problems in the supplying countries, low bulk commodity prices, and increased competition from Asian sources.

U.S. exports

U.S. exports of agricultural products declined irregularly during 1997-2002, by 11 percent, to $58.3 billion (see table 4-3). The greatest absolute declines in such exports occurred for cigarettes ($2.9 billion), oilseeds ($1.8 billion), cereals ($1.2 billion), and poultry ($698 million). Cigarette exports fell as a result of declining U.S. production, particularly as U.S. firms shifted to European production sites; static demand in European markets; and price discounting in the Japanese market. Oilseed (mainly soybean) and cereal (mainly wheat and corn) exports dropped in value mainly as a result of falling prices and ample global supplies. Poultry exports (principally frozen chicken leg quarters) declined in value mainly as a result of a drop in volume and prices in major export markets (Russia and Hong Kong) and a shift in volume to low-price, nontraditional markets (Guatemala, Cuba, Georgia, Romania, and Turkey).

The largest absolute export increases during the period were accounted for by fresh or frozen fish ($338 million); sauces, condiments, and soups ($231 million); and swine and pork ($225 million). The rise in fish exports was accounted for mainly by frozen Alaskan pollock fillets (mainly in block form), surimi (fish paste) and roe; markets contributing the largest increases included Korea and the EU. Korea and the EU are major fish processors and import U.S. products as raw materials to supplement limited domestic supplies. Soups and broths accounted for the bulk of the increase in the sauces, condiments, and soups category, with Mexico the primary growth market owing to rising demand. Pork carcasses and cuts accounted for the greatest share of the rise in swine and pork exports; Japan was the primary market responsible for the increase. Japanese consumers shifted consumption from beef to pork as a result of concerns regarding mad cow disease.

U.S. exports of agricultural products generally shifted from traditional Asian markets (Japan, Korea, Taiwan, Hong Kong) and Europe to Western Hemisphere and relatively new Asian markets (China, India, Thailand, Vietnam), mainly because of the NAFTA, the Asian economic crisis, a prolonged Japanese recession, robust emerging Asian economies, and increased competition from third-country suppliers in traditional U.S. export markets.

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[7] The United States maintains a tariff rate quota for imports of sugar and sugar-containing products. The quota allocation for raw sugar, by far the largest category, declined by 47 percent between 1997-2002.

Table 4-5
Agricultural products: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
AG001	Certain miscellaneous animals and meats:				
	Exports	1,631	1,460	-171	-10.5
	Imports	1,509	1,510	1	0.1
	Trade balance	122	-50	-172	([3])
AG002	Cattle and beef:				
	Exports	3,335	2,952	-382	-11.5
	Imports	4,062	4,038	-24	-0.6
	Trade balance	-727	-1,086	-359	-49.4
AG003	Swine and pork:				
	Exports	1,364	1,286	-78	-5.7
	Imports	1,129	1,026	-103	-9.1
	Trade balance	235	260	25	10.5
AG004	Sheep and meat of sheep:				
	Exports	25	26	2	6.1
	Imports	238	275	38	15.8
	Trade balance	-213	-249	-36	-17.0
AG005	Poultry:				
	Exports	2,376	1,817	-559	-23.5
	Imports	97	111	14	14.6
	Trade balance	2,279	1,705	-573	-25.2
AG006	Fresh or frozen fish:				
	Exports	2,016	1,947	-68	-3.4
	Imports	2,958	3,158	200	6.8
	Trade balance	-943	-1,211	-268	-28.5
AG007	Canned fish:				
	Exports	202	181	-20	-10.1
	Imports	568	664	95	16.8
	Trade balance	-367	-482	-116	-31.6
AG008	Cured and other fish:				
	Exports	193	159	-34	-17.7
	Imports	298	300	2	0.7
	Trade balance	-104	-141	-36	-34.8
AG009	Shellfish:				
	Exports	708	737	29	4.2
	Imports	5,908	5,910	2	([4])
	Trade balance	-5,200	-5,172	27	0.5
AG010	Dairy produce:				
	Exports	723	618	-104	-14.4
	Imports	1,574	1,488	-86	-5.4
	Trade balance	-851	-870	-19	-2.2
AG011	Eggs:				
	Exports	162	155	-7	-4.3
	Imports	20	28	8	42.6
	Trade balance	142	127	-15	-10.8
AG012	Sugar and other sweeteners:				
	Exports	391	365	-27	-6.8
	Imports	843	961	119	14.1
	Trade balance	-451	-597	-145	-32.2
AG012A	Sugar:				
	Exports	90	74	-17	-18.3
	Imports	547	569	22	4.0
	Trade balance	-457	-495	-38	-8.4
AG012B	High fructose corn sweetener:				
	Exports	83	63	-20	-24.1
	Imports	39	34	-5	-11.8
	Trade balance	44	29	-15	-34.8

See footnote(s) at end of table.

Table 4-5--*Continued*
Agricultural products: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
AG013	Animal feeds:				
	Exports	4,508	4,189	-319	-7.1
	Imports	626	670	44	7.0
	Trade balance	3,881	3,518	-363	-9.3
AG014	Live plants:				
	Exports	116	113	-3	-2.4
	Imports	495	503	8	1.6
	Trade balance	-379	-389	-11	-2.8
AG015	Seeds:				
	Exports	768	892	124	16.2
	Imports	436	431	-5	-1.1
	Trade balance	332	461	129	39.0
AG016	Cut flowers:				
	Exports	39	36	-3	-8.4
	Imports	565	541	-24	-4.2
	Trade balance	-526	-505	21	3.9
AG017	Miscellaneous vegetable substances:				
	Exports	505	476	-29	-5.7
	Imports	794	760	-33	-4.2
	Trade balance	-288	-284	4	1.4
AG018	Fresh, chilled, or frozen vegetables:				
	Exports	1,304	1,353	49	3.7
	Imports	2,628	2,758	131	5.0
	Trade balance	-1,324	-1,405	-82	-6.2
AG019	Prepared or preserved vegetables, mushrooms, and olives:				
	Exports	1,387	1,365	-22	-1.6
	Imports	1,493	1,574	81	5.4
	Trade balance	-106	-209	-103	-97.4
AG020	Edible nuts:				
	Exports	1,309	1,542	233	17.8
	Imports	670	701	31	4.6
	Trade balance	639	841	202	31.7
AG021	Tropical fruit:				
	Exports	49	46	-3	-5.8
	Imports	1,616	1,705	89	5.5
	Trade balance	-1,567	-1,659	-92	-5.8
AG022	Citrus fruit:				
	Exports	613	636	23	3.8
	Imports	308	325	17	5.5
	Trade balance	305	311	6	2.0
AG023	Deciduous fruit:				
	Exports	832	788	-44	-5.3
	Imports	270	294	24	8.7
	Trade balance	562	494	-68	-12.1
AG024	Other fresh fruit:				
	Exports	674	708	34	5.1
	Imports	1,065	1,183	118	11.1
	Trade balance	-392	-476	-84	-21.4
AG025	Dried fruit other than tropical:				
	Exports	349	338	-11	-3.1
	Imports	63	90	26	41.7
	Trade balance	285	248	-37	-13.1

See footnote(s) at end of table.

Table 4-5--*Continued*
Agricultural products: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
AG026	Frozen fruit:				
	Exports	80	80	([5])	-0.3
	Imports	117	152	35	30.0
	Trade balance	-37	-72	-35	-96.3
AG027	Prepared or preserved fruit:				
	Exports	195	184	-11	-5.6
	Imports	559	622	63	11.2
	Trade balance	-364	-437	-74	-20.3
AG028	Coffee and tea:				
	Exports	314	297	-16	-5.2
	Imports	1,915	1,942	27	1.4
	Trade balance	-1,601	-1,645	-44	-2.7
AG029	Spices:				
	Exports	76	70	-6	-8.5
	Imports	517	549	32	6.2
	Trade balance	-441	-480	-39	-8.7
AG030	Cereals:				
	Exports	9,397	9,929	532	5.7
	Imports	761	735	-26	-3.4
	Trade balance	8,636	9,194	558	6.5
AG031	Milled grains, malts, and starches:				
	Exports	446	594	147	33.0
	Imports	305	379	74	24.4
	Trade balance	142	215	73	51.5
AG032	Oilseeds:				
	Exports	5,642	5,790	148	2.6
	Imports	203	191	-12	-5.9
	Trade balance	5,439	5,599	160	2.9
AG033	Animal or vegetable fats and oils:				
	Exports	1,405	1,917	512	36.4
	Imports	1,128	1,285	157	13.9
	Trade balance	277	632	355	128.3
AG034	Pasta, cereals, and other bakery goods:				
	Exports	1,153	1,184	30	2.6
	Imports	1,902	2,191	290	15.2
	Trade balance	-748	-1,008	-259	-34.7
AG035	Sauces, condiments, and soups:				
	Exports	737	761	24	3.2
	Imports	576	670	94	16.4
	Trade balance	161	91	-71	-43.7
AG036	Infant formulas, malt extracts, and other edible preparations:				
	Exports	2,729	2,582	-147	-5.4
	Imports	659	795	136	20.6
	Trade balance	2,070	1,787	-283	-13.7
AG037	Cocoa, chocolate, and confectionery:				
	Exports	997	817	-181	-18.1
	Imports	2,301	2,662	361	15.7
	Trade balance	-1,304	-1,846	-542	-41.6
AG038	Fruit and vegetable juices:				
	Exports	665	682	17	2.5
	Imports	661	675	14	2.1
	Trade balance	5	7	2	52.3

See footnote(s) at end of table.

Table 4-5--*Continued*
Agricultural products: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
AG039	Nonalcoholic beverages, excluding fruit and vegetable juices:				
	Exports	312	334	22	7.2
	Imports	745	823	77	10.4
	Trade balance	-434	-489	-55	-12.7
AG040	Malt beverages:				
	Exports	191	171	-21	-10.9
	Imports	2,333	2,566	233	10.0
	Trade balance	-2,142	-2,395	-254	-11.8
AG041	Wine and certain other fermented beverages:				
	Exports	531	541	10	1.9
	Imports	2,316	2,740	424	18.3
	Trade balance	-1,785	-2,199	-414	-23.2
AG042	Distilled spirits:				
	Exports	534	555	20	3.8
	Imports	2,848	3,111	263	9.2
	Trade balance	-2,313	-2,556	-243	-10.5
AG043	Unmanufactured tobacco:				
	Exports	1,268	1,050	-219	-17.3
	Imports	680	716	35	5.2
	Trade balance	588	334	-254	-43.2
AG044	Cigars and certain other manufactured tobacco:				
	Exports	616	485	-131	-21.3
	Imports	285	299	14	4.9
	Trade balance	331	185	-145	-44.0
AG045	Cigarettes:				
	Exports	2,118	1,463	-655	-30.9
	Imports	189	230	41	21.7
	Trade balance	1,930	1,234	-696	-36.1
AG046	Hides, skins, and leather:				
	Exports	2,650	2,390	-259	-9.8
	Imports	1,032	935	-98	-9.5
	Trade balance	1,617	1,456	-162	-10.0
AG047	Furskins:				
	Exports	173	173	([5])	-0.2
	Imports	96	87	-8	-8.8
	Trade balance	77	85	8	10.5
AG048	Wool and other animal hair:				
	Exports	11	26	15	133.8
	Imports	57	42	-16	-27.4
	Trade balance	-46	-16	30	65.5
AG049	Cotton, not carded or combed:				
	Exports	2,164	2,015	-150	-6.9
	Imports	4	20	16	384.5
	Trade balance	2,160	1,995	-166	-7.7

See footnote(s) at end of table.

Table 4-5--*Continued*
Agricultural products: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
AG050	Ethyl alcohol for nonbeverage purposes:				
	Exports	125	71	-53	-42.7
	Imports	178	170	-8	-4.4
	Trade balance	-53	-99	-45	-85.4

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes
[3]Not meaningful for purposes of comparison.
[4]Less than 0.05 percent.
[5]Less than $500,000.

Note.—Calculations based on unrounded data.

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

CHAPTER 5
Forest Products

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Change in 2002 from 2001:

U.S. trade deficit: Increased by $1.3 billion (10 percent) to $14.2 billion
U.S. exports: Decreased by $918 million (4 percent) to $22.8 billion
U.S. imports: Increased by $370 million (1 percent) to $37.0 billion

The U.S. trade deficit in forest products increased between 2001 and 2002, as exports declined and imports increased slightly (table 5-1). Product groups with the largest decreases in exports included printing and writing papers, printed matter, industrial papers and paperboards, and logs and rough wood products (table 5-2). Sluggish economic conditions and cutbacks in advertising spending in many foreign markets reduced demand and prices for U.S. exports of printing and writing papers. Slow economic growth in Mexico and Japan, two principal markets for U.S. exports of printed matter, led to declining demand for these exports during 2002. Declining industrial activity in important foreign markets, and with it a drop in demand for packaging materials, coupled with growth in foreign packaging capacity, led to lower U.S. exports of industrial papers and paperboards. A continued slump in housing starts in Japan during 2002 reduced demand for U.S. exports of logs and rough wood products.

Product groups with the largest increases in imports were wood veneer and wood panels, miscellaneous paper products, and moldings, millwork, and joinery (see table 5-2). A strong housing market (both housing starts and residential repair and remodeling expenditures) in the United States during 2002 led to increased imports of wood veneer, wood panels, moldings, millwork, and joinery. In recent years, countries with sizeable forest resources, such as Brazil, Chile, Indonesia, and New Zealand, have increased production of these finished wood products as a way to retain more of the value of their wood resources. The large residential construction market in the United States has provided opportunities for these countries to expand their exports of these products. Trade statistics for all product groups in the forest products sector are presented in table 5-3 at the end of this chapter.

U.S. BILATERAL TRADE

Largest trade balance shifts in 2002 from 2001:

Canada: U.S. deficit decreased by $1.2 billion (7 percent) to $14.8 billion
Japan: U.S. surplus decreased by $538 million (28 percent) to $1.4 billion
China: U.S. deficit increased by $343 million (25 percent) to $1.7 billion

In 2002, the United States had a trade surplus in forest products with 6 of its top 10 trade partners (Mexico, Japan, the United Kingdom, Korea, Italy, and Hong Kong) and a trade deficit with the remainder (see table 5-1). Canada was the largest sector trade partner of the United States, accounting

Table 5-1

Forest products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001 and 2002[1]

Item	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
Canada	7,462	7,502	41	0.5
Mexico	3,282	3,056	-226	-6.9
China	820	1,058	239	29.2
Japan	2,497	2,017	-480	-19.2
United Kingdom	1,143	1,047	-97	-8.4
Germany	671	558	-113	-16.8
Brazil	223	204	-19	-8.6
Korea	561	659	99	17.6
Italy	636	627	-9	-1.4
Hong Kong	444	426	-18	-4.0
All other	6,005	5,670	-334	-5.6
Total	23,743	22,825	-918	-3.9
EU-15	4,240	3,852	-388	-9.1
OPEC	516	465	-51	-9.9
Latin America	5,170	4,769	-401	-7.8
CBERA	985	945	-40	-4.0
Asia	5,570	5,473	-97	-1.7
Sub-Saharan Africa	148	120	-28	-18.8
Central and Eastern Europe	79	77	-2	-2.4
U.S. imports of merchandise for consumption:				
Canada	23,449	22,311	-1,138	-4.9
Mexico	999	1,038	38	3.8
China	2,168	2,749	582	26.8
Japan	542	600	58	10.6
United Kingdom	805	729	-76	-9.5
Germany	906	1,031	125	13.8
Brazil	1,145	1,288	142	12.4
Korea	348	404	55	15.9
Italy	403	392	-11	-2.6
Hong Kong	390	392	2	0.6
All other	5,522	6,114	592	10.7
Total	36,678	37,048	370	1.0
EU-15	4,371	4,778	407	9.3
OPEC	610	547	-63	-10.3
Latin America	2,933	3,268	335	11.4
CBERA	113	124	11	9.8
Asia	4,960	5,662	702	14.1
Sub-Saharan Africa	119	121	1	1.1
Central and Eastern Europe	57	56	-1	-2.4
U.S. merchandise trade balance:				
Canada	-15,987	-14,809	1,178	7.4
Mexico	2,283	2,018	-265	-11.6
China	-1,348	-1,691	-343	-25.4
Japan	1,955	1,417	-538	-27.5
United Kingdom	338	318	-20	-6.0
Germany	-235	-473	-238	-101.2
Brazil	-922	-1,083	-161	-17.5
Korea	212	255	43	20.3
Italy	233	235	2	0.8
Hong Kong	54	34	-20	-37.3
All other	482	-444	-926	(2)
Total	-12,935	-14,223	-1,288	-10.0
EU-15	-132	-926	-795	-604.2
OPEC	-94	-82	12	12.5
Latin America	2,236	1,500	-736	-32.9
CBERA	872	821	-51	-5.8
Asia	610	-189	-798	(2)
Sub-Saharan Africa	28	-1	-29	(2)
Central and Eastern Europe	22	21	-1	-2.4

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2002.

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

Table 5-2
Leading changes in U.S. exports and imports of forest products, 2001 and 2002

Sector/commodity	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. EXPORTS:				
Increases:				
Certain specialty papers (AG064)	618	1,056	439	71.0
Wood pulp and wastepaper (AG059)	3,711	3,853	142	3.8
Miscellaneous paper products (AG065)	1,322	1,431	109	8.3
Decreases:				
Printing and writing papers (AG063)	1,308	620	-688	-52.6
Printed matter (AG066)	4,353	4,006	-347	-8.0
Industrial papers and paperboards (AG061)	5,403	5,228	-174	-3.2
Logs and rough wood products (AG051)	1,622	1,490	-132	-8.1
All other	5,407	5,141	-266	-4.9
TOTAL	23,743	22,825	-918	-3.9
U.S. IMPORTS:				
Increases:				
Wood veneer and wood panels (AG054)	3,280	3,730	450	13.7
Miscellaneous paper products (AG065)	1,295	1,740	444	34.3
Moldings, millwork, and joinery (AG053)	2,521	2,866	344	13.6
Decreases:				
Newsprint (AG062)	3,597	3,039	-558	-15.5
Printing and writing papers (AG063)	4,761	4,372	-389	-8.2
Wood pulp and wastepaper (AG059)	2,650	2,371	-279	-10.5
All other	18,574	18,931	357	1.9
TOTAL	36,678	37,048	370	1.0

Note.-Calculations based on unrounded data.

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

for 50 percent of total U.S. trade (exports plus imports) in forest products in 2002. Mexico, the second-largest trade partner, accounted for only 7 percent of total U.S. trade in forest products.

U.S. trade in forest products with Canada contracted by $1.1 billion between 2001 and 2002, from $30.9 billion to $29.8 billion. A small increase in U.S. exports to Canada was accompanied by a decrease in U.S. imports (see table 5-1). Lumber, newsprint, and printing and writing papers accounted for much of the decline in the value of U.S. imports. Despite an increase in the volume of U.S. lumber imports from Canada during 2002, due to brisk residential construction activity and strong demand for lumber in the United States, the value of these imports declined between 2001 and 2002 because of declining prices resulting from an oversupply of lumber in the U.S. market.[1] The volume of imports of newsprint and printing and writing papers from Canada rose slightly between 2001 and 2002, but the value of these imports fell as a downturn in advertising spending in the United States weakened prices for these paper grades.[2]

In 2002, the United States maintained a large trade surplus in forest products with Japan, although it fell by 28 percent compared with 2001 (see table 5-1). U.S. exports of forest products to Japan decreased moderately, while U.S. imports registered a small increase. Continued weakness in the Japanese economy during 2002 reduced demand for a variety of forest products. Housing starts in Japan dropped by an

[1] "U.S. Lumber Paralyzed," *Wood Markets*, Vol. 7, No. 8, Oct. 2002, p. 1.

[2] Gregory Rudder, "U.S. Newsprint Still Soft, Producers Work Through Part of Price Hike," *Pulp & Paper*, Dec. 2002; Bruno Navarro, "Coated Free-Sheet Prices, Demand Set for a Rebound in 2003," *Pulp & Paper*, Mar. 2003.

estimated 5 percent, causing a decline in U.S. exports of lumber and logs and rough wood products.[3] Reduced industrial activity, advertising expenditures, and papermaking led to lower U.S. exports of industrial papers and paperboards (packaging materials), newsprint, and wood pulp and wastepaper, respectively.

Total U.S. trade in forest products with China has grown rapidly in recent years, from $2.2 billion in 1999 to $3.8 billion in 2002. The U.S. trade deficit in forest products has also grown during this period; in 2002, a rise in U.S. exports of forest products to China was more than offset by an increase in imports (see table 5-1). Increases in U.S. exports of industrial papers and paperboards and lumber during 2002 were driven by rising industrial production and residential construction in China. Increased exports of wood pulp and wastepaper served an expanding Chinese paper industry. U.S. imports of wood veneer, wood panels, moldings, millwork, and joinery rose in response to strong U.S. residential construction and residential repair and remodeling during 2002. Growth in U.S. imports of printed matter, such as books, brochures, and greeting cards, and miscellaneous paper products, such as diaries, memo pads, and address books, occurred as Chinese output and exports of these products have increased and made inroads into the U.S. market.

[3] U.S. Department of Agriculture, Foreign Agricultural Service, *Japan Solid Wood Products Annual 2002,* Tokyo, AGR No. JA2032, Aug. 16, 2002.

Table 5-3
Forest products: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
AG051	Logs and rough wood products:				
	Exports	1,622	1,490	-132	-8.1
	Imports	582	582	([3])	([4])
	Trade balance	1,039	907	-132	-12.7
AG052	Lumber:				
	Exports	1,781	1,720	-61	-3.4
	Imports	6,854	6,647	-207	-3.0
	Trade balance	-5,073	-4,927	146	2.9
AG053	Moldings, millwork, and joinery:				
	Exports	467	443	-25	-5.3
	Imports	2,521	2,866	344	13.6
	Trade balance	-2,054	-2,423	-369	-18.0
AG054	Wood veneer and wood panels:				
	Exports	889	928	39	4.4
	Imports	3,280	3,730	450	13.7
	Trade balance	-2,391	-2,801	-411	-17.2
AG055	Wooden containers:				
	Exports	150	135	-15	-10.1
	Imports	555	612	57	10.2
	Trade balance	-405	-477	-72	-17.8
AG056	Tools and tool handles of wood:				
	Exports	37	42	5	13.1
	Imports	130	131	1	1.0
	Trade balance	-93	-89	4	3.8
AG057	Miscellaneous articles of wood:				
	Exports	175	167	-8	-4.5
	Imports	1,041	1,152	111	10.7
	Trade balance	-866	-985	-119	-13.8
AG058	Cork and rattan:				
	Exports	53	61	8	14.8
	Imports	522	570	48	9.3
	Trade balance	-469	-509	-40	-8.6
AG059	Wood pulp and wastepaper:				
	Exports	3,711	3,853	142	3.8
	Imports	2,650	2,371	-279	-10.5
	Trade balance	1,061	1,482	421	39.7
AG060	Paper boxes and bags:				
	Exports	1,445	1,315	-130	-9.0
	Imports	1,011	1,121	110	10.9
	Trade balance	435	195	-240	-55.2
AG061	Industrial papers and paperboards:				
	Exports	5,403	5,228	-174	-3.2
	Imports	3,276	3,464	188	5.8
	Trade balance	2,127	1,764	-363	-17.1
AG061A	Paperboard:				
	Exports	3,165	3,538	373	11.8
	Imports	1,591	1,829	238	14.9
	Trade balance	1,574	1,709	135	8.6
AG061B	Tissue and tissue products:				
	Exports	1,283	1,211	-72	-5.6
	Imports	1,082	1,237	155	14.3
	Trade balance	201	-26	-227	([5])
AG061C	Industrial paper:				
	Exports	954	480	-475	-49.7
	Imports	602	398	-204	-33.8
	Trade balance	352	81	-271	-76.9

See footnote(s) at end of table.

Table 5-3--*Continued*
Forest products sector: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
AG062	Newsprint:				
	Exports	409	330	-79	-19.3
	Imports	3,597	3,039	-558	-15.5
	Trade balance	-3,188	-2,709	479	15.0
AG063	Printing and writing papers:				
	Exports	1,308	620	-688	-52.6
	Imports	4,761	4,372	-389	-8.2
	Trade balance	-3,453	-3,752	-299	-8.7
AG064	Certain specialty papers:				
	Exports	618	1,056	439	71.0
	Imports	1,067	909	-158	-14.8
	Trade balance	-449	147	597	([5])
AG065	Miscellaneous paper products:				
	Exports	1,322	1,431	109	8.3
	Imports	1,295	1,740	444	34.3
	Trade balance	26	-309	-335	([5])
AG066	Printed matter:				
	Exports	4,353	4,006	-347	-8.0
	Imports	3,536	3,742	207	5.9
	Trade balance	817	263	-554	-67.8

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes
[3]Less than $500,000.
[4]Less than 0.05 percent.
[5]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data.

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

CHAPTER 6
Chemicals and Related Products

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Change in 2002 from 2001:

U.S. trade deficit: Increased by $7.9 billion (109 percent) to $15.2 billion
U.S. exports: Increased by $428 million (less than 1 percent) to $91.7 billion
U.S. imports: Increased by $8.4 billion (9 percent) to $107 billion

The U.S. trade deficit for chemicals and related products more than doubled in 2002, continuing a deficit position that began in 2000 after a number of years of a surplus (table 6-1).[1] Increased imports of medicinal chemicals (pharmaceuticals) accounted for most of the deficit increase (table 6-2). Several new and innovative medicines were introduced into the U.S. market in 2002; 24 new drugs and 8 new biologicals were approved by the Food and Drug Administration during the year and many of these products were imported from low-cost suppliers.[2]

Exports of organic commodity chemicals, other plastics in primary forms, and polyethylene resins in primary forms increased in 2002 largely because the price of natural gas (the primary raw material for these products for most U.S. producers) in the U.S. market declined to parity as compared to petroleum.[3] This reduced costs for U.S. producers as compared with foreign producers in Western Europe and Asia, most of whom use petroleum-based raw materials. As a result, U.S. producers were able to reduce prices and compete more effectively in world markets. Exports of these products also increased as a result of a moderate economic recovery in parts of Asia and Latin America and because U.S. products are viewed as high quality compared with those of many foreign producers. In addition, Shintech, Inc., a Japanese firm, began production of plastics in primary forms at a new plant in the United States.[4]

Export increases in these products were offset by export decreases in organic specialty chemicals and polyvinyl resins in primary form. U.S. exports of these products were competing with low-cost gas-derived products from the Middle East and Asian countries, which increased their capacity in 2001.[5]

The largest increases in imports were miscellaneous plastic products and pneumatic tires and tubes.[6] The largest decreases in imports were certain organic chemicals and fertilizers, with both markets being influenced by the generally slow world economy. In addition, the lower cost of natural gas, also a

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[1] For additional information, see "Pneumatic Tires and Tubes" in this chapter.

[2] For more information on 10-year pharmaceutical trends, see "Medicinal Chemicals" in ch. 3.

[3] Kevin Swift and Martha Moore, *The Business of Chemistry, 1st Quarter, 2003* p. 4. Petroleum is a globally traded commodity and the price is determined in a world market; natural gas is not traded on the world market, so prices are determined by local and regional conditions.

[4] Mihir Patel, Occidental Chemical, telephone interview by USITC staff, Mar. 22, 2002.

[5] Pamela Sauer, "Mapping the Future of European Chemicals," *Chemical Marketing Report*, Mar. 26, 2001, p. 5.

[6] For additional information, see "Pneumatic Tires and Tubes" in this chapter.

Table 6-1
Chemicals and related products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001 and 2002[1]

Item	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
Canada	19,692	20,115	423	2.1
Ireland	1,120	1,270	150	13.4
Mexico	12,266	12,444	178	1.4
Japan	6,105	5,762	-343	-5.6
United Kingdom	5,806	5,179	-627	-10.8
Germany	3,059	2,886	-173	-5.7
China	2,315	3,069	754	32.6
France	3,032	3,185	153	5.0
Belgium	4,547	5,240	693	15.2
Netherlands	3,812	4,127	315	8.3
All other	29,520	28,425	-1,095	-3.7
Total	91,274	91,702	428	0.5
EU-15	24,711	25,058	347	1.4
OPEC	2,091	1,761	-331	-15.8
Latin America	21,664	20,713	-951	-4.4
CBERA	2,176	2,188	13	0.6
Asia	18,651	19,754	1,102	5.9
Sub-Saharan Africa	780	699	-80	-10.3
Central and Eastern Europe	304	278	-26	-8.5
U.S. imports of merchandise for consumption:				
Canada	16,398	16,673	275	1.7
Ireland	13,355	16,282	2,927	21.9
Mexico	3,388	3,637	249	7.3
Japan	8,601	9,099	499	5.8
United Kingdom	7,466	8,195	729	9.8
Germany	7,662	8,892	1,230	16.1
China	5,333	6,262	929	17.4
France	4,883	5,119	236	4.8
Belgium	2,090	2,054	-36	-1.7
Netherlands	1,541	1,523	-18	-1.2
All other	27,847	29,188	1,340	4.8
Total	98,564	106,924	8,359	8.5
EU-15	42,784	48,700	5,916	13.8
OPEC	4,742	5,024	282	5.9
Latin America	7,778	7,904	125	1.6
CBERA	1,312	1,109	-203	-15.4
Asia	20,777	22,768	1,991	9.6
Sub-Saharan Africa	660	448	-212	-32.1
Central and Eastern Europe	1,167	1,199	32	2.8
U.S. merchandise trade balance:				
Canada	3,294	3,442	148	4.5
Ireland	-12,235	-15,012	-2,777	-22.7
Mexico	8,878	8,807	-71	-0.8
Japan	-2,496	-3,337	-841	-33.7
United Kingdom	-1,660	-3,016	-1,356	-81.7
Germany	-4,603	-6,007	-1,403	-30.5
China	-3,017	-3,193	-176	-5.8
France	-1,851	-1,934	-83	-4.5
Belgium	2,457	3,186	729	29.7
Netherlands	2,271	2,605	334	14.7
All other	1,672	-763	-2,435	(2)
Total	-7,290	-15,222	-7,932	-108.8
EU-15	-18,073	-23,642	-5,569	-30.8
OPEC	-2,651	-3,263	-612	-23.1
Latin America	13,886	12,809	-1,077	-7.8
CBERA	864	1,079	215	24.9
Asia	-2,126	-3,015	-889	-41.8
Sub-Saharan Africa	120	251	131	109.9
Central and Eastern Europe	-863	-921	-58	-6.7

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2002.

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

Table 6-2
Leading changes in U.S. exports and imports of chemicals and related products, 2001 and 2002

Sector/commodity	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. EXPORTS:				
Increases:				
Medicinal chemicals (CH025)	18,169	18,742	573	3.2
Organic commodity chemicals (CH010)	1,494	2,010	515	34.5
Other plastics in primary forms (CH036)	6,766	7,189	423	6.3
Polyethylene resins in primary forms (CH031)	2,416	2,590	173	7.2
Decreases:				
Organic specialty chemicals (CH011)	5,678	5,050	-627	-11.1
Polyvinyl chloride resins in primary forms (CH033)	1,004	781	-223	-22.2
Miscellaneous rubber products (CH042)	2,645	2,437	-208	-7.9
Chlor-alkali chemicals (CH015)	1,054	851	-204	-19.3
All other	52,049	52,052	3	([1])
TOTAL	91,274	91,702	428	0.5
U.S. IMPORTS:				
Increases:				
Medicinal chemicals (CH025)	33,956	40,699	6,742	19.9
Miscellaneous plastic products (CH041)	12,376	13,459	1,083	8.8
Pneumatic tires and tubes (new) (CH039)	4,146	4,694	548	13.2
Major primary olefins (CH007)	2,913	3,397	485	16.6
Decreases:				
Certain organic chemicals (CH012)	5,148	4,699	-449	-8.7
Fertilizers (CH016)	3,478	3,043	-435	-12.5
Miscellaneous inorganic chemicals (CH013)	5,195	4,948	-246	-4.7
Organic specialty chemicals (CH011)	6,962	6,781	-181	-2.6
All other	24,391	25,203	812	3.3
TOTAL	98,564	106,924	8,359	8.5

[1]Less than 0.05 percent.

Note.-Calculations based on unrounded data.

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

major raw material for certain fertilizers, made the cost of domestic fertilizer more competitive in the U.S. market as compared with imported fertilizers. Trade statistics for all commodity/industry groups in the chemicals and related products sector are presented in table 6-3 at the end of this chapter.

U.S. BILATERAL TRADE

Largest trade balance shifts in 2002 from 2001:

Ireland: U.S. deficit increased by $2.8 billion (23 percent) to $15.0 billion
Germany: U.S. deficit increased by $1.4 billion (31 percent) to $6.0 billion
United Kingdom: U.S. deficit increased by $1.4 billion (82 percent) to $3.0 billion

The largest increase in the U.S. bilateral trade deficit was with Ireland, mostly a result of developments in the pharmaceutical industry.[7] The U.S. trade balances with Germany and the United Kingdom, two major industrial and chemical-producing nations that have large multinational pharmaceutical companies, were also influenced by bilateral trade in pharmaceuticals. In 2002, U.S. pharmaceutical imports

[7] For additional information, see "Medicinal Chemicals" in ch. 3.

from the United Kingdom accounted for 66 percent of total U.S. imports from the United Kingdom, and U.S. pharmaceutical exports accounted for 51 percent of total U.S. exports to the United Kingdom. Similarly, U.S. pharmaceutical imports accounted for 48 percent of total U.S. imports from Germany, while U.S. exports account for 33 percent of total U.S. exports to Germany. These increased deficits reflect, in part, the increasing U.S. consumption of pharmaceuticals. Furthermore, because pharmaceutical prices are unregulated in the United States but are regulated in Europe, U.S. imports tend to be higher priced products as compared with U.S. exports to these two countries.

The largest increase in the U.S. bilateral trade surplus was with Canada,[8] the United States' primary trading partner in chemicals and related products, largely due to proximity, similar economies, fostering of regional integration of the industries and markets, and reduced tariff rates under the CFTA and NAFTA. An increase in U.S. exports to Canada of primarily specialty and industrial chemicals was partly the result of a surging Canadian economy and low prices for natural gas and natural gas liquids, which increased U.S. competitiveness in the Canadian market, in spite of a relatively stronger U.S. dollar. This has occurred despite lessening gas supplies and possible increased environmental restrictions imposed on the Canadian chemical industry.[9]

Mexico was the second-largest U.S. trading partner (in terms of total trade) and is an important market because of its abundant natural gas reserves (which is used as raw material for many organic commodity chemicals, plastics, and polyethylene resins by most U.S. producers), large domestic market, border manufacturing, and proximity to the United States. Growth in U.S.-Mexican sector trade can be attributed to the development of Mexico's downstream manufacturing industries that use U.S. chemicals and related products, as well as the strengthening of Mexican markets for the finished products. However, the effort to expand basic chemical production has been hampered, reportedly because privatization of Pemex's Petroquimica plants has not taken place.[10] This concern was underscored by the president of Mexico's chemical industry association, who noted that chemicals accounted for 55 percent of Mexico's total trade deficit.

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COMMODITY ANALYSIS OF PNEUMATIC TIRES AND TUBES

Change in 2002 from 2001:

U.S. trade deficit: Increased by $596 million (32 percent) to $2.5 billion.
U.S. exports: Decreased by $49 million (2 percent) to $2.2 billion
U.S. imports: Increased by $548 million (13 percent) to $4.7 billion

The significant increase in the trade deficit in 2002 was principally due to increased demand for these products after the recession in 2001, which sharply depressed domestic shipments and imports. This

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[8] The data in table 6-1 indicate that the United States exhibited a larger bilateral trade surplus with Belgium. However, both Belgium and the Netherlands have major sea ports that transport chemicals to and from many other countries in Europe.

[9] Karen Harris, "Gravy Train to Success", *European Chemical News*, Aug. 2002, p. 32; A.B. Kaniski and B.C. Victoria, "Canada: Taking Risks to Grow," *Chemical Week*, Aug. 7, 2002, p. 19.

[10] Robert Westervelt and Kara Sissel, "Pemex to Invest $1 billion in Petchems," *Chem Week*, Apr. 3, 2002, p. 9.

decline in consumer demand was further compounded by the terrorist events of September 11, 2001.[11] U.S. imports of radial passenger car tires were most affected, followed by truck radials. The unit prices, however, were relatively unchanged. Domestic shipments and imports returned to more normal levels in 2002 compared with 2001, while the change in exports was negligible.

In 2002, the United States experienced its largest trade deficit in these products at $2.5 billion compared with $1.9 billion in 2001; Japan, China, and Korea accounted for 78 percent of the total increase. Mexico was the only major country with which the United States had a trade surplus in 2002 ($411 million).

U.S. imports

U.S. imports from Japan, China, and Korea–the second-, third-, and fourth-largest importers of record after Canada–recorded large increases in 2002.[12] Together, these three countries accounted for 82 percent of the total trade shift. Both China and Korea have significantly increased their presence in the U.S. marketplace during recent years, and, contrary to most other major trading partners, neither country lost import trade during the recession of 2001. U.S. imports from China increased by $144 million (47 percent) in 2002, while U.S. imports from Korea increased by $102 million (31 percent). China's improved productivity and infrastructure have resulted in increasing domestic and offshore shipments.[13] Also, Goodyear Tire and Rubber Co. now operate a plant in China.[14] Korea is also believed to be improving its infrastructure and establishing more channels of distribution in the U.S. marketplace. Hankook Tire Co. operates two plants in Korea and another two plants in China, as well. This Korean firm has developed an extensive number of distribution centers in the United States.[15]

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[11] Research Division, Office of Economics, USITC, and staff contacts with representatives of the Rubber Manufacturers Association, Cooper Tire, and Modern Tire Dealer, Mar. 19, 2003.

[12] Canadian imports increased by only 1 percent.

[13] Staff contacts with representatives of Cooper Tire, Mar. 19, 2003.

[14] Goodyear Dalian Tires, Dalian, China; found at *http://gemini.goodyear.com/story/release/background.html*, retrieved Mar. 26, 2003.

[15] Global Distribution Network, Hankook Tires, found at *http://www.hanta.co.kr/hantax/english/global_network/global_distibution/index_02.html*, retrieved Mar. 26, 2003.

Table 6-3
Chemicals and related products: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
CH007	Major primary olefins:				
	Exports	120	245	125	104.2
	Imports	2,913	3,397	485	16.6
	Trade balance	-2,793	-3,152	-359	-12.9
CH008	Other olefins:				
	Exports	311	260	-51	-16.4
	Imports	143	113	-30	-20.8
	Trade balance	168	147	-21	-12.6
CH009	Primary aromatics:				
	Exports	122	148	26	21.5
	Imports	1,122	1,159	37	3.3
	Trade balance	-1,000	-1,011	-11	-1.1
CH010	Organic commodity chemicals:				
	Exports	1,494	2,010	515	34.5
	Imports	1,021	1,111	91	8.9
	Trade balance	474	898	425	89.7
CH011	Organic specialty chemicals:				
	Exports	5,678	5,050	-627	-11.1
	Imports	6,962	6,781	-181	-2.6
	Trade balance	-1,285	-1,731	-447	-34.8
CH012	Certain organic chemicals:				
	Exports	7,774	7,668	-106	-1.4
	Imports	5,148	4,699	-449	-8.7
	Trade balance	2,626	2,969	343	13.1
CH013	Miscellaneous inorganic chemicals:				
	Exports	4,940	4,820	-120	-2.4
	Imports	5,195	4,948	-246	-4.7
	Trade balance	-255	-128	127	49.8
CH014	Inorganic acids:				
	Exports	242	214	-28	-11.7
	Imports	252	246	-6	-2.3
	Trade balance	-9	-32	-23	-240.9
CH015	Chlor-alkali chemicals:				
	Exports	1,054	851	-204	-19.3
	Imports	219	166	-53	-24.3
	Trade balance	835	685	-151	-18.0
CH016	Fertilizers:				
	Exports	2,183	2,184	1	0.1
	Imports	3,478	3,043	-435	-12.5
	Trade balance	-1,295	-859	436	33.7
CH017	Paints, inks, and related items, and certain components thereof:				
	Exports	3,546	3,614	68	1.9
	Imports	2,090	1,996	-94	-4.5
	Trade balance	1,455	1,618	163	11.2
CH018	Synthetic organic pigments:				
	Exports	329	331	2	0.5
	Imports	301	319	18	6.0
	Trade balance	29	12	-16	-56.8
CH019	Synthetic dyes and azoic couplers:				
	Exports	361	249	-112	-31.0
	Imports	378	393	15	4.0
	Trade balance	-16	-143	-127	-780.8

See footnote(s) at end of table.

Table 6-3--*Continued*
Chemicals and related products: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
CH020	Synthetic tanning agents:				
	Exports	17	18	2	9.0
	Imports	5	7	1	28.9
	Trade balance	12	12	([3])	0.5
CH021	Natural tanning and dyeing materials:				
	Exports	26	27	2	6.5
	Imports	65	54	-11	-17.2
	Trade balance	-40	-27	13	32.6
CH022	Photographic chemicals and preparations:				
	Exports	413	522	109	26.5
	Imports	479	435	-44	-9.1
	Trade balance	-66	87	153	([4])
CH023	Pesticide products and formulations:				
	Exports	2,166	2,028	-139	-6.4
	Imports	1,318	1,185	-133	-10.1
	Trade balance	848	842	-6	-0.7
CH024	Adhesives and glues:				
	Exports	565	588	23	4.0
	Imports	176	206	30	16.8
	Trade balance	388	382	-7	-1.8
CH025	Medicinal chemicals:				
	Exports	18,169	18,742	573	3.2
	Imports	33,956	40,699	6,742	19.9
	Trade balance	-15,788	-21,957	-6,169	-39.1
CH026	Essential oils and other flavoring materials:				
	Exports	1,109	1,211	102	9.2
	Imports	736	786	51	6.9
	Trade balance	373	425	52	13.8
CH027	Perfumes, cosmetics, and toiletries:				
	Exports	3,187	3,160	-27	-0.9
	Imports	2,443	2,716	273	11.2
	Trade balance	744	444	-300	-40.3
CH028	Soaps, detergents, and surface-active agents:				
	Exports	2,223	2,282	60	2.7
	Imports	1,115	1,273	158	14.2
	Trade balance	1,107	1,009	-99	-8.9
CH029	Miscellaneous chemicals and specialties:				
	Exports	2,862	2,901	39	1.3
	Imports	1,856	1,957	100	5.4
	Trade balance	1,006	944	-62	-6.1
CH030	Explosives, propellant powders, and related items:				
	Exports	254	286	32	12.7
	Imports	285	302	18	6.1
	Trade balance	-31	-17	15	46.4
CH031	Polyethylene resins in primary forms:				
	Exports	2,416	2,590	173	7.2
	Imports	1,735	1,651	-83	-4.8
	Trade balance	681	938	257	37.7
CH032	Polypropylene resins in primary forms:				
	Exports	1,100	1,188	88	8.0
	Imports	219	259	40	18.3
	Trade balance	881	929	48	5.4

See footnote(s) at end of table.

Table 6-3--*Continued*
Chemicals and related products: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
CH033	Polyvinyl chloride resins in primary forms:				
	Exports	1,004	781	-223	-22.2
	Imports	332	247	-84	-25.4
	Trade balance	672	534	-138	-20.6
CH034	Styrene polymers in primary forms:				
	Exports	731	752	22	3.0
	Imports	579	580	1	0.2
	Trade balance	152	172	20	13.4
CH035	Saturated polyester resins:				
	Exports	798	712	-85	-10.7
	Imports	502	537	35	7.0
	Trade balance	296	175	-121	-40.8
CH036	Other plastics in primary forms:				
	Exports	6,766	7,189	423	6.3
	Imports	2,649	2,823	174	6.6
	Trade balance	4,117	4,366	249	6.1
CH037	Styrene-butadiene rubber in primary forms:				
	Exports	297	273	-25	-8.4
	Imports	258	232	-26	-10.2
	Trade balance	39	41	1	3.6
CH038	Other synthetic rubber:				
	Exports	1,328	1,361	34	2.5
	Imports	734	725	-9	-1.2
	Trade balance	594	636	43	7.2
CH039	Pneumatic tires and tubes (new):				
	Exports	2,282	2,233	-49	-2.1
	Imports	4,146	4,694	548	13.2
	Trade balance	-1,864	-2,460	-597	-32.0
CH040	Other tires:				
	Exports	96	94	-2	-2.3
	Imports	122	123	1	0.4
	Trade balance	-26	-29	-3	-10.9
CH041	Miscellaneous plastic products:				
	Exports	12,561	12,567	7	0.1
	Imports	12,376	13,459	1,083	8.8
	Trade balance	185	-892	-1,076	([4])
CH042	Miscellaneous rubber products:				
	Exports	2,645	2,437	-208	-7.9
	Imports	2,549	2,752	203	8.0
	Trade balance	96	-315	-411	([4])
CH043	Gelatin:				
	Exports	74	75	1	1.8
	Imports	94	96	2	2.3
	Trade balance	-20	-21	-1	-4.1

See footnote(s) at end of table.

Table 6-3--*Continued*
Chemicals and related products: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
CH044	Natural rubber:				
	Exports	34	40	6	16.7
	Imports	613	751	138	22.6
	Trade balance	-579	-712	-133	-22.9

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes
[3]Less than $500,000.
[4]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data.

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

CHAPTER 7
Energy-Related Products

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Change in 2002 from 2001:

U.S. trade deficit: Decreased by $3.8 billion (4 percent) to $95.4 billion
U.S. exports: Decreased by $643 million (4 percent) to $14.4 billion
U.S. imports: Decreased by $4.4 billion (4 percent) to $109.8 billion

In 2002, the U.S. trade deficit in energy-related products decreased primarily because of a substantial decline in the price of natural gas, which dropped almost 50 percent as an energy crisis in California eased (tables 7-1 and 7-2), contributing to a 19-percent decrease in imports of natural gas and related products. In addition, lower heating oil imports resulting from mild weather conditions in early 2002 further reduced energy product imports.

Much of the decline in imports was offset by a 10-percent increase in the value of crude petroleum imports, the result of a $2.00 per barrel increase in the average price in 2002 from the 2001 levels. However, the quantity of U.S. imports of crude petroleum decreased by slightly more than 3 percent during the period. Although still accounting for more than 60 percent of U.S. consumption and remaining higher than levels in the 1980s and 1990s, this decrease was the first year-to-year decline in the quantity of crude petroleum imports since 1985. U.S. imports of crude petroleum began to rise in 1985 when declining world crude petroleum prices resulted in the reduced profitability of certain high cost U.S. stripper wells, many of which were then shut down. Consequently, U.S. production declined each year, reaching an all-time low of 5.8 million barrels per day (b/d) in 2000, and remaining at that level during 2001 and 2002.

In terms of quantity, U.S. imports of coal, coke, and related chemicals products decreased by 11 percent, petroleum products decreased by 7 percent, and imports of natural gas and electrical energy each remained at the same levels from 2001 to 2002. Canada, Venezuela, Mexico, Saudi Arabia, and Nigeria were again the principal sources of U.S. imports of energy-related products in 2002.

The quantity of U.S. exports of crude petroleum, which are generally prohibited, remained unchanged from 2001 to 2002 as did U.S. exports of electricity, refined petroleum products, and coal. However, the quantity of U.S. exports of natural gas increased by more than 20 percent from 2001 to 2002, primarily to Mexico to satisfy increased Mexican demand for natural gas as a feedstock in that nation's production of primary petrochemicals.

In 2002, petroleum products accounted for 60 percent of the U.S. export value of energy-related products; coal, coke, and related products accounted for 15 percent; electricity, nuclear material, and natural gas each accounted for 8 percent; and crude petroleum accounted for less than 1 percent. The primary markets for U.S. exports of energy-related products were Mexico and Canada. Trade statistics for all commodity/industry groups in the energy-related products sector are presented in table 7-3 at the end of this chapter.

Table 7-1
Energy-related products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001 and 2002[1]

Item	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
Canada	3,862	2,889	-973	-25.2
Mexico	3,296	3,274	-23	-0.7
Venezuela	111	121	10	9.3
Saudi Arabia	37	34	-3	-7.6
Nigeria	24	37	12	50.1
United Kingdom	278	201	-77	-27.6
Norway	39	51	13	32.1
Angola	1	3	2	110.5
Russia	216	231	15	6.9
Colombia	43	53	10	23.8
All other	7,166	7,537	371	5.2
Total	15,073	14,431	-643	-4.3
EU-15	2,146	1,731	-415	-19.3
OPEC	273	300	27	10.0
Latin America	5,161	5,290	129	2.5
CBERA	1,026	1,213	187	18.2
Asia	2,793	3,305	512	18.3
Sub-Saharan Africa	149	193	44	29.4
Central and Eastern Europe	40	30	-10	-25.7
U.S. imports of merchandise for consumption:				
Canada	34,598	29,903	-4,694	-13.6
Mexico	9,103	11,567	2,464	27.1
Venezuela	12,030	11,798	-231	-1.9
Saudi Arabia	10,625	10,264	-361	-3.4
Nigeria	8,627	5,773	-2,854	-33.1
United Kingdom	3,298	4,399	1,100	33.4
Norway	3,147	3,257	110	3.5
Angola	2,769	3,204	435	15.7
Russia	1,746	2,591	844	48.4
Colombia	2,828	2,697	-132	-4.7
All other	25,455	24,347	-1,108	-4.4
Total	114,226	109,800	-4,426	-3.9
EU-15	7,614	8,778	1,165	15.3
OPEC	39,424	34,506	-4,918	-12.5
Latin America	29,945	32,598	2,653	8.9
CBERA	2,689	2,900	210	7.8
Asia	2,720	2,284	-437	-16.1
Sub-Saharan Africa	14,271	11,713	-2,559	-17.9
Central and Eastern Europe	131	201	70	53.8
U.S. merchandise trade balance:				
Canada	-30,736	-27,014	3,721	12.1
Mexico	-5,807	-8,294	-2,487	-42.8
Venezuela	-11,919	-11,677	242	2.0
Saudi Arabia	-10,588	-10,230	358	3.4
Nigeria	-8,603	-5,736	2,867	33.3
United Kingdom	-3,020	-4,197	-1,177	-39.0
Norway	-3,108	-3,206	-97	-3.1
Angola	-2,767	-3,201	-434	-15.7
Russia	-1,531	-2,360	-830	-54.2
Colombia	-2,785	-2,643	142	5.1
All other	-18,289	-16,810	1,479	8.1
Total	-99,153	-95,369	3,783	3.8
EU-15	-5,468	-7,048	-1,580	-28.9
OPEC	-39,152	-34,206	4,946	12.6
Latin America	-24,784	-27,308	-2,524	-10.2
CBERA	-1,664	-1,687	-23	-1.4
Asia	73	1,022	949	1,295.3
Sub-Saharan Africa	-14,122	-11,520	2,603	18.4
Central and Eastern Europe	-91	-171	-81	-89.0

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

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2002.

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

Table 7-2
Leading changes in U.S. exports and imports of energy-related products, 2001 and 2002

Sector/commodity	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. EXPORTS:				
Increases:				
Natural gas and components (CH006)	1,109	1,675	566	51.0
Decreases:				
Electrical energy (CH001)	1,258	304	-955	-75.9
Petroleum products (CH005)	8,936	8,662	-273	-3.1
All other	3,770	3,790	20	0.5
TOTAL	15,073	14,431	-643	-4.3
U.S. IMPORTS:				
Increases:				
Crude petroleum (CH004)	49,673	54,704	5,030	10.1
Decreases:				
Natural gas and components (CH006)	23,054	18,609	-4,445	-19.3
Petroleum products (CH005)	34,372	30,594	-3,778	-11.0
Electrical energy (CH001)	2,681	1,160	-1,520	-56.7
All other	4,447	4,734	287	6.5
TOTAL	114,226	109,800	-4,426	-3.9

Note.-Calculations based on unrounded data.

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

U.S. BILATERAL TRADE

Largest trade balance shifts in 2002 from 2001:

Canada: U.S. deficit decreased by $3.7 billion (12 percent) to $27.0 billion
Nigeria: U.S. deficit decreased by $2.9 billion (33 percent) to $5.7 billion
Mexico: U.S. deficit increased by $2.5 billion (43 percent) to $8.3 billion

Canada remained the leading U.S. trading partner for energy-related products in 2002. The United States and Canada share a sophisticated and intricate system of pipelines that carry natural gas, crude petroleum, and refined petroleum products between the two countries. Also, the United States and Canada share interconnected grids used to transmit electricity across the border. The U.S. trade deficit with Canada decreased as a result of the decreases in the price of natural gas.

The U.S. trade deficit with Nigeria, a member of OPEC, decreased from 2001 to 2002. In terms of quantity, U.S. imports of crude petroleum from Nigeria decreased from 842,000 barrels per day in 2001 to 567,000 barrels per day in 2002 because of continued political unrest in that nation, which resulted in production slowdowns.

The U.S. energy-related products trade deficit with Latin America increased as a result of rising crude petroleum prices. U.S. imports of crude petroleum from Mexico increased by about 100,000 barrels per day (6 percent) from 2001 to 2002. The United States is the primary market for Mexican crude exports, which account for the largest share of Mexico's export earnings.

COMMODITY ANALYSIS OF ELECTRICAL ENERGY

Change in 2002 from 2001:

U.S. trade deficit: Decreased by $566 million (40 percent) to $857 million
U.S. exports: Decreased by $955 million (76 percent) to $304 million
U.S. imports: Decreased by $1.5 billion (57 percent) to $1.2 billion

The U.S. trade deficit in electricity decreased in 2002 as a result of the decrease in the price for natural gas, which is the largest single fuel (fossil or renewable) used to generate electricity. Fossil fuels account for an average of 75 percent of total U.S. electricity generation, with nuclear fuels accounting for 18 percent and renewable fuels accounting for 7 percent. Of the fossil fuels used to generate electricity, on average, petroleum accounts for 3 percent, coal accounts for 30 percent, and natural gas accounts for 42 percent. The recently concluded FERC investigation into the California energy crisis found a close link between electricity and natural gas prices.[1] As a result of the 37-percent drop in the natural gas prices that occurred from 2001 to 2002, the value of imports and exports of electricity appear to have decreased dramatically.

Canada has historically been the only U.S. trading partner for electricity. The United States and Canada share a sophisticated system of interconnected grids used to transmit electricity across the border. The quantity of U.S. imports of electricity remained constant at 38 billion kilowatt-hours in both 2001 and 2002. U.S. exports decreased minimally from 18 billion kilowatt-hours in 2001 to 17.8 billion kilowatt-hours in 2002. Canada remained the leading U.S. trading partner for energy-related products in 2002, accounting for 100 percent of the U.S. electricity trade. Although there is some sporadic trade with Mexico (less than 0.1 percent, on average), there is no synchronized grid interconnecting the U.S. and Mexican border.

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[1] "FERC Sides with California on Energy Dispute," *New York Times*, Mar. 27, 2003, p. 1.

Table 7-3
Energy-related products: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
CH001	Electrical energy:				
	Exports	1,258	304	-955	-75.9
	Imports	2,681	1,160	-1,520	-56.7
	Trade balance	-1,423	-857	566	39.8
CH002	Nuclear materials:				
	Exports	1,239	1,510	270	21.8
	Imports	2,036	2,144	108	5.3
	Trade balance	-797	-635	162	20.4
CH003	Coal, coke, and related chemical products:				
	Exports	2,354	2,188	-165	-7.0
	Imports	2,411	2,589	179	7.4
	Trade balance	-57	-401	-344	-605.0
CH004	Crude petroleum:				
	Exports	177	92	-85	-48.2
	Imports	49,673	54,704	5,030	10.1
	Trade balance	-49,496	-54,612	-5,116	-10.3
CH005	Petroleum products:				
	Exports	8,936	8,662	-273	-3.1
	Imports	34,372	30,594	-3,778	-11.0
	Trade balance	-25,436	-21,931	3,504	13.8
CH006	Natural gas and components:				
	Exports	1,109	1,675	566	51.0
	Imports	23,054	18,609	-4,445	-19.3
	Trade balance	-21,944	-16,934	5,011	22.8

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

Note.—Calculations based on unrounded data.

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

CHAPTER 8
Textiles, Apparel, and Footwear

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Change in 2002 from 2001 for textiles and apparel:[1]

U.S. trade deficit: Increased by $2.5 billion (4 percent) to $64.3 billion
U.S. exports: Decreased by $820 million (5 percent) to $17.3 billion
U.S. imports: Increased by $1.6 billion (2 percent) to $81.6 billion

The U.S. trade deficit in textiles and apparel widened by 4 percent in 2002, up from a 2-percent increase in 2001, as U.S. exports decreased while imports rose (tables 8-1 and 8-2). Although the increase in imports represented a reversal of the 15-percent decrease in 2001, the marginal 2-percent growth rate partly reflected continued sluggishness in U.S. economic activity. The recovery of imports in 2002 was attributable in part to a slight resurgence in consumer spending on apparel (including footwear), which grew by 3 percent in 2002, up from less than 1-percent growth a year earlier.[2] That level, however, remains below the sector's annual average growth rate of 5 percent from 1996-2000. Apparel accounted for 78 percent of total textile and apparel imports in 2002.

In 2002, imports declined by $68 million (less than 1 percent) to $64 billion for apparel, but rose by $1.7 billion (11 percent) to $17.6 billion for textiles. The share of the U.S. apparel market supplied by imports remained consistent at an estimated 56 percent by value in 2002. Imports accounted for 21 percent of the U.S. textile market in 2002, down from 28 percent in the previous year. U.S. apparel production declined by 2 percent in 2002, while U.S. textile production remained flat after suffering declines during the previous 2 years.[3] U.S. imports of textiles and apparel are likely to expand their share of domestic markets as a result of the gradual elimination of U.S. quotas on such goods under the World Trade Organization Agreement on Textiles and Clothing;[4] recent enactment of legislation granting preferential market access to qualifying apparel articles from Bolivia, Colombia, Ecuador, and Peru under the Andean Trade Promotion and Drug Eradication Act; determination of eligibility for 7 additional sub-Saharan African countries under the African Growth and Opportunity Act (AGOA) for a total of 19 countries; and the price competitiveness of many low-labor-cost nations.

In 2002, exports declined by $820 million (5 percent) to $17 billion for textiles and apparel. The decline in U.S. exports in 2002 was attributable not only to the continued slowing of economic activity in major foreign markets, but also to the continued relative strength of the U.S. dollar, which has effectively

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[1] Footwear is addressed separately in this chapter.

[2] U.S. Department of Commerce, Bureau of Economic Analysis, Email message to USITC staff, Apr. 2, 2003.

[3] U.S. Bureau of the Census, "Manufacturers' Shipments, Inventories, and Orders," found at *http://www.census.gov*, retrieved Mar. 31, 2003.

[4] The quota phaseout schedule mandated by the WTO's Agreement on Textiles and Clothing required integration of 16 percent of textile and apparel products under quota on July 1, 1995, an additional 17 percent on July 1, 1998, and another 18 percent on July 1, 2002.

Table 8-1
Textiles and apparel: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001 and 2002[1]

Item	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
Mexico	5,232	4,939	-293	-5.6
China	261	339	78	29.8
Canada	3,344	3,193	-151	-4.5
Hong Kong	313	324	10	3.3
Honduras	1,409	1,523	114	8.1
Dominican Rep	1,290	1,293	2	0.2
Korea	170	184	14	8.5
India	39	44	6	15.4
Taiwan	77	89	12	14.9
Thailand	41	46	5	12.8
All other	5,942	5,323	-619	-10.4
Total	18,118	17,298	-820	-4.5
EU-15	1,698	1,520	-179	-10.5
OPEC	269	222	-47	-17.4
Latin America	10,536	10,077	-460	-4.4
CBERA	4,783	4,761	-21	-0.4
Asia	1,819	1,883	64	3.5
Sub-Saharan Africa	131	124	-6	-4.7
Central and Eastern Europe	46	40	-6	-12.1
U.S. imports of merchandise for consumption:				
Mexico	9,941	9,649	-292	-2.9
China	11,124	12,602	1,478	13.3
Canada	3,791	3,859	69	1.8
Hong Kong	4,491	4,081	-410	-9.1
Honduras	2,443	2,509	67	2.7
Dominican Rep	2,337	2,242	-94	-4.0
Korea	3,316	3,287	-29	-0.9
India	3,038	3,382	343	11.3
Taiwan	2,700	2,480	-220	-8.1
Thailand	2,524	2,495	-30	-1.2
All other	34,242	34,998	757	2.2
Total	79,946	81,585	1,640	2.1
EU-15	5,190	5,163	-26	-0.5
OPEC	3,251	2,981	-270	-8.3
Latin America	20,841	20,639	-202	-1.0
CBERA	9,728	9,711	-17	-0.2
Asia	43,218	44,666	1,447	3.3
Sub-Saharan Africa	998	1,136	138	13.9
Central and Eastern Europe	541	515	-26	-4.8
U.S. merchandise trade balance:				
Mexico	-4,709	-4,710	-1	(2)
China	-10,863	-12,263	-1,400	-12.9
Canada	-446	-666	-219	-49.1
Hong Kong	-4,178	-3,757	420	10.1
Honduras	-1,034	-986	48	4.6
Dominican Rep	-1,047	-950	97	9.3
Korea	-3,146	-3,103	43	1.4
India	-3,000	-3,337	-337	-11.2
Taiwan	-2,623	-2,391	231	8.8
Thailand	-2,484	-2,449	35	1.4
All other	-28,299	-29,675	-1,376	-4.9
Total	-61,828	-64,288	-2,460	-4.0
EU-15	-3,491	-3,644	-152	-4.4
OPEC	-2,982	-2,759	223	7.5
Latin America	-10,305	-10,563	-257	-2.5
CBERA	-4,946	-4,950	-4	-0.1
Asia	-41,399	-42,783	-1,384	-3.3
Sub-Saharan Africa	-867	-1,012	-144	-16.6
Central and Eastern Europe	-495	-474	20	4.1

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]Less than 0.05 percent.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2002.

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

Table 8-2
Leading changes in U.S. exports and imports of textiles and apparel, 2001 and 2002

Sector/commodity	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million dollars		
U.S. EXPORTS:				
Increases:				
Knit fabrics (CH046B)	918	1,082	164	17.9
Fibers and yarns, except raw cotton and raw wool (CH045)	2,640	2,656	17	0.6
Broadwoven fabrics (CH046A)	2,997	3,003	6	0.2
Decreases:				
Apparel (CH049)	6,537	5,491	-1,046	-16.0
Miscellaneous textile products (CH050)	1,666	1,619	-47	-2.8
Home furnishings (CH048)	403	363	-40	-9.9
Carpets and rugs (CH047)	711	684	-26	-3.7
All other	2,247	2,399	152	6.8
TOTAL	18,118	17,298	-820	-4.5
U.S. IMPORTS:				
Increases:				
Home furnishings (CH048)	3,332	4,226	894	26.8
Women's and girls' trousers (CH049D)	7,668	7,996	328	4.3
Broadwoven fabrics (CH046A)	3,058	3,243	184	6.0
Robes, nightwear, and underwear (CH049I)	4,796	4,961	166	3.5
Miscellaneous textile products (CH050)	3,198	3,340	142	4.4
Shirts and blouses (CH049E)	19,676	19,765	89	0.5
Decreases:				
Women's and girls' suits, skirts, and coats (CH049G)	4,417	4,235	-181	-4.1
Other wearing apparel (CH049S)	3,433	3,287	-146	-4.3
Men's and boys' trousers (CH049C)	6,980	6,973	-7	-0.1
All other	23,388	23,560	172	0.7
TOTAL	79,946	81,585	1,640	2.1

Note.-Calculations based on unrounded data.

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

reduced the price competitiveness of U.S. goods in foreign markets, and weak foreign demand for U.S. inputs used in the production of apparel for export to the United States.[5]

More than one-third of the decline in total exports, or $330 million, was accounted for by Canada and the EU. Countries making large quantities of apparel for the U.S. market from U.S. inputs – Mexico and Caribbean Basin Economic Recovery Act (CBERA) beneficiary countries – also accounted for more than one-third of the decline. Since the production of apparel for import from factories in Mexico and CBERA countries is tied directly to U.S. consumer demand, slow recovery of U.S. demand for apparel in 2002 resulted in a decrease in exports of intermediate textile inputs from the United States to those countries. Furthermore, following accession to the WTO and subsequent access to preferential trade provisions, China captured substantial market share from traditional suppliers of finished goods that typically use U.S. textile inputs, such as Mexico.[6]

[5] ATMI, *Textile HiLights*, Dec. 2002, p. vii.

[6] See U.S. bilateral trade section for further information on significant changes in U.S. textile and apparel trade with leading trading partners.

Change in 2002 from 2001 for footwear:

U.S. trade deficit: Increased by $248 million (2 percent) to $14.9 billion
U.S. exports: Decreased by $118 million (19 percent) to $520 million
U.S. imports: Increased by $130 million (1 percent) to $15.4 billion

The U.S. trade deficit in footwear widened in 2002 mainly because of a continued increase in imports (table 8-3). U.S. producers' shipments of footwear in 2002 are estimated to have fallen by $136 million (12 percent) to $995 million.[7] As a result, it is estimated that the share of the U.S. footwear market supplied by imports in 2002 rose to 97 percent by value.[8] Footwear imports from China increased by $475 million (5 percent) in 2002, resulting in an increase of U.S. footwear imports to 67 percent by value. China has penetrated virtually all segments of the world footwear market, which can be attributed to its price competitiveness, rooted in low wages and an established production infrastructure. Trade statistics for all industry/commodity groups in the textile, apparel, and footwear sector are presented in table 8-4 at the end of this chapter.

U.S. BILATERAL TRADE

Largest trade balance shifts in 2002 from 2001 for textiles and apparel[9]:

China: U.S. deficit increased by $1.4 billion (13 percent) to $12.3 billion
Hong Kong: U.S. deficit decreased by $420 million (10 percent) to $3.8 billion
India: U.S. deficit increased by $337 million (11 percent) to $3.3 billion

The U.S. sector deficit with China widened by $1.4 billion in 2002, the single largest change in the trade balance of any trading partner. The increase in U.S. imports from China of $1.5 billion (13 percent) far exceeded the gain in U.S. exports to China of $78 million (30 percent). Most of the increase in U.S. imports from China consisted of apparel, which rose by $690 million (8 percent) to $9.6 billion, while most of the increase in U.S. exports to China consisted of certain nonwoven fabrics of manmade fibers, which rose by $30 million (269 percent) to $41 million; synthetic monofilament yarn, which increased $9 million (422 percent) to $11 million; and artificial filament tow (a raw material), which rose by $8 million (9 percent) to $105 million. The growth in U.S. imports of Chinese textiles and apparel in 2002 is likely attributable to its newfound WTO member status, as well as ongoing efforts in China to modernize textile manufacturing and eliminate unprofitable operations.

The U.S. trade deficit with Hong Kong showed the greatest decrease in 2002 as U.S. imports of textiles and apparel from Hong Kong declined by $410 million (9 percent) to $4.1 billion compared with an increase of $10 million in U.S. exports (3 percent) to $324 million. The textile and apparel industry is the third-largest manufacturing industry in Hong Kong and is reputed to produce high-quality dyed and printed fabrics with complex designs and textures. In recent years, however, Hong Kong's rising land, labor, and

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[7] Data estimates extrapolated from 2001 figures from U.S. Census Bureau, "Current Industrial Reports, Footwear Production: 2001," Sept. 2002.

[8] The U.S. footwear industry has been contracting steadily over the past several decades because U.S. producers cannot compete with significantly lower cost foreign suppliers in this labor-intensive industry. U.S. production has steadily declined as a share of total U.S. consumption of footwear.

[9] See previous section for a discussion of footwear bilateral trade.

Table 8-3
Footwear: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001 and 2002[1]

Item	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
China	46	35	-11	-24.3
Italy	5	5	(2)	5.5
Brazil	1	1	(2)	1.1
Indonesia	13	15	2	14.4
Mexico	123	95	-28	-22.6
Thailand	5	4	-1	-18.7
Spain	5	6	1	26.4
Vietnam	19	18	-1	-7.6
Dominican Rep	51	30	-22	-42.0
Canada	70	65	-5	-7.4
All other	300	246	-54	-18.0
Total	638	520	-118	-18.6
EU-15	67	57	-11	-15.6
OPEC	37	35	-1	-3.6
Latin America	246	196	-50	-20.3
CBERA	97	75	-21	-22.0
Asia	218	164	-53	-24.5
Sub-Saharan Africa	10	13	3	24.9
Central and Eastern Europe	3	2	-1	-30.8
U.S. imports of merchandise for consumption:				
China	9,767	10,242	475	4.9
Italy	1,261	1,182	-79	-6.2
Brazil	1,162	1,080	-82	-7.1
Indonesia	725	731	6	0.8
Mexico	312	279	-33	-10.6
Thailand	315	278	-38	-11.9
Spain	273	269	-4	-1.5
Vietnam	132	224	92	69.8
Dominican Rep	193	140	-53	-27.6
Canada	79	68	-11	-13.6
All other	1,031	887	-144	-13.9
Total	15,249	15,379	130	0.9
EU-15	1,951	1,826	-125	-6.4
OPEC	725	731	6	0.8
Latin America	1,693	1,516	-177	-10.4
CBERA	206	148	-57	-27.9
Asia	11,330	11,797	466	4.1
Sub-Saharan Africa	1	1	(2)	-8.0
Central and Eastern Europe	145	126	-18	-12.6
U.S. merchandise trade balance:				
China	-9,721	-10,207	-486	-5.0
Italy	-1,256	-1,178	79	6.3
Brazil	-1,160	-1,078	82	7.1
Indonesia	-712	-716	-4	-0.6
Mexico	-189	-183	5	2.8
Thailand	-311	-274	37	11.8
Spain	-268	-263	5	2.0
Vietnam	-113	-206	-94	-83.1
Dominican Rep	-142	-110	32	22.5
Canada	-9	-3	5	62.5
All other	-731	-641	90	12.3
Total	-14,611	-14,860	-248	-1.7
EU-15	-1,883	-1,769	114	6.1
OPEC	-688	-696	-7	-1.1
Latin America	-1,447	-1,320	127	8.8
CBERA	-109	-73	36	33.2
Asia	-11,113	-11,632	-520	-4.7
Sub-Saharan Africa	9	11	3	30.6
Central and Eastern Europe	-142	-124	17	12.2

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]Less than $500,000.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2002.

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

environmental costs have prompted many of its bleaching and dyeing factories and other textile-manufacturing facilities to relocate to mainland China, where such costs are substantially lower. Hong Kong's textile and apparel industry reportedly has largely evolved into a marketing and purchasing center that provides logistics support for its manufacturing operations in China.[10] These developments and increased competition resulting from the currency devaluations of neighboring East Asian countries have contributed to the decline in Hong Kong's exports of textiles and apparel to the United States.

The U.S. trade deficit with India registered the second-largest increase among trade partners in 2002, rising $337 million (11 percent) to $3.3 billion. The $6-million (15 percent) increase in U.S. exports to India in 2002 was offset by a $343-million (11 percent) rise in imports, consisting largely of apparel and home textiles. Products accounting for the elevation in U.S. exports to India include manmade staple fibers, yarns, and fabrics.

Countries that benefit from preferential access to the U.S. market – namely NAFTA partners Mexico and Canada and the CBERA and sub-Saharan African countries – accounted for 15 percent of the increase in the U.S. trade deficit in textiles and apparel for 2002, a significant departure from their 71-percent share in 2001. The U.S. textile and apparel trade deficit with Canada showed the greatest deterioration in percentage terms in 2002 (49 percent), as U.S. exports declined while imports rose. The widening of the trade imbalance likely reflected the slight pickup in U.S. consumer spending on apparel. The principal imports from Canada in 2002 were synthetic filament yarn, knit shirts, and men's and women's trousers. Canada's textile and apparel industry is capital-intensive, modernized, and known for quality, fashion, and performance.[11] The trade deficit with Mexico increased a negligible amount in 2002, reflecting nearly identical declines in U.S. exports of $293 million (6 percent), to $4.9 billion, and U.S. imports of $292 million (3 percent), to $9.6 billion. A large portion of the exports to Mexico consisted of inputs (yarns, fabrics, and garment parts) for use in the production of apparel for export to the United States. U.S. imports from Mexico, which fell for the second consecutive year in 2002, consisted mostly of apparel ($7.7 billion, or 80 percent of the total). Mexico's dependence on the U.S. market for export sales made it especially vulnerable to the U.S. economic downturn that began in 2001. Also negatively affecting Mexico's textile and apparel industry was increased competition in the U.S. market from low-cost imports from Asian countries, particularly China and those whose currencies depreciated sharply in recent years.

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[10] U.S. Department of Commerce, "Hong Kong: Local Industry and Market: Export Advantage," found at *http://web.ita.doc.gov/tacgi/overseas.nsf/09bd...*, retrieved Apr. 24, 2002.

[11] OTEXA, Export Advantage, "Country Information-Canada: Local Industry and Market," Oct. 3, 2001, found at *http://otexa.ita.doc.gov*, retrieved Apr. 12, 2002.

Table 8-4
Textiles, apparel, and footwear: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
CH045	Fibers and yarns, except raw cotton and raw wool:				
	Exports	2,640	2,656	17	0.6
	Imports	2,545	2,641	96	3.8
	Trade balance	95	16	-79	-83.6
CH046	Fabrics:				
	Exports	6,162	6,485	323	5.2
	Imports	5,466	5,922	456	8.3
	Trade balance	696	563	-133	-19.1
CH046A	Broadwoven fabrics:				
	Exports	2,997	3,003	6	0.2
	Imports	3,058	3,243	184	6.0
	Trade balance	-61	-240	-178	-290.6
CH046B	Knit fabrics:				
	Exports	918	1,082	164	17.9
	Imports	1,014	1,080	66	6.5
	Trade balance	-96	3	99	([3])
CH046C	Specialty fabrics:				
	Exports	465	572	108	23.1
	Imports	346	383	37	10.7
	Trade balance	119	190	71	59.3
CH046D	Coated and other fabrics:				
	Exports	1,003	995	-7	-0.7
	Imports	570	679	109	19.1
	Trade balance	433	316	-116	-26.9
CH046E	Glass fiber fabrics:				
	Exports	84	87	3	3.9
	Imports	104	105	1	1.0
	Trade balance	-20	-18	2	10.8
CH046F	Other fabrics:				
	Exports	696	744	49	7.0
	Imports	374	432	58	15.6
	Trade balance	322	312	-10	-3.0
CH047	Carpets and rugs:				
	Exports	711	684	-26	-3.7
	Imports	1,410	1,531	121	8.6
	Trade balance	-699	-846	-147	-21.0
CH048	Home furnishings:				
	Exports	403	363	-40	-9.9
	Imports	3,332	4,226	894	26.8
	Trade balance	-2,929	-3,863	-934	-31.9
CH048A	Blankets:				
	Exports	34	32	-2	-5.6
	Imports	230	353	123	53.6
	Trade balance	-196	-321	-125	-63.9
CH048B	Pillowcases and sheets:				
	Exports	90	76	-14	-15.1
	Imports	765	903	138	18.0
	Trade balance	-675	-826	-151	-22.4
CH048C	Table/kitchen linens and towels:				
	Exports	109	93	-16	-15.1
	Imports	1,080	1,236	156	14.5
	Trade balance	-970	-1,143	-173	-17.8

See footnote(s) at end of table.

Table 8-4--*Continued*
Textiles, apparel, and footwear: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
CH048D	Curtains:				
	Exports	35	39	4	10.4
	Imports	397	576	179	45.1
	Trade balance	-362	-537	-176	-48.5
CH048E	Bedspreads and other furnishing articles:				
	Exports	43	41	-2	-4.5
	Imports	515	735	220	42.6
	Trade balance	-472	-694	-221	-46.9
CH048F	Pillows, cushions, and sleeping bags:				
	Exports	91	81	-10	-11.0
	Imports	340	417	77	22.6
	Trade balance	-250	-336	-87	-34.7
CH048G	Tapestries and other wall hangings:				
	Exports	1	1	([4])	35.9
	Imports	5	6	1	26.9
	Trade balance	-4	-5	-1	-25.2
CH049	Apparel:				
	Exports	6,537	5,491	-1,046	-16.0
	Imports	63,995	63,927	-68	-0.1
	Trade balance	-57,458	-58,436	-978	-1.7
CH049A	Men's and boys' suits and sports coats:				
	Exports	66	46	-19	-29.6
	Imports	1,026	974	-52	-5.1
	Trade balance	-960	-928	33	3.4
CH049B	Men's and boys' coats and jackets:				
	Exports	99	92	-8	-7.6
	Imports	1,992	1,876	-116	-5.8
	Trade balance	-1,893	-1,784	109	5.7
CH049C	Men's and boys' trousers:				
	Exports	728	625	-104	-14.2
	Imports	6,980	6,973	-7	-0.1
	Trade balance	-6,252	-6,348	-96	-1.5
CH049D	Women's and girls' trousers:				
	Exports	454	357	-97	-21.3
	Imports	7,668	7,996	328	4.3
	Trade balance	-7,214	-7,639	-425	-5.9
CH049E	Shirts and blouses:				
	Exports	1,533	1,219	-314	-20.5
	Imports	19,676	19,765	89	0.5
	Trade balance	-18,143	-18,546	-403	-2.2
CH049F	Sweaters:				
	Exports	36	38	2	5.2
	Imports	2,933	2,959	25	0.9
	Trade balance	-2,897	-2,921	-23	-0.8
CH049G	Women's and girls' suits, skirts, and coats:				
	Exports	211	154	-56	-26.7
	Imports	4,417	4,235	-181	-4.1
	Trade balance	-4,206	-4,081	125	3.0
CH049H	Women's and girls' dresses:				
	Exports	81	62	-19	-23.6
	Imports	1,675	1,470	-205	-12.2
	Trade balance	-1,594	-1,409	186	11.7
CH049I	Robes, nightwear, and underwear:				
	Exports	906	744	-162	-17.9
	Imports	4,796	4,961	166	3.5
	Trade balance	-3,889	-4,218	-328	-8.4

See footnote(s) at end of table.

Table 8-4--*Continued*
Textiles, apparel, and footwear: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
CH049J	Hosiery:				
	Exports	362	344	-18	-5.0
	Imports	923	1,031	108	11.7
	Trade balance	-560	-687	-127	-22.6
CH049K	Body-supporting garments:				
	Exports	330	385	55	16.7
	Imports	1,434	1,648	214	14.9
	Trade balance	-1,104	-1,263	-159	-14.4
CH049L	Neckwear, handkerchiefs, and scarves:				
	Exports	28	24	-4	-15.0
	Imports	457	432	-25	-5.5
	Trade balance	-429	-408	21	4.9
CH049M	Gloves, including gloves for sports:				
	Exports	181	122	-59	-32.7
	Imports	2,119	2,176	58	2.7
	Trade balance	-1,938	-2,054	-117	-6.0
CH049N	Headwear:				
	Exports	116	91	-25	-21.7
	Imports	1,288	1,279	-9	-0.7
	Trade balance	-1,172	-1,188	-16	-1.3
CH049O	Leather apparel and accessories:				
	Exports	100	95	-6	-5.7
	Imports	2,121	1,869	-252	-11.9
	Trade balance	-2,021	-1,775	246	12.2
CH049P	Fur apparel and other fur articles:				
	Exports	34	25	-10	-28.0
	Imports	264	245	-19	-7.2
	Trade balance	-230	-220	9	4.1
CH049Q	Rubber, plastic, and coated-fabric apparel:				
	Exports	123	99	-24	-19.5
	Imports	381	349	-33	-8.6
	Trade balance	-258	-250	9	3.3
CH049R	Nonwoven apparel:				
	Exports	52	47	-4	-8.4
	Imports	411	401	-11	-2.6
	Trade balance	-360	-353	6	1.7
CH049S	Other wearing apparel:				
	Exports	1,095	922	-173	-15.8
	Imports	3,433	3,287	-146	-4.3
	Trade balance	-2,338	-2,366	-27	-1.2
CH050	Miscellaneous textile products:				
	Exports	1,666	1,619	-47	-2.8
	Imports	3,198	3,340	142	4.4
	Trade balance	-1,532	-1,721	-189	-12.4
CH051	Footwear:				
	Exports	638	520	-118	-18.6
	Imports	15,249	15,379	130	0.9
	Trade balance	-14,611	-14,860	-248	-1.7

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes
[3]Not meaningful for purposes of comparison.
[4]Less than $500,000.

Note.—Calculations based on unrounded data.

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

CHAPTER 9
Minerals and Metals

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Change in 2002 from 2001:

U.S. trade deficit: Increased by $5.3 billion (13 percent) to $45.7 billion
U.S. exports: Decreased by $3.6 billion (8 percent) to $39.9 billion
U.S. imports: Increased by $1.8 billion (2 percent) to $85.6 billion

The U.S. trade deficit in the minerals and metals sector grew largely due to a 49-percent export decrease for refined and unrefined gold which was particularly pronounced with respect to the EU-15 ($1.2-billion decline). Exports of natural and unrefined synthetic gemstones were down 28 percent or $508 million.[1] This was mainly due to a $421-million decrease in nonindustrial diamonds, particularly to EU countries (table 9-1).

Overall, U.S. exports of glass products, including flat glass, glass containers, and household glassware, dropped 13 percent from 2001 to 2002. Exports of flat glass to Japan decreased as U.S. products lost market share to those from Thailand and Taiwan.[2] Japanese consumption for miscellaneous glass products, specifically tubes, rods, and lenses, also decreased during this period while exports of glass containers and household glassware to Mexico decreased as Mexico's Grupo Vitro, one of the largest glass producers in the world, increased production. In addition, Mexico is beginning to switch from glass containers to polyethylene terephthalate (a type of plastic) containers, further decreasing demand for glass.[3]

There were few export increases in 2002. The most significant increase was for iron and steel waste and scrap ($157 million or 14 percent), particularly to Mexico and Korea (table 9-2). The steel industry in Mexico has grown in the past year, consuming more feed scrap, leading to an increase in exports of certain steel products to the U.S. market that were excluded from safeguard measures implemented under section 203 of the Trade Act.[4] Scrap exports to Korea recovered to earlier (1999) levels. Another notable shift was a $41-million increase in exports of zinc. The U.S. exported more zinc to Japan in 2002 due to a reduction in Japanese production of zinc in the past 5 years[5] coupled with a rise in Japanese demand for zinc used

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[1] For additional information, see "Precious Metal and Non-Numismatic Coins" and "Natural and Synthetic Gemstones" in this chapter.

[2] "Flat Glass - Key Performance Indicators," James Lukes, *Industry Trade and Technology Review*, USITC publication 3574, Dec. 2002, p. A-6, found at *www.usitc.gov/webpubs.htm*.

[3] John Hoffman, "PET and Polyester Markets See Solid Growth Ahead," *Chemical Market Reporter*, Aug. 5, 2002.

[4] President George W. Bush, Presidential Proclamation No. 7529, "To Facilitate Positive Adjustment to Competition From Imports of Certain Steel Products," 67 *F.R.* 10555, Mar. 5, 2002..

[5] "Japan Historical Data - Mining Production," *EIU Viewswire*, Mar. 10, 2003 found at *http://www.viewswire.com/index.asp?layout=display_article&search_text=zinc&doc_id=242652*, retrieved Mar. 12, 2003.

Table 9-1
Minerals and metals: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001 and 2002[1]

Item	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
Canada	13,262	13,447	185	1.4
Mexico	6,956	6,671	-285	-4.1
China	1,497	1,539	42	2.8
Israel	732	677	-55	-7.6
Japan	1,919	1,590	-329	-17.1
United Kingdom	3,039	2,622	-417	-13.7
Germany	1,440	1,196	-243	-16.9
India	242	206	-35	-14.7
Belgium	1,151	854	-297	-25.8
Taiwan	594	647	53	8.8
All other	12,676	10,475	-2,202	-17.4
Total	43,507	39,924	-3,583	-8.2
EU-15	8,171	6,951	-1,220	-14.9
OPEC	805	754	-51	-6.4
Latin America	9,030	8,394	-636	-7.0
CBERA	777	749	-28	-3.7
Asia	7,177	6,622	-556	-7.7
Sub-Saharan Africa	250	265	15	6.0
Central and Eastern Europe	159	121	-38	-24.1
U.S. imports of merchandise for consumption:				
Canada	16,916	17,797	881	5.2
Mexico	6,528	7,013	485	7.4
China	7,250	8,656	1,406	19.4
Israel	5,412	6,073	661	12.2
Japan	4,634	4,123	-511	-11.0
United Kingdom	2,946	2,174	-772	-26.2
Germany	3,724	3,438	-286	-7.7
India	2,770	3,799	1,029	37.1
Belgium	2,944	2,910	-34	-1.2
Taiwan	2,950	3,003	53	1.8
All other	27,773	26,631	-1,142	-4.1
Total	83,847	85,616	1,768	2.1
EU-15	17,101	15,589	-1,512	-8.8
OPEC	1,259	1,311	53	4.2
Latin America	12,111	13,261	1,149	9.5
CBERA	552	657	105	19.0
Asia	21,771	23,501	1,729	7.9
Sub-Saharan Africa	3,082	2,705	-377	-12.2
Central and Eastern Europe	676	780	105	15.5
U.S. merchandise trade balance:				
Canada	-3,654	-4,350	-695	-19.0
Mexico	428	-342	-769	(2)
China	-5,754	-7,117	-1,363	-23.7
Israel	-4,680	-5,396	-716	-15.3
Japan	-2,716	-2,534	182	6.7
United Kingdom	94	448	355	378.2
Germany	-2,284	-2,242	42	1.9
India	-2,528	-3,592	-1,064	-42.1
Belgium	-1,794	-2,056	-262	-14.6
Taiwan	-2,355	-2,356	(3)	(2)
All other	-15,097	-16,156	-1,059	-7.0
Total	-40,341	-45,692	-5,352	-13.3
EU-15	-8,930	-8,637	293	3.3
OPEC	-453	-558	-104	-23.0
Latin America	-3,081	-4,866	-1,785	-57.9
CBERA	225	92	-133	-59.1
Asia	-14,594	-16,879	-2,285	-15.7
Sub-Saharan Africa	-2,832	-2,440	392	13.8
Central and Eastern Europe	-517	-660	-143	-27.6

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]Not meaningful for purposes of comparison.
[3]Less than $500,000.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2002.

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

Table 9-2
Leading changes in U.S. exports and imports of minerals and metals, 2001 and 2002

Sector/commodity	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. EXPORTS:				
Increases:				
Iron and steel waste and scrap (MM023)	1,151	1,307	157	13.6
Zinc ores, concentrates, and residues (MM006)	299	339	41	13.6
Decreases:				
Precious metals and non-numismatic coins (MM020)	6,826	5,070	-1,756	-25.7
Natural and synthetic gemstones (MM019)	1,840	1,331	-508	-27.6
All other	33,392	31,875	-1,517	-4.5
TOTAL	43,507	39,924	-3,583	-8.2
U.S. IMPORTS:				
Increases:				
Natural and synthetic gemstones (MM019)	11,577	13,063	1,486	12.8
Miscellaneous products of base metal (MM031)	7,107	7,773	666	9.4
Steel mill products (MM025)	11,630	12,203	573	4.9
Unrefined and refined gold (MM020A)	1,700	2,143	443	26.1
Decreases:				
Precious metals and non-numismatic coins (MM020)	8,193	6,263	-1,930	-23.6
Copper and related articles (MM036)	4,296	3,715	-581	-13.5
Certain base metals and chemical elements (MM041)	2,467	1,952	-515	-20.9
All other	36,877	38,503	1,626	4.4
TOTAL	83,847	85,616	1,768	2.1

Note.-Calculations based on unrounded data.

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

to produce galvanized steel.[6] U.S. exports of unwrought aluminum increased slightly as production of aluminum increased following restarts of smelters in the Pacific Northwest which have been closed due to high electricity prices. Exports of U.S. lead concentrates increased (by $24 million), as one of the three remaining primary smelters closed in 2002 and more lead concentrate was sent abroad for processing.

The most significant increase in imports occurred for natural and synthetic gemstones (up $1.5 billion).[7] Imports of miscellaneous products of base metal grew $666 million in 2002, particularly from Mexico (up $166 million) and China (up $398 million). The largest increase was for various domestic cooking appliances made of iron and steel from China. China's household appliance industry has recovered in the past year, with the introduction of new products and a push by Chinese firms to market overseas.[8]

Other notable shifts include an increase in U.S. imports of steel mill products (a $573-million gain). Certain steel semifinished slabs accounted for 83 percent of the growth in this product category. Slabs can be imported under a tariff-rate quota safeguard measure with no increase in duties for imports below the within-quota level of 4.9 million metric tons in the first year of the measure and an increase in duties of 30 percent ad valorem for imports above the within-quota level in the first year.[9] Imports of steel mill products

[6] "Japan Zinc Demand Remains Strong," *Platt's Metals Week*, Dec. 9, 2002.

[7] For additional information, see "Natural and Synthetic Gemstones" in this chapter.

[8] "Konka to Focus on Overseas Markets," *Asiainfo Daily China News*, Sept. 17, 2002.

[9] President George W. Bush, Presidential Memorandum, "Action Under Section 203 of the Trade Act of 1974 Concerning Certain Steel Products," 76 *F.R.* 10594.

from Canada increased in almost all product categories, in part reflecting Canada's exclusion from steel safeguard measures.[10]

Despite a $1.9-billion decrease in imports of precious metals and non-numismatic coins, U.S. imports of unwrought gold, a component of this category, increased by $454 million. This gain was offset by a 64-percent decline in imports of palladium. In this product category, imports from the United Kingdom dropped 26 percent (down $772 million).

Copper imports also decreased by $581 million in 2002, specifically copper products from Mexico ($322-million decline). The largest decrease was for unrefined copper, which dropped 43 percent ($272 million) likely due to a reduction in U.S. refining capacity.[11] A significant decrease in imports of nickel contributed to the $515-million decline for the certain base metals and chemical elements product group. Nickel consumption has declined as a result of reduced consumption of end-use products such as stainless steel, superalloys, batteries, and electronic components.[12]

The commodity analyses that follow for precious metals and non-numismatic coins, and for natural and synthetic gemstones, provide more specific information on these trade shifts. Trade statistics for all industry/commodity groups in this sector are presented in table 9-6 at the end of the chapter.

U.S. BILATERAL TRADE

Largest trade balance shifts in 2002 from 2001:

China: U.S. deficit increased by $1.4 billion (24 percent) to $7.1 billion
India: U.S. deficit increased by $1.1 billion (42 percent) to $3.6 billion
Mexico: U.S. surplus of $428 million to U.S. deficit of $342 million

Canada and Mexico remained the primary markets and leading suppliers for minerals and metals products in 2002, while China was the leading source of imports. The U.S. trade deficit in minerals and metals increased largely as a result of an increase in imports from China and India, particularly for miscellaneous base metals, cooking and kitchenware, and ceramic household articles. Imports of miscellaneous base metals from China grew $398 million, most notably for iron and steel products for cooking and miscellaneous aluminum articles. China's metals sector has rapidly expanded capacity in recent years to meet consumption fueled by its economic growth.[13] China's production of six base metals increased from 1.2 million metric tons to 2.3 million metric tons in 1990, and reportedly has reached over 9 million metric tons in 2002, according to industry sources.[14]

Imports of ceramic household articles from China also increased significantly, particularly for household tableware and kitchenware. China has concentrated on producing and exporting inexpensive chinaware for the restaurant and hotel industry, a highly price-competitive and labor-intensive segment of the U.S. market where China has an advantage due to low labor costs.

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[10] President George W. Bush, Presidential Proclamation No. 7529, p. 10555.

[11] For a discussion of the competitive challenges of the U.S. refined copper industry, see Christopher B. Mapes, "Major Contraction of the Domestic Refined Copper Industry," *Industry Trade and Technology Review*, Dec. 2002.

[12] Tom Stundza, "Higher Prices Seen in 2003 Due to Stronger Demand," *Purchasing*, Sept. 5, 2002.

[13] Lu Xiaoming, "Will Supply Put the Brakes on Base Metals Growth?," *Metal Bulletin Monthly*, Dec. 2002.

[14] Ibid.

The U.S. trade deficit with India increased largely due to a $700-million increase in imports of worked diamonds from India, part of an overall increase in trade between the two countries. India is now the leading exporter of small and medium-sized diamonds to the United States.[15] U.S. imports of Indian steel mill products also increased threefold from $95 million to $350 million, partially due to an increase in prices for Indian steel products as the industry begins to produce higher-value products.[16]

A $285-million decline in exports and a $485-million increase in imports resulted in a shift from a trade surplus in 2001 to a trade deficit in 2002 with Mexico. The most significant trade shift was due to miscellaneous products of base metal as exports decreased by $167 million and imports increased by $166 million. An increase in U.S. production of automobiles in 2002 accounted for increased demand for motor vehicle-related products, such as springs for suspensions, metal hinges, and locks, whereas the export decline occurred primarily in miscellaneous iron and steel products.

In 2002, the United States imported substantially more steel mill products from Mexico (an increase of $315 million) and exported less (a decrease of $175 million). Another notable import shift occurred in precious metals and non-numismatic coins, which grew by 57 percent to $448 million, primarily due to an increase in imports of silver bullion.

COMMODITY ANALYSIS

Precious Metals and Non-numismatic Coins[17]

Change in 2002 from 2001:

U.S. trade deficit: Decreased by $174 million (13 percent) to $1.2 billion
U.S. exports: Decreased by $1.8 billion (26 percent) to $5.1 billion
U.S. imports: Decreased by $1.9 billion (24 percent) to $6.3 billion

The U.S. trade deficit declined primarily because of lower gold exports and platinum-group metals (PGM) imports. Quantities traded declined enough in 2002 to reduce both U.S. import and export values, despite significantly higher prices for gold and platinum.[18]

U.S. exports

The decline in precious-metals and non-numismatic coin exports was dominated by significantly lower gold exports in 2002 compared to the previous year (table 9-3).The top two export markets for gold and other precious metals continued to be Switzerland ($2.0 billion, or 39 percent share) and the United

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[15] "India-US Bilateral Trade Zooms in 2002," U.S. Embassy of India, Mar. 4, 2003, found at *http://www.indianembassy.org/press_release/2003/mar/04.htm*, retrieved Mar. 10, 2003.

[16] "Industrial Revival is Fragile," EIU Viewswire, Dec. 10, 2002, found at *http://www.viewswire.com/index.asp?layout=display_article&search_text=steel&doc_id=225291*, retrieved Mar. 10, 2003.

[17] This industry/commodity group includes gold, silver, and platinum-group metals (platinum, palladium, rhodium, iridium, ruthenium, and osmium) in unwrought or semimanufactured forms; precious-metals waste and scrap; and precious-metal non-numismatic coins. Monetary gold held as official reserves by central banks is excluded from this group.

[18] The annual average of the London Final fix for gold rose to $309.97 per troy ounce in 2002 compared to $270.99 per troy ounce in 2001. The Englehard Industries annual-average prices for platinum rose to $542.56 per troy ounce in 2002 compared to $533.31 per troy ounce in 2001. Earle B. Amey and Henry E. Hilliard, "Precious Metals in December 2002," *Mineral Industry Surveys*, U.S. Geological Survey (USGS), Mar. 2003, p. 4.

Kingdom ($1.3 billion, or 26 percent). Gold was shipped predominantly as refined unwrought bullion bars ($1.4-billion decline, or 94 percent of the net decline in gold exports), but also as unrefined dore[19] ($85-million decline, or 5 percent), to the United Kingdom and Switzerland, two major worldwide precious-metals refining, fabricating, and trading centers.[20] Reduced quantities of exported gold largely reflected a 10-percent decline of U.S. mine output in 2002, as four gold mines ceased operations between July 2001 and August 2002,[21] and as U.S. refinery production of primary gold fell 6 percent below the previous year's level.[22]

Despite lower world gold consumption and mine production (down 9 percent and 2 percent, respectively) during 2002,[23] prices increased throughout the year in terms of the U.S. dollar and other major currencies. At the beginning of the year, concerns over equity markets, banking loan portfolios, accounting transparency, and corporate governance led to renewed investor interest in gold as a risk-management "safe haven;" similarly, geopolitical uncertainties, particularly in the last quarter of the year, augmented the upward pressure on gold prices.[24] However, the rise in gold prices was not sufficient to mitigate the sharp decline in quantities exported.

U.S. imports

The decline in precious-metals and non-numismatic coin imports was predominantly due to significantly lower PGM imports in 2002 compared to the previous year (table 9-4). The United States has only one producing PGM mine and must rely extensively on imports to meet domestic consumption needs.[25] Reduced PGM imports were primarily palladium ($2.0-billion decline, or 83 percent of the net decline in PGM imports) and rhodium ($292 million, or 12 percent) in unwrought or powder forms. Despite increased automobile production, the largest consumer of PGMs, in 2002, automakers have limited spot-market purchases, continued drawing down inventories, and even substituted some platinum for palladium in catalytic converters,[26] leading to a decline in imports for PGM.

The decline in import quantities was augmented by continued lower palladium and rhodium prices, down sharply since 2000 when supply concerns and more robust automotive demand encouraged stockpiling as a hedge against further price escalations.[27] Pressure on prices in 2002 was further eased as Russia

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[19] Gold dore is unrefined metallic gold which often contains some silver and various base metals.

[20] The United States is a major producer and also a refining, fabricating, and trading center for precious metals.

[21] According to industry sources, mine closures largely reflected difficulties experienced by mining companies in replacing production with new reserves, partly a result of declining gold exploration expenditures for a fifth-consecutive year. Otherwise, average output per operating mine remained at about the same level as in the previous year. Domestic mine production of 300 metric tons was still high enough to maintain the United States as the world's second-largest gold producer behind South Africa's production of 395 metric tons. Earle B. Amey, "Gold," *Mineral Commodity Summaries*, USGS, Jan. 2003, pp. 74-75.

[22] Domestic refinery production of primary gold was 180 metric tons in 2002. Ibid., p. 74.

[23] Official statistics of the World Gold Council (WGC), London, United Kingdom; and Amey, "Gold," p. 75.

[24] "Market Developments," *Gold Demand Trends*, No. 42, WGC, Mar. 2003, p. 6. See also ch. 2 for a general discussion about U.S. and international macroeconomic conditions that influenced U.S. merchandise trade performance in 2002.

[25] Imports as a share of apparent consumption in 2002 were estimated at 93 percent for platinum and 69 percent for palladium. Henry E. Hilliard, "Platinum-Group Metals," *Mineral Commodity Summaries*, USGS, Jan. 2003, p. 126.

[26] Alysson Pisculli, "JM Sees Palladium Demand Down 28 Percent in '02," *American Metal Market*, Nov. 12, 2002, found at *http://www.amm.com/subscrib/2002/nov/week2/1112pm01.htm*, retrieved Nov. 13, 2002.

[27] The Englehard Industries annual-average prices for palladium fell to $339.68 per troy ounce in 2002 from $610.61 per troy ounce in 2001.The equivalent price for rhodium over the same period fell to $837.94 per troy ounce from $1,598.67. Henry E. Hilliard, USGS, interview with USITC staff, Apr. 2, 2003.

increased mine output 11 percent over the previous year's level;[28] with Russia's largest PGM producer, MMC Norilsk Nickel, signing long-term supply contracts with both U.S. and Japanese automakers; and by market anticipation that the Russian Government will possibly increase sales next year from its official inventories to aid debt repayments.[29] As a major minerals producer, Russia was the fourth-largest supplier of precious metals and non-numismatic coins to the United States in 2002 ($509 million, or 8 percent share). Larger U.S. sources for these products in that year continued to be major minerals producers, Canada ($2.0 billion, or 32 percent) and South Africa ($1.2 billion, or 19 percent), and the major metals processing and marketing center, the United Kingdom ($510 million, or 8 percent).

Table 9-3
Changes in U.S. exports of precious metals and non-numismatic coins, 2001 and 2002

Item (All forms)	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
Silver	233	265	32	14
Non-numismatic coins	22	37	15	65
Waste, scrap, and ash	1,216	1,226	10	1
Platinum-group metals	960	722	-237	-25
Gold	4,395	2,820	-1,575	-36
Total	6,826	5,070	-1,756	-26

Note.–Calculations based on unrounded data.

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

Table 9-4
Changes in U.S. imports of precious metals and non-numismatic coins, 2001 and 2002

Item (All forms)	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
Gold	2,022	2,352	330	16
Silver	531	687	156	29
Non-numismatic coins	106	143	36	34
Waste, scrap, and ash	304	256	-48	-16
Platinum-group metals	5,229	2,825	-2,403	-46
Total	8,193	6,263	-1,930	-24

Note.–Calculations based on unrounded data.

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

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[28] Russia is the world's largest producer of palladium, supplying 99.5 metric tons in 2002. Hilliard, "Platinum-Group Metals," p. 127.

[29] Pisculli, "JM Sees Palladium Demand Down 28 Percent in '02."

Natural and Synthetic Gemstones

Change in 2002 from 2001:

U.S. trade deficit: Increased by $2.0 billion (21 percent) to $11.7 billion
U.S. exports: Decreased by $508 million (28 percent) to $1.3 billion
U.S. imports: Increased by $1.5 billion (13 percent) to $13.1 billion

The expanded U.S. trade deficit for natural and synthetic gemstones was principally the result of increased consumption for slightly lower priced imported products, especially diamonds (table 9-5).[30] As the world's largest consumer market for gemstones with little or no natural resources of its own, the United States relies on imports to supply most of its requirements.[31] After 4 consecutive years of growth, U.S. exports decreased in quantity and unit value in 2002,[32] reflecting a reduced inventory of U.S. cut diamonds[33] and relatively weaker global economic markets compared with that of the United States.[34]

U.S. imports

The U.S. diamond industry entered 2002 with a cautious view towards growth after stronger holiday sales than anticipated for the previous year.[35] Although holiday sales were supported by discounted prices,[36] early signs of a strengthening U.S. economy[37] and significantly reduced inventory in the U.S. distribution pipeline[38] resulted in increased imports of cut diamonds, which accounted for 95 percent of the import value of this product group. However, prevailing consumer concerns about the overall economic environment[39] appear to have prompted the restocking of inventory with less expensive goods, which was underscored by the magnitude of imports from India.[40] As the low-priced supplier of cut diamonds, India accounted for 2.9 million carats (78 percent) of the increase in imports by weight and 12.6 million carats (63 percent) of total imports.

As in previous years, Israel, India, and Belgium —major diamond cutting and trading centers—continued to account for most U.S. diamond imports by value. These three countries together

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[30] Cut diamonds were the dominant items, registering an increased import value of $1.5 billion (15 percent) to $11.5 billion. At the same time, the quantity increased by 3.7 million carats (23 percent), thereby decreasing the trade weighted average unit import price by $42 (7 percent) to $577 per carat.

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

[32] The export value of cut diamonds decreased by $421 million (27 percent) to about $1.2 billion; the quantity decreased by 239 million carats (13 percent) to 1.6 billion; and the trade weighted average unit export price decreased by $135 to $749 per carat.

[33] "De Beers 2002 Financial Results," *De Beers Press Release*, Feb. 6, 2003, found at *http://www.diamonds.net/news/newsitem.asp?num=7750&type=all&topic=all.*

[34] "Editorial: A Hesitant Recovery," *OECD Economic Outlook*, vol. 2002/2, No. 72 (Dec. 2002), pp. vi-viii.

[35] Martin Rapaport, "Market Outlook 2002," *Rapaport News*, Feb. 28, 2002, found at *http://www.diamonds.net/news/newsitem.asp?num=6313&type=all&topic=all.*

[36] Ibid.

[37] "Developments in the United States," *OECD Economic Outlook*, (Dec. 2002), p. 37.

[38] "De Beers 2002 Financial Results," *De Beers Press Release*, Feb. 6, 2003

[39] The consumer confidence index was down by 10 points to 96.6 in 2002 compared with 2001. However, other economic market indicators used by the gemstone industry include real gross domestic product which was up by 2.4 percent to $9.4 trillion; real disposable personal income, up by 4 percent to $7.0 trillion; and the average prime rate of interest, down by 2 percentage points to 4.67percent.

[40] Saul Singer, "U.S. Imports/Exports Highlights - 2002," *Rapaport News*, Feb. 23, 2003, found at *http://www.diamonds.net/news/newsitem.asp?num=7750&type=all&topic=all.*

represented $10.7 billion (89 percent) of imported diamonds in 2002, an increase of $1.5 billion (17 percent) from 2001. Sources of other gemstone products included Thailand and India as the dominant suppliers of natural colored gemstones, together accounting for $272 million (43 percent) of imports in 2002, up by nearly $21 million (8 percent); Japan supplied about $104 million (34 percent) of pearl imports, down by $5 million (4 percent); and lastly China, Germany, and Switzerland together supplied $28 million (62 percent) of synthetic products, down by about $6 million (17 percent).

Table 9-5
Changes in U.S. imports of natural and synthetic gemstones, 2001 and 2002

Item	2001	2002	Change, 2002 from 2001	
			Absolute	*Percent*
	Million dollars			
Diamonds	10,625	12,088	1,463	14
Natural color gemstones	572	629	57	10
Pearls	321	301	-21	-7
Synthetic and reconstructed gemstones	58	45	-13	-22
Total	11,577	13,063	1,486	13

Note.–Calculations based on unrounded data.

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

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Table 9-6
Minerals and metals: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
MM001	Clays and related mineral products:				
	Exports	973	941	-32	-3.3
	Imports	179	158	-20	-11.4
	Trade balance	794	782	-12	-1.5
MM002	Fluorspar and miscellaneous mineral substances:				
	Exports	51	39	-12	-23.8
	Imports	159	147	-12	-7.4
	Trade balance	-108	-109	(3)	-0.3
MM003	Iron ores and concentrates:				
	Exports	229	249	20	8.5
	Imports	293	313	20	6.8
	Trade balance	-64	-64	(3)	-0.4
MM004	Copper ores and concentrates:				
	Exports	84	79	-6	-6.8
	Imports	58	105	47	81.5
	Trade balance	26	-26	-53	(4)
MM005	Lead ores, concentrates, and residues:				
	Exports	108	133	24	22.4
	Imports	1	(3)	-1	-98.5
	Trade balance	108	133	25	23.0
MM005A	Lead ores and concentrates:				
	Exports	106	117	11	10.8
	Imports	(3)	(3)	(3)	-98.2
	Trade balance	105	117	12	11.3
MM006	Zinc ores, concentrates, and residues:				
	Exports	299	339	41	13.6
	Imports	38	53	15	38.1
	Trade balance	260	286	26	9.9
MM006A	Zinc ores and concentrates:				
	Exports	290	328	37	12.9
	Imports	32	45	13	41.0
	Trade balance	259	283	24	9.5
MM007	Certain ores, concentrates, ash, and residues:				
	Exports	248	183	-65	-26.4
	Imports	797	728	-69	-8.7
	Trade balance	-549	-545	4	0.7
MM007A	Molybdenum ores and concentrates:				
	Exports	110	112	2	2.1
	Imports	33	37	4	12.2
	Trade balance	77	76	-2	-2.2
MM008	Precious metal ores and concentrates:				
	Exports	85	68	-17	-19.9
	Imports	14	43	29	205.1
	Trade balance	71	26	-45	-64.0
MM008A	Gold ores and concentrates:				
	Exports	7	10	3	35.8
	Imports	1	28	26	2,016.2
	Trade balance	6	-18	-24	(4)
MM008B	Silver ores and concentrates:				
	Exports	72	57	-15	-20.3
	Imports	3	13	10	378.2
	Trade balance	69	44	-25	-36.1

See footnote(s) at end of table.

Table 9-6--*Continued*
Minerals and metals: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
MM009	Cement, stone, and related products:				
	Exports	1,322	1,279	-42	-3.2
	Imports	4,407	4,611	204	4.6
	Trade balance	-3,085	-3,332	-247	-8.0
MM009A	Cement:				
	Exports	56	58	2	3.1
	Imports	987	939	-48	-4.9
	Trade balance	-931	-881	50	5.3
MM010	Industrial ceramics:				
	Exports	711	645	-65	-9.2
	Imports	640	497	-143	-22.3
	Trade balance	71	148	77	109.2
MM011	Ceramic bricks and similar articles:				
	Exports	23	23	([3])	-1.2
	Imports	31	34	4	12.5
	Trade balance	-8	-12	-4	-53.4
MM012	Ceramic floor and wall tiles:				
	Exports	27	28	1	5.0
	Imports	1,112	1,290	178	16.0
	Trade balance	-1,086	-1,262	-177	-16.3
MM013	Ceramic household articles:				
	Exports	96	83	-13	-13.5
	Imports	1,635	1,691	56	3.4
	Trade balance	-1,539	-1,608	-69	-4.5
MM014	Flat glass:				
	Exports	1,791	1,694	-97	-5.4
	Imports	1,500	1,553	53	3.5
	Trade balance	291	140	-150	-51.7
MM015	Glass containers:				
	Exports	211	165	-46	-21.7
	Imports	538	608	70	13.0
	Trade balance	-327	-443	-116	-35.5
MM016	Household glassware:				
	Exports	209	177	-33	-15.6
	Imports	835	888	54	6.4
	Trade balance	-625	-711	-86	-13.8
MM017	Miscellaneous glass products:				
	Exports	814	729	-85	-10.4
	Imports	769	653	-116	-15.1
	Trade balance	46	76	31	67.6
MM018	Fiberglass insulation products:				
	Exports	74	75	1	1.0
	Imports	124	131	7	5.9
	Trade balance	-50	-56	-7	-13.2
MM019	Natural and synthetic gemstones:				
	Exports	1,840	1,331	-508	-27.6
	Imports	11,577	13,063	1,486	12.8
	Trade balance	-9,737	-11,731	-1,994	-20.5
MM020	Precious metals and non-numismatic coins:				
	Exports	6,826	5,070	-1,756	-25.7
	Imports	8,193	6,263	-1,930	-23.6
	Trade balance	-1,366	-1,193	174	12.7

See footnote(s) at end of table.

Table 9-6--*Continued*
Minerals and metals: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
MM020A	Unrefined and refined gold:				
	Exports	4,186	2,639	-1,547	-37.0
	Imports	1,700	2,143	443	26.1
	Trade balance	2,486	496	-1,990	-80.1
MM021	Primary iron products:				
	Exports	7	7	([3])	-0.3
	Imports	632	729	97	15.4
	Trade balance	-624	-722	-97	-15.6
MM022	Ferroalloys:				
	Exports	74	50	-23	-31.6
	Imports	660	713	53	8.1
	Trade balance	-586	-663	-77	-13.1
MM023	Iron and steel waste and scrap:				
	Exports	1,151	1,307	157	13.6
	Imports	284	397	113	40.0
	Trade balance	867	911	43	5.0
MM024	Abrasive and ferrous products:				
	Exports	476	445	-31	-6.5
	Imports	718	746	28	3.9
	Trade balance	-242	-301	-59	-24.2
MM024A	Abrasive products:				
	Exports	289	284	-5	-1.8
	Imports	473	505	33	6.9
	Trade balance	-184	-222	-38	-20.5
MM025	Steel mill products:				
	Exports	4,756	4,533	-223	-4.7
	Imports	11,630	12,203	573	4.9
	Trade balance	-6,874	-7,670	-796	-11.6
MM025A	Ingots, blooms, billets, and slabs of carbon and alloy steels:				
	Exports	70	55	-16	-22.2
	Imports	1,056	1,601	545	51.6
	Trade balance	-986	-1,546	-561	-56.9
MM025B	Plates, sheets, and strips of carbon and alloy steels:				
	Exports	1,922	1,794	-128	-6.7
	Imports	3,422	3,860	439	12.8
	Trade balance	-1,500	-2,067	-567	-37.8
MM025C	Bars, rods, and light shapes of carbon and alloy steels:				
	Exports	408	414	6	1.6
	Imports	1,886	1,928	42	2.2
	Trade balance	-1,478	-1,514	-36	-2.4
MM025D	Angles, shapes, and sections of carbon and alloy steels:				
	Exports	199	156	-43	-21.8
	Imports	421	338	-83	-19.7
	Trade balance	-222	-182	40	17.9
MM025E	Wire of carbon and alloy steels:				
	Exports	180	159	-20	-11.3
	Imports	449	467	19	4.1
	Trade balance	-269	-308	-39	-14.4

See footnote(s) at end of table.

Table 9-6--*Continued*
Minerals and metals: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
MM025F	Ingots, blooms, billets, and slabs of stainless steels:				
	Exports	37	59	22	59.6
	Imports	299	306	7	2.2
	Trade balance	-262	-247	15	5.9
MM025G	Plates, sheets, and strips of stainless steels:				
	Exports	403	410	7	1.7
	Imports	512	553	41	8.0
	Trade balance	-108	-142	-34	-31.6
MM025H	Bars, rods, and light shapes of stainless steels:				
	Exports	94	82	-11	-12.1
	Imports	351	284	-67	-19.0
	Trade balance	-257	-202	55	21.5
MM025I	Angles, shapes, and sections of stainless steels:				
	Exports	7	6	-1	-12.2
	Imports	14	12	-2	-15.0
	Trade balance	-7	-6	1	17.9
MM025J	Wire of stainless steels:				
	Exports	71	67	-4	-5.0
	Imports	98	92	-6	-6.0
	Trade balance	-27	-25	2	8.6
MM025K	Rails and accessories of carbon and alloy steels:				
	Exports	77	73	-3	-4.5
	Imports	154	167	13	8.3
	Trade balance	-77	-93	-16	-21.1
MM025L	Pipes and tubes of carbon and alloy steels:				
	Exports	1,015	1,016	1	0.1
	Imports	2,434	2,136	-298	-12.2
	Trade balance	-1,419	-1,120	299	21.1
MM025M	Pipes and tubes of stainless steels:				
	Exports	141	118	-23	-16.4
	Imports	338	274	-64	-18.8
	Trade balance	-197	-156	40	20.5
MM025N	Tool steels:				
	Exports	132	122	-9	-7.1
	Imports	196	184	-13	-6.5
	Trade balance	-65	-61	3	5.3
MM026	Steel pipe and tube fittings and certain cast products:				
	Exports	707	669	-38	-5.4
	Imports	697	669	-27	-3.9
	Trade balance	10	([3])	-11	([4])
MM027	Fabricated structurals:				
	Exports	184	166	-18	-9.6
	Imports	638	627	-12	-1.8
	Trade balance	-454	-460	-6	-1.3
MM028	Metal construction components:				
	Exports	505	497	-8	-1.6
	Imports	990	1,135	145	14.6
	Trade balance	-485	-638	-153	-31.5
MM029	Metallic containers:				
	Exports	666	661	-5	-0.7
	Imports	570	645	75	13.2
	Trade balance	96	16	-80	-82.9

See footnote(s) at end of table.

Table 9-6--*Continued*
Minerals and metals: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
MM030	Wire products of base metal:				
	Exports	718	732	15	2.0
	Imports	1,355	1,416	61	4.5
	Trade balance	-637	-684	-46	-7.3
MM031	Miscellaneous products of base metal:				
	Exports	5,264	5,283	19	0.4
	Imports	7,107	7,773	666	9.4
	Trade balance	-1,843	-2,491	-647	-35.1
MM032	Industrial fasteners of base metal:				
	Exports	1,481	1,496	15	1.0
	Imports	2,006	2,085	80	4.0
	Trade balance	-525	-589	-64	-12.3
MM033	Cooking and kitchen ware:				
	Exports	260	201	-59	-22.6
	Imports	1,743	1,933	190	10.9
	Trade balance	-1,483	-1,732	-249	-16.8
MM034	Metal and ceramic sanitary ware:				
	Exports	124	134	10	7.7
	Imports	588	742	154	26.2
	Trade balance	-464	-608	-144	-31.2
MM035	Construction castings and other cast-iron articles:				
	Exports	24	25	1	5.0
	Imports	110	112	2	2.1
	Trade balance	-86	-87	-1	-1.3
MM036	Copper and related articles:				
	Exports	1,852	1,744	-108	-5.8
	Imports	4,296	3,715	-581	-13.5
	Trade balance	-2,444	-1,972	473	19.3
MM036A	Unrefined and refined copper:				
	Exports	69	92	23	33.1
	Imports	2,140	1,740	-399	-18.7
	Trade balance	-2,070	-1,648	422	20.4
MM036B	Copper alloy plate, sheet, and strip:				
	Exports	155	117	-37	-24.2
	Imports	145	118	-27	-18.5
	Trade balance	9	-1	-10	([4])
MM037	Unwrought aluminum:				
	Exports	923	950	27	2.9
	Imports	4,748	4,774	27	0.6
	Trade balance	-3,825	-3,824	([3])	([5])
MM037A	Primary and secondary aluminum:				
	Exports	466	431	-36	-7.6
	Imports	4,085	4,188	103	2.5
	Trade balance	-3,619	-3,757	-139	-3.8
MM038	Aluminum mill products:				
	Exports	2,784	2,519	-265	-9.5
	Imports	2,305	2,516	211	9.1
	Trade balance	479	3	-476	-99.3
MM038A	Aluminum bars, rods, and profiles:				
	Exports	245	226	-19	-7.6
	Imports	352	417	65	18.3
	Trade balance	-108	-191	-83	-77.4

See footnote(s) at end of table.

Table 9-6--*Continued*
Minerals and metals: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
MM038B	Aluminum wire:				
	Exports	84	77	-7	-8.8
	Imports	162	190	28	17.3
	Trade balance	-78	-114	-36	-45.5
MM038C	Aluminum plate, sheet, and strip:				
	Exports	1,872	1,652	-220	-11.7
	Imports	1,242	1,331	89	7.1
	Trade balance	629	321	-308	-49.0
MM038D	Aluminum foil:				
	Exports	328	319	-9	-2.8
	Imports	441	468	27	6.2
	Trade balance	-113	-150	-37	-32.4
MM038E	Aluminum tubes, pipes, and fittings:				
	Exports	215	205	-10	-4.6
	Imports	90	95	4	4.9
	Trade balance	125	111	-14	-11.6
MM039	Lead and related articles:				
	Exports	78	68	-11	-13.6
	Imports	167	125	-42	-25.2
	Trade balance	-88	-57	31	35.5
MM039A	Refined lead:				
	Exports	8	14	6	82.2
	Imports	90	82	-8	-9.4
	Trade balance	-83	-68	15	18.0
MM040	Zinc and related articles:				
	Exports	86	84	-2	-2.8
	Imports	968	908	-60	-6.2
	Trade balance	-882	-825	57	6.5
MM040A	Unwrought zinc:				
	Exports	1	1	([3])	-6.5
	Imports	786	731	-55	-7.0
	Trade balance	-785	-730	55	7.0
MM041	Certain base metals and chemical elements:				
	Exports	1,702	1,498	-205	-12.0
	Imports	2,467	1,952	-515	-20.9
	Trade balance	-765	-454	311	40.6
MM041A	Titanium ingot:				
	Exports	22	12	-9	-42.1
	Imports	27	13	-14	-51.7
	Trade balance	-6	-1	5	88.2
MM042	Nonpowered handtools:				
	Exports	2,119	2,038	-82	-3.8
	Imports	2,996	3,284	288	9.6
	Trade balance	-876	-1,246	-370	-42.2
MM043	Certain cutlery, sewing implements, and related products:				
	Exports	556	551	-5	-0.8
	Imports	865	912	48	5.5
	Trade balance	-309	-361	-52	-16.9
MM044	Table flatware and related products:				
	Exports	28	29	1	3.3
	Imports	463	478	15	3.3
	Trade balance	-435	-450	-14	-3.3

See footnote(s) at end of table.

Table 9-6--*Continued*
Minerals and metals: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
MM045	Certain builders' hardware:				
	Exports	961	907	-54	-5.6
	Imports	1,948	2,197	248	12.7
	Trade balance	-987	-1,289	-302	-30.6

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes
[3]Less than $500,000.
[4]Not meaningful for purposes of comparison.
[5]Less than 0.05 percent.

Note.—Calculations based on unrounded data.

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

CHAPTER 10
Machinery

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Change in 2002 from 2001:

U.S. trade deficit: Increased by $6.6 billion (43 percent) to $21.9 billion
U.S. exports: Decreased by $6.3 billion (9 percent) to $63.3 billion
U.S. imports: Increased by $314 million (0.4 percent) to $85.2 billion

The U.S. trade deficit in machinery increased significantly in 2002, for the second consecutive year, as exports declined by 9 percent.[1] Decreased exports accounted for more than 95 percent of the deficit increase (table 10-1), although the decrease in machinery exports in 2002 was less than two-thirds as large as the prior year's decrease. Three industry/commodity groups--semiconductor-manufacturing equipment and robotics; electric motors, generators, and related equipment; and electrical transformers, static converters, and inductors--accounted for more than 40 percent of the export decrease. As in previous years, Canada and Mexico were by far the two largest export markets for U.S. machinery. In 2002, for the first time, machinery imports from China exceeded $10 billion.

Semiconductor-manufacturing equipment and robotics accounted for more than 17 percent of the total decrease in U.S. machinery exports (table 10-2), although the decrease in this industry group in 2002 was only one-fifth as large as the decrease in 2001. This decrease is attributable to the global slowdown in demand for products containing integrated circuits. The next largest industry group, electric motors, generators, and related equipment, accounted for more than 12 percent of the total decrease. This contrasts sharply with the previous year, when these products accounted for the largest absolute and relative increases of all industry groups in the machinery sector, led by exports of electric power generation equipment to Brazil. U.S. exports of power generation and transmission equipment to Brazil surged in 2001 due to investments in thermal power-generating plants after several years of drought drastically reduced the generating capacity of Brazil's hydroelectric facilities. The market collapsed in 2002, however, as rains filled reservoirs, electricity rationing reduced consumption patterns, and industrial power usage declined in the midst of the falling value of the Brazilian real.[2] In 2002, as demand reverted to historic levels, Brazil recorded the largest decrease in U.S. exports for this industry group ($446 million). More than 10 percent of the total decrease in U.S. machinery exports in 2002 occurred in electrical transformers, static converters, and inductors with decreased sales to Canada and Mexico accounting for more than 60 percent of the $652 million downturn.

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[1] For additional information, see "Semiconductor Manufacturing Machinery" and "Household Appliances, Including Commercial Applications" in this chapter.

[2] For additional information, see U.S. International Trade Commission, "Power Generation and Transmission Equipment in the Latin American Market," *Industry, Trade, and Technology Review,* USITC publication No 3574, Dec. 2002.

Table 10-1
Machinery: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001 and 2002[1]

Item	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
Mexico	10,263	9,183	-1,080	-10.5
Canada	15,949	15,207	-742	-4.7
Japan	4,133	3,328	-804	-19.5
China	2,356	2,730	374	15.9
Germany	3,413	2,625	-788	-23.1
Taiwan	2,954	3,217	263	8.9
United Kingdom	3,293	2,731	-562	-17.1
Korea	2,452	2,521	69	2.8
Italy	957	786	-171	-17.8
France	1,955	1,622	-333	-17.0
All other	21,828	19,312	-2,516	-11.5
Total	69,552	63,262	-6,290	-9.0
EU-15	13,998	11,669	-2,330	-16.6
OPEC	2,717	2,476	-241	-8.9
Latin America	16,223	13,627	-2,595	-16.0
CBERA	1,577	1,357	-220	-14.0
Asia	17,215	16,799	-415	-2.4
Sub-Saharan Africa	669	672	2	0.4
Central and Eastern Europe	397	395	-2	-0.6
U.S. imports of merchandise for consumption:				
Mexico	14,821	16,321	1,499	10.1
Canada	9,876	9,810	-66	-0.7
Japan	14,286	12,689	-1,597	-11.2
China	8,620	10,467	1,847	21.4
Germany	9,648	8,902	-745	-7.7
Taiwan	2,872	2,743	-129	-4.5
United Kingdom	3,420	3,002	-418	-12.2
Korea	2,297	2,554	257	11.2
Italy	3,499	3,519	20	0.6
France	2,027	1,919	-108	-5.3
All other	13,500	13,254	-246	-1.8
Total	84,867	85,181	314	0.4
EU-15	24,642	23,076	-1,566	-6.4
OPEC	233	219	-14	-6.1
Latin America	15,899	17,469	1,570	9.9
CBERA	220	235	15	6.8
Asia	30,675	31,163	488	1.6
Sub-Saharan Africa	264	231	-32	-12.3
Central and Eastern Europe	789	836	47	5.9
U.S. merchandise trade balance:				
Mexico	-4,558	-7,138	-2,580	-56.6
Canada	6,073	5,396	-676	-11.1
Japan	-10,153	-9,361	792	7.8
China	-6,265	-7,737	-1,473	-23.5
Germany	-6,235	-6,278	-43	-0.7
Taiwan	82	474	392	476.0
United Kingdom	-127	-271	-144	-113.1
Korea	154	-33	-188	(2)
Italy	-2,542	-2,732	-190	-7.5
France	-72	-297	-225	-311.0
All other	8,328	6,058	-2,270	-27.3
Total	-15,315	-21,919	-6,604	-43.1
EU-15	-10,644	-11,408	-764	-7.2
OPEC	2,484	2,257	-226	-9.1
Latin America	324	-3,842	-4,166	(2)
CBERA	1,357	1,122	-235	-17.3
Asia	-13,460	-14,364	-904	-6.7
Sub-Saharan Africa	406	441	35	8.6
Central and Eastern Europe	-392	-441	-49	-12.5

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2002.

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

Table 10-2
Leading changes in U.S. exports and imports of machinery, 2001 and 2002

Sector/commodity	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million dollars		
U.S. EXPORTS:				
Increases:				
Farm and garden machinery and equipment (MM078)	4,565	4,747	182	4.0
Wiring harnesses for motor vehicles (MM068)	866	961	94	10.9
Pumps for motor vehicles (MM069)	642	681	39	6.1
Industrial food-processing and related machinery (MM079)	576	606	30	5.2
Decreases:				
Semiconductor manufacturing machinery (MM087A)	8,044	6,972	-1,071	-13.3
Electric motors, generators, and related equipment (MM091)	4,691	3,923	-769	-16.4
Electrical transformers, static converters, and inductors (MM092)	2,436	1,784	-652	-26.8
All other	47,732	43,589	-4,143	-8.7
TOTAL	69,552	63,262	-6,290	-9.0
U.S. IMPORTS:				
Increases:				
Household appliances, including commercial applications (MM073)	8,356	9,564	1,208	14.5
Wiring harnesses for motor vehicles (MM068)	4,684	5,302	617	13.2
Air-conditioning equipment and parts (MM071)	6,081	6,674	593	9.7
Decreases:				
Metal cutting machine tools and machine tool accessories (MM084)	3,407	2,558	-849	-24.9
Semiconductor manufacturing machinery (MM087A)	3,947	3,304	-643	-16.3
Metal forming machine tools (MM085)	1,331	846	-485	-36.4
Electric motors, generators, and related equipment (MM091)	7,646	7,177	-468	-6.1
All other	49,415	49,757	342	0.7
TOTAL	84,867	85,181	314	0.4

Note.-Calculations based on unrounded data.

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

Increased imports accounted for less than 5 percent of the trade deficit increase in machinery in 2002 compared to 2001 (see table 10-1). Significant increases in the value of imports for major appliances,[3] wiring harnesses for motor vehicles, and air-conditioning equipment and parts were somewhat countered by decreases in other industry groups, including metal cutting machine tools and machine tool accessories; semiconductor manufacturing equipment and robotics; metal forming machine tools; and electric motors, generators, and related equipment.

Within the machinery sector, U.S. exports of semiconductor manufacturing equipment and robotics went primarily to China, Japan, Korea, Taiwan, and Singapore, while such U.S. imports were largely supplied by Germany, Israel, Japan, the Netherlands, and the United Kingdom. The market for electric motors, generators, and related equipment reflects manufacturing integration in North America, with Mexico and Canada, respectively, being the largest customer and the major supplier to the United States. Other key

[3] For additional information, see "Household Appliances, Including Commercial Applications" in this chapter.

export markets for this equipment were Brazil and the United Kingdom, while China, Germany, and Japan were major import sources.

The commodity analyses that follow for semiconductor manufacturing machinery, and for household appliances, provide more specific information on these trade shifts. Trade statistics for all industry/commodity groups in this sector are presented in table 10-5 at the end of the chapter.

U.S. BILATERAL TRADE

Largest trade balance shifts in 2002 from 2001:

Mexico: U.S. deficit increased by $2.6 billion (57 percent) to $7.1 billion
China: U.S. deficit increased by $1.5 billion (24 percent) to $7.7 billion
Japan: U.S. deficit decreased by $792 million (8 percent) to $9.4 billion

As integration of the North American manufacturing economy accelerated during 2002, the increase in the U.S. machinery trade deficit with Mexico exceeded that of the other trading partner for the first time. Machinery imports from Mexico increased in 2002 by $15 billion, or 10 percent, to $16.3 billion. Three industry/commodity groups--wiring harnesses for motor vehicles; electric motors, generators, and related equipment; and major appliances--accounted for more than half of these imports from Mexico. During the same period, U.S. exports of machinery to Mexico fell by more than 10 percent.

The growing increase in the machinery trade deficit with China was principally due to greater U.S. imports of major appliances, air-conditioning equipment and parts, and portable electric handtools, which increased by more than 23 percent between 2001-2002, to $5.6 billion, and accounted for more than half of all machinery imports from China in 2002. These imports were partially offset by $1.2 billion in U.S. exports of semiconductor manufacturing equipment and robotics; miscellaneous machinery; and major appliances which, combined, increased by almost one-third during 2001-2002 and accounted for more than 40 percent of U.S. machinery exports to China. These two trends reflect the continuing expansion of manufacturing capability in China, which drives increases in both machinery supply and demand.

During 2002, the U.S. machinery trade deficit with Japan decreased for the second year in a row. U.S. imports of semiconductor manufacturing equipment and robotics; electric motors, generators, and related equipment; and metal-cutting machine tools and machine tool accessories from Japan decreased by almost one-fourth between 2001-2002. During the same period, U.S. exports of machinery to Japan declined by almost 20 percent as Japan's economy underwent a tenth year of limited growth.[4]

[4] Tim Callen and Johnathan D. Ostry (eds.), *Japan's Lost Decade: Policies for Economic Revival* (Washington: International Monetary Fund), 2003.

COMMODITY ANALYSIS

Semiconductor-Manufacturing Machinery

Change in 2002 from 2001:

U.S. trade surplus: Decreased by $428 million (10 percent) to $3.7 billion
U.S. exports: Decreased by $1.1 billion (13 percent) to $7.0 billion
U.S. imports: Decreased by $643 million (16 percent) to $3.3 billion

U.S. trade in semiconductor-manufacturing machinery contracted in 2002, largely because of a downturn in consumption due to weakened demand for semiconductors and worldwide political uncertainties.[5] Worldwide semiconductor equipment sales fell by 24 percent to $29.8 billion in 2002.[6] However, the United States and China significantly increased their trade relationship in semiconductor manufacturing machinery in 2002, as imports from China grew by 97 percent to $8 million, while exports to China increased by 63 percent to $551 million. China currently accounts for 6 percent of worldwide semiconductor chip consumption and chip production is expected to increase by 40 percent annually, creating sustained demand for new equipment.[7]

U.S. exports

The major markets for U.S. exports of semiconductor-manufacturing machinery in 2002 were Taiwan and Japan, which together accounted for 41 percent of total U.S. exports. The Taiwanese market remains relatively strong; moreover, Taiwan's foundries continue to be highly competitive[8] and are investing in new technology.[9] The most commonly exported products to these countries were machines for the production of semiconductor devices and circuits, and measuring and checking instruments. Korea, Singapore, and China were the next largest markets for U.S. exports, respectively.[10]

U.S. imports

The most significant supplier of semiconductor-manufacturing machinery to the U.S. market in 2002 was Japan, which accounted for 53 percent of total U.S. imports of such equipment. Although Japan

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[5] "Applied Materials CFO Says Global Worries Still Strong," *Solid State Technology*, Feb, 25, 2003, found at *http://sst.pennet.com/Articles/Article_Display.cfm?Section=OnlineArticles&SubSection=Display&PUBLICATION_ID=5&ARTICLE_ID=169376*, retrieved Feb. 27, 2003.

[6] Mark LaPedus, "ASML Jumps to Third Place in '02 Fab-Tool Rankings," *Silicon Strategies*, Feb. 24, 2003, found at *http://www.siliconstrategies.com/story/OEG20030224S0065*, retrieved Feb. 27, 2003.

[7] Tony Santiago, "Singapore Riding IC Roller Coaster," *EE Times*, Feb. 26, 2003, found at *http://www.siliconstrategies.com/story/OEG20030226S0024*, retrieved Feb. 27, 2003.

[8] A foundry is a semiconductor fabricator that receives a design from a semiconductor company and then manufactures the chips (i.e., it is not involved in the design of new chips). Taiwan is projected to produce 40 percent of the world's wafers (thin, round slices of silicon on which semiconductor chips are produced) by 2010. "Chips on Monster Wafers," *Business Week*, Nov. 4, 2002; and Mure Dickie, "Foundry Model Holds up Despite Slump in Demand," *Financial Times*, Oct. 1, 2002.

[9] Taiwan's investments have upgraded facilities to produce bigger wafers and more chips on each wafer. Katherine Chiu, "Applied Materials: Semiconductor Industry Showing Positive Recovery," *Digitimes.com*, Sept. 17, 2002.

[10] China was the seventh-largest market in 2001.

traditionally has specialized in back-end equipment,[11] there was a wide variety of imports from Japan in 2002. Machines for the production of semiconductor devices and circuits and photolithography equipment were the two largest imports from Japan. U.S. imports from Japan decreased by 27 percent in 2002, whereas U.S. semiconductor manufacturing machinery imports from Korea and the Netherlands increased by 72 percent and 41 percent, respectively. The largest import from the Netherlands was photolithography equipment, which accounted for 29 percent of semiconductor-manufacturing machinery imports in 2002, as Dutch company ASML reported increased orders by customers buying new technology systems in anticipation of an industry upturn.[12] The top three producers of photolithography machines are ASML, Nikon, and Canon;[13] the United States has no competitive producers of this equipment.

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Household Appliances, Including Commercial Applications[14]

Change in 2002 from 2001:

U.S. trade deficit: Increased by $1.6 billion (51 percent) to $4.7 billion
U.S. exports: Decreased by $381 million (7 percent) to $4.8 billion
U.S. imports: Increased by $1.2 billion (14 percent) to $9.6 billion

The increase in the household appliance trade deficit was driven largely by a continued rise in demand by U.S. consumers for residential housing due to record low-financing rates. An increase in U.S. imports of all types of appliances, including those with commercial applications, combined with a worldwide economic slowdown that adversely affected U.S. export markets, contributed to a near record deficit for the sector.

U.S. imports

U.S. imports of household appliances rose significantly from 2001 to 2002 (table 10-3). Imports from the two leading sources, China and Mexico, both registered large to moderate increases in 2002 and accounted for $5.4 billion (56 percent) of total imports of appliances (table 10-4). China continued to be the largest supplier as imports rose by $576 million to $3.4 billion in 2002. Portable appliances including vacuum cleaners, microwave ovens, coffee and tea makers, food grinders and processors, mixers, and fruit or vegetable juice extractors were the major products imported from China. Mexico, the second largest U.S. supplier of household appliances, accounted for $1.9 billion, or 20 percent of the sector total in 2002. Unlike China, imports from Mexico consisted largely of major household appliances such as laundry equipment,

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[11] Back-end equipment is used to package and test semiconductors, whereas front-end equipment is the machinery used to convert raw materials into semiconductor chips. The front-end equipment is much higher in value and adds more value to the final product than back-end equipment.

[12] "ASML Reiterates the Company's Outlook," Sept. 25, 2002, found at *http://www.asml.com/NASApp/asmldotcom/newsrelease.do?rid=1426&ctx=231*, retrieved Mar. 19, 2003.

[13] ASML moved from third to first place in 2002. Mark LaPedus, "ASML Jumps to Third Place in '02 Fab-Tool Rankings," *Silicon Strategies*, Feb. 24, 2003, found at *http://www.siliconstrategies.com/story/OEG20030224S0065*, retrieved Feb. 27, 2003.

[14] This industry/commodity group covers all types of household appliances including vacuum cleaners, vending machines, floor polishers, trash compactors, and traditional major appliances consisting of refrigerators, dishwashers, washers, dryers, gas stoves, and electric ranges.

household refrigerator-freezer units, and gas and electric stoves and ranges. Significant transportation costs and geographic proximity make it more competitive to locate this type of production in Mexico rather than China. In recent years, all major U.S. household appliance companies (Maytag, GE, and Whirlpool) have significantly increased production capacity in Mexico.

U.S. exports

Exports of household appliances fell by $381 million to $4.8 billion in 2002 as demand for these products decreased worldwide as the result of a major slowdown in economic growth. Exports of household appliances to Mexico, the second-largest market for these products in 2002, decreased by $71 million (10 percent) to $649 million. The decrease was due principally to a slowing of the U.S. economy (all major appliance firms have shifted production to maquiladora assembly plants for re-export to the U.S. market) along with a sparse 0.9-percent growth in Mexico's GDP in 2002. In addition, appliances assembled by U.S. firms at plants in Mexico can be sold directly to the Mexican market, substituting for imports from the United States. Household compression-type refrigerators and parts, vacuum cleaners, vending machines and parts, and washing machines exceeding 10 kg were the leading items registering export declines to Mexico.

Other notable declines in U.S. exports of these products occurred in key markets in the EU, principally the United Kingdom and Germany. Together these two countries accounted for 8 percent of total U.S. exports of household appliances. Reduced shipments of centrifugal clothes dryers and encasements for refrigerating or freezing equipment were some of the leading appliance items registering decreases in 2002. The slumping world economy led commercial and residential customers alike to defer their purchases of appliances in 2002.

Of only a handful of countries which experienced growth in U.S. exports of these products and parts, exports to China rose 12 percent to $267 million in 2002. High levels of FDI by multinational firms such as Whirlpool, Eureka, Hoover, and Maytag Corp. in China's appliance and components industry[15] have greatly contributed to the growth in U.S. exports of parts and subassemblies used in producing these products. Floor polishers and components, housings and parts for vacuum cleaners, dishwashing machines, and parts of refrigerators were some of the leading exports to China in 2002.

Table 10-3
Changes in U.S. imports of household appliances, including commercial applications, 2001 and 2002

Item	2001	2002	Change, 2002 from 2001	
			Absolute	*Percent*
	Thousand dollars			
Laundry-type washing machines, exceeding 10 kg	65,743	171,313	105,570	161
Centrifugal clothes dryers	316	836	520	164
Refrigerators compression type	209,612	285,162	75,550	36
Combined refrigerator-freezers	557,779	669,413	111,634	16
Laundry-type washing machines, not exceeding 10 kg	23	677	654	2,832
All other	7,522,527	8,436,599	914,072	12
Total	8,356,000	9,564,000	1,208,000	14

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

[15] For additional information, see "China" in ch. 3.

Table 10-4
Changes in U.S. imports of household appliances, including commercial applications, by country, 2001 and 2002

Item	2001	2002	Change, 2002 from 2001	
			Absolute	*Percent*
	Million dollars			
China	2,845	3,421	576	20
Mexico	1,839	1,991	152	8
Canada	848	873	25	3
Korea	611	818	207	34
Germany	427	566	139	33
All other	1,786	1,895	109	6
Total	8,356	9,564	1,208	14

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

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Table 10-5
Machinery: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
MM068	Wiring harnesses for motor vehicles:				
	Exports	866	961	94	10.9
	Imports	4,684	5,302	617	13.2
	Trade balance	-3,818	-4,341	-523	-13.7
MM069	Pumps for motor vehicles:				
	Exports	642	681	39	6.1
	Imports	788	913	125	15.8
	Trade balance	-147	-232	-86	-58.3
MM070	Pumps for liquids:				
	Exports	2,561	2,393	-168	-6.5
	Imports	1,801	1,883	83	4.6
	Trade balance	760	510	-250	-32.9
MM071	Air-conditioning equipment and parts:				
	Exports	5,694	5,318	-376	-6.6
	Imports	6,081	6,674	593	9.7
	Trade balance	-387	-1,356	-969	-250.0
MM072	Industrial thermal-processing equipment and furnaces:				
	Exports	2,496	2,111	-385	-15.4
	Imports	1,641	1,694	53	3.2
	Trade balance	855	417	-438	-51.2
MM073	Household appliances, including commercial applications:				
	Exports	5,226	4,845	-381	-7.3
	Imports	8,356	9,564	1,208	14.5
	Trade balance	-3,130	-4,719	-1,589	-50.8
MM073A	Major household appliances and parts:				
	Exports	1,708	1,610	-98	-5.8
	Imports	1,986	2,444	458	23.0
	Trade balance	-278	-834	-556	-199.9
MM074	Centrifuges and filtering and purifying equipment:				
	Exports	3,208	3,045	-163	-5.1
	Imports	2,275	2,403	128	5.6
	Trade balance	933	642	-291	-31.2
MM075	Wrapping, packaging, and can-sealing machinery:				
	Exports	711	639	-72	-10.2
	Imports	1,302	1,333	30	2.3
	Trade balance	-591	-694	-103	-17.4
MM076	Scales and weighing machinery:				
	Exports	175	164	-11	-6.2
	Imports	279	293	14	5.1
	Trade balance	-104	-129	-25	-24.3
MM077	Mineral processing machinery:				
	Exports	582	485	-97	-16.6
	Imports	576	565	-10	-1.7
	Trade balance	6	-81	-87	([3])
MM078	Farm and garden machinery and equipment:				
	Exports	4,565	4,747	182	4.0
	Imports	3,602	3,898	296	8.2
	Trade balance	963	848	-115	-11.9
MM079	Industrial food-processing and related machinery:				
	Exports	576	606	30	5.2
	Imports	537	570	33	6.2
	Trade balance	40	36	-3	-7.9

See footnote(s) at end of table.

Table 10-5--*Continued*
Machinery: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
MM080	Pulp, paper, and paperboard machinery:				
	Exports	678	560	-118	-17.4
	Imports	1,091	719	-373	-34.1
	Trade balance	-414	-159	255	61.5
MM081	Printing and related machinery:				
	Exports	1,232	1,136	-96	-7.8
	Imports	1,929	2,001	71	3.7
	Trade balance	-697	-865	-167	-24.0
MM082	Textile machinery:				
	Exports	897	871	-25	-2.8
	Imports	1,411	1,314	-98	-6.9
	Trade balance	-515	-442	72	14.1
MM083	Metal rolling mills:				
	Exports	210	169	-41	-19.4
	Imports	180	163	-17	-9.4
	Trade balance	30	7	-24	-78.3
MM084	Metal cutting machine tools and machine tool accessories:				
	Exports	1,809	1,634	-176	-9.7
	Imports	3,407	2,558	-849	-24.9
	Trade balance	-1,598	-924	674	42.2
MM085	Metal forming machine tools:				
	Exports	743	652	-91	-12.2
	Imports	1,331	846	-485	-36.4
	Trade balance	-588	-194	394	67.0
MM086	Non-metalworking machine tools:				
	Exports	807	768	-39	-4.9
	Imports	1,276	1,242	-34	-2.7
	Trade balance	-468	-474	-5	-1.1
MM087	Semiconductor manufacturing equipment and robotics:				
	Exports	8,553	7,341	-1,212	-14.2
	Imports	4,389	3,679	-710	-16.2
	Trade balance	4,164	3,662	-502	-12.1
MM087A	Semiconductor manufacturing machinery:				
	Exports	8,044	6,972	-1,071	-13.3
	Imports	3,947	3,304	-643	-16.3
	Trade balance	4,096	3,668	-428	-10.4
MM088	Taps, cocks, valves, and similar devices:				
	Exports	3,351	3,202	-150	-4.5
	Imports	4,809	5,156	347	7.2
	Trade balance	-1,458	-1,954	-496	-34.0
MM089	Mechanical power transmission equipment:				
	Exports	939	936	-2	-0.3
	Imports	2,004	1,994	-11	-0.5
	Trade balance	-1,066	-1,057	8	0.8
MM090	Boilers, turbines, and related machinery:				
	Exports	1,106	892	-214	-19.3
	Imports	1,204	1,514	310	25.8
	Trade balance	-98	-622	-524	-536.6
MM091	Electric motors, generators, and related equipment:				
	Exports	4,691	3,923	-769	-16.4
	Imports	7,646	7,177	-468	-6.1
	Trade balance	-2,954	-3,255	-300	-10.2

See footnote(s) at end of table.

Table 10-5--*Continued*
Machinery: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
MM092	Electrical transformers, static converters, and inductors:				
	Exports	2,436	1,784	-652	-26.8
	Imports	5,134	4,707	-427	-8.3
	Trade balance	-2,698	-2,923	-225	-8.3
MM093	Portable electric handtools:				
	Exports	291	212	-79	-27.1
	Imports	1,185	1,434	249	21.1
	Trade balance	-894	-1,222	-328	-36.7
MM094	Nonelectrically powered handtools and parts thereof:				
	Exports	563	549	-14	-2.4
	Imports	901	961	60	6.7
	Trade balance	-338	-412	-74	-21.9
MM095	Electric lamps (bulbs) and portable electric lights:				
	Exports	799	750	-49	-6.2
	Imports	1,785	1,687	-98	-5.5
	Trade balance	-986	-937	49	4.9
MM096	Welding and soldering equipment:				
	Exports	703	635	-68	-9.7
	Imports	803	761	-42	-5.2
	Trade balance	-101	-126	-26	-25.6
MM097	Nonautomotive insulated electrical wire and related products:				
	Exports	3,286	2,856	-430	-13.1
	Imports	3,203	3,076	-127	-4.0
	Trade balance	83	-220	-303	([3])
MM098	Miscellaneous machinery:				
	Exports	7,366	6,793	-573	-7.8
	Imports	6,455	6,133	-322	-5.0
	Trade balance	911	660	-251	-27.5
MM099	Molds and molding machinery:				
	Exports	1,791	1,605	-185	-10.3
	Imports	2,803	2,969	166	5.9
	Trade balance	-1,012	-1,363	-352	-34.7

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes
[3]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data.

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

CHAPTER 11
Transportation Equipment

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Change in 2002 from 2001:

U.S. trade deficit: Increased by $4.9 billion (6 percent) to $82.5 billion
U.S. exports: Increased by $330 million (0.2 percent) to $144.7 billion
U.S. imports: Increased by $5.2 million (2 percent) to $227.1 billion

The expanded trade deficit in transportation equipment during 2002 reflected a number of changes within the sector (table 11-1). The increased surpluses in aerospace products were offset by increased deficits in automotive products.[1] Other product groups that contributed to the overall trend in transportation equipment trade in 2002 include motorcycles, mopeds, and parts (deficit increased); construction and mining equipment (surplus decreased); and ships, tugs, and pleasure boats, and rail locomotives and rolling stock (surplus became a deficit) (table 11-2).

Automotive products (motor vehicles, internal combustion piston engines, and certain motor-vehicle parts) registered the largest increase in imports of transportation equipment. Motor vehicle imports from leading sources, Canada and Japan, increased in 2002.[2] U.S. motor vehicle imports from Japan increased because of sustained popularity of Japanese models coupled with the depreciated yen; increased imports from Canada reflect the highly integrated nature of the North American motor vehicle industry and strong U.S. sales in 2002. Engine and automotive parts imports from the leading three sources – Canada, Japan, and Mexico – rose as well in 2002, owing to increased U.S. motor vehicle production.

Aircraft, spacecraft, and related equipment, coupled with aircraft engines and gas turbines, registered the largest decreases by value in exports of all transportation equipment industry/commodity groups.[3] Exports of aircraft, spacecraft, and related equipment to the United Kingdom, Germany, Singapore, and Canada registered significant decreases in 2002. Within this product category, notable decreases in exports were registered in parts of airplanes, other aircraft, and helicopters; as well as business and regional jets.

Exports of aircraft engines and gas turbines decreased by 6 percent; the largest decreases in exports by value were those to Brazil, United Kingdom, and France. Smaller but significant decreases were also registered for Canada, Japan, and Germany. As all of these nations are aircraft producers, this decline likely is attributable to the depressed market for aircraft during 2002. Within this product category, the largest decreases in exports were in aircraft turbojets for large regional jets and large civil aircraft, and parts of gas turbines. Trade statistics for all industry/commodity groups in the transportation equipment sector are presented in table 11-3.

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[1] For additional information, see "Aircraft, Spacecraft, and Related Equipment" and "Certain Motor-Vehicle Parts" in this chapter.

[2] For additional information, see "Motor Vehicles" in ch. 3.

[3] For additional information, see "Aircraft, Spacecraft, and Related Equipment" in this chapter.

Table 11-1
Transportation equipment: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001 and 2002[1]

Item	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
Canada	44,207	46,733	2,526	5.7
Japan	6,812	8,099	1,287	18.9
Mexico	14,953	14,524	-429	-2.9
Germany	7,452	6,961	-490	-6.6
United Kingdom	9,234	6,970	-2,263	-24.5
France	5,760	6,042	282	4.9
Korea	3,510	3,364	-145	-4.1
Brazil	3,855	3,116	-739	-19.2
China	3,198	4,293	1,095	34.2
Australia	2,794	5,014	2,220	79.4
All other	42,551	39,540	-3,011	-7.1
Total	144,325	144,655	330	0.2
EU-15	33,844	31,778	-2,065	-6.1
OPEC	5,832	5,641	-190	-3.3
Latin America	23,859	22,226	-1,634	-6.8
CBERA	1,473	1,756	282	19.2
Asia	24,123	25,073	950	3.9
Sub-Saharan Africa	2,856	1,877	-980	-34.3
Central and Eastern Europe	523	389	-135	-25.7
U.S. imports of merchandise for consumption:				
Canada	64,781	65,462	682	1.1
Japan	52,200	55,583	3,383	6.5
Mexico	31,046	31,117	71	0.2
Germany	23,916	24,978	1,062	4.4
United Kingdom	9,831	10,147	317	3.2
France	10,437	9,161	-1,276	-12.2
Korea	7,810	8,282	473	6.1
Brazil	3,463	3,739	275	8.0
China	1,773	2,302	530	29.9
Australia	693	732	39	5.6
All other	15,958	15,643	-315	-2.0
Total	221,907	227,147	5,240	2.4
EU-15	54,414	53,599	-815	-1.5
OPEC	339	344	5	1.4
Latin America	34,821	35,223	402	1.2
CBERA	60	70	10	17.1
Asia	64,395	69,115	4,721	7.3
Sub-Saharan Africa	399	621	222	55.5
Central and Eastern Europe	799	842	42	5.3
U.S. merchandise trade balance:				
Canada	-20,574	-18,730	1,844	9.0
Japan	-45,388	-47,484	-2,096	-4.6
Mexico	-16,093	-16,593	-500	-3.1
Germany	-16,464	-18,017	-1,553	-9.4
United Kingdom	-597	-3,177	-2,580	-432.1
France	-4,677	-3,119	1,558	33.3
Korea	-4,300	-4,918	-618	-14.4
Brazil	392	-623	-1,015	(2)
China	1,425	1,990	565	39.7
Australia	2,101	4,282	2,181	103.8
All other	26,592	23,897	-2,695	-10.1
Total	-77,583	-82,492	-4,909	-6.3
EU-15	-20,570	-21,820	-1,251	-6.1
OPEC	5,492	5,297	-195	-3.6
Latin America	-10,961	-12,997	-2,036	-18.6
CBERA	1,414	1,686	272	19.3
Asia	-40,272	-44,042	-3,771	-9.4
Sub-Saharan Africa	2,457	1,256	-1,201	-48.9
Central and Eastern Europe	-276	-453	-177	-64.1

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2002.

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

Table 11-2
Leading changes in U.S. exports and imports of transportation equipment, 2001 and 2002

Sector/commodity	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million dollars		
U.S. EXPORTS:				
Increases:				
Motor vehicles (ET009)	22,651	26,209	3,559	15.7
Internal combustion piston engines, other than for aircraft (ET002)	12,408	13,069	661	5.3
Certain motor-vehicle parts (ET010)	26,521	26,651	131	0.5
Decreases:				
Aircraft, spacecraft, and related equipment (ET013)	42,535	41,447	-1,089	-2.6
Aircraft engines and gas turbines (ET001)	16,524	15,498	-1,025	-6.2
All other	23,686	21,780	-1,906	-8.0
TOTAL	144,325	144,655	330	0.2
U.S. IMPORTS:				
Increases:				
Motor vehicles (ET009)	127,257	133,264	6,007	4.7
Certain motor-vehicle parts (ET010)	23,977	27,761	3,784	15.8
Internal combustion piston engines, other than for aircraft (ET002)	13,657	14,841	1,184	8.7
Decreases:				
Aircraft, spacecraft, and related equipment (ET013)	21,027	17,636	-3,391	-16.1
Aircraft engines and gas turbines (ET001)	13,548	10,993	-2,555	-18.9
All other	22,442	22,652	210	0.9
TOTAL	221,907	227,147	5,240	2.4

Note.-Calculations based on unrounded data.

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

U.S. BILATERAL TRADE

Largest trade balance shifts in 2002 from 2001:

United Kingdom: U.S. deficit increased by $2.6 billion (432 percent) to $3.2 billion
Australia: U.S. surplus increased by $2.2 billion (104 percent) to $4.3 billion
Japan: U.S. deficit increased by $2.1 billion (5 percent) to $47.5 billion

The increased deficit with the United Kingdom is attributable to the aircraft, spacecraft, and related equipment product category as well as the motor vehicle industry. The U.S. trade surplus in aircraft, spacecraft, and related equipment with the United Kingdom decreased by $1.7 billion in 2002, largely attributable to a decline in U.S. exports of large civil aircraft (LCA), which decreased from $2.6 billion in 2001 to $743 million in 2002. The U.S. trade deficit in motor vehicles with the United Kingdom increased by $1.4 billion. U.S. imports of vehicles assembled in the United Kingdom by automakers such as Honda, Jaguar, Land Rover, and BMW increased considerably, as certain models imported from the United Kingdom expanded their U.S. market penetration in 2002.

With respect to Australia, the largest contributor to the increased trade surplus was the aircraft, spacecraft, and related equipment product category, with a surplus increase of $2.1 billion in 2002. U.S. shipments of LCA accounted for this growth; such shipments rose from $400 million in 2001 to $2.5 billion in 2002. The decline in U.S. sector imports is largely attributable to a decline in U.S. imports of parts of aircraft; fewer parts were required by the U.S. industry in 2002 as U.S. shipments of LCA in 2002 declined by nearly 30 percent.

The increased deficit with Japan is largely accounted for by the motor vehicle industry, wherein the deficit in vehicles increased by $3.0 billion and the deficit in certain motor-vehicle parts increased by $1.1 billion. Japanese shipments of motor vehicles to the United States were up by nearly 15 percent in 2002, while sales in the Japanese market were down by 2 percent. Sustained popularity of Japanese models coupled with the depreciated yen contributed to the increased transportation equipment deficit with Japan.

COMMODITY ANALYSIS

Certain Motor-Vehicle Parts[4]

Change in 2002 from 2001:

U.S. trade balance: Surplus of $2.5 billion to deficit of $1.1 billion
U.S. exports: Increased by $131 million (1 percent) to $26.7 billion
U.S. imports: Increased by $3.8 billion (16 percent) to $27.8 billion

The U.S. trade balance for certain motor-vehicle parts slipped into a trade deficit in 2002 as U.S. imports from leading trade partners–Canada, Mexico, and Japan–increased at a greater pace than total U.S. exports. North American motor vehicle production rebounded in 2002 with production up 5 percent to 16.7 million units,[5] following a 10-percent decline in vehicle production in 2001. The implementation of NAFTA has accelerated the integration of the North American automotive industry and facilitated automotive parts trade between NAFTA partner countries. Producers in Canada and Mexico manufacture a wide variety of automotive components that not only incorporate significant U.S. content, but are often used in the assembly of U.S.-made vehicles, contributing to large bilateral trade flows with the United States. Japan remains a leading trade partner in automotive components in part because of the numerous Japanese transplants located in the United States that incorporate Japanese auto parts in their motor vehicles.

U.S. imports

The 16-percent increase in U.S. imports of motor-vehicle parts in 2002 was led by growth in miscellaneous motor-vehicle body parts (up 17 percent to $5.6 billion), miscellaneous motor-vehicle parts (up 15 percent to $4.4 billion), and gear boxes for passenger vehicles (up 25 percent to $2.9 billion). Greater U.S. motor vehicle production and the extensive integration of the North American motor vehicle and components industry contributed to this import growth.

NAFTA partners Canada and Mexico accounted for 53 percent of total U.S. imports of motor-vehicle parts, reflecting their critical role in the highly integrated North American automotive industry. Canada remains the leading U.S. import source for motor-vehicle parts, accounting for $9.7 billion (35 percent) of such imports in 2002. The 13-percent increase in imports from Canada was driven by growth in imports of miscellaneous motor-vehicle body parts (up 20 percent to $2.8 billion), miscellaneous motor-vehicle parts (up 9 percent to $2.1 billion), gear boxes for passenger vehicles (up 7 percent to $986 million), and miscellaneous parts for power trains (up 14 percent to $820 million). Canada reportedly benefits from a

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[4] This commodity group includes body stampings, bumpers, brakes and parts, gear boxes, axles, wheels, shock absorbers, radiators, exhaust systems, clutches, steering wheels, and miscellaneous parts and accessories.

[5] "North America Car and Truck Production," found at *http://www.autonews.com/images/dataCenter/1372.pdf*, retrieved Mar. 19, 2003.

comparatively low cost structure and a decade of investments in equipment and technology focused on productivity improvements and the manufacture of higher value components.[6]

Imports from Mexico, which increased by $571 million (13 percent) to $5.1 billion, represented 18 percent of U.S. motor-vehicle parts imports. According to industry sources, the depreciation of the Mexican peso as compared with the U.S. dollar in 2002 and increased demand for replacement parts boosted U.S. imports from Mexico.[7] Significant growth occurred in imports of miscellaneous motor-vehicle body parts (up 9 percent to $1.3 billion), miscellaneous motor-vehicle parts (up 23 percent to $925 million), steering wheels, steering columns, and steering boxes (up 24 percent to $381 million), and brakes and servo-brakes and related parts (up 43 percent to $362 million).

Imports from Japan, the second-leading supplier of U.S. motor-vehicle components, increased at the greatest rate for the leading three import sources. Such imports rose by $1.1 billion (22 percent) to $6.3 billion, and accounted for 23 percent of U.S. imports in 2002. This increase was spurred by growth in imports of gear boxes for passenger cars (up 45 percent to $1.2 billion), miscellaneous power train parts (up 28 percent to $914 million), miscellaneous motor-vehicle body parts (up 20 percent to $696 million), miscellaneous motor-vehicle parts (up 32 percent to $677 million), and drive axles with differentials (up 88 percent to $488 million).

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Aircraft, Spacecraft, and Related Equipment

Change in 2002 from 2001:

U.S. trade surplus: Increased by $2.3 billion (11 percent) to $23.8 billion
U.S. exports: Decreased by $1.1 billion (3 percent) to $41.4 billion
U.S. imports: Decreased by $3.4 billion (16 percent) to $17.6 billion

The U.S. trade surplus for aircraft, spacecraft, and related equipment grew primarily because of a sharp decline in imports of these products. The decrease in U.S. imports reflects the decreased demand for large civil aircraft (LCA) by domestic airlines, the result of their poor financial condition[8] and the general public's increased concern with flying.

U.S. imports

U.S. imports of all aircraft, spacecraft, and related equipment declined by $3.4 billion (16 percent) in 2002. The decline in imports is almost entirely accounted for by fewer imports of LCA and parts thereof. The recession in the United States, along with the threat of international terrorist activities, diminished both discretionary and business travel. As demand for passenger travel in the United States diminished, U.S. airlines began parking their aircraft in storage and deferred many deliveries of aircraft they had on order.

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[6] "Canadian Auto Report," Scotia Economics, Jan. 29, 2003, found at *http://www.scotiabank.com*, retrieved Jan. 31, 2003.

[7] "Mexico's Auto Parts Exports to Get Boost From Weak Peso,"*AutoParts Report*, Mar. 19, 2003, p. 4.

[8] U.S. airlines lost $7.7 billion in 2001, and an estimated $10.0 billion in 2002. For 2003, these airlines are projected to lose about $6.7 billion. *Airlines in Crisis: The Perfect Economic Storm* (Airline Transport Association: Washington, DC, Mar. 11, 2003), p. 23.

As a result, U.S. imports of LCA declined to $5.6 billion in 2002, a drop of almost $2.0 billion (26 percent) from 2001. Airplanes over 2,000 kg but less than 15,000 kg (usually business and/or regional jets (RJs)) remained largely unchanged at $6.5 billion (37 percent of product group imports). In general this reflects steady purchasing of RJ's as U.S. airlines attempt to utilize smaller aircraft to maintain routes in light of declining passenger loads. Further, regional jets are being used to feed the U.S. hub and spoke system where traditional, larger LCA would not be economically feasible. Imports of parts for aircraft amounted to $4.6 billion (26 percent), a decline of $1.1 billion (19 percent) over 2001, reflecting the decreased usage of the domestic airline fleet.

The leading exporters to the United States in 2002 included Canada, the EU, Brazil, and Japan, each sending over $1 billion of products to the United States. Canada's principal exports to the United States include business jets and RJs produced by Bombardier, Canada's only producer of business and RJs (Brazil is the only other producer of RJs). U.S. imports of Canadian business jets grew to $2.8 billion (7 percent), whereas imports of RJs from Canada fell to $1.1 billion (31 percent). Increased business jet sales from Canada may be the result of a shift from large corporate buyers to high net-worth individuals and small companies doing well in this weak economy, and broad implications of the September 11, 2001 terrorist attacks.[9] Japan does not manufacture aircraft, but does manufacture parts and assemblies for aircraft. In 2002, Japan supplied the United States with $1 billion in parts, a decline of $370 million (27 percent) from 2001.

U.S. exports

LCA, which accounted for 58 percent of all exports, increased slightly by $433 million (2 percent) over 2001. Foreign countries were affected by the same market forces that U.S. airlines faced, albeit to a lesser extent. Deliveries of some LCA were delayed, as demand for air travel diminished in the face of the threat of terrorism, recession, and a lack of disposable personal income. Foreign airlines also parked aircraft in the face of diminished air travel demand, a further drag on new aircraft sales.

Two notable exceptions to this trend were Australia and Japan. Exports to Australia grew by $2.1 billion (233 percent), accounted for by U.S. shipments of LCA, which grew by $2.1 billion. Qantas, the major airline in Australia, accounted for the majority of LCA shipped to Australia, likely designated for fleet replacement needs. Japan took an additional $1.1 billion in U.S. exports from the United States; while some U.S. exports to Japan declined, LCA exports increased by $1.4 billion (605 percent) to $1.6 billion. Japan took delivery of 14 Boeing aircraft (12 B-767s and 2 B-777s), as part of their routine fleet renewal.[10]

Principal export markets included the EU ($12.3 billion, or 30 percent of all product group exports), Japan ($3.8 billion, or 9 percent), and China ($3.4 billion, or 8 percent). Of these markets, U.S. exports to the EU declined by $1.6 billion (12 percent) to $12.3 billion, largely accounted for by a drop in LCA shipments by over $1.0 billion. Parts for aircraft declined by $98 million (less than 1 percent), indicating that foreign airlines continued to use their aircraft, which required parts to be replaced. Airplanes over 2,000 kg but less than 15,000 kg accounted for $1.9 billion (5 percent) of all exports, a $347 million (16 percent) decline from 2001.

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[9] People are buying business jets to avoid exposure to possible terrorist elements. Anthony L. Vellocci, Jr., "Gradual Rebound Underway in Used Business Jet Market," *Aviation Week and Space Technology*, New York, Nov. 25, 2002.

[10] Delivery data found at *http://active.boeing.com/commercial/orders/customreport.cfm*, retrieved Apr. 2, 2002.

Table 11-3
Transportation equipment: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
ET001	Aircraft engines and gas turbines:				
	Exports	16,524	15,498	-1,025	-6.2
	Imports	13,548	10,993	-2,555	-18.9
	Trade balance	2,976	4,505	1,529	51.4
ET002	Internal combustion piston engines, other than for aircraft:				
	Exports	12,408	13,069	661	5.3
	Imports	13,657	14,841	1,184	8.7
	Trade balance	-1,249	-1,771	-523	-41.8
ET003	Forklift trucks and similar industrial vehicles:				
	Exports	1,341	1,090	-251	-18.7
	Imports	1,423	1,266	-157	-11.0
	Trade balance	-82	-176	-94	-114.8
ET004	Construction and mining equipment:				
	Exports	9,903	9,504	-399	-4.0
	Imports	5,260	5,302	42	0.8
	Trade balance	4,643	4,202	-441	-9.5
ET005	Ball and rollers bearings:				
	Exports	1,197	1,249	51	4.3
	Imports	1,579	1,598	19	1.2
	Trade balance	-381	-349	32	8.4
ET006	Primary cells and batteries and electric storage batteries:				
	Exports	2,270	1,807	-464	-20.4
	Imports	2,342	2,196	-146	-6.2
	Trade balance	-72	-389	-318	-442.7
ET007	Ignition, starting, lighting, and other electrical equipment:				
	Exports	1,824	1,894	69	3.8
	Imports	3,052	3,467	415	13.6
	Trade balance	-1,228	-1,574	-346	-28.2
ET008	Rail locomotive and rolling stock:				
	Exports	1,422	1,006	-416	-29.3
	Imports	1,357	1,039	-318	-23.4
	Trade balance	65	-33	-98	(3)
ET009	Motor vehicles:				
	Exports	22,651	26,209	3,559	15.7
	Imports	127,257	133,264	6,007	4.7
	Trade balance	-104,606	-107,054	-2,448	-2.3
ET010	Certain motor-vehicle parts:				
	Exports	26,521	26,651	131	0.5
	Imports	23,977	27,761	3,784	15.8
	Trade balance	2,544	-1,110	-3,654	(3)
ET011	Motorcycles, mopeds, and parts:				
	Exports	742	793	51	6.9
	Imports	2,870	2,927	57	2.0
	Trade balance	-2,128	-2,134	-6	-0.3
ET012	Miscellaneous vehicles and transportation-related equipment:				
	Exports	2,658	2,725	68	2.5
	Imports	2,364	2,744	380	16.1
	Trade balance	293	-19	-312	(3)
ET013	Aircraft, spacecraft, and related equipment:				
	Exports	42,535	41,447	-1,089	-2.6
	Imports	21,027	17,636	-3,391	-16.1
	Trade balance	21,508	23,811	2,302	10.7

See footnote(s) at end of table.

Table 11-3--*Continued*
Transportation equipment: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
ET014	Ships, tugs, pleasure boats, and similar vessels:				
	Exports	1,820	1,234	-587	-32.2
	Imports	1,411	1,413	2	0.1
	Trade balance	410	-179	-589	(3)
ET015	Motors and engines, except internal combustion, aircraft, or electric:				
	Exports	508	479	-29	-5.7
	Imports	784	700	-85	-10.8
	Trade balance	-276	-221	55	20.0

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes
[3]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data.

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

CHAPTER 12
Electronic Products

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Change in 2002 from 2001:

U.S. trade deficit: Increased by $19.9 billion (29 percent) to $88.8 billion
U.S. exports: Decreased by $20.2 billion (13 percent) to $140.4 billion
U.S. imports: Decreased by $326 million (0.1 percent) to $229.2 billion

The trade deficit in electronic products increased significantly in 2002 as a result of large declines in exports, most notably of computers, peripherals, and parts (computer equipment); telephone and telegraph apparatus (telecommunications equipment); and semiconductors and integrated circuits (semiconductors) (tables 12-1 and 12-2).[1] Together, these industry/commodity groups accounted for 53 percent of sector exports and 56 percent of sector imports in 2002. Exports declined as the U.S. and world economies continued their slowdown, while imports remained flat. The decline in U.S. exports was also due in part to the continued movement offshore by U.S. companies of portions of their manufacturing operations. Semiconductors was one of the few significant industry/commodity groups with a trade surplus, which grew in 2002 as a result of imports declining more than exports.

The major markets for U.S. exports of electronic products were Mexico, Canada, and Japan, which together accounted for 35 percent of sector exports in 2002. Although their share of sector exports remained flat, the value of exports to these countries declined by 15 percent. Computer equipment and semiconductors were the principal sector exports to these three countries.

In 2002, China, Mexico, and Japan, the leading suppliers of electronic products to the United States, together accounted for 45 percent of sector imports, up from the 44-percent share these countries held in 2001. Although imports from Mexico and Japan declined by 10 percent, or $7.1 billion, imports from China more than made up for that, growing by $9.0 billion to $36.3 billion, and for the first time, China was the largest source of imports, supplying 16 percent of the total. The majority of the increase from China was in computer equipment, consumer electronics (except televisions), and telecommunications equipment, as leading electronics producers continued to move production there to lower production costs and gain access to its quickly growing market.

Historically, the United States has maintained a trade deficit in electronic products. Production sharing is a major factor in the trade deficit as U.S.-made components are exported to lower wage countries for assembly into finished goods, which are then re-exported to the United States. Mexico is a major

[1] For additional information, see "Computers, Peripherals, and Parts;" "Semiconductors and Integrated Circuits;" and "Consumer Electronics (Except Televisions)"in this chapter. Also see "Medical Goods" in ch. 3.

Table 12-1
Electronic products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001 and 2002[1]

Item	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
Mexico	20,798	18,965	-1,833	-8.8
Japan	15,393	11,810	-3,583	-23.3
China	4,892	4,855	-36	-0.7
Canada	20,108	17,025	-3,083	-15.3
Malaysia	5,145	5,997	852	16.6
Taiwan	5,661	5,961	299	5.3
Korea	6,479	6,380	-99	-1.5
Singapore	5,193	4,600	-593	-11.4
Germany	8,787	7,639	-1,147	-13.1
United Kingdom	9,748	7,432	-2,316	-23.8
All other	58,406	49,764	-8,642	-14.8
Total	160,610	140,428	-20,182	-12.6
EU-15	41,819	34,805	-7,014	-16.8
OPEC	2,462	1,981	-480	-19.5
Latin America	31,759	27,705	-4,054	-12.8
CBERA	2,505	2,883	378	15.1
Asia	56,809	51,835	-4,974	-8.8
Sub-Saharan Africa	700	637	-63	-9.1
Central and Eastern Europe	872	823	-49	-5.6
U.S. imports of merchandise for consumption:				
Mexico	37,221	35,029	-2,192	-5.9
Japan	35,676	30,745	-4,930	-13.8
China	27,231	36,270	9,038	33.2
Canada	13,868	10,605	-3,263	-23.5
Malaysia	17,751	19,501	1,750	9.9
Taiwan	17,391	16,594	-797	-4.6
Korea	15,409	15,411	2	(2)
Singapore	11,462	10,669	-793	-6.9
Germany	7,242	7,295	53	0.7
United Kingdom	5,805	4,597	-1,208	-20.8
All other	40,515	42,530	2,014	5.0
Total	229,571	229,245	-326	-0.1
EU-15	26,545	27,220	675	2.5
OPEC	2,300	2,093	-207	-9.0
Latin America	40,186	38,299	-1,886	-4.7
CBERA	1,510	1,732	221	14.7
Asia	141,280	145,645	4,365	3.1
Sub-Saharan Africa	53	50	-3	-5.7
Central and Eastern Europe	1,327	1,207	-121	-9.1
U.S. merchandise trade balance:				
Mexico	-16,423	-16,064	359	2.2
Japan	-20,283	-18,935	1,348	6.6
China	-22,340	-31,414	-9,075	-40.6
Canada	6,241	6,420	179	2.9
Malaysia	-12,606	-13,504	-898	-7.1
Taiwan	-11,729	-10,633	1,097	9.3
Korea	-8,930	-9,031	-101	-1.1
Singapore	-6,269	-6,069	200	3.2
Germany	1,544	345	-1,200	-77.7
United Kingdom	3,942	2,835	-1,108	-28.1
All other	17,891	7,235	-10,656	-59.6
Total	-68,962	-88,817	-19,856	-28.8
EU-15	15,274	7,585	-7,689	-50.3
OPEC	161	-111	-273	(3)
Latin America	-8,427	-10,594	-2,168	-25.7
CBERA	995	1,151	156	15.7
Asia	-84,471	-93,811	-9,339	-11.1
Sub-Saharan Africa	648	587	-60	-9.3
Central and Eastern Europe	-455	-383	72	15.8

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]Less than 0.05 percent.
[3]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2002.

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

Table 12-2
Leading changes in U.S. exports and imports of electronic products, 2001 and 2002

Sector/commodity	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. EXPORTS:				
Increases:				
Photographic film and paper (ET036)	1,953	2,127	174	8.9
Decreases:				
Computers, peripherals, and parts (ET035)	*38,125*	*29,534*	*-8,591*	*-22.5*
Telephone and telegraph apparatus (ET017)	16,506	12,952	-3,554	-21.5
Semiconductors and integrated circuits (ET033)	33,455	31,738	-1,717	-5.1
All other	70,571	64,077	-6,494	-9.2
TOTAL	160,610	140,428	-20,182	-12.6
U.S. IMPORTS:				
Increases:				
Medical goods (ET040)	10,869	13,232	2,363	21.7
Television receivers and video monitors (ET022)	*8,615*	*10,586*	*1,972*	*22.9*
Consumer electronics (except televisions) (ET018)	19,525	21,455	1,931	9.9
Computers, peripherals, and parts (ET035)	74,547	75,817	1,270	1.7
Decreases:				
Semiconductors and integrated circuits (ET033)	30,016	25,651	-4,365	-14.5
All other	86,000	82,503	-3,497	-4.1
TOTAL	229,571	229,245	-326	-0.1

Note.-Calculations based on unrounded data.

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

production-sharing partner for many sector products, and this relationship has resulted, in part, in Mexico's position in 2002 as both the leading market for U.S. exports and the second-leading source of U.S. imports. Trade in semiconductor products with East Asia is also characterized by a high level of production sharing.

The industry/commodity groups with the largest import and export shifts are shown in table 12-2. *Among the groups for which exports decreased markedly were computers, which decreased by $8.6 billion* to $29.5 billion, and telecommunications equipment, which decreased by $3.6 billion to $13.0 billion. The decrease in exports of computer and telecommunication equipment was due in large part to a weak global economy.

Semiconductor imports decreased by $4.4 billion to $25.7 billion, and exports decreased by $1.7 billion to $31.7 billion. The decreased trade in semiconductors was due to the general economic downturn worldwide. As consumption decreased, trade between production sharing partners decreased as well.

Imports of consumer electronic products also increased--television receivers by $2.0 billion to $10.6 billion, and other consumer electronics by $1.9 billion to $21.5 billion. The increase in imports of television receivers was due to an increase in both expensive televisions with the latest technology from Japan, and less expensive televisions from countries with low labor costs such as Malaysia and China. The increase in imports of other consumer electronics was due to increased demand for newer consumer electronic products, including DVD players and still image video cameras. Trade statistics for all industry/commodity groups in this sector are presented in table 12-3 at the end of this chapter.

U.S. BILATERAL TRADE

Largest trade balance shifts in 2002 from 2001:

China: U.S. deficit increased by $9.1 billion (41 percent) to $31.4 billion
Japan: U.S. deficit decreased by $1.3 billion (7 percent) to $18.9 billion
Germany: U.S. surplus decreased by $1.2 billion (78 percent) to $345 million

China, Japan, and Germany were the countries for which the change in the balance of trade was greatest. The trade deficit with China grew as a result of increased U.S. imports of computer equipment, consumer electronics, telecommunications equipment, and television receivers and video monitors (particularly for flat panel monitors), certain portable data processing machines, and miscellaneous parts. Formerly known for low-end consumer electronics, China is increasing production of consumer electronics with more advanced technology, including DVD players and digital cameras. China is the second-largest supplier of handheld cellular telephones to the United States, with imports more than doubling from 2001-02, accounting for 15 percent of total U.S. imports. China is also exporting more color television receivers to the United States, much of which are imported by major retailers.

The trade surplus with Germany decreased as a result of a decline in exports, primarily of computer equipment and telecommunications equipment. The reduced exports reflected the flat German economy and efforts by Germany to reduce increasing healthcare costs by curtailing purchases of advanced medical technology, an area in which the United States is prominent.

The trade deficit with Japan decreased slightly in percentage terms as the reduction in imports exceeded the reduction in exports. Exports of computers and telecommunications equipment declined by 34 percent and 37 percent, respectively, due to weakened demand resulting from Japan's stagnant economy.[2] U.S. imports of semiconductors and computer equipment from Japan decreased by 38 percent and 14 percent, respectively, reflecting weakened demand in the United States and the continued movement offshore of Japanese electronics manufacturing.

COMMODITY ANALYSIS

Computers, Peripherals, and Parts

Change in 2002 from 2001:

U.S. trade deficit: Increased by $9.9 billion (27 percent) to $46.3 billion
U.S. exports: Decreased by $8.6 billion (23 percent) to $29.5 billion
U.S. imports: Increased by $1.3 billion (2 percent) to $75.8 billion

The expansion of the deficit reflected a continued movement offshore of U.S. computer hardware production, the competitive pricing strategies of computer hardware manufacturers, and a change in computer purchasing patterns by both companies and individual households. The continued slowdown of the U.S. and other major world economies also contributed to reduced worldwide demand for computer equipment.

The slight overall increase in imports resulted from a significant growth in total imports from China ($4.3 billion). The increase in imports from China is reflective of the growing practice by U.S.-

[2] Growth in GDP for 2002 was estimated to be less than 1 percent.

headquartered computer companies of outsourcing[3] their computer hardware production to firms that often have manufacturing facilities located in lower wage-rate areas. Many of these outsourcing firms have shifted production from the United States to areas such as China in response to demands from their outsourcing partners to reduce overall production costs.[4]

U.S. exports

Weak consumer and business demand resulted in a depressed global computer hardware market in 2002 and contributed to varying degrees of decline in U.S. exports to leading trading partners. The decline in the global computer market was largely attributable to the slowing of major world economies, the failure of an expected personal computer (PC) replacement cycle to transpire,[5] and the lack of new breakthrough functional innovation in the computer hardware industry to motivate new purchases. The continued movement offshore of U.S. computer manufacturing likely also contributed to the decline in U.S. exports.

U.S. exports of computer hardware experienced declines to nearly all major markets in 2002. Exports to the European Union, the world's second-largest computer hardware market, declined by $3.4 billion (27 percent).[6] This decline was due in part to a decrease in European corporate spending in 2002.[7] Exports to Latin America fell by $588 million (9 percent) while shipments to members of ASEAN decreased by $355 million (4 percent). In contrast to the overall decline, U.S. exports of computer hardware to Mexico increased by 13 percent to slightly more than $3.6 billion in 2002. Much of the growth can be attributed to an increase in exports of computer components, such as parts and accessories of printed circuit assemblies and computer printer units destined for further assembly in Mexico.

U.S. exports of both complete systems and parts declined in 2002. U.S. exports of complete systems[8] decreased by more than 19 percent to approximately $2.4 billion, in part due to competitive pricing strategies[9] adopted by leading computer manufacturers. Manufacturers undertook these steps in response to consumers that were increasingly making purchasing decisions based on price rather than technological innovation.[10] With regard to computer parts, exports of control and adapter units[11] for computers declined by more than 52 percent from $5.4 billion to $2.6 billion and certain circuit assemblies[12] declined by $1.7 billion (20 percent) to approximately $6.8 billion.

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[3] Almost all computer hardware original equipment manufacturers now use contract manufacturers to manufacture at least a portion of their products as a method of reducing production costs.

[4] Industry representative, interview by USITC staff, Los Angeles, CA, Apr. 2003.

[5] A PC replacement cycle typically occurs around every 2 to 3 years, but the time has been recently extended by corporate users and consumers. 2002 had been expected to be a year in which users would purchase new PCs to replace the PCs purchased in 1998-99 to address Y2K concerns. However, increased purchases did not occur.

[6] For additional information, see "European Union" in ch. 3.

[7] Nic Fildes, "The Bottom Line: Cost-Cutting to Dull European PC Market," *Dow Jones Newswires*, Nov. 15, 2002, found at *http://www.factiva.com*, retrieved Mar. 3, 2003.

[8] This refers to complete systems that fall under HTS 8471.49.10.

[9] Significant price erosion for computer components allowed many computer hardware manufacturers to lower prices for their finished products.

[10] Standard & Poor's, "Industry Survey: Computers: Hardware," Nov. 14, 2002, p. 12.

[11] HTS 8471.80.10.

[12] This encompasses products that fall under HTS 8473.30.10. Products include computer parts that are unassembled and do not include a CRT output unit. Typically, printed circuit boards (i.e., motherboards) that lack the central processing unit (CPU) chip fall under this category.

Semiconductors and Integrated Circuits

Change in 2002 from 2001:

U.S. trade surplus: Increased by $2.6 billion (77 percent) to $6.1 billion
U.S. exports: Decreased by $1.7 billion (5 percent) to $31.7 billion
U.S. imports: Decreased by $4.4 billion (15 percent) to $25.7 billion

The global semiconductor industry experienced a modest recovery in 2002 after suffering one of its worst declines ever during 2001 when worldwide sales fell by 32 percent from the previous year. In spite of the start of the global recovery, both U.S. imports and exports of semiconductors declined again in 2002 as they had in 2001. However, the U.S. trade surplus increased by $2.6 billion as the decline in imports exceeded the decline in exports. This was the second year in a row that the United States experienced a surplus after more than two decades of deficits in semiconductor trade.

U.S. exports

A major factor in the decline in exports of semiconductors and integrated circuits was the continuing weakness in the computer and telecommunications equipment markets. The personal computer (PC) segment of the computer industry is the largest consumer of semiconductors, accounting for 30 percent of consumption.[13] Demand for PCs, which had been weak for some time, showed signs of recovering during 2002 as the number of units shipped worldwide grew by about 2 to 3 percent.[14] However, lower unit values for computer products meant that revenues actually declined slightly.[15] The telecommunications equipment industry, the second-largest consumer of semiconductors, experienced a second year of significant revenue decline. Global spending on telecommunications equipment has declined by 24 percent over the past 2 years, according to the Telecommunications Industry Association.[16] The decline in spending on telecommunications equipment is largely a result of reduced capital spending by major telecommunication service providers, the principal customers for this equipment, because of current overcapacity in most telecommunications networks.[17]

Despite the overall decline, exports of unmounted chips, dice, and wafers of silicon rose $2.7 billion from 2001-2002. Such exports accounted for 47 percent of total semiconductor exports in 2002, up from 36 percent in 2001. These products are unfinished goods being shipped to assembly plants, often in the Philippines, Malaysia, Taiwan, Korea, and Singapore. After assembly, these goods are often exported back to the United States or a third-country market for consumption.

The leading markets for U.S. exports in 2002 were Malaysia, Philippines, Korea, Taiwan, and Mexico. These five countries accounted for 57 percent of total exports in 2002, up from 52 percent in 2001.

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[13] "Global Chips Sales Up 1.3 % in Recovery Year," Semiconductor Industry Association press release, Feb. 3, 2003. Found at *www.semichips.org*, retrieved Mar. 19, 2003.

[14] "2002 Computer Shipments Inch Up," *This Week in Consumer Electronics*, Jan. 27, 2003, found at *www.twice.com*, retrieved Mar. 25, 2003.

[15] See Dell Computer Corp., Form 10-Q for the quarterly period ended November 1, 2002, p. 9; and Hewlett-Packard Co., Form 10-K for the fiscal year ended October 31, 2002, pp. 41-43. Also see the Computers, Peripherals, and Parts writeup above where it is noted that computer manufacturers adopted competitive pricing strategies in response to consumers making purchasing decisions based on price rather than on technological innovation.

[16] "TIA Releases 2003 Market Review and Forecast," TIA press release Feb. 25, 2003, found at *www.tiaonline.org*, retrieved Apr. 4, 2003.

[17] For additional information, see "European Union" in ch. 3.

As previously stated, four of the countries are locations for semiconductor assembly and all five are centers of electronic equipment production because of low labor rates.

U.S. imports

U.S. imports of semiconductors decreased in 2002 by 15 percent after declining in 2001 by 37 percent. This is the first time that semiconductor imports have decreased for 2 years in a row. The decline in imports is attributable in large measure to the continued decline in U.S. production of computer and telecommunications equipment. The value of U.S. imports of semiconductors fell from $30.0 billion to $25.7 billion between 2001 and 2002. Imports from each of the leading sources, Malaysia, Philippines, Korea, Taiwan, and Japan, also declined. Together, these five countries accounted for 66 percent of total imports in 2002 and for $2.6 billion of the $4.4-billion decline in imports over the period. Imports from Japan experienced the largest percentage decline, falling by 38 percent. Imports from Japan continue to drop, a trend that reflects that country's relative decline in importance as a global producer of semiconductors.

The largest category of imports in 2002 was monolithic digital integrated circuits; this category is composed of memory devices of various kinds[18] and microprocessors. Imports of such articles fell from $19.7 billion to $17.7 billion or by only 10 percent (compared to the decline of 15 percent for total imports) with the result that their share of imports increased from 66 percent of the total in 2001 to 69 percent in 2002. Most of these articles are used in personal computers, among other devices, and the weak computer market likely accounted for the declining value of imports of these devices between 2001 and 2002.

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Consumer Electronics (Except Televisions)[19]

Change in 2002 from 2001:

U.S. trade deficit: Increased by $2.1 billion (12 percent) to $18.8 billion
U.S. exports: Decreased by $161 million (6 percent) to $2.6 billion
U.S. imports: Increased by $1.9 billion (10 percent) to $21.5 billion

The increase in the trade deficit for consumer electronics (except televisions) is attributable principally to the increase in imports, reflecting growing demand for certain relatively new products, notably DVD players and still image video cameras. China is the largest supplier of consumer electronics to the United States and continues to increase in importance, accounting for 38 percent of U.S. imports in this commodity group, up from 32 percent in 2001. Japan, the largest supplier until overtaken by China in 2000, continues as the second-largest supplier, with its share of the U.S. market remaining flat at 21 percent.

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[18] Memory devices include such products as dynamic random access memory (DRAM), static random access memory (SRAM), erasable programable read only memory (EPROM), and electrically erasable programable read only memory (EEPROM).

[19] This commodity group includes: broadcast radio receivers and radio combinations; audio and video recording and reproducing equipment including CD players, DVD players, VCRs, camcorders, and still image digital cameras; and audio components.

U.S. imports

U.S. imports increased by $1.9 billion, primarily as a result of increasing demand for electronic entertainment devices. This growth has been hastened by declining prices, the increasingly technology-savvy consumer, and the convergence of home computers and consumer electronic products.[20] The DVD player would appear to be a catalyst for this convergence.

Imports of DVD players and still image video cameras increased by 45 percent and 36 percent, respectively, to $3.6 billion and $2.8 billion. The two products together accounted for 29 percent of 2002 imports of consumer electronics. U.S. sales of DVD players have grown at a rate far higher than that of any other consumer electronic products. VCRs took 13 years and CD players 8 years to get into 30 million U.S. households, but DVD players took only 5 years, due to rapidly falling prices for these products and to a more technology-savvy consumer.[21] The average value of a DVD player declined by 20 percent from 2001-2002 to $99. The average value of a still image video camera declined by 16 percent during the same period to $178, even as cameras with greater capabilities were placed on the market.

Although imports of DVD players grew, imports of VCRs declined by 22 percent to $1.0 billion. The decrease in VCR imports is due to reduced demand due to an already high 95-percent household penetration rate,[22] a drop in the average price of VCRs, and a shift in demand to DVD players, which have a household penetration rate of 38 percent.[23]

China, Japan, and Mexico accounted for 71 percent of imports in this commodity group in 2002, up from 68 percent in 2001. China supplied $8.2 billion, or 38 percent, of these imports by the United States in 2002, rising from 32 percent in 2001. Formerly known for low-end consumer electronics, China is growing in importance as a producer of consumer electronics incorporating more advanced technology, including DVD players and still image video cameras. With CD players, these three products accounted for 46 percent of commodity group imports from China in 2002.

Japan's share of U.S. imports remained steady at 21 percent for 2001-02 while the value of the commodity group grew. Still image video cameras, camcorders, and DVD players accounted for 75 percent of U.S. imports from Japan in 2002, a slightly higher share than in 2001. Increased imports of camcorders and still image video cameras - by 21 percent and 18 percent, respectively - offset declines in imports of older technology consumer electronics such as VCRs and CD players. Although Japan accounted for 61 percent of U.S. imports of still image video cameras in 2002, that was down from a 68-percent share in 2001, as production shifted to countries with lower costs.

Mexico's share of U.S. imports of consumer electronics declined from 14 percent of the total to 12 percent in 2002. Radio combinations for motor vehicle use continued to account for the majority of consumer electronics imported from Mexico, declining from 62 percent of consumer electronics imports from Mexico in 2001 to 59 percent in 2002. Although the total value of radio combinations with CD players

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[20] Convergence is the blurring of the line between computer and consumer electronic devices, where a personal computer is used to record and playback audio and video, or where a television receiver or settop box uses computer technology to retrieve not only broadcast programs, but related information that adds to the viewing experience.

[21] Betsy Spethmann, "All Wired Up," Mar. 1, 2002, found at *http://www.promomagazine.com/ar/marketing_wired/*, retrieved Mar. 4, 2003.

[22] DigitalTV, "Do Consumers Still Want Digital," found at *http://www.digitaltelevision.com/2002/march/digital.shtml*, retrieved Mar. 20, 2003.

[23] CNN/Money, "...and a DVD in a Pear Tree," Nov. 27, 2002, found at http://money.cnn.com/2002/11/26/news/companies/holiday_dvd/, retrieved Mar. 20, 2003.

decreased by 5 percent to $1.4 billion and the average unit value decreased by 24 percent, total volume increased by 24 percent, reflecting a shift in consumer demand to CD players. During the same period, the total value of imports of other radio combinations decreased by 67 percent to $97.1 million, the average value fell by 27 percent, and the total volume decreased by 55 percent.

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Table 12-3
Electronic products: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
ET016	Office machines:				
	Exports	1,061	816	-244	-23.0
	Imports	1,817	1,491	-326	-18.0
	Trade balance	-757	-675	82	10.8
ET017	Telephone and telegraph apparatus:				
	Exports	16,506	12,952	-3,554	-21.5
	Imports	27,174	27,948	774	2.8
	Trade balance	-10,668	-14,996	-4,328	-40.6
ET018	Consumer electronics (except televisions):				
	Exports	2,791	2,631	-161	-5.8
	Imports	19,525	21,455	1,931	9.9
	Trade balance	-16,734	-18,825	-2,091	-12.5
ET019	Blank media:				
	Exports	1,017	970	-47	-4.6
	Imports	2,423	2,746	323	13.3
	Trade balance	-1,406	-1,776	-370	-26.3
ET020	Prerecorded media:				
	Exports	3,195	3,069	-126	-3.9
	Imports	1,259	1,308	48	3.8
	Trade balance	1,935	1,761	-174	-9.0
ET021	Navigational instruments and remote control apparatus:				
	Exports	3,102	2,921	-181	-5.8
	Imports	1,796	1,858	62	3.4
	Trade balance	1,306	1,063	-243	-18.6
ET022	Television receivers and video monitors:				
	Exports	1,237	1,257	20	1.6
	Imports	8,615	10,586	1,972	22.9
	Trade balance	-7,378	-9,329	-1,952	-26.5
ET023	Radio and television broadcasting equipment:				
	Exports	2,321	1,364	-957	-41.2
	Imports	6,066	4,977	-1,089	-17.9
	Trade balance	-3,745	-3,613	132	3.5
ET024	Electric sound and visual signaling apparatus:				
	Exports	949	1,042	94	9.9
	Imports	1,968	1,797	-171	-8.7
	Trade balance	-1,020	-755	265	26.0
ET025	Electrical capacitors and resistors:				
	Exports	2,002	1,706	-296	-14.8
	Imports	2,333	2,093	-240	-10.3
	Trade balance	-331	-386	-55	-16.8
ET026	Printed circuits:				
	Exports	2,089	1,853	-236	-11.3
	Imports	2,141	1,896	-245	-11.4
	Trade balance	-53	-44	9	16.7
ET027	Circuit apparatus exceeding 1000V:				
	Exports	612	549	-63	-10.3
	Imports	357	338	-19	-5.4
	Trade balance	255	211	-44	-17.1
ET028	Circuit apparatus not exceeding 1000V:				
	Exports	5,098	4,478	-621	-12.2
	Imports	5,280	4,933	-347	-6.6
	Trade balance	-182	-455	-273	-150.4

See footnote(s) at end of table.

Table 12-3--*Continued*
Electronic products: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
ET029	Circuit apparatus assemblies:				
	Exports	1,179	1,108	-71	-6.1
	Imports	2,528	2,577	48	1.9
	Trade balance	-1,350	-1,469	-120	-8.9
ET030	Parts of circuit apparatus:				
	Exports	1,503	1,592	89	5.9
	Imports	1,108	1,087	-21	-1.9
	Trade balance	396	506	110	27.8
ET031	Cathode-ray tubes:				
	Exports	2,056	1,762	-294	-14.3
	Imports	612	607	-5	-0.8
	Trade balance	1,444	1,155	-289	-20.0
ET032	Electron tubes other than CRTs:				
	Exports	178	180	2	1.1
	Imports	271	247	-25	-9.0
	Trade balance	-93	-66	26	28.5
ET033	Semiconductors and integrated circuits:				
	Exports	33,455	31,738	-1,717	-5.1
	Imports	30,016	25,651	-4,365	-14.5
	Trade balance	3,439	6,087	2,648	77.0
ET034	Miscellaneous electrical equipment:				
	Exports	1,805	1,564	-241	-13.4
	Imports	2,277	2,428	151	6.6
	Trade balance	-473	-865	-392	-82.9
ET035	Computers, peripherals, and parts:				
	Exports	38,125	29,534	-8,591	-22.5
	Imports	74,547	75,817	1,270	1.7
	Trade balance	-36,422	-46,283	-9,861	-27.1
ET036	Photographic film and paper:				
	Exports	1,953	2,127	174	8.9
	Imports	1,856	1,865	8	0.4
	Trade balance	96	262	166	171.9
ET037	Optical fibers, optical fiber bundles and cables:				
	Exports	1,689	474	-1,216	-72.0
	Imports	1,244	252	-992	-79.8
	Trade balance	446	222	-224	-50.2
ET038	Optical goods, including ophthalmic goods:				
	Exports	3,727	3,548	-179	-4.8
	Imports	4,957	4,142	-815	-16.4
	Trade balance	-1,230	-594	636	51.7
ET039	Photographic cameras and equipment:				
	Exports	1,694	1,187	-507	-29.9
	Imports	3,560	3,029	-531	-14.9
	Trade balance	-1,866	-1,842	24	1.3
ET040	Medical goods:				
	Exports	14,987	15,059	71	0.5
	Imports	10,869	13,232	2,363	21.7
	Trade balance	4,119	1,826	-2,292	-55.7
ET041	Watches and clocks:				
	Exports	279	235	-44	-15.8
	Imports	2,957	3,098	142	4.8
	Trade balance	-2,678	-2,864	-186	-6.9
ET042	Drawing, drafting, and calculating instruments:				
	Exports	395	368	-28	-7.0
	Imports	207	192	-16	-7.7
	Trade balance	188	176	-12	-6.2

See footnote(s) at end of table.

Table 12-3--*Continued*
Electronic products: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
ET043	Measuring, testing, and controlling instruments:				
	Exports	15,605	14,346	-1,259	-8.1
	Imports	11,806	11,595	-210	-1.8
	Trade balance	3,799	2,751	-1,049	-27.6

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

Note.—Calculations based on unrounded data.

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

CHAPTER 13
Miscellaneous Manufactures

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Change in 2002 from 2001:

U.S. trade deficit: Increased by $7.0 billion (14 percent) to $57.1 billion
U.S. exports: Decreased by $1.4 billion (9 percent) to $15.0 billion
U.S. imports: Increased by $5.6 billion (8 percent) to $72.1 billion

The U.S. trade deficit in miscellaneous manufactures expanded significantly in 2002 as an almost across-the-board decline in U.S. exports to its major trading partners was compounded by strong U.S. demand for imports (table 13-1). The expansion of the trade deficit in 2002 was a sharp contrast to the year before when the trade deficit remained at $50 billion.

While the decline in U.S. exports was pronounced, a significant portion was accounted for by works of art exchanged between museums in the EU and the United States (table 13-2).[1] The works are to be exported back to the EU when the exhibition is closed. Many more pieces were returned to their European owners in 2001 than in 2002, resulting in much of the $798-million decline in exports of works of art and miscellaneous manufactured goods in 2002.[2] In another sector, weaker demand in Canada contributed to a $281-million reduction in exports of furniture.

Strong U.S. consumer demand for furniture, precious jewelry, lamps and lighting fittings, toys, and games coupled with low prices offered by suppliers in China resulted in significant increases in U.S. imports of these products in 2002.[3] Liberal financing terms and other incentives bolstered the sale of motor vehicles. That, in turn, contributed to an increase in imports of motor vehicle seats, particularly from Mexico, for use in auto assembly plants.

Production processes for goods classified in the miscellaneous manufactures sector tend to be labor-intensive and the production technology is readily transferable to developing or newly industrialized countries. Numerous sector imports are produced in Asia under license from U.S. companies, and Asian countries were the source of 62 percent of U.S. imports in 2002; China alone accounted for 44 percent. Imports tend to be concentrated in products for which there is no competing U.S. industry (e.g., certain works of art), where there is no remaining U.S. production (e.g., home video games and certain Christmas decorations), that require semiskilled assembly (e.g., jewelry, furniture, lamps and lighting fittings), or that

[1] For example, the Metropolitan Museum of Art spent several years putting together its exhibition "Painters in Paris" for which most of these works were located outside of the United States.

[2] Customs documents require that the value be reported for each article that is imported or exported, even for temporary entries.

[3] For additional information, see "Precious Jewelry and Related Articles" in this chapter.

Table 13-1
Miscellaneous manufactures: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001 and 2002[1]

Item	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. exports of domestic merchandise:				
China	136	137	1	0.7
Canada	3,759	3,561	-198	-5.3
Mexico	1,729	1,687	-42	-2.4
Japan	2,007	1,686	-321	-16.0
Italy	250	236	-14	-5.8
United Kingdom	1,516	1,327	-189	-12.5
France	505	334	-171	-33.9
Taiwan	404	230	-174	-43.1
Thailand	67	71	4	5.7
Germany	667	455	-212	-31.8
All other	5,387	5,280	-107	-2.0
Total	16,428	15,004	-1,424	-8.7
EU-15	4,119	3,434	-685	-16.6
OPEC	461	394	-67	-14.5
Latin America	2,970	2,869	-101	-3.4
CBERA	688	789	101	14.7
Asia	3,629	3,303	-326	-9.0
Sub-Saharan Africa	99	69	-30	-30.0
Central and Eastern Europe	39	38	-1	-1.6
U.S. imports of merchandise for consumption:				
China	25,690	31,490	5,800	22.6
Canada	5,931	5,967	37	0.6
Mexico	5,295	6,356	1,060	20.0
Japan	4,732	3,399	-1,332	-28.2
Italy	3,818	4,020	202	5.3
United Kingdom	1,730	1,602	-127	-7.4
France	2,914	2,546	-368	-12.6
Taiwan	2,427	2,325	-101	-4.2
Thailand	1,693	1,634	-59	-3.5
Germany	1,107	1,189	82	7.4
All other	11,238	11,598	360	3.2
Total	66,575	72,129	5,554	8.3
EU-15	11,403	11,338	-65	-0.6
OPEC	1,126	1,125	(2)	(3)
Latin America	6,582	7,779	1,197	18.2
CBERA	419	465	46	11.0
Asia	40,296	44,775	4,479	11.1
Sub-Saharan Africa	109	118	9	8.3
Central and Eastern Europe	589	485	-104	-17.7
U.S. merchandise trade balance:				
China	-25,554	-31,353	-5,799	-22.7
Canada	-2,172	-2,406	-235	-10.8
Mexico	-3,566	-4,668	-1,102	-30.9
Japan	-2,724	-1,713	1,011	37.1
Italy	-3,568	-3,785	-217	-6.1
United Kingdom	-214	-275	-61	-28.7
France	-2,409	-2,213	196	8.1
Taiwan	-2,022	-2,095	-73	-3.6
Thailand	-1,627	-1,564	63	3.9
Germany	-440	-734	-294	-66.8
All other	-5,851	-6,318	-467	-8.0
Total	-50,147	-57,124	-6,978	-13.9
EU-15	-7,284	-7,905	-620	-8.5
OPEC	-665	-732	-67	-10.0
Latin America	-3,612	-4,910	-1,298	-35.9
CBERA	269	324	55	20.6
Asia	-36,667	-41,472	-4,805	-13.1
Sub-Saharan Africa	-9	-48	-39	-414.4
Central and Eastern Europe	-550	-447	104	18.9

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]Less than $500,000.
[3]Less than 0.05 percent.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2002.

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

Table 13-2
Leading changes in U.S. exports and imports of miscellaneous manufactures, 2001 and 2002

Sector/commodity	2001	2002	Change, 2002 from 2001 Absolute	Percent
	Million dollars			
U.S. EXPORTS:				
Increases:				
Precious jewelry and related articles (MM051)	1,659	1,826	167	10.1
Decreases:				
Works of art and miscellaneous manufactured goods (MM064)	2,177	1,379	-798	-36.7
Furniture (MM054)	2,689	2,409	-281	-10.4
Seats for motor vehicles and aircraft (MM067)	1,808	1,641	-167	-9.2
Sporting goods (MM061)	1,672	1,537	-136	-8.1
All other	6,423	6,212	-210	-3.3
TOTAL	16,428	15,004	-1,424	-8.7
U.S. IMPORTS:				
Increases:				
Furniture (MM054)	14,839	17,028	2,189	14.8
Precious jewelry and related articles (MM051)	5,533	6,261	728	13.2
Seats for motor vehicles and aircraft (MM067)	3,239	3,886	648	20.0
Lamps and lighting fittings (MM056)	4,148	4,605	457	11.0
Toys (MM059)	7,905	8,292	387	4.9
Games (MM060)	5,537	5,887	350	6.3
Decreases:				
Works of art and miscellaneous manufactured goods (MM064)	9,312	9,274	-39	-0.4
All other	16,062	16,896	834	5.2
TOTAL	66,575	72,129	5,554	8.3

Note.-Calculations based on unrounded data.

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

require sewing (e.g., luggage, automobile seat covers, and baseballs) or low-technology injection molding (e.g., toys and dolls). Less import-sensitive industry/commodity groups are characterized by products with high transportation costs (e.g., upholstered furniture and fairground amusement rides); low raw-material cost in the United States relative to those of foreign producers (e.g., baseball bats and silverware); or for which U.S. manufacturers have superior design and production technology or copyright protection (e.g., water skis and board games). Trade statistics for all commodity/industry groups in the miscellaneous manufactures sector are presented in table 13-3.

U.S. BILATERAL TRADE

Largest trade balance shifts in 2002 from 2001:

China: U.S. deficit increased by $5.8 billion (23 percent) to $31.4 billion
Mexico: U.S. deficit increased by $1.1 billion (31 percent) to $4.7 billion
Japan: U.S. deficit decreased by $1.0 billion (37 percent) to $37.1 billion

Five factors characterized U.S. bilateral trade in the miscellaneous manufactures sector: predominance of labor-intensive articles imported from China; high imports of video games from Japan, but a shift towards China; rationalized production and inter-company trade between the United States and Canada; the presence of two-way trade in high-end manufactured goods and works of art between the United States and the European Union; and a continued reliance on assembly plants in Mexico by U.S. and foreign manufacturers.

One of Japan's two leading manufacturers of home video games consoles shifted a significant part of its production to China in 2002 in an effort to make its games more price competitive with games by the other leading producer in Japan and their U.S. competitor, which assembles its games in Mexico. As a result, U.S. imports of video game consoles from Japan fell by $1.2 billion in 2002, accounting for virtually all of the decrease in miscellaneous manufactures sector imports from Japan. Imports from China, however, grew by $1.1 billion, indicating no slackening of U.S. demand for these products. Imports of home video game consoles from Mexico rose by almost $500 million, nearly one-half the total increase in sector imports from Mexico in 2002.

COMMODITY ANALYSIS OF PRECIOUS JEWELRY AND RELATED ARTICLES

Change in 2002 from 2001:

U.S. trade deficit: Increased by $561 million (15 percent) to $4.4 billion
U.S. exports: Increased by $167 million (10 percent) to $1.8 billion
U.S. imports: Increased by $728 million (13 percent) to $6.3 billion

The increase in the U.S. trade deficit in precious jewelry and related articles (precious jewelry) reflects a surge in imports. Demand for goods such as jewelry, precious metals, gemstones, and works of art tends to increase during times of political and economic uncertainty because such goods can serve as a store of value. As a result, total U.S. trade in precious jewelry exceeded total trade in other merchandise categories in this sector in 2002. Most notable increases in the precious jewelry trade deficit in 2002 were with the European Union, India, and Thailand, whereas the United States exhibited a moderate trade surplus with Japan, Switzerland, and the Netherlands.

U.S. exports

The growth in U.S. exports of precious jewelry also can be attributed to the premium that foreign customers are willing to pay for U.S. brand recognition and the perception of high quality attached to U.S. products in many countries. The rise in U.S. exports was concentrated in the gold jewelry category. Gold neck chains, in particular, are commonly used as a store of value. Despite the increase in exports in 2002, intense competition has led to the closure of many precious jewelry manufacturers in the United States that were unable to transition from labor-intensive to more automated manufacturing processes.

The largest increases in U.S. exports of precious jewelry in 2002 were to Mexico, by $79 million (74 percent); Netherlands Antilles, by $48 million (32 percent); Italy, by $39 million (117 percent); and Aruba, by $28 million (122 percent). A significant portion of precious jewelry exports to Mexico are parts used in the assembly of jewelry for export to the U.S. market. Shipments to the Netherlands, Antilles, and Aruba were more likely for investment purposes. The largest decreases in exports were to Japan, by $75 million (23 percent); France, by $36 million (37 percent); and Israel, by $29 million (65 percent). However, Japan remained the leading market for U.S. exports of precious jewelry in 2002 (14 percent of total U.S. exports), followed by Switzerland (12 percent), the Netherlands Antilles (11 percent), and Mexico (10 percent).

U.S. imports

Although some of the increases in U.S. imports of precious jewelry can be attributed to demand for these goods as a store of value, other customers may have been influenced by the relatively low prices associated with imports from countries with low labor costs. For example, investment grade consumers were

likely responsible for much of the increase in demand for imports from Italy, which grew by $127 million (11 percent) in 2002, whereas value-oriented consumers were likely responsible for the sharper rise in imports from India, by $300 million (51 percent), and China, by $194 million (49 percent). Italy remained the leading supplier of precious jewelry to the U.S. market in 2002, accounting for 24 percent of total U.S. imports, followed by India (14 percent), Thailand (11 percent), China (9 percent), and Hong Kong (8 percent). Although a small number of U.S. manufacturers are assembling certain types of jewelry in Mexico and Central America to reduce their production costs, the industry as a whole has been losing market share in recent years to imports from Asia.

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Table 13-3
Miscellaneous manufactures: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
MM046	Luggage, handbags, and flat goods:				
	Exports	308	278	-30	-9.8
	Imports	4,309	4,412	103	2.4
	Trade balance	-4,001	-4,134	-133	-3.3
MM046A	Luggage:				
	Exports	223	194	-29	-13.0
	Imports	2,667	2,656	-11	-0.4
	Trade balance	-2,444	-2,462	-18	-0.7
MM046B	Handbags:				
	Exports	58	55	-3	-4.8
	Imports	1,203	1,301	98	8.2
	Trade balance	-1,146	-1,247	-101	-8.8
MM046C	Flat goods:				
	Exports	22	25	4	16.9
	Imports	417	433	15	3.7
	Trade balance	-396	-408	-12	-3.0
MM047	Certain other leather goods:				
	Exports	100	94	-6	-6.1
	Imports	256	291	35	13.5
	Trade balance	-156	-197	-41	-26.2
MM048	Musical instruments and accessories:				
	Exports	398	373	-25	-6.2
	Imports	1,300	1,306	6	0.5
	Trade balance	-902	-933	-31	-3.4
MM049	Umbrellas, whips, riding crops, and canes:				
	Exports	11	9	-3	-24.1
	Imports	293	275	-18	-6.2
	Trade balance	-281	-266	15	5.4
MM050	Silverware and related articles of precious metal:				
	Exports	180	155	-25	-13.8
	Imports	57	54	-3	-5.0
	Trade balance	124	101	-22	-17.9
MM051	Precious jewelry and related articles:				
	Exports	1,659	1,826	167	10.1
	Imports	5,533	6,261	728	13.2
	Trade balance	-3,874	-4,435	-561	-14.5
MM052	Costume jewelry and related articles:				
	Exports	113	104	-9	-8.1
	Imports	655	750	94	14.4
	Trade balance	-542	-646	-104	-19.1
MM053	Bicycles and certain parts:				
	Exports	226	216	-11	-4.7
	Imports	1,025	1,125	100	9.8
	Trade balance	-799	-909	-111	-13.9
MM054	Furniture:				
	Exports	2,689	2,409	-281	-10.4
	Imports	14,839	17,028	2,189	14.8
	Trade balance	-12,150	-14,620	-2,470	-20.3
MM055	Writing instruments and related articles:				
	Exports	263	269	6	2.4
	Imports	1,027	1,044	18	1.7
	Trade balance	-764	-775	-11	-1.5
MM056	Lamps and lighting fittings:				
	Exports	648	671	23	3.5
	Imports	4,148	4,605	457	11.0
	Trade balance	-3,500	-3,934	-434	-12.4

See footnote(s) at end of table.

Table 13-3--*Continued*
Miscellaneous manufactures: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	Percent
		Million Dollars			
MM057	Prefabricated buildings:				
	Exports	291	275	-16	-5.4
	Imports	308	341	32	10.5
	Trade balance	-17	-66	-48	-276.5
MM058	Dolls:				
	Exports	33	24	-9	-26.8
	Imports	1,218	1,257	39	3.2
	Trade balance	-1,186	-1,233	-48	-4.0
MM059	Toys:				
	Exports	489	424	-65	-13.2
	Imports	7,905	8,292	387	4.9
	Trade balance	-7,416	-7,868	-452	-6.1
MM060	Games:				
	Exports	788	858	70	8.8
	Imports	5,537	5,887	350	6.3
	Trade balance	-4,748	-5,029	-280	-5.9
MM061	Sporting goods:				
	Exports	1,672	1,537	-136	-8.1
	Imports	3,632	3,859	227	6.2
	Trade balance	-1,960	-2,322	-363	-18.5
MM062	Smokers' articles:				
	Exports	77	82	5	7.1
	Imports	163	139	-24	-14.5
	Trade balance	-86	-57	29	33.8
MM063	Brooms, brushes, and hair grooming articles:				
	Exports	213	205	-8	-3.8
	Imports	894	999	105	11.7
	Trade balance	-682	-795	-113	-16.6
MM063A	Brooms and brushes:				
	Exports	187	185	-3	-1.5
	Imports	697	815	117	16.8
	Trade balance	-510	-630	-120	-23.5
MM063B	Hair grooming articles, non-electric (except brushes):				
	Exports	25	20	-5	-21.5
	Imports	197	184	-13	-6.4
	Trade balance	-172	-164	7	4.1
MM064	Works of art and miscellaneous manufactured goods:				
	Exports	2,177	1,379	-798	-36.7
	Imports	9,312	9,274	-39	-0.4
	Trade balance	-7,136	-7,895	-759	-10.6
MM065	Apparel fasteners:				
	Exports	154	157	3	2.2
	Imports	73	65	-8	-11.2
	Trade balance	81	92	12	14.3
MM066	Arms and ammunition:				
	Exports	2,130	2,019	-112	-5.3
	Imports	850	978	128	15.1
	Trade balance	1,280	1,040	-240	-18.8
MM066A	Small arms and ammunition:				
	Exports	558	480	-78	-14.0
	Imports	679	800	121	17.9
	Trade balance	-120	-320	-200	-166.2

See footnote(s) at end of table.

Table 13-3--*Continued*
Miscellaneous manufactures: U.S. trade for selected industry/commodity groups, 2001 and 2002[1]

USITC code[2]	Industry/commodity group	2001	2002	Change, 2002 from 2001 Absolute	*Percent*
		Million Dollars			
MM067	Seats for motor vehicles and aircraft:				
	Exports	1,808	1,641	-167	-9.2
	Imports	3,239	3,886	648	20.0
	Trade balance	-1,431	-2,245	-814	-56.9

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

Note.—Calculations based on unrounded data.

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

APPENDIX A
Industry/Commodity Groups and Subgroups in This Report

Industry/commodity groups have product subgroups within the present industry/commodity structure. These subgroups show trade data for narrower product groups that serve analytical purposes, and provide for more meaningful profile data. Subgroups are designated by alphabetical suffix to the USITC industry/commodity group.

Agricultural products sector[1]
(HTS chapters[2] 1-24, 35, 41, 43, 51, 52)

AG001 Certain miscellaneous animals and meats
AG002 Cattle and beef
AG003 Swine and pork
AG004 Sheep and meat of sheep
AG005 Poultry
AG006 Fresh or frozen fish
AG007 Canned fish
AG008 Cured and other fish
AG009 Shellfish
AG010 Dairy produce
AG011 Eggs
AG012 Sugar and other sweeteners
  AG012A Sugar
  AG012B High fructose corn sweetener
AG013 Animal feeds
AG014 Live plants
AG015 Seeds
AG016 Cut flowers
AG017 Miscellaneous vegetable substances
AG018 Fresh, chilled, or frozen vegetables
AG019 Prepared or preserved vegetables, mushrooms, and olives
AG020 Edible nuts
AG021 Tropical fruit
AG022 Citrus fruit
AG023 Deciduous fruit
AG024 Other fresh fruit
AG025 Dried fruit other than tropical
AG026 Frozen fruit
AG027 Prepared or preserved fruit
AG028 Coffee and tea
AG029 Spices
AG030 Cereals
AG031 Milled grains, malts, and starches
AG032 Oilseeds
AG033 Animal or vegetable fats and oils
AG034 Pasta, cereals, and other bakery goods
AG035 Sauces, condiments, and soups
AG036 Infant formulas, malt extracts, and other edible preparations
AG037 Cocoa, chocolate, and confectionery
AG038 Fruit and vegetable juices
AG039 Nonalcoholic beverages, excluding fruit and vegetable juices
AG040 Malt beverages
AG041 Wine and certain other fermented beverages
AG042 Distilled spirits
AG043 Unmanufactured tobacco
AG044 Cigars and certain other manufactured tobacco
AG045 Cigarettes
AG046 Hides, skins, and leather
AG047 Furskins
AG048 Wool and other animal hair
AG049 Cotton, not carded or combed
AG050 Ethyl alcohol for nonbeverage purposes

Forest products sector
(HTS chapters 14, 44-49)

AG051 Logs and rough wood products
AG052 Lumber
AG053 Moldings, millwork, and joinery
AG054 Wood veneer and wood panels
AG055 Wooden containers
AG056 Tools and tool handles of wood
AG057 Miscellaneous articles of wood
AG058 Cork and rattan
AG059 Wood pulp and wastepaper
AG060 Paper boxes and bags
AG061 Industrial papers and paperboards
  AG061A Paperboard
  AG061B Tissue and tissue products
  AG061C Industrial paper
AG062 Newsprint
AG063 Printing and writing papers
AG064 Certain specialty papers
AG065 Miscellaneous paper products
AG066 Printed matter

Chemicals and related products sector
(HTS chapters 13-15, 22, 25, 27-40)

CH007 Major primary olefins
CH008 Other olefins
CH009 Primary aromatics
CH010 Organic commodity chemicals
CH011 Organic specialty chemicals
CH012 Certain organic chemicals
CH013 Miscellaneous inorganic chemicals
CH014 Inorganic acids
CH015 Chlor-alkali chemicals
CH016 Fertilizers

CH017 Paints, inks, and related items, and certain components thereof
CH018 Synthetic organic pigments
CH019 Synthetic dyes and azoic couplers
CH020 Synthetic tanning agents
CH021 Natural tanning and dyeing materials
CH022 Photographic chemicals and preparations
CH023 Pesticide products and formulations
CH024 Adhesives and glues
CH025 Medicinal chemicals
CH026 Essential oils and other flavoring materials
CH027 Perfumes, cosmetics, and toiletries
CH028 Soaps, detergents, and surface-active agents
CH029 Miscellaneous chemicals and specialties
CH030 Explosives, propellant powders, and related items
CH031 Polyethylene resins in primary forms
CH032 Polypropylene resins in primary forms
CH033 Polyvinyl chloride resins in primary forms
CH034 Styrene polymers in primary forms
CH035 Saturated polyester resins
CH036 Other plastics in primary forms
CH037 Styrene-butadiene rubber in primary forms
CH038 Other synthetic rubber
CH039 Pneumatic tires and tubes (new)
CH040 Other tires
CH041 Miscellaneous plastic products
CH042 Miscellaneous rubber products
CH043 Gelatin
CH044 Natural rubber

Energy-related products sector
(HTS chapters 27-29, 34, 36, 38)

CH001 Electrical energy
CH002 Nuclear materials
CH003 Coal, coke, and related chemical products
CH004 Crude petroleum
CH005 Petroleum products
CH006 Natural gas and components

Textiles, apparel, and footwear sector
(HTS chapters 39, 40, 42, 43, 50-65)

CH045 Fibers and yarns, except raw cotton and raw wool
CH046 Fabrics
- CH046A Broadwoven fabrics
- CH046B Knit fabrics
- CH046C Specialty fabrics
- CH046D Coated and other fabrics
- CH046E Glass fiber fabrics
- CH046F Other fabrics

CH047 Carpets and rugs
CH048 Home furnishings
- CH048A Blankets
- CH048B Pillowcases and sheets
- CH048C Table/kitchen linens and towels
- CH048D Curtains
- CH048E Bedspreads and other furnishing articles
- CH048F Pillows, cushions, and sleeping bags
- CH048G Tapestries and other wall hangings

CH049 Apparel
- CH049A Men's and boys' suits and sports coats
- CH049B Men's and boys' coats and jackets
- CH049C Men's and boys' trousers
- CH049D Women's and girls' trousers
- CH049E Shirts and blouses
- CH049F Sweaters
- CH049G Women's and girls' suits, skirts, and coats
- CH049H Women's and girls' dresses
- CH049I Robes, nightwear, and underwear
- CH049J Hosiery
- CH049K Body-supporting garments
- CH049L Neckwear, handkerchiefs, and scarves
- CH049M Gloves, including gloves for sports
- CH049N Headwear
- CH049O Leather apparel and accessories
- CH049P Fur apparel and other fur articles
- CH049Q Rubber, plastic, and coated-fabric apparel
- CH049R Nonwoven apparel
- CH049S Other wearing apparel

CH050 Miscellaneous textile products
CH051 Footwear

Minerals and metals sector
(HTS chapters 25, 26, 68-76, 78-83)

MM001 Clays and related mineral products
MM002 Fluorspar and miscellaneous mineral substances
MM003 Iron ores and concentrates
MM004 Copper ores and concentrates
MM005 Lead ores, concentrates, and residues
  MM005A Lead ores and concentrates
MM006 Zinc ores, concentrates, and residues
  MM006A Zinc ores and concentrates
MM007 Certain ores, concentrates, ash, and residues
  MM007A Molybdenum ores and concentrates
MM008 Precious metal ores and concentrates
  MM008A Gold ores and concentrates
  MM008B Silver ores and concentrates
MM009 Cement, stone, and related products
  MM009A Cement
MM010 Industrial ceramics
MM011 Ceramic bricks and similar articles
MM012 Ceramic floor and wall tiles
MM013 Ceramic household articles
MM014 Flat glass
MM015 Glass containers
MM016 Household glassware
MM017 Miscellaneous glass products
MM018 Fiberglass insulation products
MM019 Natural and synthetic gemstones
MM020 Precious metals and non-numismatic coins
  MM020A Unrefined and refined gold
MM021 Primary iron products
MM022 Ferroalloys
MM023 Iron and steel waste and scrap
MM024 Abrasive and ferrous products
  MM024A Abrasive products
MM025 Steel mill products
  MM025A Ingots, blooms, billets, and slabs of carbon and alloy steels
  MM025B Plates, sheets, and strips of carbon and alloy steels
  MM025C Bars, rods, and light shapes of carbon and alloy steels
  MM025D Angles, shapes, and sections of carbon and alloy steels
  MM025E Wire of carbon and alloy steels
  MM025F Ingots, blooms, billets, and slabs of stainless steels
  MM025G Plates, sheets, and strips of stainless steels
  MM025H Bars, rods, and light shapes of stainless steels
  MM025I Angles, shapes, and sections of stainless steels
  MM025J Wire of stainless steels
  MM025K Rails and accessories of carbon and alloy steels
  MM025L Pipes and tubes of carbon and alloy steels
  MM025M Pipes and tubes of stainless steels
  MM025N Tool steels
MM026 Steel pipe and tube fittings and certain cast products
MM027 Fabricated structurals
MM028 Metal construction components
MM029 Metallic containers
MM030 Wire products of base metal
MM031 Miscellaneous products of base metal
MM032 Industrial fasteners of base metal
MM033 Cooking and kitchen ware
MM034 Metal and ceramic sanitary ware
MM035 Construction castings and other cast-iron articles
MM036 Copper and related articles
  MM036A Unrefined and refined copper
  MM036B Copper alloy plate, sheet, and strip
MM037 Unwrought aluminum
  MM037A Primary and secondary aluminum
MM038 Aluminum mill products
  MM038A Aluminum bars, rods, and profiles
  MM038B Aluminum wire
  MM038C Aluminum plate, sheet, and strip
  MM038D Aluminum foil
  MM038E Aluminum tubes, pipes, and fittings
MM039 Lead and related articles
  MM039A Refined lead
MM040 Zinc and related articles
  MM040A Unwrought zinc
MM041 Certain base metals and chemical elements
  MM041A Titanium ingot
MM042 Nonpowered handtools
MM043 Certain cutlery, sewing implements, and related products
MM044 Table flatware and related products
MM045 Certain builders' hardware

Machinery sector
(HTS chapters 84, 85, 87)

MM068 Wiring harnesses for motor vehicles
MM069 Pumps for motor vehicles
MM070 Pumps for liquids
MM071 Air-conditioning equipment and parts
MM072 Industrial thermal-processing equipment and furnaces
MM073 Household appliances, including commercial applications
MM073A Major household appliances and parts
MM074 Centrifuges and filtering and purifying equipment
MM075 Wrapping, packaging, and can-sealing machinery
MM076 Scales and weighing machinery
MM077 Mineral processing machinery
MM078 Farm and garden machinery and equipment
MM079 Industrial food-processing and related machinery
MM080 Pulp, paper, and paperboard machinery
MM081 Printing and related machinery
MM082 Textile machinery
MM083 Metal rolling mills
MM084 Metal cutting machine tools and machine tool accessories
MM085 Metal forming machine tools
MM086 Non-metalworking machine tools
MM087 Semiconductor manufacturing equipment and robotics
MM087A Semiconductor manufacturing machinery
MM088 Taps, cocks, valves, and similar devices
MM089 Mechanical power transmission equipment
MM090 Boilers, turbines, and related machinery
MM091 Electric motors, generators, and related equipment
MM092 Electrical transformers, static converters, and inductors
MM093 Portable electric handtools
MM094 Nonelectrically powered handtools and parts thereof
MM095 Electric lamps (bulbs) and portable electric lights
MM096 Welding and soldering equipment
MM097 Nonautomotive insulated electrical wire and related products
MM098 Miscellaneous machinery
MM099 Molds and molding machinery

Transportation equipment sector
(HTS chapters 84-89)

ET001 Aircraft engines and gas turbines
ET002 Internal combustion piston engines, other than for aircraft
ET003 Forklift trucks and similar industrial vehicles
ET004 Construction and mining equipment
ET005 Ball and rollers bearings
ET006 Primary cells and batteries and electric storage batteries
ET007 Ignition, starting, lighting, and other electrical equipment
ET008 Rail locomotive and rolling stock
ET009 Motor vehicles
ET010 Certain motor-vehicle parts
ET011 Motorcycles, mopeds, and parts
ET012 Miscellaneous vehicles and transportation-related equipment
ET013 Aircraft, spacecraft, and related equipment
ET014 Ships, tugs, pleasure boats, and similar vessels
ET015 Motors and engines, except internal combustion, aircraft, or electric

Electronic products sector
(HTS chapters 37, 84, 85, 88, 90, 91)

ET016 Office machines
ET017 Telephone and telegraph apparatus
ET018 Consumer electronics (except televisions)
ET019 Blank media
ET020 Prerecorded media
ET021 Navigational instruments and remote control apparatus
ET022 Television receivers and video monitors
ET023 Radio and television broadcasting equipment
ET024 Electric sound and visual signaling apparatus

ET025 Electrical capacitors and resistors
ET026 Printed circuits
ET027 Circuit apparatus exceeding 1000V
ET028 Circuit apparatus not exceeding 1000V
ET029 Circuit apparatus assemblies
ET030 Parts of circuit apparatus
ET031 Cathode-ray tubes
ET032 Electron tubes other than CRTs
ET033 Semiconductors and integrated circuits
ET034 Miscellaneous electrical equipment
ET035 Computers, peripherals, and parts
ET036 Photographic film and paper
ET037 Optical fibers, optical fiber bundles and cables
ET038 Optical goods, including ophthalmic goods
ET039 Photographic cameras and equipment
ET040 Medical goods
ET041 Watches and clocks
ET042 Drawing, drafting, and calculating instruments
ET043 Measuring, testing, and controlling instruments

Miscellaneous manufactures sector
(HTS chapters 14, 44-49)

MM046 Luggage, handbags, and flat goods
  MM046A Luggage
  MM046B Handbags
  MM046C Flat goods
MM047 Certain other leather goods
MM048 Musical instruments and accessories
MM049 Umbrellas, whips, riding crops, and canes
MM050 Silverware and related articles of precious metal
MM051 Precious jewelry and related articles
MM052 Costume jewelry and related articles
MM053 Bicycles and certain parts
MM054 Furniture
MM055 Writing instruments and related articles
MM056 Lamps and lighting fittings
MM057 Prefabricated buildings
MM058 Dolls
MM059 Toys
MM060 Games
MM061 Sporting goods
MM062 Smokers' articles
MM063 Brooms, brushes, and hair grooming articles
  MM063A Brooms and brushes
  MM063B Hair grooming articles, non-electric (except brushes)
MM064 Works of art and miscellaneous manufactured goods
MM065 Apparel fasteners
MM066 Arms and ammunition
  MM066A Small arms and ammunition
MM067 Seats for motor vehicles and aircraft

[1] This coding system (e.g., AG0012, AG012A) is used by the USITC to identify major groupings and subgroupings of U.S. Harmonized Tariff Schedule headings/subheadings and corresponding export categories for trade monitoring purposes. See app. C for industry and trade data for certain groupings and subgroupings.

[2] Products in some HTS chapters are divided between industry/commodity groups monitored by the Commission; however, no products are in more than one sector. Chapter 77 of the HTS is not used and is reserved for possible future use. Chapters 98-99 of the HTS are for special classification provisions.

APPENDIX B
HTS 8-Digit Subheading Ranges Included in Industry/Commodity Groups and Subgroups, by Sector

Table B-1
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
Agricultural products sector:		
AG001	Certain miscellaneous animals and meats	0101.10.00 - 0102.10.00
		0103.10.00 - 0103.10.00
		0104.20.00 - 0104.20.00
		0106.00.10 - 0106.90.00
		0204.50.00 - 0205.00.00
		0206.80.00 - 0206.90.00
		0208.10.00 - 0208.90.90
		0210.11.00 - 0210.99.90
		0410.00.00 - 0511.10.00
		0511.99.20 - 0511.99.40
		1601.00.20 - 1602.10.00
		1602.41.10 - 1603.00.90
		3502.90.00 - 3502.90.00
AG002	Cattle and beef	0102.90.20 - 0102.90.40
		0201.10.05 - 0202.30.80
		0206.10.00 - 0206.29.00
AG003	Swine and pork	0103.91.00 - 0103.92.00
		0203.11.00 - 0203.29.40
		0206.30.00 - 0206.49.00
AG004	Sheep and meat of sheep	0104.10.00 - 0104.10.00
		0204.10.00 - 0204.43.40
AG005	Poultry	0105.11.00 - 0105.99.00
		0207.11.00 - 0207.36.00
		1602.20.20 - 1602.39.00
AG006	Fresh or frozen fish	0302.11.00 - 0304.90.90
AG007	Canned fish	1604.11.20 - 1604.19.80
AG008	Cured and other fish	0301.10.00 - 0301.99.00
		0305.10.20 - 0305.69.60
		0511.91.00 - 0511.91.00
		1604.20.05 - 1604.30.40
AG009	Shellfish	0306.11.00 - 0307.99.00
		1605.10.05 - 1605.90.60
AG010	Dairy produce	0401.10.00 - 0406.90.99
		2105.00.05 - 2105.00.50
		3501.10.10 - 3501.10.50
		3501.90.60 - 3501.90.60
		3502.20.00 - 3502.20.00
AG011	Eggs	0407.00.00 - 0408.99.00
		3502.11.00 - 3502.19.00
AG012	Sugar and other sweeteners	0409.00.00 - 0409.00.00
		1212.91.00 - 1212.92.00
		1701.11.05 - 1703.90.50
AG012A	Sugar	1701.11.05 - 1701.99.50
		1702.90.05 - 1702.90.90
AG012B	High fructose corn sweetener	1702.40.22 - 1702.40.40
		1702.60.22 - 1702.60.40
AG013	Animal feeds	1208.10.00 - 1208.90.00
		1213.00.00 - 1214.90.00
		2301.10.00 - 2309.90.95
AG014	Live plants	0601.10.15 - 0602.90.40
		0602.90.60 - 0602.90.90
AG015	Seeds	0602.90.50 - 0602.90.50
		0701.10.00 - 0701.10.00
		0712.90.80 - 0712.90.80
		0712.90.85 - 0712.90.85
		0713.10.10 - 0713.10.10

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		0713.20.10 - 0713.20.10
		0713.31.10 - 0713.31.10
		0713.32.10 - 0713.32.10
		0713.33.10 - 0713.33.10
		0713.39.10 - 0713.39.10
		0713.40.10 - 0713.40.10
		0713.50.10 - 0713.50.10
		0713.90.10 - 0713.90.10
		1001.10.00 - 1001.10.00
		1001.90.10 - 1001.90.10
		1002.00.00 - 1002.00.00
		1003.00.40 - 1003.00.40
		1004.00.00 - 1004.00.00
		1005.10.00 - 1005.10.00
		1007.00.00 - 1007.00.00
		1008.20.00 - 1008.20.00
		1201.00.00 - 1201.00.00
		1204.00.00 - 1204.00.00
		1205.00.00 - 1205.00.00
		1205.10.00 - 1205.10.00
		1205.90.00 - 1205.90.00
		1206.00.00 - 1206.00.00
		1207.20.00 - 1207.20.00
		1209.10.00 - 1209.99.40
AG016	Cut flowers	0603.10.30 - 0603.90.00
AG017	Miscellaneous vegetable substances	0604.10.00 - 0604.99.60
		1108.20.00 - 1108.20.00
		1210.10.00 - 1212.30.90
		1212.99.00 - 1212.99.90
		1301.10.00 - 1301.90.90
		1302.12.00 - 1302.39.00
		1402.00.91 - 1403.90.40
		1404.90.00 - 1404.90.00
AG018	Fresh, chilled, or frozen vegetables	0701.90.10 - 0710.90.91
AG019	Prepared or preserved vegetables, mushrooms, and olives	0711.10.00 - 0712.90.78
		0712.90.80 - 0712.90.80
		0712.90.85 - 0712.90.85
		0713.10.20 - 0713.10.40
		0713.20.20 - 0713.20.20
		0713.31.20 - 0713.31.40
		0713.32.20 - 0713.32.20
		0713.33.20 - 0713.33.40
		0713.39.15 - 0713.39.40
		0713.40.20 - 0713.40.20
		0713.50.20 - 0713.50.20
		0713.90.50 - 0714.90.60
		1105.10.00 - 1106.20.90
		2001.10.00 - 2005.90.97
		2008.91.00 - 2008.91.00
		2008.99.61 - 2008.99.61
		2008.99.65 - 2008.99.71
AG020	Edible nuts	0801.11.00 - 0802.90.98
		0813.50.00 - 0813.50.00
		1202.10.05 - 1202.20.80
		2008.11.02 - 2008.19.90
AG021	Tropical fruit	0803.00.20 - 0804.50.80
		0807.20.00 - 0807.20.00

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		0810.60.00 - 0810.60.00
		0810.90.25 - 0810.90.25
		0813.40.10 - 0813.40.10
		0813.40.80 - 0813.40.80
AG022	Citrus fruit	0805.10.00 - 0805.90.01
		0812.90.20 - 0812.90.20
		0814.00.10 - 0814.00.80
		2008.30.10 - 2008.30.96
AG023	Deciduous fruit	0808.10.00 - 0809.40.40
AG024	Other fresh fruit	0806.10.20 - 0806.10.60
		0807.11.30 - 0807.19.80
		0810.10.20 - 0810.50.00
		0810.90.20 - 0810.90.20
		0810.90.25 - 0810.90.45
AG025	Dried fruit other than tropical	0806.20.10 - 0806.20.90
		0813.10.00 - 0813.30.00
		0813.40.15 - 0813.40.40
		0813.40.90 - 0813.40.90
		0813.50.00 - 0813.50.00
AG026	Frozen fruit	0811.10.00 - 0811.90.80
AG027	Prepared or preserved fruit	0812.10.00 - 0812.90.10
		0812.90.30 - 0812.90.90
		1106.30.20 - 1106.30.40
		2006.00.20 - 2007.99.75
		2008.20.00 - 2008.20.00
		2008.40.00 - 2008.80.00
		2008.92.10 - 2008.99.60
		2008.99.63 - 2008.99.63
		2008.99.80 - 2008.99.90
AG028	Coffee and tea	0901.11.00 - 0903.00.00
		2101.11.21 - 2101.30.00
AG029	Spices	0904.11.00 - 0910.99.60
		1207.50.00 - 1207.50.00
		2103.30.20 - 2103.30.40
AG030	Cereals	1001.10.00 - 1001.10.00
		1001.90.20 - 1001.90.20
		1002.00.00 - 1003.00.20
		1003.00.40 - 1003.00.40
		1004.00.00 - 1004.00.00
		1005.90.20 - 1006.40.00
		1007.00.00 - 1008.10.00
		1008.30.00 - 1008.90.00
AG031	Milled grains, malts, and starches	1101.00.00 - 1104.30.00
		1107.10.00 - 1108.19.00
		1109.00.10 - 1109.00.90
		1903.00.20 - 1903.00.40
AG032	Oilseeds	1201.00.00 - 1201.00.00
		1203.00.00 - 1203.00.00
		1204.00.00 - 1204.00.00
		1205.00.00 - 1205.00.00
		1205.10.00 - 1205.10.00
		1205.90.00 - 1205.90.00
		1206.00.00 - 1207.10.00
		1207.20.00 - 1207.40.00
		1207.60.00 - 1207.99.01
AG033	Animal or vegetable fats and oils	0209.00.00 - 0209.00.00
		1501.00.00 - 1518.00.40

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		1522.00.00 - 1522.00.00
AG034	Pasta, cereals, and other bakery goods	1901.20.02 - 1901.20.80
		1902.11.20 - 1902.40.00
		1904.10.00 - 1905.90.90
		2102.10.00 - 2102.30.00
AG035	Sauces, condiments, and soups	2103.10.00 - 2103.20.40
		2103.90.20 - 2104.20.00
		2209.00.00 - 2209.00.00
AG036	Infant formulas, malt extracts, and other edible preparations	1901.10.05 - 1901.10.95
		1901.90.10 - 1901.90.90
		2106.10.00 - 2106.90.09
		2106.90.22 - 2106.90.46
		2106.90.58 - 2106.90.99
		3504.00.10 - 3504.00.50
AG037	Cocoa, chocolate, and confectionery	1704.10.00 - 1806.90.90
AG038	Fruit and vegetable juices	2009.11.00 - 2009.90.40
		2106.90.48 - 2106.90.54
AG039	Nonalcoholic beverages, excluding fruit and vegetable juices	2201.10.00 - 2202.90.90
AG040	Malt beverages	2203.00.00 - 2203.00.00
AG041	Wine and certain other fermented beverages	2204.10.00 - 2206.00.90
AG042	Distilled spirits	2106.90.12 - 2106.90.18
		2207.10.30 - 2207.10.30
		2208.20.10 - 2208.90.80
AG043	Unmanufactured tobacco	2401.10.21 - 2401.30.70
AG044	Cigars and certain other manufactured tobacco	2402.10.30 - 2402.10.80
		2402.90.00 - 2403.99.90
AG045	Cigarettes	2402.20.10 - 2402.20.90
AG046	Hides, skins, and leather	4101.10.00 - 4115.20.00
AG047	Furskins	4301.10.00 - 4302.30.00
AG048	Wool and other animal hair	5101.11.10 - 5102.20.00
AG049	Cotton, not carded or combed	5201.00.05 - 5201.00.80
AG050	Ethyl alcohol for nonbeverage purposes	2207.10.60 - 2207.20.00
Forest products sector:		
AG051	Logs and rough wood products	4401.10.00 - 4405.00.00
		4418.50.00 - 4418.50.00
AG052	Lumber	4406.10.00 - 4407.99.00
AG053	Moldings, millwork, and joinery	4409.10.05 - 4409.20.90
		4414.00.00 - 4414.00.00
		4418.10.00 - 4418.30.00
		4418.90.20 - 4418.90.45
AG054	Wood veneer and wood panels	4408.10.00 - 4408.90.01
		4410.11.00 - 4412.99.96
AG055	Wooden containers	4415.10.30 - 4416.00.90
		4420.90.20 - 4420.90.80
AG056	Tools and tool handles of wood	4417.00.20 - 4417.00.80
		4419.00.40 - 4419.00.80
AG057	Miscellaneous articles of wood	4413.00.00 - 4413.00.00
		4418.40.00 - 4418.40.00
		4420.10.00 - 4420.10.00
		4421.10.00 - 4421.90.98
AG058	Cork and rattan	1401.10.00 - 1401.90.40
		4501.10.00 - 4601.20.90
		4601.91.20 - 4601.99.00
		4602.10.05 - 4602.90.00
AG059	Wood pulp and wastepaper	1404.20.00 - 1404.20.00
		4601.91.05 - 4601.91.05

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		4601.99.05 - 4601.99.90
		4701.00.00 - 4707.90.00
AG060	Paper boxes and bags	4819.10.00 - 4819.60.00
AG061	Industrial papers and paperboards	4803.00.20 - 4808.90.60
		4810.31.00 - 4810.92.14
		4810.99.00 - 4811.10.10
		4811.31.20 - 4811.31.40
		4811.39.40 - 4811.40.00
		4811.51.20 - 4811.51.40
		4811.59.40 - 4811.59.40
		4811.60.40 - 4811.60.40
		4811.90.10 - 4812.00.00
		4818.10.00 - 4818.90.00
		4823.20.10 - 4823.20.90
AG061A	Paperboard	4804.11.00 - 4805.93.40
		4808.10.00 - 4808.90.60
		4810.31.00 - 4810.92.14
		4810.99.00 - 4810.99.65
		4811.39.40 - 4811.39.40
		4811.51.20 - 4811.51.40
		4811.59.40 - 4811.59.40
AG061B	Tissue and tissue products	4803.00.20 - 4803.00.40
		4818.10.00 - 4818.90.00
AG061C	Industrial paper	4806.10.00 - 4807.90.40
		4811.10.00 - 4811.10.10
		4811.31.20 - 4811.31.40
		4811.40.00 - 4811.40.00
		4811.60.40 - 4811.60.40
		4811.90.10 - 4812.00.00
		4823.20.10 - 4823.20.90
AG062	Newsprint	4801.00.00 - 4801.00.00
AG063	Printing and writing papers	4802.30.20 - 4802.30.60
		4802.51.10 - 4802.54.30
		4802.55.10 - 4802.55.40
		4802.56.10 - 4802.56.40
		4802.57.10 - 4802.58.20
		4802.60.10 - 4802.61.30
		4802.62.10 - 4802.62.30
		4802.69.10 - 4802.69.30
		4810.11.20 - 4810.13.20
		4810.14.11 - 4810.14.20
		4810.19.11 - 4810.22.10
		4810.29.00 - 4810.29.10
		4811.39.20 - 4811.39.20
		4811.59.20 - 4811.59.20
AG064	Certain specialty papers	4802.10.00 - 4802.20.40
		4802.30.70 - 4802.40.00
		4802.54.40 - 4802.54.60
		4802.55.50 - 4802.55.70
		4802.56.50 - 4802.56.70
		4802.58.40 - 4802.58.60
		4802.61.40 - 4802.61.60
		4802.62.40 - 4802.62.60
		4809.10.20 - 4809.90.80
		4810.13.50 - 4810.13.70
		4810.14.50 - 4810.14.70
		4810.22.50 - 4810.22.70

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		4810.29.50 - 4810.29.70
		4813.10.00 - 4814.90.00
		4816.10.00 - 4816.20.00
		4816.90.00 - 4817.30.00
		4823.51.00 - 4823.59.40
AG065	Miscellaneous paper products	4810.92.30 - 4810.92.65
		4811.10.20 - 4811.29.00
		4811.41.10 - 4811.49.30
		4811.51.60 - 4811.51.60
		4811.59.60 - 4811.59.60
		4811.60.60 - 4811.60.60
		4815.00.00 - 4815.00.00
		4816.30.00 - 4816.30.00
		4820.10.20 - 4823.19.01
		4823.30.00 - 4823.40.00
		4823.60.00 - 4823.90.86
AG066	Printed matter	4901.10.00 - 4911.99.80
Chemicals and related products sector:		
CH007	Major primary olefins	2711.14.00 - 2711.14.00
		2901.21.00 - 2901.24.10
CH008	Other olefins	2901.24.20 - 2901.29.50
CH009	Primary aromatics	2902.20.00 - 2902.30.00
		2902.44.00 - 2902.44.00
CH010	Organic commodity chemicals	2902.11.00 - 2902.19.00
		2902.41.00 - 2902.43.00
		2902.50.00 - 2902.90.90
		2906.12.00 - 2906.12.00
		2907.11.00 - 2907.11.00
		2917.35.00 - 2917.37.00
		2921.41.10 - 2921.41.20
		2933.71.00 - 2933.71.00
CH011	Organic specialty chemicals	2903.51.00 - 2903.59.05
		2903.59.15 - 2903.69.27
		2903.69.70 - 2904.20.20
		2904.20.35 - 2904.90.50
		2905.22.20 - 2905.29.90
		2906.19.10 - 2906.21.00
		2906.29.30 - 2906.29.60
		2907.12.00 - 2907.21.00
		2907.22.50 - 2908.10.10
		2908.10.25 - 2908.90.50
		2909.20.00 - 2909.30.09
		2909.30.40 - 2909.30.60
		2909.49.10 - 2909.49.60
		2909.50.45 - 2909.60.50
		2910.90.20 - 2910.90.20
		2912.21.00 - 2912.30.10
		2912.50.10 - 2913.00.50
		2914.22.10 - 2914.22.20
		2914.29.10 - 2914.61.00
		2914.69.60 - 2914.70.90
		2915.13.10 - 2915.13.10
		2915.39.30 - 2915.39.35
		2916.20.50 - 2916.31.15
		2916.31.30 - 2916.32.20
		2916.34.25 - 2916.34.55

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		2916.35.25 - 2916.39.12
		2916.39.17 - 2916.39.17
		2916.39.45 - 2916.39.75
		2917.12.10 - 2917.12.50
		2917.14.10 - 2917.14.50
		2917.19.15 - 2917.34.00
		2917.39.04 - 2917.39.70
		2918.19.10 - 2918.19.10
		2918.19.20 - 2918.19.90
		2918.21.50 - 2918.21.50
		2918.22.50 - 2918.22.50
		2918.23.30 - 2918.90.05
		2918.90.43 - 2919.00.50
		2920.10.30 - 2920.10.50
		2920.90.20 - 2921.19.60
		2921.30.05 - 2921.30.50
		2921.42.10 - 2921.42.36
		2921.42.65 - 2921.45.90
		2921.49.10 - 2921.49.15
		2921.49.45 - 2921.51.10
		2921.51.30 - 2921.59.80
		2922.19.20 - 2922.29.20
		2922.29.60 - 2922.39.50
		2922.43.10 - 2922.43.50
		2922.49.05 - 2922.49.10
		2922.49.30 - 2922.49.37
		2922.50.07 - 2922.50.11
		2922.50.35 - 2922.50.50
		2924.21.18 - 2924.23.75
		2924.29.01 - 2924.29.05
		2924.29.20 - 2924.29.36
		2924.29.65 - 2924.29.95
		2925.19.10 - 2925.19.90
		2925.20.18 - 2925.20.18
		2925.20.60 - 2925.20.90
		2926.30.20 - 2926.90.19
		2926.90.43 - 2927.00.18
		2927.00.40 - 2927.00.50
		2928.00.15 - 2928.00.25
		2929.10.10 - 2929.90.50
		2930.20.20 - 2930.20.70
		2930.90.24 - 2930.90.29
		2931.00.05 - 2931.00.15
		2931.00.27 - 2932.19.50
		2932.29.25 - 2932.29.50
		2932.99.32 - 2932.99.90
		2933.19.04 - 2933.19.18
		2933.19.37 - 2933.19.43
		2933.19.70 - 2933.19.90
		2933.29.05 - 2933.29.10
		2933.29.35 - 2933.29.43
		2933.29.60 - 2933.32.50
		2933.39.08 - 2933.39.20
		2933.39.61 - 2933.40.17
		2933.40.60 - 2933.40.70
		2933.49.08 - 2933.49.17
		2933.49.60 - 2933.49.70

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		2933.59.70 - 2933.59.95
		2933.79.04 - 2933.90.13
		2933.90.79 - 2933.90.89
		2933.90.97 - 2933.90.97
		2933.99.01 - 2933.99.05
		2933.99.08 - 2933.99.13
		2933.99.79 - 2933.99.89
		2933.99.97 - 2934.20.30
		2934.20.40 - 2934.30.18
		2934.30.43 - 2934.30.50
		2934.90.05 - 2934.90.06
		2934.90.08 - 2934.90.08
		2934.90.39 - 2934.90.44
		2934.90.70 - 2934.90.90
		2934.99.05 - 2934.99.06
		2934.99.08 - 2934.99.08
		2934.99.39 - 2934.99.44
		2934.99.70 - 2935.00.05
		2935.00.10 - 2935.00.15
		2935.00.75 - 2935.00.95
		2942.00.03 - 2942.00.03
		2942.00.10 - 2942.00.50
CH012	Certain organic chemicals	2903.11.00 - 2903.49.90
		2905.11.10 - 2905.19.60
		2905.31.00 - 2905.59.90
		2909.11.00 - 2909.19.60
		2909.41.00 - 2909.44.00
		2910.10.00 - 2910.90.10
		2910.90.50 - 2912.13.00
		2912.19.40 - 2912.19.50
		2914.11.10 - 2914.19.00
		2915.11.00 - 2915.12.00
		2915.13.50 - 2915.35.00
		2915.39.47 - 2915.60.50
		2915.90.20 - 2916.14.20
		2916.19.10 - 2916.19.50
		2917.11.00 - 2917.11.00
		2917.13.00 - 2917.13.00
		2918.11.10 - 2918.16.50
		2921.21.00 - 2921.29.00
		2922.11.00 - 2922.13.00
		2922.41.00 - 2922.41.00
		2922.42.50 - 2922.42.50
		2922.49.40 - 2922.49.80
		2924.10.10 - 2924.19.80
		2926.10.00 - 2926.20.00
		2928.00.10 - 2928.00.10
		2928.00.50 - 2928.00.50
		2930.10.00 - 2930.10.00
		2930.30.30 - 2930.30.60
		2933.61.00 - 2933.69.60
		3507.10.00 - 3507.90.70
		3812.10.10 - 3812.30.90
		3814.00.10 - 3814.00.50
		3817.00.10 - 3817.20.00
		3824.10.00 - 3824.20.00
		3824.40.10 - 3824.40.10

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		3824.40.21 - 3824.40.50
		3824.71.00 - 3824.79.00
		3824.90.21 - 3824.90.22
		3824.90.26 - 3824.90.28
		3824.90.45 - 3825.90.00
CH013	Miscellaneous inorganic chemicals	2501.00.00 - 2502.00.00
		2509.00.10 - 2509.00.20
		2511.10.10 - 2511.20.00
		2528.10.00 - 2528.90.00
		2801.20.00 - 2801.30.20
		2804.50.00 - 2804.69.50
		2804.80.00 - 2805.40.00
		2811.22.10 - 2813.90.50
		2815.30.00 - 2816.40.20
		2818.10.10 - 2820.90.00
		2822.00.00 - 2822.00.00
		2825.10.00 - 2830.10.00
		2830.20.20 - 2834.10.50
		2834.22.00 - 2834.29.05
		2834.29.20 - 2836.10.00
		2836.50.00 - 2836.60.00
		2836.91.00 - 2843.90.00
		2846.10.00 - 2851.00.00
		3813.00.10 - 3813.00.50
		3815.11.00 - 3816.00.00
		3818.00.00 - 3818.00.00
		3824.30.00 - 3824.30.00
		3824.40.20 - 3824.40.20
		3824.50.00 - 3824.50.00
		3824.90.11 - 3824.90.19
		3824.90.31 - 3824.90.39
CH014	Inorganic acids	2806.10.00 - 2811.19.60
CH015	Chlor-alkali chemicals	2801.10.00 - 2801.10.00
		2815.11.00 - 2815.20.00
		2836.20.00 - 2836.40.20
CH016	Fertilizers	2503.00.00 - 2503.00.00
		2510.10.00 - 2510.20.00
		2802.00.00 - 2802.00.00
		2804.70.00 - 2804.70.00
		2814.10.00 - 2814.20.00
		2834.21.00 - 2834.21.00
		2834.29.10 - 2834.29.10
		3100.00.00 - 3105.90.00
CH017	Paints, inks, and related items, and certain components thereof	2803.00.00 - 2803.00.00
		2817.00.00 - 2817.00.00
		2821.10.00 - 2821.20.00
		2823.00.00 - 2824.90.50
		2830.20.10 - 2830.20.10
		2836.70.00 - 2836.70.00
		3206.11.00 - 3215.90.50
CH018	Synthetic organic pigments	3204.17.04 - 3204.17.90
		3205.00.05 - 3205.00.50
CH019	Synthetic dyes and azoic couplers	2921.42.55 - 2921.42.55
		2921.49.32 - 2921.49.32
		2922.29.26 - 2922.29.26
		2924.29.52 - 2924.29.52
		2927.00.30 - 2927.00.30

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		2935.00.20 - 2935.00.20
		3204.11.10 - 3204.16.50
		3204.19.06 - 3204.90.00
		3809.10.00 - 3809.10.00
CH020	Synthetic tanning agents	3202.10.10 - 3202.90.50
CH021	Natural tanning and dyeing materials	1404.10.00 - 1404.10.00
		3201.10.00 - 3201.90.50
		3203.00.10 - 3203.00.80
CH022	Photographic chemicals and preparations	2907.22.10 - 2907.22.10
		2914.69.10 - 2914.69.10
		2921.51.20 - 2921.51.20
		2922.29.29 - 2922.29.29
		2927.00.25 - 2927.00.25
		2933.19.24 - 2933.19.30
		2933.90.24 - 2933.90.24
		2933.99.24 - 2933.99.24
		2934.90.20 - 2934.90.20
		2934.99.20 - 2934.99.20
		3707.90.31 - 3707.90.60
CH023	Pesticide products and formulations	2903.59.10 - 2903.59.10
		2903.69.30 - 2903.69.30
		2908.10.15 - 2908.10.20
		2909.30.30 - 2909.30.30
		2916.20.10 - 2916.20.10
		2918.90.06 - 2918.90.20
		2920.10.10 - 2920.10.10
		2920.90.10 - 2920.90.10
		2924.21.04 - 2924.21.16
		2924.29.41 - 2924.29.47
		2926.90.21 - 2926.90.30
		2930.20.10 - 2930.20.10
		2930.20.90 - 2930.20.90
		2930.90.10 - 2930.90.10
		2930.90.30 - 2930.90.44
		2931.00.25 - 2931.00.25
		2932.29.10 - 2932.29.10
		2932.99.04 - 2932.99.20
		2933.19.23 - 2933.19.23
		2933.39.21 - 2933.39.27
		2933.40.30 - 2933.40.30
		2933.49.30 - 2933.49.30
		2933.59.10 - 2933.59.18
		2933.90.14 - 2933.90.22
		2933.99.06 - 2933.99.06
		2933.99.14 - 2933.99.22
		2934.20.35 - 2934.20.35
		2934.90.01 - 2934.90.03
		2934.90.07 - 2934.90.07
		2934.90.09 - 2934.90.18
		2934.99.01 - 2934.99.03
		2934.99.07 - 2934.99.07
		2934.99.09 - 2934.99.18
		2935.00.06 - 2935.00.06
		3808.10.10 - 3808.90.95
CH024	Adhesives and glues	3501.90.20 - 3501.90.20
		3503.00.10 - 3503.00.40
		3505.20.00 - 3506.99.00

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
CH025	Medicinal chemicals	1302.11.00 - 1302.11.00
		2906.13.10 - 2906.13.50
		2909.49.05 - 2909.49.05
		2909.50.10 - 2909.50.20
		2912.19.30 - 2912.19.30
		2914.69.20 - 2914.69.20
		2916.39.15 - 2916.39.16
		2917.19.10 - 2917.19.10
		2918.17.10 - 2918.17.50
		2918.19.12 - 2918.19.15
		2918.21.10 - 2918.21.10
		2918.22.10 - 2918.22.10
		2918.23.10 - 2918.23.10
		2918.90.30 - 2918.90.30
		2921.46.00 - 2921.46.00
		2921.49.38 - 2921.49.43
		2922.14.00 - 2922.19.18
		2922.29.27 - 2922.29.27
		2922.44.00 - 2922.44.00
		2922.49.26 - 2922.49.27
		2922.50.13 - 2922.50.25
		2923.10.00 - 2923.10.00
		2924.24.00 - 2924.24.00
		2924.29.57 - 2924.29.62
		2925.12.00 - 2925.12.00
		2925.20.10 - 2925.20.10
		2925.20.20 - 2925.20.20
		2926.30.10 - 2926.30.10
		2928.00.30 - 2928.00.30
		2930.40.00 - 2930.40.00
		2931.00.22 - 2931.00.22
		2932.29.20 - 2932.29.20
		2932.95.00 - 2932.95.00
		2933.11.00 - 2933.11.00
		2933.19.35 - 2933.19.35
		2933.19.45 - 2933.19.45
		2933.21.00 - 2933.21.00
		2933.29.20 - 2933.29.20
		2933.29.45 - 2933.29.45
		2933.33.00 - 2933.33.00
		2933.39.30 - 2933.39.41
		2933.40.20 - 2933.40.26
		2933.41.00 - 2933.41.00
		2933.49.20 - 2933.49.26
		2933.51.10 - 2933.55.00
		2933.59.21 - 2933.59.59
		2933.72.00 - 2933.72.00
		2933.90.26 - 2933.90.75
		2933.90.90 - 2933.90.90
		2933.91.00 - 2933.91.00
		2933.99.26 - 2933.99.75
		2933.99.90 - 2933.99.90
		2934.30.23 - 2934.30.27
		2934.90.30 - 2934.90.30
		2934.90.47 - 2934.90.47
		2934.91.00 - 2934.91.00
		2934.99.30 - 2934.99.30

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		2934.99.47 - 2934.99.47
		2935.00.29 - 2935.00.60
		2936.10.00 - 2939.99.00
		2941.10.10 - 2941.90.50
		2942.00.05 - 2942.00.05
		3001.10.00 - 3004.90.91
		3006.20.00 - 3006.30.50
		3006.60.00 - 3006.80.00
		3822.00.10 - 3822.00.60
CH026	Essential oils and other flavoring materials	2904.20.30 - 2904.20.30
		2905.22.10 - 2905.22.10
		2906.11.00 - 2906.11.00
		2906.14.00 - 2906.14.00
		2906.29.10 - 2906.29.20
		2909.30.10 - 2909.30.20
		2909.50.40 - 2909.50.40
		2912.19.10 - 2912.19.20
		2912.30.20 - 2912.49.50
		2914.23.00 - 2914.23.00
		2915.39.10 - 2915.39.20
		2915.39.40 - 2915.39.45
		2916.31.20 - 2916.31.20
		2916.34.10 - 2916.34.15
		2916.35.15 - 2916.35.15
		2916.39.20 - 2916.39.20
		2918.23.20 - 2918.23.20
		2918.90.35 - 2918.90.35
		2922.42.10 - 2922.42.10
		2924.29.10 - 2924.29.10
		2925.11.00 - 2925.11.00
		2932.21.00 - 2932.21.00
		2932.91.00 - 2932.94.00
		3301.11.00 - 3302.90.20
CH027	Perfumes, cosmetics, and toiletries	3303.00.10 - 3307.90.00
CH028	Soaps, detergents, and surface-active agents	2923.20.10 - 2923.90.00
		3401.11.10 - 3403.11.50
		3403.91.10 - 3403.99.00
		3804.00.10 - 3804.00.10
		3809.91.00 - 3809.93.50
		3912.31.00 - 3912.31.00
CH029	Miscellaneous chemicals and specialties	1519.11.00 - 1521.90.40
		2712.90.10 - 2712.90.20
		2804.10.00 - 2804.40.00
		2811.21.00 - 2811.21.00
		2914.21.10 - 2914.21.20
		2915.70.00 - 2915.90.18
		2916.15.10 - 2916.15.50
		2930.90.45 - 2930.90.90
		2940.00.20 - 2940.00.60
		3005.10.10 - 3006.10.00
		3006.40.00 - 3006.50.00
		3404.10.00 - 3407.00.40
		3505.10.00 - 3505.10.00
		3801.10.10 - 3803.00.00
		3804.00.50 - 3807.00.00
		3810.10.00 - 3810.90.50
		3820.00.00 - 3821.00.00

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		3823.11.00 - 3823.70.60
		3824.60.00 - 3824.60.00
		3824.90.25 - 3824.90.25
		3824.90.40 - 3824.90.40
CH030	Explosives, propellant powders, and related items	3601.00.00 - 3605.00.00
		3606.90.30 - 3606.90.80
CH031	Polyethylene resins in primary forms	3901.10.00 - 3901.90.90
CH032	Polypropylene resins in primary forms	3902.10.00 - 3902.10.00
		3902.30.00 - 3902.30.00
CH033	Polyvinyl chloride resins in primary forms	3904.10.00 - 3904.40.00
CH034	Styrene polymers in primary forms	3903.11.00 - 3903.90.50
CH035	Saturated polyester resins	3907.60.00 - 3907.60.00
		3907.99.00 - 3907.99.00
CH036	Other plastics in primary forms	3902.20.10 - 3902.20.50
		3902.90.00 - 3902.90.00
		3904.50.00 - 3907.50.00
		3907.91.20 - 3907.91.50
		3908.10.00 - 3911.90.10
		3911.90.35 - 3912.20.00
		3912.39.00 - 3914.00.60
CH037	Styrene-butadiene rubber in primary forms	4002.11.00 - 4002.19.00
CH038	Other synthetic rubber	4002.20.00 - 4002.99.00
		4005.10.00 - 4006.90.50
CH039	Pneumatic tires and tubes (new)	3911.90.15 - 3911.90.25
		4011.10.10 - 4011.99.85
		4013.10.00 - 4013.90.50
CH040	Other tires	4012.10.10 - 4012.90.90
CH041	Miscellaneous plastic products	3915.10.00 - 3926.10.00
		3926.30.10 - 3926.90.98
CH042	Miscellaneous rubber products	3926.90.98 - 3926.90.98
		4003.00.00 - 4004.00.00
		4007.00.00 - 4010.39.90
		4014.10.00 - 4014.90.50
		4016.10.00 - 4017.00.00
CH043	Gelatin	3503.00.55 - 3503.00.55
CH044	Natural rubber	4001.10.00 - 4001.30.00
Energy-related products sector:		
CH001	Electrical energy	2716.00.00 - 2716.00.00
CH002	Nuclear materials	2844.10.10 - 2845.90.00
CH003	Coal, coke, and related chemical products	2701.11.00 - 2708.20.00
CH004	Crude petroleum	2709.00.10 - 2709.00.20
CH005	Petroleum products	2710.00.05 - 2710.99.90
		2712.10.00 - 2712.20.00
		2713.11.00 - 2715.00.00
		3403.19.10 - 3403.19.50
		3606.10.00 - 3606.10.00
		3811.11.10 - 3811.90.00
		3819.00.00 - 3819.00.00
CH006	Natural gas and components	2711.11.00 - 2711.13.00
		2711.19.00 - 2711.29.00
		2901.10.10 - 2901.10.50
Textiles, apparel, and footwear sector:		
CH045	Fibers and yarns, except raw cotton and raw wool	5001.00.00 - 5006.00.90
		5103.10.00 - 5110.00.00
		5202.10.00 - 5207.90.00

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		5301.10.00 - 5308.90.90
		5401.10.00 - 5406.20.00
		5501.10.00 - 5511.30.00
		5604.10.00 - 5606.00.00
		7019.11.00 - 7019.19.90
		7019.90.50 - 7019.90.50
CH046	Fabrics	5007.10.30 - 5007.90.60
		5111.11.20 - 5113.00.00
		5208.11.20 - 5212.25.60
		5309.11.00 - 5311.00.60
		5407.10.00 - 5408.34.90
		5512.11.00 - 5516.94.00
		5603.11.00 - 5603.94.90
		5801.10.00 - 5804.30.00
		5806.10.10 - 5806.39.30
		5809.00.00 - 5809.00.00
		5901.10.10 - 5903.90.30
		5905.00.10 - 5907.00.80
		5911.10.10 - 5911.20.30
		6001.10.20 - 6006.90.90
		7019.40.05 - 7019.90.10
CH046A	Broadwoven fabrics	5007.10.30 - 5007.90.60
		5111.11.20 - 5113.00.00
		5208.11.20 - 5212.25.60
		5309.11.00 - 5311.00.60
		5407.10.00 - 5408.34.90
		5512.11.00 - 5516.94.00
CH046B	Knit fabrics	6001.10.20 - 6006.90.90
CH046C	Specialty fabrics	5801.10.00 - 5804.30.00
		5806.10.10 - 5806.39.30
		5809.00.00 - 5809.00.00
CH046D	Coated and other fabrics	5901.10.10 - 5903.90.30
		5905.00.10 - 5907.00.80
		5911.10.10 - 5911.20.30
CH046E	Glass fiber fabrics	7019.40.05 - 7019.90.10
CH046F	Other fabrics	5603.11.00 - 5603.94.90
CH047	Carpets and rugs	5701.10.13 - 5705.00.20
CH048	Home furnishings	5805.00.10 - 5805.00.40
		6301.10.00 - 6304.99.60
		9404.90.10 - 9404.90.95
CH048A	Blankets	6301.10.00 - 6301.90.00
CH048B	Pillowcases and sheets	6302.10.00 - 6302.39.00
CH048C	Table/kitchen linens and towels	6302.40.10 - 6302.99.20
CH048D	Curtains	6303.11.00 - 6303.99.00
CH048E	Bedspreads and other furnishing articles	6304.11.10 - 6304.99.60
		9404.90.85 - 9404.90.95
CH048F	Pillows, cushions, and sleeping bags	9404.90.10 - 9404.90.80
CH048G	Tapestries and other wall hangings	5805.00.10 - 5805.00.40
CH049	Apparel	3926.20.10 - 3926.20.90
		4015.11.00 - 4015.90.00
		4203.10.20 - 4203.40.60
		4303.10.00 - 4303.90.00
		6101.10.00 - 6217.90.90
		6501.00.30 - 6507.00.00
CH049A	Men's and boys' suits and sports coats	6103.11.00 - 6103.39.80
		6203.11.15 - 6203.21.90
		6203.22.30 - 6203.39.90

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
CH049B	Men's and boys' coats and jackets	6101.10.00 - 6101.90.90
		6103.21.00 - 6103.29.20
		6112.11.00 - 6112.20.10
		6113.00.90 - 6113.00.90
		6201.11.00 - 6201.99.90
		6203.21.30 - 6203.21.90
		6203.22.30 - 6203.29.30
		6210.20.50 - 6210.20.50
		6210.20.90 - 6210.20.90
		6210.40.50 - 6210.40.50
		6210.40.90 - 6210.40.90
		6211.20.04 - 6211.20.04
		6211.20.15 - 6211.20.28
		6211.31.00 - 6211.39.90
		6211.49.10 - 6211.49.10
CH049C	Men's and boys' trousers	6103.21.00 - 6103.29.20
		6103.41.10 - 6103.49.80
		6112.11.00 - 6112.20.10
		6113.00.90 - 6113.00.90
		6203.21.30 - 6203.21.90
		6203.22.30 - 6203.29.30
		6203.41.05 - 6203.49.80
		6210.40.50 - 6210.40.50
		6210.40.90 - 6210.40.90
		6211.20.08 - 6211.20.15
		6211.20.34 - 6211.20.48
		6211.32.00 - 6211.39.90
		6211.49.10 - 6211.49.10
CH049D	Women's and girls' trousers	6104.21.00 - 6104.29.20
		6104.61.00 - 6104.69.80
		6112.11.00 - 6112.20.10
		6113.00.90 - 6113.00.90
		6204.21.00 - 6204.21.00
		6204.22.30 - 6204.29.40
		6204.61.10 - 6204.69.90
		6210.50.50 - 6210.50.50
		6210.50.90 - 6210.50.90
		6211.20.08 - 6211.20.15
		6211.20.64 - 6211.31.00
		6211.41.00 - 6211.43.00
		6211.49.90 - 6211.49.90
CH049E	Shirts and blouses	6103.21.00 - 6103.29.20
		6104.21.00 - 6104.29.20
		6105.10.00 - 6106.90.30
		6109.10.00 - 6110.10.20
		6110.20.10 - 6110.90.90
		6112.11.00 - 6112.19.80
		6114.10.00 - 6114.30.10
		6114.30.30 - 6114.90.90
		6203.21.90 - 6203.21.90
		6203.22.30 - 6203.29.30
		6204.21.00 - 6204.21.00
		6204.22.30 - 6204.29.40
		6205.10.10 - 6206.90.00
		6211.31.00 - 6211.49.90
		6217.90.90 - 6217.90.90
CH049F	Sweaters	6103.21.00 - 6103.29.20

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		6104.21.00 - 6104.29.20
		6110.10.10 - 6110.10.10
		6110.11.00 - 6110.90.90
CH049G	Women's and girls' suits, skirts, and coats	6102.10.00 - 6102.90.90
		6104.11.00 - 6104.29.10
		6104.31.00 - 6104.39.20
		6104.51.00 - 6104.59.80
		6112.11.00 - 6112.20.10
		6113.00.90 - 6114.20.00
		6114.90.10 - 6114.90.90
		6202.11.00 - 6202.99.90
		6204.11.00 - 6204.21.00
		6204.22.30 - 6204.29.20
		6204.31.10 - 6204.39.80
		6204.51.00 - 6204.59.40
		6210.30.50 - 6210.30.50
		6210.30.90 - 6210.30.90
		6210.50.50 - 6210.50.50
		6210.50.90 - 6210.50.90
		6211.20.04 - 6211.20.04
		6211.20.15 - 6211.20.15
		6211.20.54 - 6211.20.58
		6211.41.00 - 6211.43.00
		6211.49.90 - 6211.49.90
CH049H	Women's and girls' dresses	6104.41.00 - 6104.49.90
		6204.41.10 - 6204.49.50
CH049I	Robes, nightwear, and underwear	6107.11.00 - 6109.10.00
		6109.90.15 - 6109.90.15
		6207.11.00 - 6208.99.80
CH049J	Hosiery	6115.11.00 - 6115.99.80
CH049K	Body-supporting garments	6212.10.30 - 6212.90.00
CH049L	Neckwear, handkerchiefs, and scarves	6117.10.10 - 6117.20.90
		6117.90.90 - 6117.90.90
		6213.10.10 - 6215.90.00
CH049M	Gloves, including gloves for sports	3926.20.10 - 3926.20.40
		4015.11.00 - 4015.19.50
		4203.21.20 - 4203.29.50
		6116.10.05 - 6116.99.95
		6216.00.05 - 6216.00.90
CH049N	Headwear	6501.00.30 - 6507.00.00
CH049O	Leather apparel and accessories	4203.10.20 - 4203.10.40
		4203.30.00 - 4203.40.60
CH049P	Fur apparel and other fur articles	4303.10.00 - 4303.90.00
CH049Q	Rubber, plastic, and coated-fabric apparel	3926.20.60 - 3926.20.90
		4015.90.00 - 4015.90.00
		6113.00.10 - 6113.00.10
		6210.20.30 - 6210.20.30
		6210.20.70 - 6210.20.70
		6210.30.30 - 6210.30.30
		6210.30.70 - 6210.30.70
		6210.40.30 - 6210.40.30
		6210.40.70 - 6210.40.70
		6210.50.30 - 6210.50.30
		6210.50.70 - 6210.50.70
CH049R	Nonwoven apparel	6210.10.20 - 6210.10.90
CH049S	Other wearing apparel	6103.21.00 - 6103.29.20
		6104.21.00 - 6104.29.20

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		6104.69.40 - 6104.69.80
		6110.10.10 - 6110.10.20
		6110.20.10 - 6110.90.10
		6111.10.00 - 6111.90.90
		6112.20.20 - 6112.49.00
		6113.00.90 - 6114.20.00
		6114.30.20 - 6114.90.90
		6117.80.10 - 6117.90.90
		6203.21.90 - 6203.29.30
		6204.21.00 - 6204.29.40
		6204.62.40 - 6204.62.40
		6209.10.00 - 6209.90.90
		6210.10.90 - 6210.10.90
		6210.40.50 - 6210.40.50
		6210.40.90 - 6210.40.90
		6210.50.50 - 6210.50.50
		6210.50.90 - 6211.12.80
		6211.20.15 - 6211.20.15
		6211.31.00 - 6211.49.90
		6217.10.10 - 6217.90.90
CH050	Miscellaneous textile products	4304.00.00 - 4304.00.00
		5601.10.10 - 5602.90.90
		5607.10.00 - 5609.00.40
		5806.40.00 - 5808.90.00
		5810.10.00 - 5811.00.40
		5904.10.00 - 5904.92.00
		5908.00.00 - 5910.00.90
		5911.31.00 - 5911.90.00
		6305.10.00 - 6310.90.20
		7019.31.00 - 7019.32.00
		7019.39.50 - 7019.39.50
		7019.90.50 - 7019.90.50
		9404.30.40 - 9404.30.80
CH051	Footwear	6401.10.00 - 6406.99.90
Minerals and metals sector:		
MM001	Clays and related mineral products	2507.00.00 - 2508.70.00
		2517.20.00 - 2517.20.00
		2530.10.00 - 2530.10.00
		2618.00.00 - 2618.00.00
		6806.20.00 - 6807.10.00
MM002	Fluorspar and miscellaneous mineral substances	2529.21.00 - 2529.22.00
		2530.20.10 - 2530.90.80
MM003	Iron ores and concentrates	2601.11.00 - 2601.12.00
MM004	Copper ores and concentrates	2603.00.00 - 2603.00.00
MM005	Lead ores, concentrates, and residues	2607.00.00 - 2607.00.00
		2620.20.00 - 2620.29.00
MM005A	Lead ores and concentrates	2607.00.00 - 2607.00.00
MM006	Zinc ores, concentrates, and residues	2608.00.00 - 2608.00.00
		2620.11.00 - 2620.19.60
MM006A	Zinc ores and concentrates	2608.00.00 - 2608.00.00
MM007	Certain ores, concentrates, ash, and residues	2602.00.00 - 2602.00.00
		2604.00.00 - 2605.00.00
		2609.00.00 - 2615.90.60
		2617.10.00 - 2617.90.00
		2620.50.00 - 2621.90.00
MM007A	Molybdenum ores and concentrates	2613.10.00 - 2613.90.00

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
MM008	Precious metal ores and concentrates	2616.10.00 - 2616.90.00
MM008A	Gold ores and concentrates	2616.90.00 - 2616.90.00
MM008B	Silver ores and concentrates	2616.10.00 - 2616.10.00
MM009	Cement, stone, and related products	2504.10.10 - 2506.29.00
		2512.00.00 - 2512.00.00
		2514.00.00 - 2517.10.00
		2517.30.00 - 2527.00.00
		2529.10.00 - 2529.10.00
		2529.30.00 - 2529.30.00
		6801.00.00 - 6803.00.50
		6806.10.00 - 6806.10.00
		6807.90.00 - 6815.99.40
MM009A	Cement	2523.10.00 - 2523.90.00
MM010	Industrial ceramics	6901.00.00 - 6903.90.00
		6909.11.20 - 6909.90.00
		6914.10.40 - 6914.90.80
		8113.00.00 - 8113.00.00
MM011	Ceramic bricks and similar articles	6904.10.00 - 6906.00.00
MM012	Ceramic floor and wall tiles	6907.10.00 - 6908.90.00
MM013	Ceramic household articles	6911.10.10 - 6913.90.50
MM014	Flat glass	7003.12.00 - 7009.92.50
MM015	Glass containers	7010.10.00 - 7010.94.50
MM016	Household glassware	7013.10.10 - 7013.99.90
MM017	Miscellaneous glass products	7001.00.10 - 7002.39.00
		7011.10.10 - 7012.00.00
		7014.00.10 - 7018.90.50
		7020.00.30 - 7020.00.60
MM018	Fiberglass insulation products	7019.39.10 - 7019.39.10
MM019	Natural and synthetic gemstones	7101.10.30 - 7102.10.00
		7102.31.00 - 7104.90.50
MM020	Precious metals and non-numismatic coins	7106.10.00 - 7112.99.00
		7118.10.00 - 7118.90.00
MM020A	Unrefined and refined gold	7108.12.10 - 7108.12.50
MM021	Primary iron products	2601.20.00 - 2601.20.00
		7201.10.00 - 7201.50.60
		7203.10.00 - 7203.90.00
MM022	Ferroalloys	7202.11.10 - 7202.99.50
MM023	Iron and steel waste and scrap	2619.00.30 - 2619.00.90
		7204.10.00 - 7204.50.00
MM024	Abrasive and ferrous products	2513.11.00 - 2513.29.00
		6804.10.00 - 6805.30.50
		7102.21.10 - 7102.29.00
		7105.10.00 - 7105.90.00
		7205.10.00 - 7205.29.00
MM024A	Abrasive products	6804.10.00 - 6805.30.50
MM025	Steel mill products	7206.10.00 - 7301.10.00
		7302.10.10 - 7302.90.90
		7304.10.10 - 7306.90.50
MM025A	Ingots, blooms, billets, and slabs of carbon and alloy steels	7206.10.00 - 7207.20.00
		7224.10.00 - 7224.90.00
MM025B	Plates, sheets, and strips of carbon and alloy steels	7208.10.15 - 7212.60.00
		7225.11.00 - 7225.19.00
		7225.30.30 - 7225.30.30
		7225.30.70 - 7225.30.70
		7225.40.30 - 7225.40.30
		7225.40.70 - 7225.40.70
		7225.50.60 - 7226.19.90

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		7226.91.50 - 7226.91.80
		7226.92.50 - 7226.99.00
MM025C	Bars, rods, and light shapes of carbon and alloy steels	7213.10.00 - 7216.22.00
		7227.20.00 - 7227.20.00
		7227.90.60 - 7227.90.60
		7228.20.10 - 7228.20.50
		7228.30.80 - 7228.40.00
		7228.50.50 - 7228.50.50
		7228.60.60 - 7228.70.30
		7228.80.00 - 7228.80.00
MM025D	Angles, shapes, and sections of carbon and alloy steels	7216.31.00 - 7216.99.00
		7228.70.30 - 7228.70.60
		7301.10.00 - 7301.10.00
MM025E	Wire of carbon and alloy steels	7217.10.10 - 7217.90.50
		7229.20.00 - 7229.90.90
MM025F	Ingots, blooms, billets, and slabs of stainless steels	7218.10.00 - 7218.99.00
MM025G	Plates, sheets, and strips of stainless steels	7219.11.00 - 7220.90.00
MM025H	Bars, rods, and light shapes of stainless steels	7221.00.00 - 7222.40.30
MM025I	Angles, shapes, and sections of stainless steels	7222.40.30 - 7222.40.60
MM025J	Wire of stainless steels	7223.00.10 - 7223.00.90
MM025K	Rails and accessories of carbon and alloy steels	7302.10.10 - 7302.90.90
MM025L	Pipes and tubes of carbon and alloy steels	7304.10.10 - 7304.39.00
		7304.51.10 - 7306.30.50
		7306.50.10 - 7306.90.50
MM025M	Pipes and tubes of stainless steels	7304.41.30 - 7304.49.00
		7306.40.10 - 7306.40.50
		7306.60.70 - 7306.60.70
MM025N	Tool steels	7224.10.00 - 7224.90.00
		7225.20.00 - 7225.30.10
		7225.30.50 - 7225.30.50
		7225.40.10 - 7225.40.10
		7225.40.50 - 7225.40.50
		7225.50.10 - 7225.50.10
		7226.20.00 - 7226.91.25
		7226.92.10 - 7226.92.30
		7227.10.00 - 7227.10.00
		7227.90.10 - 7227.90.20
		7228.10.00 - 7228.10.00
		7228.30.20 - 7228.30.60
		7228.50.10 - 7228.50.10
		7228.60.10 - 7228.60.10
		7229.10.00 - 7229.10.00
MM026	Steel pipe and tube fittings and certain cast products	7303.00.00 - 7303.00.00
		7307.11.00 - 7307.99.50
MM027	Fabricated structurals	7301.20.10 - 7301.20.50
		7308.10.00 - 7308.20.00
		7308.40.00 - 7308.90.60
MM028	Metal construction components	7308.30.10 - 7308.30.50
		7308.90.70 - 7308.90.95
		7610.10.00 - 7610.90.00
MM029	Metallic containers	7309.00.00 - 7311.00.00
		7611.00.00 - 7613.00.00
MM030	Wire products of base metal	7312.10.05 - 7314.49.60
		7317.00.10 - 7317.00.75
		7320.20.50 - 7320.90.50
		7413.00.10 - 7415.10.00
		7416.00.00 - 7416.00.00

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		7508.10.00 - 7508.90.50
		7614.10.10 - 7614.90.50
		7616.10.10 - 7616.10.10
		7616.91.00 - 7616.91.00
MM031	Miscellaneous products of base metal	7314.50.00 - 7316.00.00
		7320.10.30 - 7320.20.10
		7321.11.10 - 7323.10.00
		7325.91.00 - 7326.90.85
		7417.00.00 - 7417.00.00
		7419.10.00 - 7419.10.00
		7616.99.10 - 7616.99.50
		8301.20.00 - 8301.20.00
		8301.40.30 - 8301.40.30
		8302.10.30 - 8302.10.30
		8302.20.00 - 8302.30.60
		8302.49.20 - 8302.49.80
		8303.00.00 - 8311.90.00
MM032	Industrial fasteners of base metal	7318.11.00 - 7318.29.00
		7415.21.00 - 7415.39.00
		7616.10.30 - 7616.10.90
MM033	Cooking and kitchen ware	7323.91.10 - 7323.99.90
		7418.11.20 - 7418.19.50
		7615.11.00 - 7615.19.90
		7907.00.10 - 7907.00.10
		8007.00.10 - 8007.00.10
		8007.00.50 - 8007.00.50
MM034	Metal and ceramic sanitary ware	6910.10.00 - 6910.90.00
		7324.10.00 - 7324.90.00
		7418.20.10 - 7418.20.50
		7615.20.00 - 7615.20.00
		8007.00.10 - 8007.00.10
MM035	Construction castings and other cast-iron articles	7325.10.00 - 7325.10.00
MM036	Copper and related articles	2620.30.00 - 2620.30.00
		7401.10.00 - 7412.20.00
		7419.91.00 - 7419.99.50
MM036A	Unrefined and refined copper	7402.00.00 - 7403.11.00
MM036B	Copper alloy plate, sheet, and strip	7409.21.00 - 7409.90.90
MM037	Unwrought aluminum	2606.00.00 - 2606.00.00
		2620.40.00 - 2620.40.00
		7601.10.30 - 7602.00.00
MM037A	Primary and secondary aluminum	7601.10.30 - 7601.20.90
MM038	Aluminum mill products	7603.10.00 - 7609.00.00
MM038A	Aluminum bars, rods, and profiles	7604.10.10 - 7604.29.50
MM038B	Aluminum wire	7605.11.00 - 7605.29.00
MM038C	Aluminum plate, sheet, and strip	7606.11.30 - 7606.92.60
MM038D	Aluminum foil	7607.11.30 - 7607.20.50
MM038E	Aluminum tubes, pipes, and fittings	7608.10.00 - 7609.00.00
MM039	Lead and related articles	7801.10.00 - 7806.00.00
MM039A	Refined lead	7801.10.00 - 7801.10.00
MM040	Zinc and related articles	7901.11.00 - 7906.00.00
		7907.00.60 - 7907.00.60
MM040A	Unwrought zinc	7901.11.00 - 7901.12.50
MM041	Certain base metals and chemical elements	7501.10.00 - 7507.20.00
		8001.10.00 - 8006.00.00
		8101.10.00 - 8112.99.01
MM041A	Titanium ingot	8108.10.50 - 8108.20.00
MM042	Nonpowered handtools	8201.10.00 - 8207.90.75

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		8209.00.00 - 8209.00.00
MM043	Certain cutlery, sewing implements, and related products	7319.10.00 - 7319.90.00
		8208.10.00 - 8208.90.60
		8210.00.00 - 8210.00.00
		8211.92.20 - 8214.90.90
MM044	Table flatware and related products	8211.10.00 - 8211.91.80
		8215.10.00 - 8215.99.50
MM045	Certain builders' hardware	8301.10.20 - 8301.10.90
		8301.30.00 - 8301.30.00
		8301.40.60 - 8301.70.00
		8302.10.60 - 8302.10.90
		8302.41.30 - 8302.42.60
		8302.50.00 - 8302.60.90
Machinery sector:		
MM068	Wiring harnesses for motor vehicles	8544.30.00 - 8544.30.00
MM069	Pumps for motor vehicles	8413.30.10 - 8413.30.90
		8413.91.10 - 8413.91.10
MM070	Pumps for liquids	8413.11.00 - 8413.20.00
		8413.40.00 - 8413.82.00
		8413.91.20 - 8413.92.00
MM071	Air-conditioning equipment and parts	8414.10.00 - 8415.90.80
MM072	Industrial thermal-processing equipment and furnaces	8416.10.00 - 8417.10.00
		8417.80.00 - 8417.90.00
		8419.11.00 - 8419.20.00
		8419.39.00 - 8419.60.50
		8419.89.60 - 8419.90.10
		8419.90.30 - 8419.90.80
		8419.90.85 - 8419.90.95
		8514.10.00 - 8514.20.00
		8514.20.60 - 8514.20.80
		8514.30.80 - 8514.90.00
		8514.90.80 - 8514.90.80
		8545.11.00 - 8545.11.00
MM073	Household appliances, including commercial applications	8418.10.00 - 8418.99.80
		8419.81.10 - 8419.81.90
		8419.90.80 - 8419.90.80
		8421.12.00 - 8421.12.00
		8421.91.20 - 8421.91.40
		8422.11.00 - 8422.19.00
		8422.90.02 - 8422.90.06
		8450.11.00 - 8451.30.00
		8451.90.30 - 8451.90.90
		8476.21.00 - 8476.90.00
		8479.89.10 - 8479.89.70
		8479.90.40 - 8479.90.85
		8509.10.00 - 8510.90.55
		8514.20.40 - 8514.20.40
		8514.90.40 - 8514.90.40
		8516.10.00 - 8516.90.90
MM073A	Major household appliances and parts	8418.10.00 - 8418.40.00
		8418.99.40 - 8418.99.80
		8422.11.00 - 8422.11.00
		8422.90.04 - 8422.90.06
		8450.11.00 - 8450.20.00
		8450.90.60 - 8450.90.60
		8516.60.40 - 8516.60.40

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		8516.90.55 - 8516.90.80
MM074	Centrifuges and filtering and purifying equipment	8421.19.00 - 8421.19.00
		8421.19.90 - 8421.22.00
		8421.29.00 - 8421.29.00
		8421.39.40 - 8421.39.80
		8421.91.60 - 8421.99.00
MM075	Wrapping, packaging, and can-sealing machinery	8422.20.00 - 8422.40.91
		8422.90.10 - 8422.90.91
MM076	Scales and weighing machinery	8423.10.00 - 8423.90.00
MM077	Mineral processing machinery	8474.10.00 - 8474.90.00
MM078	Farm and garden machinery and equipment	8419.31.00 - 8419.31.00
		8424.81.10 - 8424.81.90
		8432.10.00 - 8434.90.00
		8436.10.00 - 8436.99.00
		8701.10.00 - 8701.10.00
		8701.30.10 - 8701.90.50
		8706.00.30 - 8706.00.50
		8707.90.10 - 8707.90.10
		8708.31.10 - 8708.31.10
		8708.39.10 - 8708.39.10
		8708.40.30 - 8708.40.30
		8708.50.10 - 8708.50.30
		8708.60.10 - 8708.60.30
		8708.70.05 - 8708.70.35
		8708.80.15 - 8708.80.25
		8708.91.10 - 8708.91.10
		8708.92.10 - 8708.92.10
		8708.93.15 - 8708.93.30
		8708.94.10 - 8708.94.10
		8708.99.03 - 8708.99.49
		8716.80.10 - 8716.80.10
		8716.90.10 - 8716.90.10
MM079	Industrial food-processing and related machinery	8417.20.00 - 8417.20.00
		8421.11.00 - 8421.11.00
		8435.10.00 - 8435.90.00
		8437.10.00 - 8438.90.90
MM080	Pulp, paper, and paperboard machinery	8419.32.10 - 8419.32.50
		8419.89.10 - 8419.89.10
		8419.90.20 - 8419.90.20
		8420.10.20 - 8420.10.20
		8420.91.20 - 8420.91.20
		8420.99.20 - 8420.99.20
		8439.10.00 - 8439.99.50
		8441.10.00 - 8441.90.00
MM081	Printing and related machinery	8440.10.00 - 8440.90.00
		8442.10.00 - 8443.40.00
		8443.51.50 - 8443.51.50
		8443.59.50 - 8443.60.00
		8443.90.50 - 8443.90.90
		8472.90.80 - 8472.90.80
		8473.40.80 - 8473.40.80
		8479.89.96 - 8479.89.96
MM082	Textile machinery	8420.10.10 - 8420.10.10
		8420.91.10 - 8420.91.10
		8420.99.10 - 8420.99.10
		8443.50.10 - 8443.51.10
		8443.59.10 - 8443.59.10

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		8443.90.10 - 8443.90.10
		8444.00.00 - 8449.00.50
		8451.40.00 - 8451.80.00
		8451.90.90 - 8452.90.00
MM083	Metal rolling mills	8455.10.00 - 8455.90.80
MM084	Metal cutting machine tools and machine tool accessories	8456.10.10 - 8456.10.10
		8456.20.10 - 8456.20.10
		8456.30.10 - 8456.30.10
		8456.99.30 - 8456.99.30
		8457.10.00 - 8461.90.80
		8466.10.80 - 8466.20.10
		8466.20.80 - 8466.30.10
		8466.30.60 - 8466.30.80
		8466.93.15 - 8466.93.45
		8466.93.53 - 8466.93.75
		8466.93.90 - 8466.93.95
MM085	Metal forming machine tools	8462.10.00 - 8462.21.00
		8462.21.80 - 8462.29.00
		8462.29.80 - 8463.90.00
		8466.94.20 - 8466.94.40
		8466.94.60 - 8466.94.65
		8466.94.80 - 8466.94.85
MM086	Non-metalworking machine tools	8456.10.50 - 8456.10.50
		8456.10.80 - 8456.10.80
		8456.20.50 - 8456.20.50
		8456.30.50 - 8456.30.50
		8456.99.50 - 8456.99.50
		8456.99.90 - 8456.99.90
		8464.10.00 - 8464.10.00
		8464.20.50 - 8464.20.50
		8464.90.90 - 8465.96.00
		8465.99.80 - 8465.99.80
		8466.91.10 - 8466.92.50
MM087	Semiconductor manufacturing equipment and robotics	8421.19.30 - 8421.19.30
		8424.89.30 - 8424.89.50
		8428.90.00 - 8428.90.00
		8456.10.60 - 8456.10.60
		8456.91.00 - 8456.99.10
		8456.99.70 - 8456.99.70
		8462.21.40 - 8462.21.40
		8462.29.40 - 8462.29.40
		8464.20.10 - 8464.20.10
		8464.90.10 - 8464.90.60
		8465.99.40 - 8465.99.40
		8466.10.40 - 8466.10.40
		8466.20.40 - 8466.20.40
		8466.30.45 - 8466.30.45
		8466.93.47 - 8466.93.47
		8466.93.85 - 8466.93.85
		8466.94.55 - 8466.94.55
		8466.94.75 - 8466.94.75
		8477.10.70 - 8477.10.70
		8477.40.40 - 8477.40.40
		8477.59.40 - 8477.59.40
		8477.90.15 - 8477.90.15
		8477.90.35 - 8477.90.35
		8477.90.55 - 8477.90.55

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		8477.90.75 - 8477.90.75
		8479.50.00 - 8479.50.00
		8479.89.84 - 8479.89.87
		8479.90.94 - 8479.90.94
		8479.90.95 - 8479.90.95
		8480.71.40 - 8480.71.40
		8514.30.20 - 8514.30.60
		8515.90.10 - 8515.90.10
		8543.11.00 - 8543.11.00
		8543.89.10 - 8543.89.10
		8543.90.10 - 8543.90.10
		9010.41.00 - 9010.49.00
		9010.90.70 - 9010.90.70
		9030.82.00 - 9030.82.00
		9030.90.64 - 9030.90.64
		9030.90.84 - 9030.90.84
		9031.41.00 - 9031.41.00
		9031.49.70 - 9031.49.70
		9031.80.40 - 9031.80.40
		9031.90.54 - 9031.90.54
		9031.90.70 - 9031.90.70
MM087A	Semiconductor manufacturing machinery	8421.19.30 - 8421.19.30
		8424.89.30 - 8424.89.50
		8456.10.60 - 8456.10.60
		8456.91.00 - 8456.99.10
		8456.99.70 - 8456.99.70
		8462.21.40 - 8462.21.40
		8462.29.40 - 8462.29.40
		8464.20.10 - 8464.20.10
		8464.90.10 - 8464.90.60
		8465.99.40 - 8465.99.40
		8466.10.40 - 8466.10.40
		8466.20.40 - 8466.20.40
		8466.30.45 - 8466.30.45
		8466.93.47 - 8466.93.47
		8466.93.85 - 8466.93.85
		8466.94.55 - 8466.94.55
		8466.94.75 - 8466.94.75
		8477.10.70 - 8477.10.70
		8477.40.40 - 8477.40.40
		8477.59.40 - 8477.59.40
		8477.90.15 - 8477.90.15
		8477.90.35 - 8477.90.35
		8477.90.55 - 8477.90.55
		8477.90.75 - 8477.90.75
		8479.89.84 - 8479.89.87
		8480.71.40 - 8480.71.40
		8514.30.20 - 8514.30.60
		8515.90.10 - 8515.90.10
		8543.11.00 - 8543.11.00
		8543.89.10 - 8543.89.10
		8543.90.10 - 8543.90.10
		9010.41.00 - 9010.49.00
		9010.90.70 - 9010.90.70
		9030.82.00 - 9030.82.00
		9030.90.64 - 9030.90.64
		9030.90.84 - 9030.90.84

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		9031.41.00 - 9031.41.00
		9031.49.70 - 9031.49.70
		9031.80.40 - 9031.80.40
		9031.90.54 - 9031.90.54
		9031.90.70 - 9031.90.70
MM088	Taps, cocks, valves, and similar devices	8481.10.00 - 8481.90.90
MM089	Mechanical power transmission equipment	8483.40.10 - 8483.90.80
MM090	Boilers, turbines, and related machinery	8401.10.00 - 8401.10.00
		8401.30.00 - 8404.90.00
		8406.10.10 - 8406.90.75
		8410.11.00 - 8410.90.00
MM091	Electric motors, generators, and related equipment	8501.10.20 - 8503.00.95
		8505.11.00 - 8505.90.80
		8545.19.20 - 8545.20.00
		8545.90.40 - 8545.90.40
		8546.90.00 - 8546.90.00
MM092	Electrical transformers, static converters, and inductors	8504.10.00 - 8504.40.40
		8504.40.85 - 8504.40.95
		8504.50.80 - 8504.50.80
		8504.90.65 - 8504.90.95
		8543.40.00 - 8543.40.00
MM093	Portable electric handtools	8467.21.00 - 8467.29.00
		8508.10.00 - 8508.90.80
MM094	Nonelectrically powered handtools and parts thereof	8467.11.10 - 8467.19.50
		8467.81.00 - 8467.99.01
MM095	Electric lamps (bulbs) and portable electric lights	8513.10.20 - 8513.90.40
		8539.10.00 - 8539.90.00
		8545.90.20 - 8545.90.20
MM096	Welding and soldering equipment	8468.10.00 - 8468.90.50
		8515.11.00 - 8515.80.00
		8515.90.20 - 8515.90.40
MM097	Nonautomotive insulated electrical wire and related products	8544.11.00 - 8544.20.00
		8544.41.40 - 8544.60.60
		8546.10.00 - 8546.20.00
		8547.20.00 - 8547.90.00
MM098	Miscellaneous machinery	8401.20.00 - 8401.20.00
		8405.10.00 - 8405.90.00
		8420.10.90 - 8420.10.90
		8420.91.90 - 8420.91.90
		8420.99.90 - 8420.99.90
		8424.10.00 - 8424.30.90
		8424.89.70 - 8425.49.00
		8428.10.00 - 8428.60.00
		8428.90.00 - 8428.90.00
		8431.10.00 - 8431.10.00
		8431.31.00 - 8431.39.00
		8453.10.00 - 8453.90.50
		8475.10.00 - 8475.90.90
		8478.10.00 - 8478.90.00
		8479.20.00 - 8479.40.00
		8479.60.00 - 8479.82.00
		8479.89.95 - 8479.89.95
		8479.89.97 - 8479.89.98
		8479.90.94 - 8479.90.94
		8479.90.95 - 8479.90.95
		8484.10.00 - 8484.90.00
		8485.90.00 - 8485.90.00

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		8543.89.20 - 8543.89.20
MM099	Molds and molding machinery	8454.10.00 - 8454.90.00
		8477.10.30 - 8477.10.40
		8477.10.90 - 8477.30.00
		8477.40.80 - 8477.51.00
		8477.59.80 - 8477.80.00
		8477.90.25 - 8477.90.25
		8477.90.45 - 8477.90.45
		8477.90.65 - 8477.90.65
		8477.90.85 - 8477.90.85
		8480.10.00 - 8480.71.10
		8480.71.80 - 8480.79.90
Transportation equipment sector:		
ET001	Aircraft engines and gas turbines	8407.10.00 - 8407.10.00
		8409.10.00 - 8409.10.00
		8411.11.40 - 8412.10.00
		8412.90.90 - 8412.90.90
ET002	Internal combustion piston engines, other than for aircraft	8407.21.00 - 8408.90.90
		8409.91.10 - 8409.99.99
		8421.23.00 - 8421.23.00
		8421.31.00 - 8421.31.00
		8483.10.10 - 8483.10.50
ET003	Forklift trucks and similar industrial vehicles	8427.10.40 - 8427.90.00
		8431.20.00 - 8431.20.00
		8709.11.00 - 8709.90.00
ET004	Construction and mining equipment	8426.11.00 - 8426.99.00
		8429.11.00 - 8430.69.01
		8431.41.00 - 8431.49.90
		8479.10.00 - 8479.10.00
		8479.90.94 - 8479.90.94
		8479.90.95 - 8479.90.95
		8704.10.10 - 8704.10.50
ET005	Ball and rollers bearings	8482.10.10 - 8482.99.65
		8483.20.40 - 8483.30.80
ET006	Primary cells and batteries and electric storage batteries	8506.10.00 - 8507.90.80
		8548.10.05 - 8548.90.00
ET007	Ignition, starting, lighting, and other electrical equipment	8511.10.00 - 8512.90.90
		8547.10.40 - 8547.10.80
ET008	Rail locomotive and rolling stock	8601.10.00 - 8609.00.00
ET009	Motor vehicles	8701.20.00 - 8701.20.00
		8702.10.30 - 8702.90.60
		8703.22.00 - 8703.90.00
		8704.21.00 - 8704.90.00
		8706.00.03 - 8706.00.15
		8707.10.00 - 8707.10.00
		8707.90.50 - 8707.90.50
ET010	Certain motor-vehicle parts	8708.10.30 - 8708.29.50
		8708.31.50 - 8708.31.50
		8708.39.50 - 8708.40.20
		8708.40.50 - 8708.40.50
		8708.50.50 - 8708.50.80
		8708.60.50 - 8708.60.80
		8708.70.45 - 8708.70.60
		8708.80.30 - 8708.80.45
		8708.91.50 - 8708.91.50
		8708.92.50 - 8708.92.50

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		8708.93.60 - 8708.93.75
		8708.94.50 - 8708.94.50
		8708.99.52 - 8708.99.80
ET011	Motorcycles, mopeds, and parts	8711.10.00 - 8711.90.00
		8714.11.00 - 8714.19.00
ET012	Miscellaneous vehicles and transportation-related equipment	8703.10.10 - 8703.21.00
		8705.10.00 - 8705.90.00
		8706.00.25 - 8706.00.25
		8710.00.00 - 8710.00.00
		8713.10.00 - 8713.90.00
		8714.20.00 - 8714.20.00
		8716.10.00 - 8716.40.00
		8716.80.50 - 8716.80.50
		8716.90.30 - 8716.90.50
ET013	Aircraft, spacecraft, and related equipment	8801.10.00 - 8802.40.00
		8802.60.90 - 8803.30.00
		8803.90.90 - 8805.29.00
ET014	Ships, tugs, pleasure boats, and similar vessels	8485.10.00 - 8485.10.00
		8901.10.00 - 8908.00.00
ET015	Motors and engines, except internal combustion, aircraft, or electric	8412.21.00 - 8412.90.10
		8412.90.90 - 8412.90.90
Electronic products sector:		
ET016	Office machines	8469.11.00 - 8470.40.00
		8470.90.00 - 8470.90.00
		8472.10.00 - 8472.30.00
		8472.90.20 - 8472.90.20
		8472.90.40 - 8472.90.60
		8472.90.90 - 8473.29.00
		8473.40.20 - 8473.40.20
		8473.40.85 - 8473.40.95
		8520.10.00 - 8520.10.00
ET017	Telephone and telegraph apparatus	8517.11.00 - 8518.10.40
		8518.29.40 - 8518.29.40
		8518.30.10 - 8518.30.10
		8518.40.10 - 8518.40.10
		8518.90.20 - 8518.90.60
		8520.20.00 - 8520.20.00
		8522.90.45 - 8522.90.55
		8525.10.90 - 8525.20.90
		8527.31.05 - 8527.31.05
		8527.90.40 - 8527.90.40
		8527.90.85 - 8527.90.95
		8529.10.70 - 8529.10.70
		8529.90.22 - 8529.90.22
		8529.90.75 - 8529.90.76
		8529.90.99 - 8529.90.99
		8531.80.40 - 8531.80.70
		8531.90.10 - 8531.90.10
		8531.90.70 - 8531.90.70
		8543.89.60 - 8543.89.60
		8802.60.30 - 8802.60.30
		8803.90.30 - 8803.90.30
ET018	Consumer electronics (except televisions)	8518.10.80 - 8518.22.00
		8518.29.80 - 8518.29.80
		8518.30.20 - 8518.30.20
		8518.40.20 - 8518.50.00

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		8518.90.80 - 8519.99.00
		8520.32.00 - 8522.90.35
		8522.90.65 - 8522.90.75
		8525.40.40 - 8525.40.80
		8527.12.00 - 8527.29.80
		8527.31.40 - 8527.39.00
		8527.90.50 - 8527.90.50
ET019	Blank media	8523.11.00 - 8523.90.00
ET020	Prerecorded media	8524.10.00 - 8524.99.40
ET021	Navigational instruments and remote control apparatus	8526.10.00 - 8526.92.00
		8529.10.40 - 8529.10.40
		8529.90.16 - 8529.90.19
		8529.90.26 - 8529.90.26
		8529.90.73 - 8529.90.73
		8529.90.95 - 8529.90.97
		9014.10.10 - 9014.90.60
ET022	Television receivers and video monitors	8528.12.04 - 8528.30.90
		8529.90.01 - 8529.90.06
		8529.90.29 - 8529.90.53
		8529.90.88 - 8529.90.93
ET023	Radio and television broadcasting equipment	8525.10.10 - 8525.10.70
		8525.30.30 - 8525.30.90
		8529.10.20 - 8529.10.20
		8529.10.90 - 8529.10.90
		8529.90.09 - 8529.90.13
		8529.90.63 - 8529.90.69
		8529.90.78 - 8529.90.86
ET024	Electric sound and visual signaling apparatus	8530.10.00 - 8531.80.00
		8531.80.90 - 8531.80.90
		8531.90.15 - 8531.90.40
		8531.90.75 - 8531.90.90
ET025	Electrical capacitors and resistors	8532.10.00 - 8533.90.80
		8543.89.96 - 8543.89.96
ET026	Printed circuits	8534.00.00 - 8534.00.00
ET027	Circuit apparatus exceeding 1000V	8535.10.00 - 8535.90.80
ET028	Circuit apparatus not exceeding 1000V	8536.10.00 - 8536.90.80
ET029	Circuit apparatus assemblies	8537.10.30 - 8537.20.00
ET030	Parts of circuit apparatus	8538.10.00 - 8538.90.80
ET031	Cathode-ray tubes	8540.11.10 - 8540.20.20
		8540.40.00 - 8540.60.00
		8540.91.15 - 8540.91.50
ET032	Electron tubes other than CRTs	8540.20.40 - 8540.20.40
		8540.71.20 - 8540.89.00
		8540.99.40 - 8540.99.80
ET033	Semiconductors and integrated circuits	8541.10.00 - 8541.50.00
		8541.90.00 - 8542.90.00
ET034	Miscellaneous electrical equipment	8541.60.00 - 8541.60.00
		8543.19.00 - 8543.30.00
		8543.81.00 - 8543.81.00
		8543.89.40 - 8543.89.40
		8543.89.70 - 8543.89.92
		8543.89.96 - 8543.89.96
		8543.90.15 - 8543.90.88
ET035	Computers, peripherals, and parts	8470.50.00 - 8470.50.00
		8471.10.00 - 8471.90.00
		8472.90.10 - 8472.90.10
		8472.90.20 - 8472.90.20

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
		8473.30.10 - 8473.40.10
		8473.50.30 - 8473.50.90
		8504.40.60 - 8504.40.70
		8504.50.40 - 8504.50.40
		8504.90.20 - 8504.90.40
ET036	Photographic film and paper	3701.10.00 - 3707.10.00
ET037	Optical fibers, optical fiber bundles and cables	8544.70.00 - 8544.70.00
		9001.10.00 - 9001.10.00
ET038	Optical goods, including ophthalmic goods	9001.20.00 - 9005.90.80
		9011.10.40 - 9013.90.90
ET039	Photographic cameras and equipment	8472.90.70 - 8472.90.70
		8473.40.60 - 8473.40.60
		9006.10.00 - 9010.10.00
		9010.50.10 - 9010.90.40
		9010.90.80 - 9010.90.90
		9027.40.00 - 9027.40.00
		9027.90.54 - 9027.90.54
ET040	Medical goods	9018.11.30 - 9022.90.95
ET041	Watches and clocks	9101.11.40 - 9114.90.50
ET042	Drawing, drafting, and calculating instruments	9017.10.00 - 9017.90.36
ET043	Measuring, testing, and controlling instruments	9015.10.40 - 9016.00.60
		9023.00.00 - 9027.30.80
		9027.50.40 - 9027.90.45
		9027.90.54 - 9030.40.00
		9030.83.00 - 9030.90.45
		9030.90.65 - 9030.90.68
		9030.90.85 - 9031.30.00
		9031.49.40 - 9031.49.40
		9031.49.80 - 9031.49.90
		9031.80.80 - 9031.90.45
		9031.90.55 - 9031.90.60
		9031.90.90 - 9033.00.00
Miscellaneous manufactures sector:		
MM046	Luggage, handbags, and flat goods	4202.11.00 - 4202.99.90
		9605.00.00 - 9605.00.00
MM046A	Luggage	4202.11.00 - 4202.19.00
		4202.91.00 - 4202.99.90
MM046B	Handbags	4202.21.30 - 4202.29.90
MM046C	Flat goods	4202.31.30 - 4202.39.90
MM047	Certain other leather goods	4201.00.30 - 4201.00.60
		4204.00.30 - 4205.00.80
MM048	Musical instruments and accessories	9201.10.00 - 9209.99.80
MM049	Umbrellas, whips, riding crops, and canes	6601.10.00 - 6603.90.80
MM050	Silverware and related articles of precious metal	7114.11.10 - 7115.90.05
MM051	Precious jewelry and related articles	7113.11.10 - 7113.20.50
		7115.90.30 - 7116.20.50
MM052	Costume jewelry and related articles	7117.11.00 - 7117.90.90
MM053	Bicycles and certain parts	8712.00.15 - 8712.00.50
		8714.91.20 - 8714.99.80
MM054	Furniture	9401.30.40 - 9401.80.60
		9401.90.15 - 9403.40.40
		9403.40.90 - 9403.50.40
		9403.50.90 - 9403.80.60
		9403.90.25 - 9404.29.90
MM055	Writing instruments and related articles	9608.10.00 - 9610.00.00
MM056	Lamps and lighting fittings	9405.10.40 - 9405.99.40

See note at end of table.

Table B-1--*Continued*
HTS 8-digit subheading ranges included in industry/commodity groups and subgroups, by sector

USITC code	Industry/commodity group or subgroup title	HTS subheading range
MM057	Prefabricated buildings	9406.00.40 - 9406.00.80
MM058	Dolls	9502.10.00 - 9502.99.00
MM059	Toys	9501.00.20 - 9501.00.60
		9503.10.00 - 9503.10.00
		9503.30.00 - 9503.90.00
		9505.90.20 - 9505.90.60
MM060	Games	9504.10.00 - 9504.90.90
MM061	Sporting goods	9506.11.20 - 9507.90.80
MM062	Smokers' articles	9613.10.00 - 9614.90.80
MM063	Brooms, brushes, and hair grooming articles	9603.10.05 - 9603.90.80
		9615.11.10 - 9615.90.60
MM063A	Brooms and brushes	9603.10.05 - 9603.90.80
MM063B	Hair grooming articles, non-electric (except brushes)	9615.11.10 - 9615.90.60
MM064	Works of art and miscellaneous manufactured goods	4206.10.30 - 4206.90.00
		6701.00.30 - 6704.90.00
		8715.00.00 - 8715.00.00
		9503.20.00 - 9503.20.00
		9505.10.10 - 9505.10.50
		9508.00.00 - 9602.00.50
		9604.00.00 - 9604.00.00
		9611.00.00 - 9612.20.00
		9616.10.00 - 9706.00.00
MM065	Apparel fasteners	9606.10.40 - 9607.20.00
MM066	Arms and ammunition	9301.00.30 - 9307.00.00
MM066A	Small arms and ammunition	9301.00.30 - 9301.00.90
		9301.90.30 - 9306.30.80
		9307.00.00 - 9307.00.00
MM067	Seats for motor vehicles and aircraft	9401.10.40 - 9401.20.00
		9401.90.10 - 9401.90.10
		9403.40.60 - 9403.40.60
		9403.50.60 - 9403.50.60
		9403.90.10 - 9403.90.10

Note.–A duplicate listing for an individual 8-digit HTS subheading indicates that the 10-digit categories within that 8-digit subheading are in more than one industry/commodity group or subgroup.

The above table shows the range of HTS 8-digit items assigned to industry/commodity groups and subgroups, and should be considered a guideline only because actual industry/commodity group and subgroup assignments are made on a HTS 10-digit basis. Therefore, any data generated on the basis of the information contained in this table may not accurately represent trade for these groups. For accurate trade data based on information contained here, see tables in the commodity chapters or appendix C (Profile of U.S. Industry and Market, by Industry/Commodity Groups and Subgroups, 1996-2000). In addition, this information represents only a snapshot of the HTS subheading composition of these groups and subgroups at a point in time. The USITC's industry/commodity groupings and subgroupings are subject to frequent revision as dictated by modifications to the HTS and other factors.

APPENDIX C
Profile of U.S. Industry and Market, by Industry/Commodity Groups and Subgroups, 1998-2002

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 secondary sources or from detailed surveys the Commission often conducts in the course of statutory investigations or other work. Further, these data may undergo adjustments based on revisions in tariff nomenclature, classification practices, or redefinitions of industry classes. Moreover, significant changes in coverage have been made as compared to previous years' reports: certain industry/commodity groups that encompass a wide variety of products are no longer profiled; and certain subgroups that represent a more meaningful selection of products are profiled.

Table C-1
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG002	Cattle and beef:					
	Number of establishments	1,151,823	1,100,098	1,080,969	1,053,284	1,035,970
	Employees (thousands)	1,220	1,168	1,150	1,122	1,105
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	39,454	45,278	48,632	50,152	48,762
	U.S. exports (million dollars)	2,860	3,290	3,859	3,335	2,952
	U.S. imports (million dollars)	2,810	2,983	3,443	4,062	4,038
	Apparent U.S. consumption (million dollars)	39,404	44,970	48,216	50,879	49,848
	Trade balance (million dollars)	50	308	416	-727	-1,086
	Ratio of imports to consumption (percent)	7.1	6.6	7.1	8.0	8.1
	Ratio of exports to production (percent)	7.2	7.3	7.9	6.6	6.1
AG003	Swine and pork:					
	Number of establishments	117,226	101,800	89,438	83,920	78,359
	Employees (thousands)	218	217	204	196	198
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	18,468	19,085	21,673	22,545	19,802
	U.S. exports (million dollars)	1,042	1,021	1,267	1,364	1,286
	U.S. imports (million dollars)	721	723	996	1,129	1,026
	Apparent U.S. consumption (million dollars)	18,147	18,787	21,402	22,310	19,542
	Trade balance (million dollars)	321	298	271	235	260
	Ratio of imports to consumption (percent)	4.0	3.8	4.7	5.1	5.3
	Ratio of exports to production (percent)	5.6	5.3	5.8	6.1	6.5
AG004	Sheep and meat of sheep:					
	Number of establishments	70,020	67,940	67,820	65,658	64,695
	Employees (thousands)	70	68	68	66	65
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	373	423	420	341	337
	U.S. exports (million dollars)	35	25	23	25	26
	U.S. imports (million dollars)	166	179	206	238	275
	Apparent U.S. consumption (million dollars)	504	578	603	554	586
	Trade balance (million dollars)	-131	-155	-183	-213	-249
	Ratio of imports to consumption (percent)	32.9	31.1	34.2	42.9	47.0
	Ratio of exports to shipments (percent)	9.4	5.9	5.6	7.2	7.8
AG005	Poultry:					
	Number of establishments	440	430	420	417	415
	Employees (thousands)	185	180	175	170	170
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. production (million dollars)	17,200	17,300	17,400	17,600	17,700
	U.S. exports (million dollars)	2,255	1,878	2,055	2,376	1,817
	U.S. imports (million dollars)	46	57	71	97	111
	Apparent U.S. consumption (million dollars)	14,990	15,479	15,416	15,321	15,995
	Trade balance (million dollars)	2,210	1,821	1,984	2,279	1,705
	Ratio of imports to consumption (percent)	0.3	0.4	0.5	0.6	0.7
	Ratio of exports to production (percent)	13.1	10.9	11.8	13.5	10.3
AG006	Fresh or frozen fish:					
	Number of establishments	1,400	1,400	1,450	1,380	1,400
	Employees (thousands)	39	40	41	39	40
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	5,224	5,051	5,550	5,200	5,350
	U.S. exports (million dollars)	1,289	1,634	1,705	2,016	1,947
	U.S. imports (million dollars)	2,641	2,945	3,103	2,958	3,158
	Apparent U.S. consumption (million dollars)	6,577	6,361	6,948	6,143	6,561
	Trade balance (million dollars)	-1,353	-1,310	-1,398	-943	-1,211
	Ratio of imports to consumption (percent)	40.2	46.3	44.7	48.2	48.1
	Ratio of exports to shipments (percent)	24.7	32.4	30.7	38.8	36.4

See footnote(s) at end of table.

Table C-1--*Continued*
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG007	Canned fish:					
	Number of establishments	36	36	34	30	30
	Employees (thousands)	7	7	6	5	5
	Capacity utilization (percent)	60	65	75	75	75
	U.S. shipments (million dollars)	1,416	1,527	1,334	1,111	1,200
	U.S. exports (million dollars)	170	222	170	202	181
	U.S. imports (million dollars)	530	611	538	568	664
	Apparent U.S. consumption (million dollars)	1,776	1,916	1,703	1,478	1,682
	Trade balance (million dollars)	-360	-389	-369	-367	-482
	Ratio of imports to consumption (percent)	29.9	31.9	31.6	38.5	39.4
	Ratio of exports to shipments (percent)	12.0	14.5	12.7	18.1	15.1
AG008	Cured and other fish:					
	Number of establishments	114	114	120	120	120
	Employees (thousands)	9	9	10	10	10
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	300	300	300	320	320
	U.S. exports (million dollars)	146	166	168	193	159
	U.S. imports (million dollars)	252	277	294	298	300
	Apparent U.S. consumption (million dollars)	406	411	426	424	461
	Trade balance (million dollars)	-106	-111	-126	-104	-141
	Ratio of imports to consumption (percent)	62.1	67.4	69.0	70.2	65.1
	Ratio of exports to shipments (percent)	48.8	55.4	56.0	60.4	49.7
AG009	Shellfish:					
	Number of establishments	725	700	700	715	690
	Employees (thousands)	60	60	59	60	56
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	2,000	2,200	2,400	2,650	2,500
	U.S. exports (million dollars)	589	752	799	708	737
	U.S. imports (million dollars)	4,654	5,072	6,007	5,908	5,910
	Apparent U.S. consumption (million dollars)	6,065	6,519	7,608	7,850	7,672
	Trade balance (million dollars)	-4,065	-4,319	-5,208	-5,200	-5,172
	Ratio of imports to consumption (percent)	76.7	77.8	79.0	75.3	77.0
	Ratio of exports to production (percent)	29.5	34.2	33.3	26.7	29.5
AG010	Dairy produce:					
	Number of establishments	140,000	130,000	125,000	124,000	122,000
	Employees (thousands)	630	620	610	600	590
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	62,000	63,000	64,000	66,000	67,000
	U.S. exports (million dollars)	592	591	664	723	618
	U.S. imports (million dollars)	1,325	1,387	1,474	1,574	1,488
	Apparent U.S. consumption (million dollars)	62,733	63,796	64,810	66,851	67,870
	Trade balance (million dollars)	-733	-796	-810	-851	-870
	Ratio of imports to consumption (percent)	2.1	2.2	2.3	2.4	2.2
	Ratio of exports to shipments (percent)	1.0	0.9	1.0	1.1	0.9
AG011	Eggs:					
	Number of establishments	67	65	64	64	64
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. production (million dollars)	6,659	6,700	6,800	6,850	6,900
	U.S. exports (million dollars)	207	155	159	162	155
	U.S. imports (million dollars)	14	20	18	20	28
	Apparent U.S. consumption (million dollars)	6,466	6,566	6,659	6,708	6,773
	Trade balance (million dollars)	193	134	141	142	127
	Ratio of imports to consumption (percent)	0.2	0.3	0.3	0.3	0.4
	Ratio of exports to production (percent)	3.1	2.3	2.3	2.4	2.3

See footnote(s) at end of table.

Table C-1--*Continued*
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG012A	Sugar:					
	Number of establishments	70	70	70	70	70
	Employees (thousands)	17	17	17	17	17
	Capacity utilization (percent)	89	90	92	92	92
	U.S. production (million dollars)	3,543	3,696	3,328	3,583	3,600
	U.S. exports (million dollars)	73	70	64	90	74
	U.S. imports (million dollars)	809	639	551	547	569
	Apparent U.S. consumption (million dollars)	4,279	4,265	3,816	4,040	4,095
	Trade balance (million dollars)	-736	-569	-488	-457	-495
	Ratio of imports to consumption (percent)	18.9	15.0	14.4	13.6	13.9
	Ratio of exports to production (percent)	2.0	1.9	1.9	2.5	2.1
AG012B	High fructose corn sweetener:					
	Number of establishments	20	23	22	22	22
	Employees (thousands)	11	11	11	11	11
	Capacity utilization (percent)	80	81	81	80	80
	U.S. production (million dollars)	2,269	2,558	2,743	3,055	3,200
	U.S. exports (million dollars)	123	103	101	83	63
	U.S. imports (million dollars)	33	34	32	39	34
	Apparent U.S. consumption (million dollars)	2,179	2,489	2,673	3,011	3,171
	Trade balance (million dollars)	90	69	70	44	29
	Ratio of imports to consumption (percent)	1.5	1.4	1.2	1.3	1.1
	Ratio of exports to production (percent)	5.4	4.0	3.7	2.7	2.0
AG013	Animal feeds:					
	Number of establishments	1,800	1,800	1,800	1,800	1,790
	Employees (thousands)	53	56	56	56	54
	Capacity utilization (percent)	72	79	79	79	80
	U.S. shipments (million dollars)	37,486	36,500	37,000	37,370	39,612
	U.S. exports (million dollars)	4,307	3,621	4,061	4,508	4,189
	U.S. imports (million dollars)	661	604	641	626	670
	Apparent U.S. consumption (million dollars)	33,840	33,483	33,581	33,489	36,094
	Trade balance (million dollars)	3,646	3,017	3,419	3,881	3,518
	Ratio of imports to consumption (percent)	2.0	1.8	1.9	1.9	1.9
	Ratio of exports to shipments (percent)	11.5	9.9	11.0	12.1	10.6
AG014	Live plants:					
	Number of establishments	28,000	30,000	30,000	30,000	30,000
	Employees (thousands)	130	139	140	140	140
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	11,744	12,175	12,800	13,440	13,571
	U.S. exports (million dollars)	142	144	132	116	113
	U.S. imports (million dollars)	387	428	460	495	503
	Apparent U.S. consumption (million dollars)	11,989	12,460	13,129	13,819	13,960
	Trade balance (million dollars)	-245	-285	-329	-379	-389
	Ratio of imports to consumption (percent)	3.2	3.4	3.5	3.6	3.6
	Ratio of exports to shipments (percent)	1.2	1.2	1.0	0.9	0.8
AG015	Seeds:					
	Number of establishments	12,479	12,561	12,500	12,500	12,500
	Employees (thousands)	(2)	(2)	(2)	(2)	(2)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	(2)	(2)	(2)	(2)	(2)
	U.S. exports (million dollars)	856	812	783	768	892
	U.S. imports (million dollars)	461	485	501	436	431
	Apparent U.S. consumption (million dollars)	(2)	(2)	(2)	(2)	(2)
	Trade balance (million dollars)	395	327	282	332	461
	Ratio of imports to consumption (percent)	(2)	(2)	(2)	(2)	(2)
	Ratio of exports to production (percent)	(2)	(2)	(2)	(2)	(2)

See footnote(s) at end of table.

Table C-1--*Continued*
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG016	Cut flowers:					
	Number of establishments	2,400	2,200	2,000	1,800	1,800
	Employees (thousands)	34	32	30	26	26
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	437	451	460	455	460
	U.S. exports (million dollars)	45	41	40	39	36
	U.S. imports (million dollars)	614	592	611	565	541
	Apparent U.S. consumption (million dollars)	1,007	1,001	1,032	981	965
	Trade balance (million dollars)	-570	-550	-572	-526	-505
	Ratio of imports to consumption (percent)	61.0	59.1	59.2	57.6	56.1
	Ratio of exports to shipments (percent)	10.2	9.2	8.6	8.7	7.9
AG017	Miscellaneous vegetable substances:					
	Number of establishments	9,000	9,000	9,000	9,000	9,000
	Employees (thousands)	(2)	(2)	(2)	(2)	(2)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	900	900	900	900	900
	U.S. exports (million dollars)	459	453	485	505	476
	U.S. imports (million dollars)	956	839	790	794	760
	Apparent U.S. consumption (million dollars)	1,397	1,286	1,205	1,188	1,184
	Trade balance (million dollars)	-497	-386	-305	-288	-284
	Ratio of imports to consumption (percent)	68.4	65.3	65.5	66.8	64.2
	Ratio of exports to production (percent)	51.0	50.4	53.9	56.1	52.9
AG018	Fresh, chilled, or frozen vegetables:					
	Number of establishments	33,500	31,000	30,000	30,100	29,500
	Employees (thousands)	43	40	39	40	39
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	4,200	4,300	4,450	4,500	4,600
	U.S. exports (million dollars)	1,195	1,198	1,346	1,304	1,353
	U.S. imports (million dollars)	2,283	2,207	2,320	2,628	2,758
	Apparent U.S. consumption (million dollars)	5,289	5,309	5,423	5,824	6,005
	Trade balance (million dollars)	-1,089	-1,009	-973	-1,324	-1,405
	Ratio of imports to consumption (percent)	43.2	41.6	42.8	45.1	45.9
	Ratio of exports to production (percent)	28.4	27.9	30.3	29.0	29.4
AG019	Prepared or preserved vegetables, mushrooms, and olives:					
	Number of establishments	1,620	1,600	1,550	1,500	1,600
	Employees (thousands)	4	4	4	4	5
	Capacity utilization (percent)	87	89	88	87	85
	U.S. production (million dollars)	8,350	8,400	8,450	8,200	8,300
	U.S. exports (million dollars)	1,586	1,535	1,451	1,387	1,365
	U.S. imports (million dollars)	1,210	1,384	1,408	1,493	1,574
	Apparent U.S. consumption (million dollars)	7,973	8,250	8,407	8,306	8,509
	Trade balance (million dollars)	377	150	43	-106	-209
	Ratio of imports to consumption (percent)	15.2	16.8	16.7	18.0	18.5
	Ratio of exports to production (percent)	19.0	18.3	17.2	16.9	16.4
AG020	Edible nuts:					
	Number of establishments	37,000	37,000	37,000	37,000	37,000
	Employees (thousands)	380	380	380	380	380
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	2,477	2,404	2,326	2,606	2,506
	U.S. exports (million dollars)	1,392	1,212	1,361	1,309	1,542
	U.S. imports (million dollars)	660	794	808	670	701
	Apparent U.S. consumption (million dollars)	1,745	1,986	1,773	1,967	1,665
	Trade balance (million dollars)	732	418	553	639	841
	Ratio of imports to consumption (percent)	37.8	40.0	45.6	34.1	42.1
	Ratio of exports to shipments (percent)	56.2	50.4	58.5	50.2	61.5

See footnote(s) at end of table.

Table C-1--*Continued*
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG021	Tropical fruit:					
	Number of establishments	9,000	8,500	8,500	8,500	8,500
	Employees (thousands)	25	20	20	20	20
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	387	498	545	496	534
	U.S. exports (million dollars)	60	64	57	49	46
	U.S. imports (million dollars)	1,495	1,574	1,548	1,616	1,705
	Apparent U.S. consumption (million dollars)	1,821	2,008	2,035	2,063	2,193
	Trade balance (million dollars)	-1,434	-1,510	-1,490	-1,567	-1,659
	Ratio of imports to consumption (percent)	82.1	78.4	76.0	78.3	77.7
	Ratio of exports to shipments (percent)	15.6	12.8	10.5	9.8	8.6
AG022	Citrus fruit:					
	Number of establishments	17,562	17,450	17,450	17,300	17,200
	Employees (thousands)	92	91	91	90	90
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	2,600	2,500	2,640	2,262	2,605
	U.S. exports (million dollars)	672	498	635	613	636
	U.S. imports (million dollars)	211	331	311	308	325
	Apparent U.S. consumption (million dollars)	2,139	2,333	2,316	1,957	2,294
	Trade balance (million dollars)	461	167	324	305	311
	Ratio of imports to consumption (percent)	9.9	14.2	13.4	15.8	14.2
	Ratio of exports to production (percent)	25.9	19.9	24.1	27.1	24.4
AG023	Deciduous fruit:					
	Number of establishments	82,000	81,000	81,000	81,000	81,000
	Employees (thousands)	160	155	155	155	155
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,886	2,058	2,101	2,134	2,723
	U.S. exports (million dollars)	665	743	797	832	788
	U.S. imports (million dollars)	177	268	247	270	294
	Apparent U.S. consumption (million dollars)	1,398	1,583	1,550	1,572	2,229
	Trade balance (million dollars)	488	475	551	562	494
	Ratio of imports to consumption (percent)	12.7	16.9	15.9	17.2	13.2
	Ratio of exports to shipments (percent)	35.3	36.1	38.0	39.0	28.9
AG024	Other fresh fruit:					
	Number of establishments	60,000	55,000	55,000	55,000	55,000
	Employees (thousands)	120	115	115	115	115
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	2,222	2,383	2,199	2,521	3,018
	U.S. exports (million dollars)	484	562	638	674	708
	U.S. imports (million dollars)	890	1,031	1,024	1,065	1,183
	Apparent U.S. consumption (million dollars)	2,628	2,852	2,585	2,913	3,494
	Trade balance (million dollars)	-406	-469	-386	-392	-476
	Ratio of imports to consumption (percent)	33.9	36.1	39.6	36.6	33.9
	Ratio of exports to shipments (percent)	21.8	23.6	29.0	26.7	23.5
AG025	Dried fruit other than tropical:					
	Number of establishments	40	40	40	40	40
	Employees (thousands)	9	9	9	9	9
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	826	1,149	1,166	799	960
	U.S. exports (million dollars)	385	379	342	349	338
	U.S. imports (million dollars)	60	78	63	63	90
	Apparent U.S. consumption (million dollars)	501	848	887	514	712
	Trade balance (million dollars)	325	301	279	285	248
	Ratio of imports to consumption (percent)	12.0	9.2	7.1	12.3	12.6
	Ratio of exports to shipments (percent)	46.6	33.0	29.4	43.6	35.2

See footnote(s) at end of table.

Table C-1--*Continued*
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG026	Frozen fruit:					
	Number of establishments	40	40	40	40	40
	Employees (thousands)	6	6	6	6	6
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	664	701	669	692	775
	U.S. exports (million dollars)	92	89	86	80	80
	U.S. imports (million dollars)	89	125	122	117	152
	Apparent U.S. consumption (million dollars)	661	738	705	729	847
	Trade balance (million dollars)	3	-37	-36	-37	-72
	Ratio of imports to consumption (percent)	13.4	17.0	17.3	16.0	17.9
	Ratio of exports to shipments (percent)	13.8	12.7	12.8	11.6	10.3
AG027	Prepared or preserved fruit:					
	Number of establishments	200	200	200	200	200
	Employees (thousands)	20	20	20	20	20
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	4,411	4,499	4,724	4,960	5,209
	U.S. exports (million dollars)	185	180	190	195	184
	U.S. imports (million dollars)	484	576	547	559	622
	Apparent U.S. consumption (million dollars)	4,710	4,895	5,080	5,324	5,646
	Trade balance (million dollars)	-299	-396	-356	-364	-437
	Ratio of imports to consumption (percent)	10.3	11.8	10.8	10.5	11.0
	Ratio of exports to shipments (percent)	4.2	4.0	4.0	3.9	3.5
AG028	Coffee and tea:					
	Number of establishments	247	247	247	247	247
	Employees (thousands)	8	8	7	7	7
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	7,153	7,116	6,300	4,855	4,855
	U.S. exports (million dollars)	263	284	298	314	297
	U.S. imports (million dollars)	3,656	3,114	2,921	1,915	1,942
	Apparent U.S. consumption (million dollars)	10,546	9,946	8,923	6,456	6,500
	Trade balance (million dollars)	-3,393	-2,830	-2,623	-1,601	-1,645
	Ratio of imports to consumption (percent)	34.7	31.3	32.7	29.7	29.9
	Ratio of exports to shipments (percent)	3.7	4.0	4.7	6.5	6.1
AG029	Spices:					
	Number of establishments	274	274	274	274	274
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	1,636	1,765	1,800	1,836	1,731
	U.S. exports (million dollars)	70	72	80	76	70
	U.S. imports (million dollars)	493	530	552	517	549
	Apparent U.S. consumption (million dollars)	2,059	2,223	2,272	2,277	2,211
	Trade balance (million dollars)	-423	-458	-472	-441	-480
	Ratio of imports to consumption (percent)	23.9	23.8	24.3	22.7	24.8
	Ratio of exports to shipments (percent)	4.2	4.1	4.4	4.1	4.0
AG030	Cereals:					
	Number of establishments	298,000	282,000	265,000	250,000	235,000
	Employees (thousands)	(2)	(2)	(2)	(2)	(2)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	35,600	28,770	25,760	26,900	26,800
	U.S. exports (million dollars)	9,989	10,128	9,467	9,397	9,929
	U.S. imports (million dollars)	771	730	660	761	735
	Apparent U.S. consumption (million dollars)	26,382	19,371	16,952	18,264	17,606
	Trade balance (million dollars)	9,218	9,399	8,808	8,636	9,194
	Ratio of imports to consumption (percent)	2.9	3.8	3.9	4.2	4.2
	Ratio of exports to production (percent)	28.1	35.2	36.8	34.9	37.1

See footnote(s) at end of table.

Table C-1--*Continued*
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG031	Milled grains, malts, and starches:					
	Number of establishments	510	515	515	500	500
	Employees (thousands)	21	21	21	20	20
	Capacity utilization (percent)	83	77	78	85	87
	U.S. shipments (million dollars)	12,532	12,753	12,500	12,125	12,125
	U.S. exports (million dollars)	417	439	402	446	594
	U.S. imports (million dollars)	258	261	304	305	379
	Apparent U.S. consumption (million dollars)	12,373	12,575	12,402	11,983	11,910
	Trade balance (million dollars)	159	178	98	142	215
	Ratio of imports to consumption (percent)	2.1	2.1	2.5	2.5	3.2
	Ratio of exports to shipments (percent)	3.3	3.4	3.2	3.7	4.9
AG032	Oilseeds:					
	Number of establishments	298,000	282,000	265,000	250,000	235,000
	Employees (thousands)	(2)	(2)	(2)	(2)	(2)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	18,900	14,900	13,300	13,600	13,800
	U.S. exports (million dollars)	5,053	4,694	5,419	5,642	5,790
	U.S. imports (million dollars)	294	238	231	203	191
	Apparent U.S. consumption (million dollars)	14,140	10,443	8,112	8,161	8,201
	Trade balance (million dollars)	4,760	4,457	5,188	5,439	5,599
	Ratio of imports to consumption (percent)	2.1	2.3	2.8	2.5	2.3
	Ratio of exports to production (percent)	26.7	31.5	40.7	41.5	42.0
AG033	Animal or vegetable fats and oils:					
	Number of establishments	515	510	506	502	500
	Employees (thousands)	32	29	27	28	28
	Capacity utilization (percent)	84	84	87	90	90
	U.S. shipments (million dollars)	9,350	8,430	7,400	7,000	8,600
	U.S. exports (million dollars)	2,763	1,947	1,450	1,405	1,917
	U.S. imports (million dollars)	1,475	1,348	1,311	1,128	1,285
	Apparent U.S. consumption (million dollars)	8,061	7,831	7,261	6,723	7,968
	Trade balance (million dollars)	1,289	599	139	277	632
	Ratio of imports to consumption (percent)	18.3	17.2	18.1	16.8	16.1
	Ratio of exports to shipments (percent)	29.6	23.1	19.6	20.1	22.3
AG034	Pasta, cereals, and other bakery goods:					
	Number of establishments	4,450	4,450	4,450	4,450	4,425
	Employees (thousands)	290	297	303	310	303
	Capacity utilization (percent)	71	72	70	73	75
	U.S. shipments (million dollars)	59,910	62,731	64,751	66,837	68,174
	U.S. exports (million dollars)	1,051	1,044	1,092	1,153	1,184
	U.S. imports (million dollars)	1,461	1,637	1,755	1,902	2,191
	Apparent U.S. consumption (million dollars)	60,320	63,324	65,413	67,585	69,182
	Trade balance (million dollars)	-410	-593	-662	-748	-1,008
	Ratio of imports to consumption (percent)	2.4	2.6	2.7	2.8	3.2
	Ratio of exports to shipments (percent)	1.8	1.7	1.7	1.7	1.7
AG035	Sauces, condiments, and soups:					
	Number of establishments	250	255	255	255	255
	Employees (thousands)	30	30	30	30	30
	Capacity utilization (percent)	68	68	60	65	70
	U.S. shipments (million dollars)	15,514	15,828	16,065	16,390	17,210
	U.S. exports (million dollars)	529	587	641	737	761
	U.S. imports (million dollars)	396	457	502	576	670
	Apparent U.S. consumption (million dollars)	15,381	15,698	15,926	16,229	17,119
	Trade balance (million dollars)	133	130	139	161	91
	Ratio of imports to consumption (percent)	2.6	2.9	3.2	3.5	3.9
	Ratio of exports to shipments (percent)	3.4	3.7	4.0	4.5	4.4

See footnote(s) at end of table.

Table C-1--*Continued*
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG036	Infant formulas, malt extracts, and other edible preparations:					
	Number of establishments	1,400	1,400	1,400	1,400	1,400
	Employees (thousands)	105	105	105	105	105
	Capacity utilization (percent)	72	72	70	75	75
	U.S. shipments (million dollars)	32,613	33,675	34,685	36,419	37,147
	U.S. exports (million dollars)	2,044	2,412	2,401	2,729	2,582
	U.S. imports (million dollars)	459	556	556	659	795
	Apparent U.S. consumption (million dollars)	31,028	31,819	32,840	34,349	35,360
	Trade balance (million dollars)	1,585	1,856	1,845	2,070	1,787
	Ratio of imports to consumption (percent)	1.5	1.7	1.7	1.9	2.2
	Ratio of exports to shipments (percent)	6.3	7.2	6.9	7.5	6.9
AG037	Cocoa, chocolate, and confectionery:					
	Number of establishments	1,010	1,200	1,300	1,300	1,350
	Employees (thousands)	74	80	90	90	90
	Capacity utilization (percent)	72	85	87	87	87
	U.S. shipments (million dollars)	12,800	14,000	16,000	16,000	16,500
	U.S. exports (million dollars)	655	697	851	997	817
	U.S. imports (million dollars)	2,284	2,238	2,178	2,301	2,662
	Apparent U.S. consumption (million dollars)	14,429	15,540	17,328	17,304	18,346
	Trade balance (million dollars)	-1,629	-1,540	-1,328	-1,304	-1,846
	Ratio of imports to consumption (percent)	15.8	14.4	12.6	13.3	14.5
	Ratio of exports to shipments (percent)	5.1	5.0	5.3	6.2	4.9
AG038	Fruit and vegetable juices:					
	Number of establishments	97	95	94	92	90
	Employees (thousands)	147	145	144	140	140
	Capacity utilization (percent)	83	83	83	83	83
	U.S. shipments (million dollars)	2,750	2,900	3,100	3,000	3,000
	U.S. exports (million dollars)	668	748	713	665	682
	U.S. imports (million dollars)	677	796	767	661	675
	Apparent U.S. consumption (million dollars)	2,759	2,948	3,153	2,995	2,993
	Trade balance (million dollars)	-9	-48	-53	5	7
	Ratio of imports to consumption (percent)	24.5	27.0	24.3	22.1	22.5
	Ratio of exports to shipments (percent)	24.3	25.8	23.0	22.2	22.7
AG039	Nonalcoholic beverages, excluding fruit and vegetable juices:					
	Number of establishments	3,200	3,200	3,200	3,200	3,200
	Employees (thousands)	110	110	110	110	110
	Capacity utilization (percent)	67	67	67	67	67
	U.S. shipments (million dollars)	61,000	62,000	63,000	65,000	70,370
	U.S. exports (million dollars)	302	328	312	312	334
	U.S. imports (million dollars)	568	625	683	745	823
	Apparent U.S. consumption (million dollars)	61,266	62,298	63,371	65,434	70,859
	Trade balance (million dollars)	-266	-298	-371	-434	-489
	Ratio of imports to consumption (percent)	0.9	1.0	1.1	1.1	1.2
	Ratio of exports to shipments (percent)	0.5	0.5	0.5	0.5	0.5

See footnote(s) at end of table.

Table C-1--*Continued*

Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG040	Malt beverages:					
	Number of establishments	529	529	529	529	529
	Employees (thousands)	32	30	31	33	33
	Capacity utilization (percent)	82	80	79	80	80
	U.S. shipments (million dollars)	18,020	16,907	16,544	16,925	16,925
	U.S. exports (million dollars)	254	201	169	191	171
	U.S. imports (million dollars)	1,699	1,881	2,166	2,333	2,566
	Apparent U.S. consumption (million dollars)	19,465	18,587	18,540	19,067	19,320
	Trade balance (million dollars)	-1,445	-1,680	-1,996	-2,142	-2,395
	Ratio of imports to consumption (percent)	8.7	10.1	11.7	12.2	13.3
	Ratio of exports to shipments (percent)	1.4	1.2	1.0	1.1	1.0
AG041	Wine and certain other fermented beverages:					
	Number of establishments	1,994	2,000	2,646	2,646	2,646
	Employees (thousands)	20	21	22	23	24
	Capacity utilization (percent)	79	79	80	82	82
	U.S. shipments (million dollars)	6,719	6,618	7,208	7,854	7,854
	U.S. exports (million dollars)	532	541	551	531	541
	U.S. imports (million dollars)	1,881	2,210	2,259	2,316	2,740
	Apparent U.S. consumption (million dollars)	8,068	8,287	8,916	9,639	10,053
	Trade balance (million dollars)	-1,349	-1,669	-1,708	-1,785	-2,199
	Ratio of imports to consumption (percent)	23.3	26.7	25.3	24.0	27.3
	Ratio of exports to shipments (percent)	7.9	8.2	7.6	6.8	6.9
AG042	Distilled spirits:					
	Number of establishments	57	57	57	57	57
	Employees (thousands)	6	6	6	8	7
	Capacity utilization (percent)	60	63	63	68	68
	U.S. shipments (million dollars)	3,439	3,063	3,860	3,929	3,929
	U.S. exports (million dollars)	506	480	483	534	555
	U.S. imports (million dollars)	2,086	2,383	2,727	2,848	3,111
	Apparent U.S. consumption (million dollars)	5,019	4,965	6,104	6,242	6,485
	Trade balance (million dollars)	-1,580	-1,902	-2,244	-2,313	-2,556
	Ratio of imports to consumption (percent)	41.6	48.0	44.7	45.6	48.0
	Ratio of exports to shipments (percent)	14.7	15.7	12.5	13.6	14.1
AG043	Unmanufactured tobacco:					
	Number of establishments	21	21	21	20	20
	Employees (thousands)	6	4	4	4	4
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	3,447	2,370	2,122	2,187	2,300
	U.S. exports (million dollars)	1,459	1,294	1,222	1,268	1,050
	U.S. imports (million dollars)	771	711	628	680	716
	Apparent U.S. consumption (million dollars)	2,759	1,787	1,528	1,599	1,966
	Trade balance (million dollars)	688	583	594	588	334
	Ratio of imports to consumption (percent)	27.9	39.8	41.1	42.5	36.4
	Ratio of exports to production (percent)	42.3	54.6	57.6	58.0	45.6
AG044	Cigars and certain other manufactured tobacco:					
	Number of establishments	57	57	57	57	57
	Employees (thousands)	3	3	3	3	3
	Capacity utilization (percent)	75	75	74	73	72
	U.S. shipments (million dollars)	1,316	1,235	1,193	1,100	1,010
	U.S. exports (million dollars)	661	651	709	616	485
	U.S. imports (million dollars)	377	301	290	285	299
	Apparent U.S. consumption (million dollars)	1,032	885	774	769	825
	Trade balance (million dollars)	284	350	419	331	185
	Ratio of imports to consumption (percent)	36.6	34.0	37.5	37.1	36.3
	Ratio of exports to shipments (percent)	50.2	52.7	59.4	56.0	48.0

See footnote(s) at end of table.

Table C-1--*Continued*
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG045	Cigarettes:					
	Number of establishments	11	10	10	10	10
	Employees (thousands)	21	18	17	15	15
	Capacity utilization (percent)	71	71	70	71	70
	U.S. shipments (million dollars)	32,800	39,686	39,686	42,787	45,696
	U.S. exports (million dollars)	4,166	3,232	3,308	2,118	1,463
	U.S. imports (million dollars)	59	112	212	189	230
	Apparent U.S. consumption (million dollars)	28,694	36,566	36,590	40,857	44,462
	Trade balance (million dollars)	4,106	3,120	3,096	1,930	1,234
	Ratio of imports to consumption (percent)	0.2	0.3	0.6	0.5	0.5
	Ratio of exports to shipments (percent)	12.7	8.1	8.3	5.0	3.2
AG046	Hides, skins, and leather:					
	Number of establishments	1,220	1,220	1,220	1,220	1,220
	Employees (thousands)	18	18	17	16	16
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	5,041	5,228	5,253	5,255	5,085
	U.S. exports (million dollars)	1,934	1,850	2,330	2,650	2,390
	U.S. imports (million dollars)	1,124	1,052	1,167	1,032	935
	Apparent U.S. consumption (million dollars)	4,232	4,430	4,090	3,638	3,629
	Trade balance (million dollars)	809	798	1,163	1,617	1,456
	Ratio of imports to consumption (percent)	26.6	23.7	28.5	28.4	25.8
	Ratio of exports to shipments (percent)	38.4	35.4	44.4	50.4	47.0
AG047	Furskins:					
	Number of establishments	438	398	350	325	318
	Employees (thousands)	3	2	2	2	2
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	205	157	151	166	128
	U.S. exports (million dollars)	196	141	158	173	173
	U.S. imports (million dollars)	86	73	87	96	87
	Apparent U.S. consumption (million dollars)	96	90	81	89	43
	Trade balance (million dollars)	109	67	70	77	85
	Ratio of imports to consumption (percent)	90.2	81.6	[3]108.1	[3]107.7	[3]204.6
	Ratio of exports to shipments (percent)	95.4	89.5	[3]104.4	[3]104.1	[3]134.8
AG048	Wool and other animal hair:					
	Number of establishments	70,020	67,940	67,800	65,658	64,695
	Employees (thousands)	(2)	(2)	(2)	(2)	(2)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	42	28	26	20	25
	U.S. exports (million dollars)	13	22	19	11	26
	U.S. imports (million dollars)	141	70	74	57	42
	Apparent U.S. consumption (million dollars)	170	76	81	66	41
	Trade balance (million dollars)	-128	-48	-55	-46	-16
	Ratio of imports to consumption (percent)	82.7	92.5	90.9	86.3	[3]101.4
	Ratio of exports to production (percent)	30.0	79.8	71.8	54.7	[3]102.3
AG049	Cotton, not carded or combed:					
	Number of establishments	30,785	30,114	30,000	30,000	30,000
	Employees (thousands)	170	166	160	160	160
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	4,141	3,810	4,260	3,384	4,678
	U.S. exports (million dollars)	2,545	968	1,883	2,164	2,015
	U.S. imports (million dollars)	14	136	21	4	20
	Apparent U.S. consumption (million dollars)	1,609	2,978	2,398	1,224	2,683
	Trade balance (million dollars)	2,532	832	1,862	2,160	1,995
	Ratio of imports to consumption (percent)	0.8	4.6	0.9	0.3	0.7
	Ratio of exports to production (percent)	61.5	25.4	44.2	64.0	43.1

See footnote(s) at end of table.

Table C-1--*Continued*
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG050	Ethyl alcohol for nonbeverage purposes:					
	Number of establishments	47	57	62	61	60
	Employees (thousands)	7	7	8	8	8
	Capacity utilization (percent)	80	78	87	75	79
	U.S. production (million dollars)	1,600	2,000	2,000	1,742	2,000
	U.S. exports (million dollars)	58	58	91	125	71
	U.S. imports (million dollars)	124	130	162	178	170
	Apparent U.S. consumption (million dollars)	1,666	2,073	2,070	1,795	2,099
	Trade balance (million dollars)	-66	-73	-70	-53	-99
	Ratio of imports to consumption (percent)	7.4	6.3	7.8	9.9	8.1
	Ratio of exports to production (percent)	3.6	2.9	4.6	7.2	3.6

[1]Capacity utilization could not be meaningfully calculated for this industry.
[2]Not available.
[3]Inventory changes, for which data are not available, likely account for ratios that exceed 100 percent.

Note.–Calculations based on unrounded data.

Table C-2
Forest products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG051	Logs and rough wood products:					
	Number of establishments	13,500	13,800	13,500	13,500	13,500
	Employees (thousands)	85	85	83	84	84
	Capacity utilization (percent)	92	92	95	93	93
	U.S. shipments (million dollars)	48,600	48,600	51,200	44,500	45,600
	U.S. exports (million dollars)	1,927	1,885	1,941	1,622	1,490
	U.S. imports (million dollars)	423	495	576	582	582
	Apparent U.S. consumption (million dollars)	47,097	47,210	49,835	43,461	44,693
	Trade balance (million dollars)	1,503	1,390	1,365	1,039	907
	Ratio of imports to consumption (percent)	0.9	1.0	1.2	1.3	1.3
	Ratio of exports to shipments (percent)	4.0	3.9	3.8	3.6	3.3
AG052	Lumber:					
	Number of establishments	5,400	5,300	5,200	5,000	5,000
	Employees (thousands)	116	118	117	116	116
	Capacity utilization (percent)	90	92	92	89	89
	U.S. shipments (million dollars)	22,500	24,700	23,400	21,500	22,100
	U.S. exports (million dollars)	2,002	2,184	2,210	1,781	1,720
	U.S. imports (million dollars)	6,743	7,820	7,071	6,854	6,647
	Apparent U.S. consumption (million dollars)	27,241	30,336	28,260	26,573	27,027
	Trade balance (million dollars)	-4,741	-5,636	-4,860	-5,073	-4,927
	Ratio of imports to consumption (percent)	24.8	25.8	25.0	25.8	24.6
	Ratio of exports to shipments (percent)	8.9	8.8	9.4	8.3	7.8
AG053	Moldings, millwork, and joinery:					
	Number of establishments	5,300	5,300	5,200	5,200	5,200
	Employees (thousands)	146	154	154	162	167
	Capacity utilization (percent)	87	87	90	90	90
	U.S. shipments (million dollars)	18,500	20,100	21,000	21,000	22,600
	U.S. exports (million dollars)	548	545	553	467	443
	U.S. imports (million dollars)	1,924	2,521	2,518	2,521	2,866
	Apparent U.S. consumption (million dollars)	19,876	22,076	22,966	23,054	25,023
	Trade balance (million dollars)	-1,376	-1,976	-1,966	-2,054	-2,423
	Ratio of imports to consumption (percent)	9.7	11.4	11.0	10.9	11.5
	Ratio of exports to shipments (percent)	3.0	2.7	2.6	2.2	2.0
AG054	Wood veneer and wood panels:					
	Number of establishments	810	810	800	780	780
	Employees (thousands)	72	72	76	74	74
	Capacity utilization (percent)	82	82	83	85	85
	U.S. production (million dollars)	13,600	14,800	14,200	12,500	13,600
	U.S. exports (million dollars)	929	958	1,029	889	928
	U.S. imports (million dollars)	2,767	3,574	3,471	3,280	3,730
	Apparent U.S. consumption (million dollars)	15,438	17,415	16,643	14,891	16,401
	Trade balance (million dollars)	-1,838	-2,615	-2,443	-2,391	-2,801
	Ratio of imports to consumption (percent)	17.9	20.5	20.9	22.0	22.7
	Ratio of exports to production (percent)	6.8	6.5	7.2	7.1	6.8
AG055	Wooden containers:					
	Number of establishments	2,900	2,800	2,800	2,800	2,800
	Employees (thousands)	53	50	51	51	50
	Capacity utilization (percent)	82	82	85	85	85
	U.S. production (million dollars)	4,500	4,700	5,000	5,200	4,800
	U.S. exports (million dollars)	138	172	197	150	135
	U.S. imports (million dollars)	419	471	565	555	612
	Apparent U.S. consumption (million dollars)	4,781	4,999	5,369	5,605	5,277
	Trade balance (million dollars)	-281	-299	-369	-405	-477
	Ratio of imports to consumption (percent)	8.8	9.4	10.5	9.9	11.6
	Ratio of exports to production (percent)	3.1	3.7	3.9	2.9	2.8

See footnote(s) at end of table.

Table C-2--*Continued*
Forest products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG056	Tools and tool handles of wood:					
	Number of establishments	125	125	120	110	110
	Employees (thousands)	3	3	3	3	3
	Capacity utilization (percent)	78	78	75	75	75
	U.S. production (million dollars)	134	138	141	130	138
	U.S. exports (million dollars)	36	44	53	37	42
	U.S. imports (million dollars)	117	120	136	130	131
	Apparent U.S. consumption (million dollars)	215	213	223	223	227
	Trade balance (million dollars)	-81	-75	-82	-93	-89
	Ratio of imports to consumption (percent)	54.6	56.0	60.7	58.2	57.6
	Ratio of exports to production (percent)	27.2	32.0	37.8	28.4	30.2
AG058	Cork and rattan:					
	Number of establishments	30	30	30	30	30
	Employees (thousands)	2	2	2	2	2
	Capacity utilization (percent)	80	80	80	80	80
	U.S. production (million dollars)	110	110	115	120	120
	U.S. exports (million dollars)	85	90	86	53	61
	U.S. imports (million dollars)	447	450	485	522	570
	Apparent U.S. consumption (million dollars)	472	469	514	589	629
	Trade balance (million dollars)	-362	-359	-399	-469	-509
	Ratio of imports to consumption (percent)	94.6	95.8	94.3	88.7	90.6
	Ratio of exports to production (percent)	77.0	82.0	74.5	44.4	51.0
AG059	Wood pulp and wastepaper:					
	Number of establishments	70	68	68	67	66
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	91	86	91	85	88
	U.S. production (million dollars)	7,300	7,900	9,300	7,300	7,900
	U.S. exports (million dollars)	3,452	3,540	4,619	3,711	3,853
	U.S. imports (million dollars)	2,447	2,604	3,388	2,650	2,371
	Apparent U.S. consumption (million dollars)	6,295	6,964	8,069	6,239	6,418
	Trade balance (million dollars)	1,005	936	1,231	1,061	1,482
	Ratio of imports to consumption (percent)	38.9	37.4	42.0	42.5	36.9
	Ratio of exports to production (percent)	47.3	44.8	49.7	50.8	48.8
AG060	Paper boxes and bags:					
	Number of establishments	2,997	3,013	3,029	3,045	3,062
	Employees (thousands)	227	228	230	232	234
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. production (million dollars)	42,700	43,600	47,700	45,700	48,300
	U.S. exports (million dollars)	1,345	1,416	1,500	1,445	1,315
	U.S. imports (million dollars)	745	802	940	1,011	1,121
	Apparent U.S. consumption (million dollars)	42,100	42,985	47,139	45,265	48,105
	Trade balance (million dollars)	600	615	561	435	195
	Ratio of imports to consumption (percent)	1.8	1.9	2.0	2.2	2.3
	Ratio of exports to production (percent)	3.1	3.2	3.1	3.2	2.7
AG061A	Paperboard:					
	Number of establishments	222	216	212	206	203
	Employees (thousands)	54	51	51	49	48
	Capacity utilization (percent)	93	96	90	86	84
	U.S. production (million dollars)	24,900	25,500	25,600	23,200	23,700
	U.S. exports (million dollars)	3,589	3,328	3,621	3,165	3,538
	U.S. imports (million dollars)	1,277	1,468	1,662	1,591	1,829
	Apparent U.S. consumption (million dollars)	22,587	23,640	23,641	21,626	21,991
	Trade balance (million dollars)	2,313	1,860	1,959	1,574	1,709
	Ratio of imports to consumption (percent)	5.7	6.2	7.0	7.4	8.3
	Ratio of exports to production (percent)	14.4	13.0	14.1	13.6	14.9

See footnote(s) at end of table.

Table C-2--*Continued*
Forest products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG061B	Tissue and tissue products:					
	Number of establishments	86	81	84	82	82
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	96	96	94	92	97
	U.S. production (million dollars)	13,700	14,600	14,500	14,900	14,200
	U.S. exports (million dollars)	872	1,005	1,119	1,283	1,211
	U.S. imports (million dollars)	643	768	906	1,082	1,237
	Apparent U.S. consumption (million dollars)	13,471	14,363	14,286	14,699	14,226
	Trade balance (million dollars)	229	237	214	201	-26
	Ratio of imports to consumption (percent)	4.8	5.4	6.3	7.4	8.7
	Ratio of exports to production (percent)	6.4	6.9	7.7	8.6	8.5
AG061C	Industrial paper:					
	Number of establishments	77	75	73	71	70
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	87	90	84	79	79
	U.S. production (million dollars)	4,900	5,300	5,300	5,100	5,200
	U.S. exports (million dollars)	848	837	919	954	480
	U.S. imports (million dollars)	522	561	589	602	398
	Apparent U.S. consumption (million dollars)	4,574	5,023	4,970	4,748	5,119
	Trade balance (million dollars)	326	277	330	352	81
	Ratio of imports to consumption (percent)	11.4	11.2	11.9	12.7	7.8
	Ratio of exports to production (percent)	17.3	15.8	17.3	18.7	9.2
AG062	Newsprint:					
	Number of establishments	25	24	24	24	20
	Employees (thousands)	13	11	10	10	8
	Capacity utilization (percent)	97	97	97	90	83
	U.S. shipments (million dollars)	4,147	3,316	3,495	3,209	2,440
	U.S. exports (million dollars)	460	423	492	409	330
	U.S. imports (million dollars)	3,766	3,517	3,789	3,597	3,039
	Apparent U.S. consumption (million dollars)	7,452	6,410	6,792	6,397	5,149
	Trade balance (million dollars)	-3,305	-3,094	-3,297	-3,188	-2,709
	Ratio of imports to consumption (percent)	50.5	54.9	55.8	56.2	59.0
	Ratio of exports to shipments (percent)	11.1	12.8	14.1	12.7	13.5
AG063	Printing and writing papers:					
	Number of establishments	120	120	115	115	105
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	92	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	23,723	23,379	24,267	21,511	21,600
	U.S. exports (million dollars)	1,225	1,338	1,522	1,308	620
	U.S. imports (million dollars)	4,115	4,337	4,977	4,761	4,372
	Apparent U.S. consumption (million dollars)	26,613	26,379	27,722	24,964	25,352
	Trade balance (million dollars)	-2,890	-3,000	-3,455	-3,453	-3,752
	Ratio of imports to consumption (percent)	15.5	16.4	18.0	19.1	17.2
	Ratio of exports to shipments (percent)	5.2	5.7	6.3	6.1	2.9
AG064	Certain specialty papers:					
	Number of establishments	(1)	(1)	(1)	(1)	(1)
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	5,091	5,300	5,564	5,600	5,700
	U.S. exports (million dollars)	701	641	689	618	1,056
	U.S. imports (million dollars)	845	971	1,138	1,067	909
	Apparent U.S. consumption (million dollars)	5,235	5,630	6,013	6,049	5,553
	Trade balance (million dollars)	-144	-330	-449	-449	147
	Ratio of imports to consumption (percent)	16.1	17.2	18.9	17.6	16.4
	Ratio of exports to shipments (percent)	13.8	12.1	12.4	11.0	18.5

See footnote(s) at end of table.

Table C-2--*Continued*

Forest products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG066	Printed matter:					
	Number of establishments	70,000	62,000	62,000	62,000	60,000
	Employees (thousands)	1,500	1,500	1,500	1,500	1,400
	Capacity utilization (percent)	74	76	75	71	([1])
	U.S. shipments (million dollars)	217,000	229,000	240,000	243,000	246,000
	U.S. exports (million dollars)	4,308	4,195	4,306	4,353	4,006
	U.S. imports (million dollars)	2,923	3,161	3,489	3,536	3,742
	Apparent U.S. consumption (million dollars)	215,615	227,966	239,183	242,183	245,737
	Trade balance (million dollars)	1,385	1,034	817	817	263
	Ratio of imports to consumption (percent)	1.4	1.4	1.5	1.5	1.5
	Ratio of exports to shipments (percent)	2.0	1.8	1.8	1.8	1.6

[1]Not available.

[2]Capacity utilization could not be meaningfully calculated for this industry.

Note.–Calculations based on unrounded data.

Table C-3
Chemicals and related products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH007	Major primary olefins:					
	Number of establishments	37	37	37	37	37
	Employees (thousands)	5	5	5	5	5
	Capacity utilization (percent)	97	98	97	92	95
	U.S. shipments (million dollars)	15,500	17,000	18,500	17,500	19,000
	U.S. exports (million dollars)	169	181	299	120	245
	U.S. imports (million dollars)	1,360	1,798	3,552	2,913	3,397
	Apparent U.S. consumption (million dollars)	16,691	18,617	21,753	20,293	22,152
	Trade balance (million dollars)	-1,191	-1,617	-3,253	-2,793	-3,152
	Ratio of imports to consumption (percent)	8.1	9.7	16.3	14.4	15.3
	Ratio of exports to shipments (percent)	1.1	1.1	1.6	0.7	1.3
CH008	Other olefins:					
	Number of establishments	23	23	23	23	23
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	97	98	97	95	97
	U.S. shipments (million dollars)	1,220	1,350	1,500	1,500	1,650
	U.S. exports (million dollars)	211	208	264	311	260
	U.S. imports (million dollars)	82	91	156	143	113
	Apparent U.S. consumption (million dollars)	1,091	1,233	1,392	1,332	1,503
	Trade balance (million dollars)	129	117	108	168	147
	Ratio of imports to consumption (percent)	7.5	7.4	11.2	10.7	7.5
	Ratio of exports to shipments (percent)	17.3	15.4	17.6	20.7	15.7
CH009	Primary aromatics:					
	Number of establishments	31	31	31	31	31
	Employees (thousands)	2	2	2	2	2
	Capacity utilization (percent)	80	80	85	85	85
	U.S. shipments (million dollars)	4,000	4,250	5,300	4,900	5,000
	U.S. exports (million dollars)	56	91	105	122	148
	U.S. imports (million dollars)	704	815	1,563	1,122	1,159
	Apparent U.S. consumption (million dollars)	4,647	4,974	6,759	5,900	6,011
	Trade balance (million dollars)	-647	-724	-1,459	-1,000	-1,011
	Ratio of imports to consumption (percent)	15.1	16.4	23.1	19.0	19.3
	Ratio of exports to shipments (percent)	1.4	2.1	2.0	2.5	3.0
CH014	Inorganic acids:					
	Number of establishments	(1)	(1)	(1)	(1)	(1)
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	(1)	(1)	2,276	1,852	(1)
	U.S. exports (million dollars)	186	204	246	242	214
	U.S. imports (million dollars)	282	238	251	252	246
	Apparent U.S. consumption (million dollars)	(1)	(1)	2,281	1,861	(1)
	Trade balance (million dollars)	-95	-34	-5	-9	-32
	Ratio of imports to consumption (percent)	(1)	(1)	11.0	13.5	(1)
	Ratio of exports to shipments (percent)	(1)	(1)	10.8	13.1	(1)
CH015	Chlor-alkali chemicals:					
	Number of establishments	(1)	(1)	(1)	(1)	(1)
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	(1)	(1)	(1)	(1)	(1)
	U.S. exports (million dollars)	834	781	862	1,054	851
	U.S. imports (million dollars)	191	126	162	219	166
	Apparent U.S. consumption (million dollars)	(1)	(1)	(1)	(1)	(1)
	Trade balance (million dollars)	642	655	700	835	685
	Ratio of imports to consumption (percent)	(1)	(1)	(1)	(1)	(1)
	Ratio of exports to shipments (percent)	(1)	(1)	(1)	(1)	(1)

See footnote(s) at end of table.

Table C-3--*Continued*
Chemicals and related products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH016	Fertilizers:					
	Number of establishments	350	350	350	350	350
	Employees (thousands)	23	23	22	22	22
	Capacity utilization (percent)	92	90	78	76	82
	U.S. shipments (million dollars)	9,400	8,000	7,500	7,000	7,500
	U.S. exports (million dollars)	3,346	3,036	2,388	2,183	2,184
	U.S. imports (million dollars)	2,472	2,486	3,224	3,478	3,043
	Apparent U.S. consumption (million dollars)	8,526	7,450	8,336	8,295	8,359
	Trade balance (million dollars)	874	550	-836	-1,295	-859
	Ratio of imports to consumption (percent)	29.0	33.4	38.7	41.9	36.4
	Ratio of exports to shipments (percent)	35.6	37.9	31.8	31.2	29.1
CH017	Paints, inks, and related items, and certain components thereof:					
	Number of establishments	1,500	1,490	1,475	1,470	1,450
	Employees (thousands)	15	15	16	16	15
	Capacity utilization (percent)	85	85	88	85	85
	U.S. shipments (million dollars)	22,800	24,000	25,000	25,600	26,000
	U.S. exports (million dollars)	3,112	3,327	3,802	3,546	3,614
	U.S. imports (million dollars)	1,755	1,959	2,119	2,090	1,996
	Apparent U.S. consumption (million dollars)	21,443	22,632	23,317	24,145	24,382
	Trade balance (million dollars)	1,357	1,368	1,683	1,455	1,618
	Ratio of imports to consumption (percent)	8.2	8.7	9.1	8.7	8.2
	Ratio of exports to shipments (percent)	13.6	13.9	15.2	13.9	13.9
CH018	Synthetic organic pigments:					
	Number of establishments	32	32	32	32	32
	Employees (thousands)	6	6	6	6	6
	Capacity utilization (percent)	85	85	85	80	80
	U.S. shipments (million dollars)	959	1,050	1,100	1,100	1,110
	U.S. exports (million dollars)	349	360	373	329	331
	U.S. imports (million dollars)	402	404	358	301	319
	Apparent U.S. consumption (million dollars)	1,012	1,093	1,084	1,071	1,098
	Trade balance (million dollars)	-53	-43	16	29	12
	Ratio of imports to consumption (percent)	39.7	36.9	33.0	28.1	29.0
	Ratio of exports to shipments (percent)	36.4	34.3	33.9	29.9	29.8
CH019	Synthetic dyes and azoic couplers:					
	Number of establishments	32	32	32	32	32
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	85	85	85	80	80
	U.S. shipments (million dollars)	1,122	1,230	1,320	1,320	1,320
	U.S. exports (million dollars)	453	404	436	361	249
	U.S. imports (million dollars)	555	527	481	378	393
	Apparent U.S. consumption (million dollars)	1,224	1,353	1,365	1,336	1,463
	Trade balance (million dollars)	-102	-123	-45	-16	-143
	Ratio of imports to consumption (percent)	45.3	38.9	35.3	28.3	26.8
	Ratio of exports to shipments (percent)	40.3	32.8	33.0	27.4	18.9
CH020	Synthetic tanning agents:					
	Number of establishments	5	5	5	5	5
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	85	85	85	80	80
	U.S. shipments (million dollars)	20	22	24	24	24
	U.S. exports (million dollars)	19	13	18	17	18
	U.S. imports (million dollars)	6	7	7	5	7
	Apparent U.S. consumption (million dollars)	7	16	13	12	12
	Trade balance (million dollars)	13	6	11	12	12
	Ratio of imports to consumption (percent)	81.6	45.3	55.5	41.4	53.6
	Ratio of exports to shipments (percent)	93.1	60.4	76.3	70.2	76.5

See footnote(s) at end of table.

Table C-3--*Continued*
Chemicals and related products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH021	Natural tanning and dyeing materials:					
	Number of establishments	10	10	10	10	10
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	85	85	85	80	80
	U.S. shipments (million dollars)	30	30	30	30	30
	U.S. exports (million dollars)	21	21	24	26	27
	U.S. imports (million dollars)	66	71	73	65	54
	Apparent U.S. consumption (million dollars)	75	80	79	70	57
	Trade balance (million dollars)	-45	-50	-49	-40	-27
	Ratio of imports to consumption (percent)	87.8	88.6	91.9	93.9	95.4
	Ratio of exports to shipments (percent)	69.6	69.7	78.6	85.8	91.3
CH022	Photographic chemicals and preparations:					
	Number of establishments	5	5	5	5	5
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	85	85	85	80	80
	U.S. shipments (million dollars)	(1)	(1)	(1)	(1)	(1)
	U.S. exports (million dollars)	449	433	507	413	522
	U.S. imports (million dollars)	633	564	555	479	435
	Apparent U.S. consumption (million dollars)	(1)	(1)	(1)	(1)	(1)
	Trade balance (million dollars)	-184	-131	-48	-66	87
	Ratio of imports to consumption (percent)	(1)	(1)	(1)	(1)	(1)
	Ratio of exports to shipments (percent)	(1)	(1)	(1)	(1)	(1)
CH023	Pesticide products and formulations:					
	Number of establishments	55	55	55	55	55
	Employees (thousands)	14	14	14	14	14
	Capacity utilization (percent)	88	85	85	85	85
	U.S. shipments (million dollars)	11,420	10,260	9,790	9,350	9,350
	U.S. exports (million dollars)	2,397	2,212	2,038	2,166	2,028
	U.S. imports (million dollars)	1,335	1,217	1,117	1,318	1,185
	Apparent U.S. consumption (million dollars)	10,358	9,265	8,869	8,502	8,508
	Trade balance (million dollars)	1,062	995	921	848	842
	Ratio of imports to consumption (percent)	12.9	13.1	12.6	15.5	13.9
	Ratio of exports to shipments (percent)	21.0	21.6	20.8	23.2	21.7
CH024	Adhesives and glues:					
	Number of establishments	500	500	500	500	500
	Employees (thousands)	10	10	10	10	10
	Capacity utilization (percent)	85	85	85	85	80
	U.S. shipments (million dollars)	4,888	5,000	5,100	5,200	5,000
	U.S. exports (million dollars)	477	502	602	565	588
	U.S. imports (million dollars)	159	181	194	176	206
	Apparent U.S. consumption (million dollars)	4,570	4,679	4,692	4,812	4,618
	Trade balance (million dollars)	318	321	408	388	382
	Ratio of imports to consumption (percent)	3.5	3.9	4.1	3.7	4.5
	Ratio of exports to shipments (percent)	9.7	10.0	11.8	10.9	11.8
CH025	Medicinal chemicals:					
	Number of establishments	718	718	718	718	715
	Employees (thousands)	208	208	208	208	208
	Capacity utilization (percent)	85	85	85	85	85
	U.S. shipments (million dollars)	81,300	91,800	105,600	107,000	107,000
	U.S. exports (million dollars)	11,975	13,701	15,772	18,169	18,742
	U.S. imports (million dollars)	17,953	23,782	29,112	33,956	40,699
	Apparent U.S. consumption (million dollars)	87,278	101,881	118,940	122,788	128,957
	Trade balance (million dollars)	-5,978	-10,081	-13,340	-15,788	-21,957
	Ratio of imports to consumption (percent)	20.6	23.3	24.5	27.7	31.6
	Ratio of exports to shipments (percent)	14.7	14.9	14.9	17.0	17.5

See footnote(s) at end of table.

Table C-3--*Continued*
Chemicals and related products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH026	Essential oils and other flavoring materials:					
	Number of establishments	53	53	53	53	53
	Employees (thousands)	50	51	50	50	50
	Capacity utilization (percent)	80	82	82	82	82
	U.S. shipments (million dollars)	3,200	3,400	3,500	3,500	3,700
	U.S. exports (million dollars)	916	948	1,034	1,109	1,211
	U.S. imports (million dollars)	836	754	775	736	786
	Apparent U.S. consumption (million dollars)	3,120	3,206	3,242	3,127	3,275
	Trade balance (million dollars)	80	194	258	373	425
	Ratio of imports to consumption (percent)	26.8	23.5	23.9	23.5	24.0
	Ratio of exports to shipments (percent)	28.6	27.9	29.5	31.7	32.7
CH027	Perfumes, cosmetics, and toiletries:					
	Number of establishments	650	650	650	650	650
	Employees (thousands)	58	59	60	59	60
	Capacity utilization (percent)	87	88	87	87	87
	U.S. shipments (million dollars)	20,000	21,500	23,000	23,300	23,000
	U.S. exports (million dollars)	2,572	2,578	2,851	3,187	3,160
	U.S. imports (million dollars)	1,629	1,864	2,192	2,443	2,716
	Apparent U.S. consumption (million dollars)	19,057	20,786	22,341	22,556	22,556
	Trade balance (million dollars)	943	714	659	744	444
	Ratio of imports to consumption (percent)	8.6	9.0	9.8	10.8	12.0
	Ratio of exports to shipments (percent)	12.9	12.0	12.4	13.7	13.7
CH028	Soaps, detergents, and surface-active agents:					
	Number of establishments	950	950	950	950	950
	Employees (thousands)	50	52	52	52	52
	Capacity utilization (percent)	87	88	87	87	87
	U.S. shipments (million dollars)	17,000	17,700	18,500	19,500	19,800
	U.S. exports (million dollars)	1,961	2,138	2,331	2,223	2,282
	U.S. imports (million dollars)	875	948	1,050	1,115	1,273
	Apparent U.S. consumption (million dollars)	15,914	16,510	17,220	18,393	18,791
	Trade balance (million dollars)	1,086	1,190	1,280	1,107	1,009
	Ratio of imports to consumption (percent)	5.5	5.7	6.1	6.1	6.8
	Ratio of exports to shipments (percent)	11.5	12.1	12.6	11.4	11.5
CH030	Explosives, propellant powders, and related items:					
	Number of establishments	127	125	122	120	118
	Employees (thousands)	13	13	13	13	13
	Capacity utilization (percent)	88	87	85	84	85
	U.S. shipments (million dollars)	1,930	2,000	2,080	2,110	2,200
	U.S. exports (million dollars)	292	264	314	254	286
	U.S. imports (million dollars)	248	267	265	285	302
	Apparent U.S. consumption (million dollars)	1,886	2,003	2,031	2,141	2,217
	Trade balance (million dollars)	44	-3	49	-31	-17
	Ratio of imports to consumption (percent)	13.2	13.3	13.0	13.3	13.6
	Ratio of exports to shipments (percent)	15.2	13.2	15.1	12.0	13.0
CH031	Polyethylene resins in primary forms:					
	Number of establishments	44	45	46	46	46
	Employees (thousands)	21	22	22	22	22
	Capacity utilization (percent)	88	89	88	80	85
	U.S. shipments (million dollars)	8,800	9,400	10,500	9,100	9,500
	U.S. exports (million dollars)	2,134	2,249	2,688	2,416	2,590
	U.S. imports (million dollars)	1,150	1,329	1,650	1,735	1,651
	Apparent U.S. consumption (million dollars)	7,816	8,480	9,462	8,419	8,562
	Trade balance (million dollars)	984	920	1,038	681	938
	Ratio of imports to consumption (percent)	14.7	15.7	17.4	20.6	19.3
	Ratio of exports to shipments (percent)	24.3	23.9	25.6	26.6	27.3

See footnote(s) at end of table.

Table C-3--*Continued*
Chemicals and related products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH032	Polypropylene resins in primary forms:					
	Number of establishments	26	26	27	28	28
	Employees (thousands)	6	6	6	6	6
	Capacity utilization (percent)	90	91	88	84	89
	U.S. shipments (million dollars)	3,800	4,400	4,500	4,000	4,500
	U.S. exports (million dollars)	760	863	1,131	1,100	1,188
	U.S. imports (million dollars)	220	232	251	219	259
	Apparent U.S. consumption (million dollars)	3,260	3,770	3,620	3,119	3,571
	Trade balance (million dollars)	540	630	880	881	929
	Ratio of imports to consumption (percent)	6.8	6.2	6.9	7.0	7.2
	Ratio of exports to shipments (percent)	20.0	19.6	25.1	27.5	26.4
CH033	Polyvinyl chloride resins in primary forms:					
	Number of establishments	28	28	28	28	28
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	90	95	84	81	84
	U.S. shipments (million dollars)	3,700	3,700	4,200	3,500	4,000
	U.S. exports (million dollars)	767	626	716	1,004	781
	U.S. imports (million dollars)	247	235	331	332	247
	Apparent U.S. consumption (million dollars)	3,180	3,309	3,815	2,828	3,466
	Trade balance (million dollars)	520	391	385	672	534
	Ratio of imports to consumption (percent)	7.8	7.1	8.7	11.7	7.1
	Ratio of exports to shipments (percent)	20.7	16.9	17.1	28.7	19.5
CH034	Styrene polymers in primary forms:					
	Number of establishments	69	69	69	70	71
	Employees (thousands)	11	11	11	11	12
	Capacity utilization (percent)	85	89	94	80	82
	U.S. shipments (million dollars)	5,300	5,500	5,900	5,200	5,700
	U.S. exports (million dollars)	779	753	848	731	752
	U.S. imports (million dollars)	418	427	572	579	580
	Apparent U.S. consumption (million dollars)	4,939	5,174	5,624	5,048	5,528
	Trade balance (million dollars)	361	326	276	152	172
	Ratio of imports to consumption (percent)	8.5	8.2	10.2	11.5	10.5
	Ratio of exports to shipments (percent)	14.7	13.7	14.4	14.0	13.2
CH035	Saturated polyester resins:					
	Number of establishments	52	52	52	52	54
	Employees (thousands)	6	6	6	6	7
	Capacity utilization (percent)	85	82	85	85	85
	U.S. shipments (million dollars)	4,600	4,800	5,500	5,200	5,500
	U.S. exports (million dollars)	626	566	629	798	712
	U.S. imports (million dollars)	451	448	522	502	537
	Apparent U.S. consumption (million dollars)	4,425	4,682	5,393	4,904	5,325
	Trade balance (million dollars)	175	118	107	296	175
	Ratio of imports to consumption (percent)	10.2	9.6	9.7	10.2	10.1
	Ratio of exports to shipments (percent)	13.6	11.8	11.4	15.3	13.0
CH037	Styrene-butadiene rubber in primary forms:					
	Number of establishments	11	11	11	11	11
	Employees (thousands)	5	5	5	5	5
	Capacity utilization (percent)	90	88	88	90	90
	U.S. shipments (million dollars)	1,340	1,390	1,460	1,430	1,430
	U.S. exports (million dollars)	322	309	344	297	273
	U.S. imports (million dollars)	175	173	232	258	232
	Apparent U.S. consumption (million dollars)	1,194	1,253	1,348	1,391	1,389
	Trade balance (million dollars)	146	137	112	39	41
	Ratio of imports to consumption (percent)	14.7	13.8	17.2	18.6	16.7
	Ratio of exports to shipments (percent)	24.0	22.2	23.6	20.8	19.1

See footnote(s) at end of table.

Table C-3--*Continued*
Chemicals and related products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH038	Other synthetic rubber:					
	Number of establishments	34	34	34	34	34
	Employees (thousands)	11	11	11	11	11
	Capacity utilization (percent)	82	82	83	83	83
	U.S. shipments (million dollars)	4,000	4,180	4,380	4,290	4,300
	U.S. exports (million dollars)	1,064	1,079	1,317	1,328	1,361
	U.S. imports (million dollars)	669	697	778	734	725
	Apparent U.S. consumption (million dollars)	3,605	3,798	3,841	3,696	3,664
	Trade balance (million dollars)	395	382	539	594	636
	Ratio of imports to consumption (percent)	18.6	18.4	20.2	19.9	19.8
	Ratio of exports to shipments (percent)	26.6	25.8	30.1	31.0	31.7
CH039	Pneumatic tires and tubes (new):					
	Number of establishments	42	42	42	42	42
	Employees (thousands)	65	64	66	63	64
	Capacity utilization (percent)	95	92	93	90	92
	U.S. shipments (million dollars)	14,320	13,950	14,600	13,400	14,000
	U.S. exports (million dollars)	2,532	2,366	2,414	2,282	2,233
	U.S. imports (million dollars)	4,011	4,559	4,700	4,146	4,694
	Apparent U.S. consumption (million dollars)	15,799	16,143	16,886	15,264	16,460
	Trade balance (million dollars)	-1,479	-2,193	-2,286	-1,864	-2,460
	Ratio of imports to consumption (percent)	25.4	28.2	27.8	27.2	28.5
	Ratio of exports to shipments (percent)	17.7	17.0	16.5	17.0	16.0
CH040	Other tires:					
	Number of establishments	1,400	1,400	1,400	1,400	1,400
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	90	90	90	90	90
	U.S. shipments (million dollars)	1,000	990	1,000	1,100	1,150
	U.S. exports (million dollars)	93	111	89	96	94
	U.S. imports (million dollars)	143	129	137	122	123
	Apparent U.S. consumption (million dollars)	1,050	1,008	1,048	1,126	1,179
	Trade balance (million dollars)	-50	-18	-48	-26	-29
	Ratio of imports to consumption (percent)	13.6	12.8	13.1	10.8	10.4
	Ratio of exports to shipments (percent)	9.3	11.2	8.9	8.8	8.2
CH044	Natural rubber:					
	Number of establishments	(1)	(1)	(1)	(1)	(1)
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	(1)	(1)	(1)	(1)	(1)
	U.S. exports (million dollars)	36	41	39	34	40
	U.S. imports (million dollars)	977	704	842	613	751
	Apparent U.S. consumption (million dollars)	(1)	(1)	(1)	(1)	(1)
	Trade balance (million dollars)	-941	-664	-803	-579	-712
	Ratio of imports to consumption (percent)	(1)	(1)	(1)	(1)	(1)
	Ratio of exports to shipments (percent)	(1)	(1)	(1)	(1)	(1)

[1]Not available.

Note.–Calculations based on unrounded data.

Table C-4
Energy-related products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH001	Electrical energy:					
	Number of establishments	3,225	3,225	3,225	3,225	3,225
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	100	100	100	100	100
	U.S. shipments (million dollars)	199,510	219,460	218,610	220,824	229,664
	U.S. exports (million dollars)	185	206	398	1,258	304
	U.S. imports (million dollars)	1,039	1,334	2,711	2,681	1,160
	Apparent U.S. consumption (million dollars)	200,364	220,587	220,923	222,247	230,521
	Trade balance (million dollars)	-854	-1,127	-2,313	-1,423	-857
	Ratio of imports to consumption (percent)	0.5	0.6	1.2	1.2	0.5
	Ratio of exports to shipments (percent)	0.1	0.1	0.2	0.6	0.1
CH003	Coal, coke, and related chemical products:					
	Number of establishments	520	520	520	520	520
	Employees (thousands)	150	150	150	150	150
	Capacity utilization (percent)	85	90	90	90	90
	U.S. shipments (million dollars)	29,965	32,965	32,606	34,320	38,496
	U.S. exports (million dollars)	3,635	2,671	2,718	2,354	2,188
	U.S. imports (million dollars)	1,570	1,741	2,460	2,411	2,589
	Apparent U.S. consumption (million dollars)	27,900	32,035	32,349	34,377	38,897
	Trade balance (million dollars)	2,065	930	257	-57	-401
	Ratio of imports to consumption (percent)	5.6	5.4	7.6	7.0	6.7
	Ratio of exports to shipments (percent)	12.1	8.1	8.3	6.9	5.7
CH004	Crude petroleum:					
	Number of establishments	18,000	18,000	18,000	18,000	18,000
	Employees (thousands)	204	204	204	204	204
	Capacity utilization (percent)	100	100	100	100	100
	U.S. shipments (million dollars)	28,344	34,602	57,499	46,960	55,203
	U.S. exports (million dollars)	670	772	444	177	92
	U.S. imports (million dollars)	25,467	31,642	56,546	49,673	54,704
	Apparent U.S. consumption (million dollars)	53,141	65,472	113,602	96,456	109,815
	Trade balance (million dollars)	-24,797	-30,870	-56,103	-49,496	-54,612
	Ratio of imports to consumption (percent)	47.9	48.3	49.8	51.5	49.8
	Ratio of exports to shipments (percent)	2.4	2.2	0.8	0.4	0.2
CH005	Petroleum products:					
	Number of establishments	190	190	190	190	190
	Employees (thousands)	75	75	75	75	75
	Capacity utilization (percent)	90	90	90	90	90
	U.S. shipments (million dollars)	85,580	113,231	213,475	140,162	193,710
	U.S. exports (million dollars)	6,233	6,599	9,562	8,936	8,662
	U.S. imports (million dollars)	17,584	22,079	39,787	34,372	30,594
	Apparent U.S. consumption (million dollars)	96,931	128,711	243,699	165,598	215,641
	Trade balance (million dollars)	-11,351	-15,480	-30,224	-25,436	-21,931
	Ratio of imports to consumption (percent)	18.1	17.2	16.3	20.8	14.2
	Ratio of exports to shipments (percent)	7.3	5.8	4.5	6.4	4.5

See footnote(s) at end of table.

Table C-4--*Continued*
Energy-related products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH006	Natural gas and components:					
	Number of establishments	(1)	(1)	(1)	(1)	(1)
	Employees (thousands)	200	200	200	200	200
	Capacity utilization (percent)	80	80	80	80	80
	U.S. shipments (million dollars)	65,000	69,000	120,000	150,000	115,000
	U.S. exports (million dollars)	581	759	1,286	1,109	1,675
	U.S. imports (million dollars)	9,212	11,042	19,157	23,054	18,609
	Apparent U.S. consumption (million dollars)	73,630	79,282	137,870	171,944	131,934
	Trade balance (million dollars)	-8,630	-10,282	-17,870	-21,944	-16,934
	Ratio of imports to consumption (percent)	12.5	13.9	13.9	13.4	14.1
	Ratio of exports to shipments (percent)	0.9	1.1	1.1	0.7	1.5

[1]Not available.

Note.–Calculations based on unrounded data.

Table C-5
Textiles, apparel, and footwear: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH045	Fibers and yarns, except raw cotton and raw wool:					
	Number of establishments	844	871	904	900	896
	Employees (thousands)	171	166	162	150	140
	Capacity utilization (percent)	77	69	77	75	69
	U.S. shipments (million dollars)	25,308	23,540	22,630	21,675	20,801
	U.S. exports (million dollars)	2,969	2,830	3,126	2,640	2,656
	U.S. imports (million dollars)	2,498	2,547	2,771	2,545	2,641
	Apparent U.S. consumption (million dollars)	24,837	23,258	22,275	21,580	20,785
	Trade balance (million dollars)	471	282	355	95	16
	Ratio of imports to consumption (percent)	10.1	11.0	12.4	11.8	12.7
	Ratio of exports to shipments (percent)	11.7	12.0	13.8	12.2	12.8
CH046	Fabrics:					
	Number of establishments	3,735	3,695	3,658	3,300	3,005
	Employees (thousands)	257	237	222	195	174
	Capacity utilization (percent)	73	79	76	71	67
	U.S. shipments (million dollars)	38,763	36,175	34,190	29,061	25,270
	U.S. exports (million dollars)	4,886	5,170	6,067	6,162	6,485
	U.S. imports (million dollars)	5,662	5,563	6,052	5,466	5,922
	Apparent U.S. consumption (million dollars)	39,539	36,568	34,175	28,365	24,707
	Trade balance (million dollars)	-776	-393	15	696	563
	Ratio of imports to consumption (percent)	14.3	15.2	17.7	19.3	24.0
	Ratio of exports to shipments (percent)	12.6	14.3	17.7	21.2	25.7
CH047	Carpets and rugs:					
	Number of establishments	483	478	441	437	433
	Employees (thousands)	64	65	66	63	60
	Capacity utilization (percent)	76	83	79	77	75
	U.S. shipments (million dollars)	11,063	11,690	11,983	12,114	12,247
	U.S. exports (million dollars)	826	772	791	711	684
	U.S. imports (million dollars)	1,109	1,248	1,464	1,410	1,531
	Apparent U.S. consumption (million dollars)	11,346	12,165	12,657	12,813	13,093
	Trade balance (million dollars)	-283	-475	-674	-699	-846
	Ratio of imports to consumption (percent)	9.8	10.3	11.6	11.0	11.7
	Ratio of exports to shipments (percent)	7.5	6.6	6.6	5.9	5.6
CH048	Home furnishings:					
	Number of establishments	2,733	2,627	2,522	2,491	2,461
	Employees (thousands)	74	75	73	64	57
	Capacity utilization (percent)	84	82	79	78	77
	U.S. shipments (million dollars)	8,589	9,433	9,744	10,066	10,398
	U.S. exports (million dollars)	442	398	418	403	363
	U.S. imports (million dollars)	2,271	2,652	3,215	3,332	4,226
	Apparent U.S. consumption (million dollars)	10,418	11,687	12,541	12,995	14,261
	Trade balance (million dollars)	-1,829	-2,254	-2,797	-2,929	-3,863
	Ratio of imports to consumption (percent)	21.8	22.7	25.6	25.6	29.6
	Ratio of exports to shipments (percent)	5.1	4.2	4.3	4.0	3.5
CH049	Apparel:					
	Number of establishments	17,432	16,721	15,485	14,200	13,112
	Employees (thousands)	766	692	633	565	510
	Capacity utilization (percent)	69	77	75	74	73
	U.S. shipments (million dollars)	58,069	58,419	55,498	55,000	54,509
	U.S. exports (million dollars)	8,514	7,964	8,177	6,537	5,491
	U.S. imports (million dollars)	53,874	56,565	64,402	63,995	63,927
	Apparent U.S. consumption (million dollars)	103,430	107,020	111,723	112,458	112,945
	Trade balance (million dollars)	-45,361	-48,601	-56,225	-57,458	-58,436
	Ratio of imports to consumption (percent)	52.1	52.9	57.6	56.9	56.6
	Ratio of exports to shipments (percent)	14.7	13.6	14.7	11.9	10.1

See footnote(s) at end of table.

Table C-5--*Continued*
Textiles, apparel, and footwear: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH051	Footwear:					
	Number of establishments	417	400	369	340	315
	Employees (thousands)	44	39	34	29	25
	Capacity utilization (percent)	70	67	64	62	60
	U.S. shipments (million dollars)	3,764	3,797	3,765	3,627	3,498
	U.S. exports (million dollars)	720	693	664	638	520
	U.S. imports (million dollars)	13,879	14,074	14,856	15,249	15,379
	Apparent U.S. consumption (million dollars)	16,923	17,177	17,957	18,238	18,358
	Trade balance (million dollars)	-13,159	-13,380	-14,192	-14,611	-14,860
	Ratio of imports to consumption (percent)	82.0	81.9	82.7	83.6	83.8
	Ratio of exports to shipments (percent)	19.1	18.3	17.6	17.6	14.9

Note.–Calculations based on unrounded data.

Table C-6
Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM001	Clays and related mineral products:					
	Number of establishments	238	233	230	230	240
	Employees (thousands)	9	9	9	9	7
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,670	1,570	1,520	1,470	1,500
	U.S. exports (million dollars)	993	952	1,040	973	941
	U.S. imports (million dollars)	190	168	195	179	158
	Apparent U.S. consumption (million dollars)	867	787	675	676	718
	Trade balance (million dollars)	803	783	845	794	782
	Ratio of imports to consumption (percent)	21.9	21.4	28.9	26.5	22.1
	Ratio of exports to shipments (percent)	59.4	60.6	68.4	66.2	62.7
MM003	Iron ores and concentrates:					
	Number of establishments	12	13	13	13	12
	Employees (thousands)	7	7	7	6	5
	Capacity utilization (percent)	98	89	97	83	90
	U.S. shipments (million dollars)	2,600	2,300	2,500	1,900	1,850
	U.S. exports (million dollars)	244	243	246	229	249
	U.S. imports (million dollars)	527	399	420	293	313
	Apparent U.S. consumption (million dollars)	2,883	2,456	2,674	1,964	1,914
	Trade balance (million dollars)	-283	-156	-174	-64	-64
	Ratio of imports to consumption (percent)	18.3	16.2	15.7	14.9	16.3
	Ratio of exports to shipments (percent)	9.4	10.6	9.8	12.1	13.4
MM004	Copper ores and concentrates:					
	Number of establishments	35	35	30	25	22
	Employees (thousands)	13	10.3	9.1	8.2	7
	Capacity utilization (percent)	90	80	84	82	72
	U.S. shipments (million dollars)	2,578	2,142	2,556	1,817	1,554
	U.S. exports (million dollars)	63	81	173	84	79
	U.S. imports (million dollars)	228	82	(2)	58	105
	Apparent U.S. consumption (million dollars)	2,743	2,144	2,383	1,791	1,580
	Trade balance (million dollars)	-165	-2	173	26	-26
	Ratio of imports to consumption (percent)	8.3	3.8	(3)	3.2	6.7
	Ratio of exports to shipments (percent)	2.4	3.8	6.8	4.6	5.1
MM005A	Lead ores and concentrates:					
	Number of establishments	17	19	19	12	12
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	89	95	85	85	82
	U.S. shipments (million dollars)	158	160	149	143	140
	U.S. exports (million dollars)	58	41	54	106	117
	U.S. imports (million dollars)	8	3	8	(2)	(2)
	Apparent U.S. consumption (million dollars)	108	122	103	38	23
	Trade balance (million dollars)	50	38	46	105	117
	Ratio of imports to consumption (percent)	7.3	2.8	7.6	1.2	(3)
	Ratio of exports to shipments (percent)	36.9	25.8	36.4	74.0	83.8
MM006A	Zinc ores and concentrates:					
	Number of establishments	19	17	19	12	12
	Employees (thousands)	2	3	3	2	2
	Capacity utilization (percent)	79	90	90	89	78
	U.S. shipments (million dollars)	453	527	563	433	346
	U.S. exports (million dollars)	296	346	308	290	328
	U.S. imports (million dollars)	24	40	27	32	45
	Apparent U.S. consumption (million dollars)	181	221	282	174	63
	Trade balance (million dollars)	272	306	281	259	283
	Ratio of imports to consumption (percent)	13.1	18.3	9.5	18.1	70.8
	Ratio of exports to shipments (percent)	65.3	65.7	54.7	67.0	94.7

See footnote(s) at end of table.

Table C-6--*Continued*
Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM007A	Molybdenum ores and concentrates:					
	Number of establishments	11	8	8	7	6
	Employees (thousands)	1.2	1.1	0.8	0.6	0.6
	Capacity utilization (percent)	73	59	57	56	50
	U.S. shipments (million dollars)	314	250	232	199	270
	U.S. exports (million dollars)	211	129	104	110	112
	U.S. imports (million dollars)	47	35	35	33	37
	Apparent U.S. consumption (million dollars)	150	156	164	122	194
	Trade balance (million dollars)	164	94	68	77	76
	Ratio of imports to consumption (percent)	31.4	22.7	21.5	26.9	18.9
	Ratio of exports to shipments (percent)	67.2	51.7	44.6	55.3	41.6
MM008A	Gold ores and concentrates:					
	Number of establishments	304	296	289	283	279
	Employees (thousands)	14	11	11	10	10
	Capacity utilization (percent)	88	86	89	88	85
	U.S. shipments (million dollars)	2,779	2,445	2,534	2,335	2,392
	U.S. exports (million dollars)	6	2	10	7	10
	U.S. imports (million dollars)	11	1	1	1	28
	Apparent U.S. consumption (million dollars)	2,784	2,445	2,524	2,329	2,410
	Trade balance (million dollars)	-5	(2)	10	6	-18
	Ratio of imports to consumption (percent)	0.4	(3)	(3)	0.1	1.1
	Ratio of exports to shipments (percent)	0.2	0.1	0.4	0.3	0.4
MM008B	Silver ores and concentrates:					
	Number of establishments	16	16	15	14	14
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	88	86	89	88	85
	U.S. shipments (million dollars)	257	229	207	171	152
	U.S. exports (million dollars)	4	37	21	72	57
	U.S. imports (million dollars)	35	2	(2)	3	13
	Apparent U.S. consumption (million dollars)	288	194	186	102	108
	Trade balance (million dollars)	-31	35	21	69	44
	Ratio of imports to consumption (percent)	12.0	1.1	0.1	2.7	12.2
	Ratio of exports to shipments (percent)	1.4	16.1	10.2	42.2	37.8
MM009A	Cement:					
	Number of establishments	116	116	116	116	116
	Employees (thousands)	18	18	18	18	18
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	6,500	7,400	7,200	7,100	7,000
	U.S. exports (million dollars)	57	55	64	56	58
	U.S. imports (million dollars)	963	1,145	1,074	987	939
	Apparent U.S. consumption (million dollars)	7,406	8,489	8,210	8,031	7,881
	Trade balance (million dollars)	-906	-1,089	-1,010	-931	-881
	Ratio of imports to consumption (percent)	13.0	13.5	13.1	12.3	11.9
	Ratio of exports to production (percent)	0.9	0.7	0.9	0.8	0.8
MM010	Industrial ceramics:					
	Number of establishments	205	200	200	200	190
	Employees (thousands)	12	12	12	12	11
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	2,950	3,040	3,000	2,950	2,800
	U.S. exports (million dollars)	668	663	748	711	645
	U.S. imports (million dollars)	545	648	827	640	497
	Apparent U.S. consumption (million dollars)	2,827	3,026	3,080	2,879	2,652
	Trade balance (million dollars)	123	14	-80	71	148
	Ratio of imports to consumption (percent)	19.3	21.4	26.9	22.2	18.7
	Ratio of exports to shipments (percent)	22.6	21.8	24.9	24.1	23.0

See footnote(s) at end of table.

Table C-6--*Continued*
Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM011	Ceramic bricks and similar articles:					
	Number of establishments	225	225	225	225	225
	Employees (thousands)	14	14	14	14	14
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,525	1,700	1,775	1,775	1,805
	U.S. exports (million dollars)	26	20	23	23	23
	U.S. imports (million dollars)	20	24	35	31	34
	Apparent U.S. consumption (million dollars)	1,518	1,705	1,786	1,783	1,817
	Trade balance (million dollars)	7	-5	-11	-8	-12
	Ratio of imports to consumption (percent)	1.3	1.4	1.9	1.7	1.9
	Ratio of exports to shipments (percent)	1.7	1.2	1.3	1.3	1.3
MM012	Ceramic floor and wall tiles:					
	Number of establishments	122	122	122	122	122
	Employees (thousands)	9	9	9	9	9
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	837	843	867	776	816
	U.S. exports (million dollars)	27	24	26	27	28
	U.S. imports (million dollars)	860	1,019	1,118	1,112	1,290
	Apparent U.S. consumption (million dollars)	1,671	1,838	1,959	1,862	2,078
	Trade balance (million dollars)	-834	-995	-1,092	-1,086	-1,262
	Ratio of imports to consumption (percent)	51.5	55.4	57.1	59.7	62.1
	Ratio of exports to shipments (percent)	3.2	2.8	3.0	3.4	3.4
MM013	Ceramic household articles:					
	Number of establishments	63	63	63	60	60
	Employees (thousands)	6	6	6	6	6
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	421	396	344	330	320
	U.S. exports (million dollars)	103	109	115	96	83
	U.S. imports (million dollars)	1,716	1,671	1,797	1,635	1,691
	Apparent U.S. consumption (million dollars)	2,034	1,959	2,027	1,869	1,928
	Trade balance (million dollars)	-1,613	-1,563	-1,683	-1,539	-1,608
	Ratio of imports to consumption (percent)	84.4	85.3	88.7	87.5	87.7
	Ratio of exports to shipments (percent)	24.5	27.5	33.3	29.1	25.9
MM014	Flat glass:					
	Number of establishments	900	900	900	900	900
	Employees (thousands)	44	45	46	44	46
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	7,800	8,400	9,100	8,500	8,800
	U.S. exports (million dollars)	1,416	1,506	1,807	1,791	1,694
	U.S. imports (million dollars)	1,120	1,268	1,473	1,500	1,553
	Apparent U.S. consumption (million dollars)	7,504	8,162	8,766	8,209	8,660
	Trade balance (million dollars)	296	238	334	291	140
	Ratio of imports to consumption (percent)	14.9	15.5	16.8	18.3	17.9
	Ratio of exports to shipments (percent)	18.2	17.9	19.9	21.1	19.2
MM015	Glass containers:					
	Number of establishments	61	61	61	61	61
	Employees (thousands)	20	19	17	16	16
	Capacity utilization (percent)	95	91	92	94	(1)
	U.S. shipments (million dollars)	4,189	4,190	4,106	4,209	4,200
	U.S. exports (million dollars)	173	173	174	211	165
	U.S. imports (million dollars)	452	526	585	538	608
	Apparent U.S. consumption (million dollars)	4,468	4,543	4,517	4,536	4,643
	Trade balance (million dollars)	-279	-353	-411	-327	-443
	Ratio of imports to consumption (percent)	10.1	11.6	13.0	11.9	13.1
	Ratio of exports to shipments (percent)	4.1	4.1	4.2	5.0	3.9

See footnote(s) at end of table.

Table C-6--*Continued*
Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM016	Household glassware:					
	Number of establishments	240	240	240	240	240
	Employees (thousands)	13	13	14	13	13
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,900	1,900	2,000	1,800	1,900
	U.S. exports (million dollars)	179	183	195	209	177
	U.S. imports (million dollars)	864	937	930	835	888
	Apparent U.S. consumption (million dollars)	2,585	2,654	2,735	2,425	2,611
	Trade balance (million dollars)	-685	-754	-735	-625	-711
	Ratio of imports to consumption (percent)	33.4	35.3	34.0	34.4	34.0
	Ratio of exports to shipments (percent)	9.4	9.6	9.7	11.6	9.3
MM018	Fiberglass insulation products:					
	Number of establishments	298	298	298	298	298
	Employees (thousands)	19	18	17	17	18
	Capacity utilization (percent)	93	88	83	86	(1)
	U.S. shipments (million dollars)	3,600	3,800	3,700	3,700	3,900
	U.S. exports (million dollars)	74	71	59	74	75
	U.S. imports (million dollars)	71	139	137	124	131
	Apparent U.S. consumption (million dollars)	3,597	3,869	3,778	3,750	3,956
	Trade balance (million dollars)	3	-69	-78	-50	-56
	Ratio of imports to consumption (percent)	2.0	3.6	3.6	3.3	3.3
	Ratio of exports to shipments (percent)	2.1	1.9	1.6	2.0	1.9
MM019	Natural and synthetic gemstones:					
	Number of establishments	235	235	235	235	235
	Employees (thousands)	2	2	2	2	2
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	475	620	540	340	430
	U.S. exports (million dollars)	217	447	1,466	1,840	1,331
	U.S. imports (million dollars)	9,449	11,021	13,234	11,577	13,063
	Apparent U.S. consumption (million dollars)	9,708	11,195	12,308	10,077	12,161
	Trade balance (million dollars)	-9,233	-10,575	-11,768	-9,737	-11,731
	Ratio of imports to consumption (percent)	97.3	98.5	[4]107.5	[4]114.9	[4]107.4
	Ratio of exports to production (percent)	45.6	72.0	[4]271.5	[4]541.0	[4]309.6
MM020A	Unrefined and refined gold:					
	Number of establishments	24	24	24	24	24
	Employees (thousands)	2	2	2	2	2
	Capacity utilization (percent)	69	73	77	69	68
	U.S. shipments (million dollars)	7,964	6,157	7,096	5,898	4,261
	U.S. exports (million dollars)	4,912	4,795	5,099	4,186	2,639
	U.S. imports (million dollars)	2,913	2,519	2,262	1,700	2,143
	Apparent U.S. consumption (million dollars)	5,965	3,881	4,260	3,412	3,765
	Trade balance (million dollars)	1,999	2,276	2,836	2,486	496
	Ratio of imports to consumption (percent)	48.8	64.9	53.1	49.8	56.9
	Ratio of exports to shipments (percent)	61.7	77.9	71.9	71.0	61.9
MM021	Primary iron products:					
	Number of establishments	23	23	23	21	16
	Employees (thousands)	22	22	22	20	15
	Capacity utilization (percent)	88	85	88	79	84
	U.S. shipments (million dollars)	8,400	7,300	7,300	6,300	5,000
	U.S. exports (million dollars)	17	14	13	7	7
	U.S. imports (million dollars)	856	643	759	632	729
	Apparent U.S. consumption (million dollars)	9,238	7,929	8,046	6,924	5,722
	Trade balance (million dollars)	-838	-629	-746	-624	-722
	Ratio of imports to consumption (percent)	9.3	8.1	9.4	9.1	12.7
	Ratio of exports to shipments (percent)	0.2	0.2	0.2	0.1	0.1

See footnote(s) at end of table.

Table C-6--*Continued*
Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM022	Ferroalloys:					
	Number of establishments	23	23	23	23	20
	Employees (thousands)	4	3	3	3	3
	Capacity utilization (percent)	(5)	(5)	(5)	(1)	(1)
	U.S. shipments (million dollars)	1,433	941	968	820	689
	U.S. exports (million dollars)	103	80	96	74	50
	U.S. imports (million dollars)	1,018	960	1,104	660	713
	Apparent U.S. consumption (million dollars)	2,347	1,821	1,976	1,406	1,352
	Trade balance (million dollars)	-914	-880	-1,008	-586	-663
	Ratio of imports to consumption (percent)	43.3	52.7	55.9	46.9	52.8
	Ratio of exports to shipments (percent)	7.2	8.5	9.9	9.0	7.3
MM023	Iron and steel waste and scrap:					
	Number of establishments	5,000	5,000	5,000	5,000	5,000
	Employees (thousands)	28	28	28	28	28
	Capacity utilization (percent)	85	80	75	75	75
	U.S. shipments (million dollars)	5,800	4,800	5,200	4,100	4,900
	U.S. exports (million dollars)	817	750	1,030	1,151	1,307
	U.S. imports (million dollars)	418	390	393	284	397
	Apparent U.S. consumption (million dollars)	5,401	4,440	4,563	3,233	3,989
	Trade balance (million dollars)	399	360	637	867	911
	Ratio of imports to consumption (percent)	7.7	8.8	8.6	8.8	9.9
	Ratio of exports to shipments (percent)	14.1	15.6	19.8	28.1	26.7
MM024A	Abrasive products:					
	Number of establishments	50	50	50	50	50
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	4,038	3,835	3,781	3,202	3,000
	U.S. exports (million dollars)	292	298	315	289	284
	U.S. imports (million dollars)	453	480	552	473	505
	Apparent U.S. consumption (million dollars)	4,200	4,017	4,018	3,386	3,222
	Trade balance (million dollars)	-162	-182	-237	-184	-222
	Ratio of imports to consumption (percent)	10.8	12.0	13.7	14.0	15.7
	Ratio of exports to shipments (percent)	7.2	7.8	8.3	9.0	9.5
MM025	Steel mill products:					
	Number of establishments	850	850	820	820	810
	Employees (thousands)	205	195	193	186	170
	Capacity utilization (percent)	87	84	86	79	89
	U.S. shipments (million dollars)	65,500	59,200	60,300	51,074	54,584
	U.S. exports (million dollars)	4,636	4,291	4,911	4,756	4,533
	U.S. imports (million dollars)	16,434	12,749	15,026	11,630	12,203
	Apparent U.S. consumption (million dollars)	77,298	67,658	70,414	57,948	62,254
	Trade balance (million dollars)	-11,798	-8,458	-10,114	-6,874	-7,670
	Ratio of imports to consumption (percent)	21.3	18.8	21.3	20.1	19.6
	Ratio of exports to shipments (percent)	7.1	7.2	8.1	9.3	8.3
MM026	Steel pipe and tube fittings and certain cast products:					
	Number of establishments	62	62	62	62	62
	Employees (thousands)	12	12	12	12	12
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	2,000	2,100	2,100	2,100	2,100
	U.S. exports (million dollars)	809	662	767	707	669
	U.S. imports (million dollars)	591	584	706	697	669
	Apparent U.S. consumption (million dollars)	1,781	2,022	2,039	2,090	2,100
	Trade balance (million dollars)	219	78	61	10	(2)
	Ratio of imports to consumption (percent)	33.2	28.9	34.6	33.3	31.9
	Ratio of exports to shipments (percent)	40.5	31.5	36.5	33.7	31.8

See footnote(s) at end of table.

Table C-6--*Continued*
Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM027	Fabricated structurals:					
	Number of establishments	2,777	2,791	2,803	2,888	2,844
	Employees (thousands)	96	102	99	94	88
	Capacity utilization (percent)	75	75	73	64	62
	U.S. shipments (million dollars)	15,224	15,596	16,450	16,105	16,043
	U.S. exports (million dollars)	151	186	204	184	166
	U.S. imports (million dollars)	328	432	534	638	627
	Apparent U.S. consumption (million dollars)	15,401	15,841	16,779	16,559	16,503
	Trade balance (million dollars)	-177	-245	-329	-454	-460
	Ratio of imports to consumption (percent)	2.1	2.7	3.2	3.9	3.8
	Ratio of exports to shipments (percent)	1.0	1.2	1.2	1.1	1.0
MM028	Metal construction components:					
	Number of establishments	2,795	2,711	2,650	2,530	2,500
	Employees (thousands)	141	151	157	150	154
	Capacity utilization (percent)	67	65	70	67	70
	U.S. shipments (million dollars)	17,809	18,888	19,666	18,800	19,400
	U.S. exports (million dollars)	611	579	533	505	497
	U.S. imports (million dollars)	562	693	922	990	1,135
	Apparent U.S. consumption (million dollars)	17,760	19,003	20,054	19,285	20,038
	Trade balance (million dollars)	49	-115	-388	-485	-638
	Ratio of imports to consumption (percent)	3.2	3.6	4.6	5.1	5.7
	Ratio of exports to shipments (percent)	3.4	3.1	2.7	2.7	2.6
MM029	Metallic containers:					
	Number of establishments	520	520	520	520	520
	Employees (thousands)	58	58	54	52	50
	Capacity utilization (percent)	82	82	82	82	80
	U.S. shipments (million dollars)	18,340	18,285	18,486	17,414	16,900
	U.S. exports (million dollars)	819	690	697	666	661
	U.S. imports (million dollars)	463	527	549	570	645
	Apparent U.S. consumption (million dollars)	17,984	18,123	18,338	17,318	16,884
	Trade balance (million dollars)	356	162	148	96	16
	Ratio of imports to consumption (percent)	2.6	2.9	3.0	3.3	3.8
	Ratio of exports to shipments (percent)	4.5	3.8	3.8	3.8	3.9
MM030	Wire products of base metal:					
	Number of establishments	1,500	1,500	1,500	1,470	1,470
	Employees (thousands)	96	96	96	92	94
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	17,363	16,700	17,300	16,500	17,000
	U.S. exports (million dollars)	756	674	826	718	732
	U.S. imports (million dollars)	1,231	1,354	1,419	1,355	1,416
	Apparent U.S. consumption (million dollars)	17,838	17,381	17,893	17,137	17,684
	Trade balance (million dollars)	-475	-681	-593	-637	-684
	Ratio of imports to consumption (percent)	6.9	7.8	7.9	7.9	8.0
	Ratio of exports to shipments (percent)	4.4	4.0	4.8	4.3	4.3
MM032	Industrial fasteners of base metal:					
	Number of establishments	923	925	920	880	860
	Employees (thousands)	47	47	47	45	46
	Capacity utilization (percent)	78	73	74	71	73
	U.S. shipments (million dollars)	7,180	6,940	7,009	6,700	7,000
	U.S. exports (million dollars)	1,470	1,535	1,663	1,481	1,496
	U.S. imports (million dollars)	2,020	2,019	2,325	2,006	2,085
	Apparent U.S. consumption (million dollars)	7,730	7,424	7,672	7,225	7,589
	Trade balance (million dollars)	-550	-484	-663	-525	-589
	Ratio of imports to consumption (percent)	26.1	27.2	30.3	27.8	27.5
	Ratio of exports to shipments (percent)	20.5	22.1	23.7	22.1	21.4

See footnote(s) at end of table.

Table C-6--*Continued*
Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM033	Cooking and kitchen ware:					
	Number of establishments	87	87	87	87	88
	Employees (thousands)	8	8	7	6	6
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,400	1,500	1,500	1,500	1,500
	U.S. exports (million dollars)	244	214	271	260	201
	U.S. imports (million dollars)	1,393	1,585	1,798	1,743	1,933
	Apparent U.S. consumption (million dollars)	2,549	2,871	3,027	2,983	3,232
	Trade balance (million dollars)	-1,149	-1,371	-1,527	-1,483	-1,732
	Ratio of imports to consumption (percent)	54.7	55.2	59.4	58.4	59.8
	Ratio of exports to shipments (percent)	17.5	14.3	18.1	17.3	13.4
MM034	Metal and ceramic sanitary ware:					
	Number of establishments	140	140	140	140	140
	Employees (thousands)	18	18	18	17	17
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	2,700	2,600	2,800	2,600	2,700
	U.S. exports (million dollars)	147	132	141	124	134
	U.S. imports (million dollars)	403	473	533	588	742
	Apparent U.S. consumption (million dollars)	2,957	2,941	3,193	3,064	3,308
	Trade balance (million dollars)	-257	-341	-393	-464	-608
	Ratio of imports to consumption (percent)	13.6	16.1	16.7	19.2	22.4
	Ratio of exports to shipments (percent)	5.4	5.1	5.0	4.8	4.9
MM035	Construction castings and other cast-iron articles:					
	Number of establishments	50	50	50	50	50
	Employees (thousands)	7	7	5	6	5
	Capacity utilization (percent)	85	85	85	85	85
	U.S. shipments (million dollars)	1,100	1,000	800	900	800
	U.S. exports (million dollars)	37	27	32	24	25
	U.S. imports (million dollars)	110	120	123	110	112
	Apparent U.S. consumption (million dollars)	1,173	1,092	891	986	887
	Trade balance (million dollars)	-73	-92	-91	-86	-87
	Ratio of imports to consumption (percent)	9.4	11.0	13.8	11.1	12.6
	Ratio of exports to shipments (percent)	3.3	2.7	4.0	2.7	3.2
MM036A	Unrefined and refined copper:					
	Number of establishments	38	32	28	26	22
	Employees (thousands)	6.9	5.3	4.4	4.4	3.9
	Capacity utilization (percent)	92	81	68	69	62
	U.S. shipments (million dollars)	4,358	3,602	3,540	3,011	2,600
	U.S. exports (million dollars)	174	89	202	69	92
	U.S. imports (million dollars)	1,454	1,667	2,223	2,140	1,740
	Apparent U.S. consumption (million dollars)	5,638	5,180	5,561	5,081	4,248
	Trade balance (million dollars)	-1,280	-1,578	-2,021	-2,070	-1,648
	Ratio of imports to consumption (percent)	25.8	32.2	40.0	42.1	41.0
	Ratio of exports to shipments (percent)	4.0	2.5	5.7	2.3	3.6
MM036B	Copper alloy plate, sheet, and strip:					
	Number of establishments	20	20	20	20	18
	Employees (thousands)	5.6	5.7	5.3	5.5	5
	Capacity utilization (percent)	88	90	86	83	75
	U.S. shipments (million dollars)	1,009	1,047	1,175	1,027	929
	U.S. exports (million dollars)	218	156	208	155	117
	U.S. imports (million dollars)	101	116	182	145	118
	Apparent U.S. consumption (million dollars)	892	1,007	1,149	1,018	930
	Trade balance (million dollars)	117	40	26	9	-1
	Ratio of imports to consumption (percent)	11.4	11.5	15.9	14.3	12.7
	Ratio of exports to shipments (percent)	21.6	14.9	17.7	15.1	12.6

See footnote(s) at end of table.

Table C-6--*Continued*
Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM037A	Primary and secondary aluminum:					
	Number of establishments	103	106	108	98	100
	Employees (thousands)	25	25	25	23	21
	Capacity utilization (percent)	88	86	77	69	69
	U.S. shipments (million dollars)	7,535	7,750	8,286	5,835	5,589
	U.S. exports (million dollars)	553	613	636	466	431
	U.S. imports (million dollars)	3,775	3,969	4,297	4,085	4,188
	Apparent U.S. consumption (million dollars)	10,757	11,106	11,946	9,454	9,346
	Trade balance (million dollars)	-3,222	-3,356	-3,660	-3,619	-3,757
	Ratio of imports to consumption (percent)	35.1	35.7	36.0	43.2	44.8
	Ratio of exports to shipments (percent)	7.3	7.9	7.7	8.0	7.7
MM038	Aluminum mill products:					
	Number of establishments	362	358	363	379	372
	Employees (thousands)	59	57	57	59	58
	Capacity utilization (percent)	83	86	80	79	80
	U.S. shipments (million dollars)	19,678	19,316	19,632	17,489	17,960
	U.S. exports (million dollars)	3,046	2,943	3,130	2,784	2,519
	U.S. imports (million dollars)	2,181	2,283	2,674	2,305	2,516
	Apparent U.S. consumption (million dollars)	18,812	18,656	19,176	17,010	17,957
	Trade balance (million dollars)	866	660	456	479	3
	Ratio of imports to consumption (percent)	11.6	12.2	13.9	13.6	14.0
	Ratio of exports to shipments (percent)	15.5	15.2	15.9	15.9	14.0
MM039A	Refined lead:					
	Number of establishments	32	31	30	29	25
	Employees (thousands)	2	2	2	2	2
	Capacity utilization (percent)	88	88	89	87	85
	U.S. shipments (million dollars)	1,395	1,358	1,366	1,278	1,261
	U.S. exports (million dollars)	15	11	16	8	14
	U.S. imports (million dollars)	122	113	117	90	82
	Apparent U.S. consumption (million dollars)	1,502	1,460	1,467	1,361	1,329
	Trade balance (million dollars)	-107	-102	-101	-83	-68
	Ratio of imports to consumption (percent)	8.1	7.7	8.0	6.6	6.2
	Ratio of exports to shipments (percent)	1.0	0.8	1.2	0.6	1.1
MM040A	Unwrought zinc:					
	Number of establishments	11	11	15	15	15
	Employees (thousands)	2	2	2	1	1
	Capacity utilization (percent)	82	83	83	69	76
	U.S. shipments (million dollars)	417	439	455	302	300
	U.S. exports (million dollars)	3	2	3	1	1
	U.S. imports (million dollars)	961	1,066	1,104	786	731
	Apparent U.S. consumption (million dollars)	1,375	1,502	1,556	1,087	1,030
	Trade balance (million dollars)	-958	-1,063	-1,101	-785	-730
	Ratio of imports to consumption (percent)	69.9	70.9	71.0	72.3	71.0
	Ratio of exports to shipments (percent)	0.7	0.5	0.7	0.4	0.4
MM041A	Titanium ingot:					
	Number of establishments	12	9	9	5	5
	Employees (thousands)	0.3	0.3	0.3	0.3	0.3
	Capacity utilization (percent)	57	44	43	49	45
	U.S. shipments (million dollars)	926	718	870	600	420
	U.S. exports (million dollars)	9	13	12	22	12
	U.S. imports (million dollars)	37	14	17	27	13
	Apparent U.S. consumption (million dollars)	954	720	875	606	421
	Trade balance (million dollars)	-28	-2	-5	-6	-1
	Ratio of imports to consumption (percent)	3.9	2.0	1.9	4.5	3.1
	Ratio of exports to shipments (percent)	1.0	1.8	1.4	3.6	3.0

See footnote(s) at end of table.

Table C-6--*Continued*
Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM042	Nonpowered handtools:					
	Number of establishments	1,150	1,100	1,000	950	900
	Employees (thousands)	122	121	120	115	110
	Capacity utilization (percent)	75	70	71	70	70
	U.S. shipments (million dollars)	13,984	13,931	14,139	12,433	11,812
	U.S. exports (million dollars)	2,060	2,031	2,263	2,119	2,038
	U.S. imports (million dollars)	2,885	2,917	3,163	2,996	3,284
	Apparent U.S. consumption (million dollars)	14,809	14,818	15,040	13,309	13,058
	Trade balance (million dollars)	-825	-887	-901	-876	-1,246
	Ratio of imports to consumption (percent)	19.5	19.7	21.0	22.5	25.1
	Ratio of exports to shipments (percent)	14.7	14.6	16.0	17.0	17.3
MM043	Certain cutlery, sewing implements, and related products:					
	Number of establishments	173	175	176	177	178
	Employees (thousands)	10	10	10	9	9
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	2,100	2,000	2,000	1,900	1,800
	U.S. exports (million dollars)	511	583	546	556	551
	U.S. imports (million dollars)	781	856	888	865	912
	Apparent U.S. consumption (million dollars)	2,371	2,273	2,342	2,209	2,161
	Trade balance (million dollars)	-271	-273	-342	-309	-361
	Ratio of imports to consumption (percent)	33.0	37.7	37.9	39.2	42.2
	Ratio of exports to shipments (percent)	24.3	29.2	27.3	29.3	30.6
MM044	Table flatware and related products:					
	Number of establishments	5	5	5	5	5
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	95	95	90	90	90
	U.S. shipments (million dollars)	45	44	42	41	41
	U.S. exports (million dollars)	24	26	25	28	29
	U.S. imports (million dollars)	327	425	507	463	478
	Apparent U.S. consumption (million dollars)	348	443	523	476	491
	Trade balance (million dollars)	-303	-399	-481	-435	-450
	Ratio of imports to consumption (percent)	94.1	96.0	96.8	97.2	97.5
	Ratio of exports to shipments (percent)	54.3	59.5	59.7	67.7	69.9
MM045	Certain builders' hardware:					
	Number of establishments	294	290	286	282	278
	Employees (thousands)	42	40	40	39	36
	Capacity utilization (percent)	71	76	75	71	68
	U.S. shipments (million dollars)	6,095	5,843	5,898	5,797	5,454
	U.S. exports (million dollars)	807	823	1,084	961	907
	U.S. imports (million dollars)	1,531	1,696	1,973	1,948	2,197
	Apparent U.S. consumption (million dollars)	6,818	6,716	6,787	6,784	6,743
	Trade balance (million dollars)	-723	-873	-889	-987	-1,289
	Ratio of imports to consumption (percent)	22.4	25.3	29.1	28.7	32.6
	Ratio of exports to shipments (percent)	13.2	14.1	18.4	16.6	16.6

[1]Not available.
[2]Less than 500,000.
[3]Less than 0.05 percent.
[4]Inventory changes, for which data are not available, likely account for ratios that exceed 100 percent.
[5]Capacity utilization could not be meaningfully calculated for this industry.

Note.–Calculations based on unrounded data.

Table C-7
Machinery: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM068	Wiring harnesses for motor vehicles:					
	Number of establishments	(1)	(1)	(1)	(1)	(1)
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	5,460	6,150	6,240	5,740	6,450
	U.S. exports (million dollars)	1,315	993	938	866	961
	U.S. imports (million dollars)	4,408	4,868	5,132	4,684	5,302
	Apparent U.S. consumption (million dollars)	8,552	10,025	10,434	9,558	10,791
	Trade balance (million dollars)	-3,092	-3,875	-4,194	-3,818	-4,341
	Ratio of imports to consumption (percent)	51.5	48.6	49.2	49.0	49.1
	Ratio of exports to shipments (percent)	24.1	16.1	15.0	15.1	14.9
MM069	Pumps for motor vehicles:					
	Number of establishments	192	202	195	215	225
	Employees (thousands)	27	27	25	28	30
	Capacity utilization (percent)	72	72	72	76	78
	U.S. shipments (million dollars)	2,840	2,982	3,012	3,223	3,384
	U.S. exports (million dollars)	556	546	680	642	681
	U.S. imports (million dollars)	780	776	863	788	913
	Apparent U.S. consumption (million dollars)	3,063	3,212	3,195	3,370	3,616
	Trade balance (million dollars)	-223	-230	-183	-147	-232
	Ratio of imports to consumption (percent)	25.5	24.2	27.0	23.4	25.3
	Ratio of exports to shipments (percent)	19.6	18.3	22.6	19.9	20.1
MM070	Pumps for liquids:					
	Number of establishments	425	450	460	485	475
	Employees (thousands)	32	36	37	37	35
	Capacity utilization (percent)	68	69	70	70	69
	U.S. shipments (million dollars)	6,289	6,603	6,800	6,936	6,867
	U.S. exports (million dollars)	2,340	2,325	2,461	2,561	2,393
	U.S. imports (million dollars)	1,587	1,643	1,809	1,801	1,883
	Apparent U.S. consumption (million dollars)	5,536	5,920	6,148	6,176	6,357
	Trade balance (million dollars)	753	683	652	760	510
	Ratio of imports to consumption (percent)	28.7	27.7	29.4	29.2	29.6
	Ratio of exports to shipments (percent)	37.2	35.2	36.2	36.9	34.8
MM071	Air-conditioning equipment and parts:					
	Number of establishments	1,205	1,225	1,262	1,295	1,240
	Employees (thousands)	140	148	151	155	142
	Capacity utilization (percent)	75	73	75	76	71
	U.S. shipments (million dollars)	25,528	26,500	27,030	28,111	23,894
	U.S. exports (million dollars)	5,471	5,641	5,884	5,694	5,318
	U.S. imports (million dollars)	4,945	5,604	6,332	6,081	6,674
	Apparent U.S. consumption (million dollars)	25,002	26,463	27,479	28,498	25,250
	Trade balance (million dollars)	526	37	-449	-387	-1,356
	Ratio of imports to consumption (percent)	19.8	21.2	23.0	21.3	26.4
	Ratio of exports to shipments (percent)	21.4	21.3	21.8	20.3	22.3
MM072	Industrial thermal-processing equipment and furnaces:					
	Number of establishments	290	329	331	320	325
	Employees (thousands)	32	33	34	32	32
	Capacity utilization (percent)	68	67	68	66	67
	U.S. shipments (million dollars)	3,610	3,715	3,752	3,564	3,599
	U.S. exports (million dollars)	2,352	2,292	2,631	2,496	2,111
	U.S. imports (million dollars)	1,351	1,483	1,663	1,641	1,694
	Apparent U.S. consumption (million dollars)	2,609	2,906	2,784	2,709	3,182
	Trade balance (million dollars)	1,001	809	968	855	417
	Ratio of imports to consumption (percent)	51.8	51.0	59.7	60.6	53.2
	Ratio of exports to shipments (percent)	65.2	61.7	70.1	70.0	58.7

See footnote(s) at end of table.

Table C-7--*Continued*
Machinery: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM073	Household appliances, including commercial applications:					
	Number of establishments	96	100	87	98	95
	Employees (thousands)	54	57	50	55	53
	Capacity utilization (percent)	69	71	67	70	69
	U.S. shipments (million dollars)	15,569	15,867	15,111	15,741	15,427
	U.S. exports (million dollars)	5,571	5,216	5,563	5,226	4,845
	U.S. imports (million dollars)	5,961	6,718	7,689	8,356	9,564
	Apparent U.S. consumption (million dollars)	15,959	17,370	17,237	18,871	20,146
	Trade balance (million dollars)	-390	-1,503	-2,126	-3,130	-4,719
	Ratio of imports to consumption (percent)	37.4	38.7	44.6	44.3	47.5
	Ratio of exports to shipments (percent)	35.8	32.9	36.8	33.2	31.4
MM073A	Major household appliances and parts:					
	Number of establishments	225	197	238	251	255
	Employees (thousands)	72	66	73	75	76
	Capacity utilization (percent)	69	67	69	70	71
	U.S. shipments (million dollars)	13,742	13,171	13,981	14,259	14,544
	U.S. exports (million dollars)	1,844	1,652	1,717	1,708	1,610
	U.S. imports (million dollars)	1,208	1,477	1,642	1,986	2,444
	Apparent U.S. consumption (million dollars)	13,105	12,995	13,906	14,537	15,378
	Trade balance (million dollars)	637	176	75	-278	-834
	Ratio of imports to consumption (percent)	9.2	11.4	11.8	13.7	15.9
	Ratio of exports to shipments (percent)	13.4	12.5	12.3	12.0	11.1
MM075	Wrapping, packaging, and can-sealing machinery:					
	Number of establishments	727	756	784	813	813
	Employees (thousands)	32	31	29	28	29
	Capacity utilization (percent)	71	67	62	59	75
	U.S. shipments (million dollars)	4,286	4,119	4,202	3,939	4,085
	U.S. exports (million dollars)	791	766	804	711	639
	U.S. imports (million dollars)	1,072	1,117	1,246	1,302	1,333
	Apparent U.S. consumption (million dollars)	4,567	4,470	4,644	4,530	4,779
	Trade balance (million dollars)	-281	-351	-442	-591	-694
	Ratio of imports to consumption (percent)	23.5	25.0	26.8	28.7	27.9
	Ratio of exports to shipments (percent)	18.5	18.6	19.1	18.1	15.6
MM076	Scales and weighing machinery:					
	Number of establishments	119	119	118	118	117
	Employees (thousands)	4.8	4.9	4.5	4.3	4.2
	Capacity utilization (percent)	60	66	56	57	58
	U.S. shipments (million dollars)	698	752	765	778	791
	U.S. exports (million dollars)	147	145	163	175	164
	U.S. imports (million dollars)	223	265	294	279	293
	Apparent U.S. consumption (million dollars)	774	873	896	882	920
	Trade balance (million dollars)	-76	-121	-131	-104	-129
	Ratio of imports to consumption (percent)	28.8	30.4	32.8	31.6	31.9
	Ratio of exports to shipments (percent)	21.1	19.3	21.4	22.5	20.8
MM077	Mineral processing machinery:					
	Number of establishments	90	90	90	90	90
	Employees (thousands)	7	7	7	7	7
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,528	1,563	1,542	1,542	1,286
	U.S. exports (million dollars)	764	590	582	582	485
	U.S. imports (million dollars)	574	667	723	576	565
	Apparent U.S. consumption (million dollars)	1,339	1,641	1,684	1,536	1,367
	Trade balance (million dollars)	189	-78	-142	6	-81
	Ratio of imports to consumption (percent)	42.9	40.7	43.0	37.5	41.4
	Ratio of exports to shipments (percent)	50.0	37.7	37.7	37.7	37.7

See footnote(s) at end of table.

Table C-7--*Continued*

Machinery: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM078	Farm and garden machinery and equipment:					
	Number of establishments	1,890	1,870	1,800	1,700	1,500
	Employees (thousands)	105	98	97	95	90
	Capacity utilization (percent)	70	63	67	67	67
	U.S. shipments (million dollars)	22,085	18,013	19,676	18,582	17,653
	U.S. exports (million dollars)	5,835	4,757	4,945	4,565	4,747
	U.S. imports (million dollars)	4,311	3,396	3,740	3,602	3,898
	Apparent U.S. consumption (million dollars)	20,561	16,652	18,471	17,619	16,805
	Trade balance (million dollars)	1,524	1,361	1,205	963	848
	Ratio of imports to consumption (percent)	21.0	20.4	20.2	20.4	23.2
	Ratio of exports to shipments (percent)	26.4	26.4	25.1	24.6	26.9
MM079	Industrial food-processing and related machinery:					
	Number of establishments	573	582	591	600	615
	Employees (thousands)	19	19	18	18	18
	Capacity utilization (percent)	70	72	67	66	68
	U.S. shipments (million dollars)	2,593	2,614	2,563	2,404	2,514
	U.S. exports (million dollars)	688	611	627	576	606
	U.S. imports (million dollars)	619	621	543	537	570
	Apparent U.S. consumption (million dollars)	2,523	2,623	2,480	2,364	2,478
	Trade balance (million dollars)	70	-9	83	40	36
	Ratio of imports to consumption (percent)	24.5	23.7	21.9	22.7	23.0
	Ratio of exports to shipments (percent)	26.5	23.4	24.5	24.0	24.1
MM080	Pulp, paper, and paperboard machinery:					
	Number of establishments	358	351	330	308	287
	Employees (thousands)	17.4	16.4	15.8	15.8	14.8
	Capacity utilization (percent)	70	60	64	72	82
	U.S. shipments (million dollars)	3,185	2,941	2,761	2,581	2,402
	U.S. exports (million dollars)	813	743	779	678	560
	U.S. imports (million dollars)	1,037	1,003	1,127	1,091	719
	Apparent U.S. consumption (million dollars)	3,409	3,201	3,109	2,995	2,561
	Trade balance (million dollars)	-224	-260	-348	-414	-159
	Ratio of imports to consumption (percent)	30.4	31.3	36.2	36.4	28.1
	Ratio of exports to shipments (percent)	25.5	25.3	28.2	26.3	23.3
MM081	Printing and related machinery:					
	Number of establishments	554	523	579	592	605
	Employees (thousands)	21.1	19.6	20	16.5	13
	Capacity utilization (percent)	69	67	69	63	59
	U.S. shipments (million dollars)	3,963	3,605	3,827	4,048	4,270
	U.S. exports (million dollars)	1,455	1,347	1,583	1,232	1,136
	U.S. imports (million dollars)	2,231	2,304	2,157	1,929	2,001
	Apparent U.S. consumption (million dollars)	4,739	4,563	4,401	4,745	5,135
	Trade balance (million dollars)	-776	-958	-574	-697	-865
	Ratio of imports to consumption (percent)	47.1	50.5	49.0	40.7	39.0
	Ratio of exports to shipments (percent)	36.7	37.4	41.4	30.4	26.6
MM082	Textile machinery:					
	Number of establishments	500	500	500	500	500
	Employees (thousands)	14	13	13	12	12
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,724	1,546	1,648	1,417	1,377
	U.S. exports (million dollars)	1,082	974	978	897	871
	U.S. imports (million dollars)	2,608	2,073	1,873	1,411	1,314
	Apparent U.S. consumption (million dollars)	3,250	2,645	2,543	1,932	1,819
	Trade balance (million dollars)	-1,526	-1,099	-895	-515	-442
	Ratio of imports to consumption (percent)	80.2	78.4	73.6	73.1	72.2
	Ratio of exports to shipments (percent)	62.7	63.0	59.3	63.3	63.3

See footnote(s) at end of table.

Table C-7--*Continued*
Machinery: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM083	Metal rolling mills:					
	Number of establishments	15	15	15	15	15
	Employees (thousands)	3	3	3	3	3
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	840	511	545	699	584
	U.S. exports (million dollars)	252	153	164	210	169
	U.S. imports (million dollars)	514	321	261	180	163
	Apparent U.S. consumption (million dollars)	1,102	679	642	669	577
	Trade balance (million dollars)	-262	-168	-97	30	7
	Ratio of imports to consumption (percent)	46.6	47.3	40.7	26.9	28.2
	Ratio of exports to shipments (percent)	30.0	30.0	30.0	30.1	29.0
MM084	Metal cutting machine tools and machine tool accessories:					
	Number of establishments	720	700	650	600	400
	Employees (thousands)	87	84	81	75	66
	Capacity utilization (percent)	70	70	68	63	60
	U.S. shipments (million dollars)	7,685	6,825	6,933	5,877	3,838
	U.S. exports (million dollars)	1,985	1,773	2,264	1,809	1,634
	U.S. imports (million dollars)	4,590	3,921	4,240	3,407	2,558
	Apparent U.S. consumption (million dollars)	10,290	8,973	8,910	7,475	4,762
	Trade balance (million dollars)	-2,605	-2,148	-1,977	-1,598	-924
	Ratio of imports to consumption (percent)	44.6	43.7	47.6	45.6	53.7
	Ratio of exports to shipments (percent)	25.8	26.0	32.6	30.8	42.6
MM085	Metal forming machine tools:					
	Number of establishments	300	250	250	220	200
	Employees (thousands)	30	28	27	20	15
	Capacity utilization (percent)	80	75	66	62	60
	U.S. shipments (million dollars)	3,234	2,980	2,890	2,185	1,647
	U.S. exports (million dollars)	984	934	876	743	652
	U.S. imports (million dollars)	1,409	1,312	1,474	1,331	846
	Apparent U.S. consumption (million dollars)	3,660	3,358	3,488	2,773	1,841
	Trade balance (million dollars)	-426	-378	-598	-588	-194
	Ratio of imports to consumption (percent)	38.5	39.1	42.3	48.0	46.0
	Ratio of exports to shipments (percent)	30.4	31.3	30.3	34.0	39.6
MM086	Non-metalworking machine tools:					
	Number of establishments	290	280	260	240	200
	Employees (thousands)	41	41	42	36	34
	Capacity utilization (percent)	80	80	77	75	70
	U.S. shipments (million dollars)	6,104	6,170	6,320	5,396	5,126
	U.S. exports (million dollars)	595	772	1,080	807	768
	U.S. imports (million dollars)	1,229	1,318	1,524	1,276	1,242
	Apparent U.S. consumption (million dollars)	6,738	6,716	6,763	5,864	5,600
	Trade balance (million dollars)	-634	-546	-443	-468	-474
	Ratio of imports to consumption (percent)	18.2	19.6	22.5	21.7	22.2
	Ratio of exports to shipments (percent)	9.8	12.5	17.1	15.0	15.0
MM087A	Semiconductor manufacturing machinery:					
	Number of establishments	380	390	410	405	400
	Employees (thousands)	44	37	48	36	34
	Capacity utilization (percent)	70	75	90	72	81
	U.S. shipments (million dollars)	9,246	11,231	16,846	11,850	10,200
	U.S. exports (million dollars)	7,786	7,907	13,866	8,044	6,972
	U.S. imports (million dollars)	2,588	2,600	4,597	3,947	3,304
	Apparent U.S. consumption (million dollars)	4,048	5,924	7,577	7,754	6,532
	Trade balance (million dollars)	5,198	5,307	9,269	4,096	3,668
	Ratio of imports to consumption (percent)	63.9	43.9	60.7	50.9	50.6
	Ratio of exports to shipments (percent)	84.2	70.4	82.3	67.9	68.4

See footnote(s) at end of table.

Table C-7--*Continued*
Machinery: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM088	Taps, cocks, valves, and similar devices:					
	Number of establishments	825	797	785	725	695
	Employees (thousands)	72	70	70	67	64
	Capacity utilization (percent)	75	75	74	70	68
	U.S. shipments (million dollars)	11,033	11,687	11,804	11,450	11,221
	U.S. exports (million dollars)	2,836	2,959	3,284	3,351	3,202
	U.S. imports (million dollars)	3,974	4,335	5,021	4,809	5,156
	Apparent U.S. consumption (million dollars)	12,171	13,063	13,541	12,908	13,175
	Trade balance (million dollars)	-1,138	-1,376	-1,737	-1,458	-1,954
	Ratio of imports to consumption (percent)	32.7	33.2	37.1	37.3	39.1
	Ratio of exports to shipments (percent)	25.7	25.3	27.8	29.3	28.5
MM089	Mechanical power transmission equipment:					
	Number of establishments	210	200	170	140	130
	Employees (thousands)	40	37	37	35	32
	Capacity utilization (percent)	69	65	62	62	60
	U.S. shipments (million dollars)	5,145	4,942	5,051	4,441	4,219
	U.S. exports (million dollars)	1,011	942	1,029	939	936
	U.S. imports (million dollars)	1,843	2,008	2,134	2,004	1,994
	Apparent U.S. consumption (million dollars)	5,977	6,008	6,156	5,507	5,276
	Trade balance (million dollars)	-832	-1,066	-1,105	-1,066	-1,057
	Ratio of imports to consumption (percent)	30.8	33.4	34.7	36.4	37.8
	Ratio of exports to shipments (percent)	19.7	19.1	20.4	21.1	22.2
MM090	Boilers, turbines, and related machinery:					
	Number of establishments	28	28	28	28	28
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	70	65	65	65	70
	U.S. shipments (million dollars)	1,604	1,465	1,543	1,648	2,240
	U.S. exports (million dollars)	1,495	1,290	1,117	1,106	892
	U.S. imports (million dollars)	370	484	833	1,204	1,514
	Apparent U.S. consumption (million dollars)	479	659	1,259	1,746	2,862
	Trade balance (million dollars)	1,125	806	284	-98	-622
	Ratio of imports to consumption (percent)	77.3	73.5	66.2	68.9	52.9
	Ratio of exports to shipments (percent)	93.2	88.1	72.4	67.1	39.8
MM091	Electric motors, generators, and related equipment:					
	Number of establishments	515	510	505	505	500
	Employees (thousands)	95	95	93	95	92
	Capacity utilization (percent)	76	75	73	76	72
	U.S. shipments (million dollars)	19,100	19,150	19,020	20,540	18,700
	U.S. exports (million dollars)	3,955	3,728	3,748	4,691	3,923
	U.S. imports (million dollars)	4,748	6,089	6,494	7,646	7,177
	Apparent U.S. consumption (million dollars)	19,893	21,512	21,766	23,494	21,955
	Trade balance (million dollars)	-793	-2,362	-2,746	-2,954	-3,255
	Ratio of imports to consumption (percent)	23.9	28.3	29.8	32.5	32.7
	Ratio of exports to shipments (percent)	20.7	19.5	19.7	22.8	21.0
MM092	Electrical transformers, static converters, and inductors:					
	Number of establishments	415	420	415	410	405
	Employees (thousands)	58	57	55	53	52
	Capacity utilization (percent)	74	76	73	71	70
	U.S. shipments (million dollars)	8,570	8,600	8,470	7,625	6,520
	U.S. exports (million dollars)	2,304	2,379	2,752	2,436	1,784
	U.S. imports (million dollars)	4,485	4,950	6,156	5,134	4,707
	Apparent U.S. consumption (million dollars)	10,751	11,171	11,874	10,323	9,443
	Trade balance (million dollars)	-2,181	-2,571	-3,404	-2,698	-2,923
	Ratio of imports to consumption (percent)	41.7	44.3	51.8	49.7	49.8
	Ratio of exports to shipments (percent)	26.9	27.7	32.5	31.9	27.4

See footnote(s) at end of table.

Table C-7--*Continued*
Machinery: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM093	Portable electric handtools:					
	Number of establishments	30	28	27	25	24
	Employees (thousands)	9	9	9	8	7
	Capacity utilization (percent)	82	81	83	80	75
	U.S. shipments (million dollars)	2,150	2,280	2,390	2,080	1,950
	U.S. exports (million dollars)	383	392	359	291	212
	U.S. imports (million dollars)	834	992	1,166	1,185	1,434
	Apparent U.S. consumption (million dollars)	2,601	2,880	3,198	2,974	3,172
	Trade balance (million dollars)	-451	-600	-808	-894	-1,222
	Ratio of imports to consumption (percent)	32.1	34.5	36.5	39.8	45.2
	Ratio of exports to shipments (percent)	17.8	17.2	15.0	14.0	10.9
MM094	Nonelectrically powered handtools and parts thereof:					
	Number of establishments	38	38	35	30	25
	Employees (thousands)	11	12	13	13	12
	Capacity utilization (percent)	77	78	77	75	70
	U.S. shipments (million dollars)	1,709	1,878	1,974	1,916	1,840
	U.S. exports (million dollars)	553	537	563	563	549
	U.S. imports (million dollars)	782	890	933	901	961
	Apparent U.S. consumption (million dollars)	1,939	2,231	2,344	2,254	2,252
	Trade balance (million dollars)	-230	-353	-370	-338	-412
	Ratio of imports to consumption (percent)	40.4	39.9	39.8	40.0	42.7
	Ratio of exports to shipments (percent)	32.3	28.6	28.5	29.4	29.8
MM095	Electric lamps (bulbs) and portable electric lights:					
	Number of establishments	120	120	115	110	105
	Employees (thousands)	24	22	21	20	19
	Capacity utilization (percent)	73	70	68	65	64
	U.S. shipments (million dollars)	3,650	3,400	3,500	3,300	3,250
	U.S. exports (million dollars)	896	894	897	799	750
	U.S. imports (million dollars)	1,287	1,454	1,579	1,785	1,687
	Apparent U.S. consumption (million dollars)	4,041	3,961	4,182	4,286	4,187
	Trade balance (million dollars)	-391	-561	-682	-986	-937
	Ratio of imports to consumption (percent)	31.8	36.7	37.8	41.7	40.3
	Ratio of exports to shipments (percent)	24.5	26.3	25.6	24.2	23.1
MM096	Welding and soldering equipment:					
	Number of establishments	245	250	250	240	225
	Employees (thousands)	17	18	18	17	16
	Capacity utilization (percent)	78	78	78	77	75
	U.S. shipments (million dollars)	4,300	4,500	4,770	4,250	3,930
	U.S. exports (million dollars)	810	989	1,050	703	635
	U.S. imports (million dollars)	781	702	803	803	761
	Apparent U.S. consumption (million dollars)	4,271	4,213	4,523	4,351	4,056
	Trade balance (million dollars)	29	287	247	-101	-126
	Ratio of imports to consumption (percent)	18.3	16.7	17.7	18.5	18.8
	Ratio of exports to shipments (percent)	18.8	22.0	22.0	16.5	16.2
MM097	Nonautomotive insulated electrical wire and related products:					
	Number of establishments	530	525	520	500	490
	Employees (thousands)	92	91	90	85	83
	Capacity utilization (percent)	85	80	78	73	71
	U.S. shipments (million dollars)	16,000	16,750	17,500	15,000	13,380
	U.S. exports (million dollars)	2,950	3,102	4,040	3,286	2,856
	U.S. imports (million dollars)	2,814	3,078	3,566	3,203	3,076
	Apparent U.S. consumption (million dollars)	15,865	16,726	17,026	14,917	13,600
	Trade balance (million dollars)	135	24	474	83	-220
	Ratio of imports to consumption (percent)	17.7	18.4	20.9	21.5	22.6
	Ratio of exports to shipments (percent)	18.4	18.5	23.1	21.9	21.3

See footnote(s) at end of table.

Table C-7--*Continued*

Machinery: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM099	Molds and molding machinery:					
	Number of establishments	120	120	120	120	120
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	5,750	5,233	5,929	5,001	4,486
	U.S. exports (million dollars)	1,896	1,879	2,129	1,791	1,605
	U.S. imports (million dollars)	3,512	3,723	3,613	2,803	2,969
	Apparent U.S. consumption (million dollars)	7,367	7,077	7,413	6,013	5,849
	Trade balance (million dollars)	-1,617	-1,844	-1,484	-1,012	-1,363
	Ratio of imports to consumption (percent)	47.7	52.6	48.7	46.6	50.8
	Ratio of exports to shipments (percent)	33.0	35.9	35.9	35.8	35.8

[1]Not available.

Note.–Calculations based on unrounded data.

Table C-8
Transportation equipment: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET001	Aircraft engines and gas turbines:					
	Number of establishments	30	28	28	27	27
	Employees (thousands)	113	110	103	109	99
	Capacity utilization (percent)	95	(1)	(1)	80	75
	U.S. shipments (million dollars)	23,536	26,642	29,226	35,051	45,000
	U.S. exports (million dollars)	13,115	14,218	15,011	16,524	15,498
	U.S. imports (million dollars)	10,404	10,328	10,939	13,548	10,993
	Apparent U.S. consumption (million dollars)	20,825	22,753	25,154	32,075	40,495
	Trade balance (million dollars)	2,711	3,889	4,072	2,976	4,505
	Ratio of imports to consumption (percent)	50.0	45.4	43.5	42.2	27.1
	Ratio of exports to shipments (percent)	55.7	53.4	51.4	47.1	34.4
ET002	Internal combustion piston engines, other than for aircraft:					
	Number of establishments	1,500	1,500	1,500	1,450	(2)
	Employees (thousands)	155	157	157	156	(2)
	Capacity utilization (percent)	75	83	75	75	(2)
	U.S. production (million dollars)	50,000	54,000	54,000	48,000	(2)
	U.S. exports (million dollars)	11,015	12,522	13,808	12,408	13,069
	U.S. imports (million dollars)	11,478	14,052	15,532	13,657	14,841
	Apparent U.S. consumption (million dollars)	50,463	55,530	55,724	49,249	(2)
	Trade balance (million dollars)	-463	-1,530	-1,724	-1,249	-1,771
	Ratio of imports to consumption (percent)	22.7	25.3	27.9	27.7	(2)
	Ratio of exports to production (percent)	22.0	23.2	25.6	25.9	(2)
ET003	Forklift trucks and similar industrial vehicles:					
	Number of establishments	455	453	451	451	(2)
	Employees (thousands)	27	27	26	26	(2)
	Capacity utilization (percent)	78	67	64	60	(2)
	U.S. production (million dollars)	5,819	5,155	5,493	4,763	(2)
	U.S. exports (million dollars)	1,188	1,243	1,332	1,341	1,090
	U.S. imports (million dollars)	1,456	1,527	1,668	1,423	1,266
	Apparent U.S. consumption (million dollars)	6,087	5,439	5,830	4,845	(2)
	Trade balance (million dollars)	-268	-284	-337	-82	-176
	Ratio of imports to consumption (percent)	23.9	28.1	28.6	29.4	(2)
	Ratio of exports to production (percent)	20.4	24.1	24.2	28.2	(2)
ET004	Construction and mining equipment:					
	Number of establishments	1,661	1,664	1,667	1,655	1,655
	Employees (thousands)	147	140	137	130	130
	Capacity utilization (percent)	87	63	61	59	58
	U.S. shipments (million dollars)	28,001	25,783	26,112	25,169	23,911
	U.S. exports (million dollars)	10,944	8,646	9,507	9,903	9,504
	U.S. imports (million dollars)	6,299	5,919	5,643	5,260	5,302
	Apparent U.S. consumption (million dollars)	23,356	23,056	22,248	20,526	19,709
	Trade balance (million dollars)	4,645	2,727	3,864	4,643	4,202
	Ratio of imports to consumption (percent)	27.0	25.7	25.4	25.6	26.9
	Ratio of exports to shipments (percent)	39.1	33.5	36.4	39.3	39.7
ET005	Ball and rollers bearings:					
	Number of establishments	183	183	183	183	181
	Employees (thousands)	37	37	36	36	35
	Capacity utilization (percent)	82	80	73	74	62
	U.S. shipments (million dollars)	6,468	6,331	6,500	5,766	5,881
	U.S. exports (million dollars)	1,141	1,098	1,242	1,197	1,249
	U.S. imports (million dollars)	1,719	1,622	1,804	1,579	1,598
	Apparent U.S. consumption (million dollars)	7,046	6,855	7,062	6,147	6,230
	Trade balance (million dollars)	-578	-524	-562	-381	-349
	Ratio of imports to consumption (percent)	24.4	23.7	25.5	25.7	25.6
	Ratio of exports to shipments (percent)	17.6	17.3	19.1	20.8	21.2

See footnote(s) at end of table.

Table C-8--*Continued*
Transportation equipment: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET006	Primary cells and batteries and electric storage batteries:					
	Number of establishments	180	180	180	170	(2)
	Employees (thousands)	31	32	32	30	(2)
	Capacity utilization (percent)	80	81	71	71	(2)
	U.S. production (million dollars)	6,900	7,600	7,800	7,000	(2)
	U.S. exports (million dollars)	2,309	2,307	2,655	2,270	1,807
	U.S. imports (million dollars)	2,056	2,392	2,656	2,342	2,196
	Apparent U.S. consumption (million dollars)	6,647	7,684	7,801	7,072	(2)
	Trade balance (million dollars)	253	-84	-1	-72	-389
	Ratio of imports to consumption (percent)	30.9	31.1	34.0	33.1	(2)
	Ratio of exports to production (percent)	33.5	30.4	34.0	32.4	(2)
ET007	Ignition, starting, lighting, and other electrical equipment:					
	Number of establishments	700	700	700	670	(2)
	Employees (thousands)	77	77	80	80	(2)
	Capacity utilization (percent)	78	79	73	73	(2)
	U.S. production (million dollars)	15,300	17,600	17,500	15,600	(2)
	U.S. exports (million dollars)	1,725	1,947	1,986	1,824	1,894
	U.S. imports (million dollars)	2,363	2,817	3,076	3,052	3,467
	Apparent U.S. consumption (million dollars)	15,937	18,470	18,590	16,828	(2)
	Trade balance (million dollars)	-637	-870	-1,090	-1,228	-1,574
	Ratio of imports to consumption (percent)	14.8	15.3	16.5	18.1	(2)
	Ratio of exports to production (percent)	11.3	11.1	11.3	11.7	(2)
ET008	Rail locomotive and rolling stock:					
	Number of establishments	190	190	190	180	180
	Employees (thousands)	31	32	30	26	27
	Capacity utilization (percent)	87	76	69	65	66
	U.S. shipments (million dollars)	7,100	7,600	7,400	4,500	4,600
	U.S. exports (million dollars)	1,694	1,558	1,336	1,422	1,006
	U.S. imports (million dollars)	2,156	2,307	1,828	1,357	1,039
	Apparent U.S. consumption (million dollars)	7,562	8,349	7,892	4,435	4,633
	Trade balance (million dollars)	-462	-749	-492	65	-33
	Ratio of imports to consumption (percent)	28.5	27.6	23.2	30.6	22.4
	Ratio of exports to shipments (percent)	23.9	20.5	18.0	31.6	21.9
ET009	Motor vehicles:					
	Number of establishments	1,288	1,290	1,295	1,300	1,305
	Employees (thousands)	297	297	293	272	280
	Capacity utilization (percent)	88	96	95	84	85
	U.S. shipments (million dollars)	240,135	279,018	251,031	227,002	242,892
	U.S. exports (million dollars)	22,594	22,116	22,865	22,651	26,209
	U.S. imports (million dollars)	99,833	119,675	129,568	127,257	133,264
	Apparent U.S. consumption (million dollars)	317,374	376,577	357,734	331,608	349,946
	Trade balance (million dollars)	-77,239	-97,559	-106,703	-104,606	-107,054
	Ratio of imports to consumption (percent)	31.5	31.8	36.2	38.4	38.1
	Ratio of exports to shipments (percent)	9.4	7.9	9.1	10.0	10.8

See footnote(s) at end of table.

Table C-8--*Continued*
Transportation equipment: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET010	Certain motor-vehicle parts:					
	Number of establishments	3,300	3,300	3,300	3,150	(2)
	Employees (thousands)	550	550	550	545	(2)
	Capacity utilization (percent)	76	81	75	75	(2)
	U.S. production (million dollars)	124,000	135,000	137,000	122,000	(2)
	U.S. exports (million dollars)	25,666	26,997	28,917	26,521	26,651
	U.S. imports (million dollars)	18,623	22,615	25,011	23,977	27,761
	Apparent U.S. consumption (million dollars)	116,957	130,618	133,093	119,456	(2)
	Trade balance (million dollars)	7,043	4,382	3,907	2,544	-1,110
	Ratio of imports to consumption (percent)	15.9	17.3	18.8	20.1	(2)
	Ratio of exports to production (percent)	20.7	20.0	21.1	21.7	(2)
ET011	Motorcycles, mopeds, and parts:					
	Number of establishments	48	50	55	60	(2)
	Employees (thousands)	8	9	10	11	(2)
	Capacity utilization (percent)	90	90	85	85	(2)
	U.S. production (million dollars)	2,500	3,000	3,500	4,200	(2)
	U.S. exports (million dollars)	626	468	563	742	793
	U.S. imports (million dollars)	1,293	1,755	2,519	2,870	2,927
	Apparent U.S. consumption (million dollars)	3,167	4,287	5,456	6,328	(2)
	Trade balance (million dollars)	-667	-1,287	-1,956	-2,128	-2,134
	Ratio of imports to consumption (percent)	40.8	40.9	46.2	45.3	(2)
	Ratio of exports to production (percent)	25.0	15.6	16.1	17.7	(2)
ET012	Miscellaneous vehicles and transportation-related equipment:					
	Number of establishments	1,202	1,203	1,203	1,210	1,213
	Employees (thousands)	57	61	61	62	64
	Capacity utilization (percent)	63	67	58	60	64
	U.S. shipments (million dollars)	12,975	13,830	14,092	14,205	14,915
	U.S. exports (million dollars)	2,958	2,759	2,939	2,658	2,725
	U.S. imports (million dollars)	1,664	2,056	2,982	2,364	2,744
	Apparent U.S. consumption (million dollars)	11,681	13,127	14,135	13,912	14,934
	Trade balance (million dollars)	1,294	703	-43	293	-19
	Ratio of imports to consumption (percent)	14.2	15.7	21.1	17.0	18.4
	Ratio of exports to shipments (percent)	22.8	19.9	20.9	18.7	18.3
ET013	Aircraft, spacecraft, and related equipment:					
	Number of establishments	250	230	230	200	210
	Employees (thousands)	454	425	394	390	359
	Capacity utilization (percent)	95	95	(1)	75	75
	U.S. shipments (million dollars)	71,350	73,693	61,868	64,395	49,043
	U.S. exports (million dollars)	50,248	47,762	39,696	42,535	41,447
	U.S. imports (million dollars)	12,748	14,592	18,019	21,027	17,636
	Apparent U.S. consumption (million dollars)	33,850	40,522	40,191	42,887	25,232
	Trade balance (million dollars)	37,500	33,171	21,677	21,508	23,811
	Ratio of imports to consumption (percent)	37.7	36.0	44.8	49.0	69.9
	Ratio of exports to shipments (percent)	70.4	64.8	64.2	66.1	84.5
ET014	Ships, tugs, pleasure boats, and similar vessels:					
	Number of establishments	1,600	1,600	1,600	1,600	1,600
	Employees (thousands)	113	113	119	112	113
	Capacity utilization (percent)	62	55	56	56	57
	U.S. shipments (million dollars)	13,600	14,200	15,200	14,000	14,100
	U.S. exports (million dollars)	1,765	1,682	1,083	1,820	1,234
	U.S. imports (million dollars)	1,090	1,246	1,223	1,411	1,413
	Apparent U.S. consumption (million dollars)	12,925	13,763	15,340	13,590	14,279
	Trade balance (million dollars)	675	437	-140	410	-179
	Ratio of imports to consumption (percent)	8.4	9.1	8.0	10.4	9.9
	Ratio of exports to shipments (percent)	13.0	11.8	7.1	13.0	8.8

See footnote(s) at end of table.

Table C-8--*Continued*
Transportation equipment: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET015	Motors and engines, except internal combustion, aircraft, or electric:					
	Number of establishments	350	350	350	335	(2)
	Employees (thousands)	42	40	40	40	(2)
	Capacity utilization (percent)	72	72	68	68	(2)
	U.S. production (million dollars)	6,700	6,500	7,000	6,300	(2)
	U.S. exports (million dollars)	397	394	453	508	479
	U.S. imports (million dollars)	621	658	772	784	700
	Apparent U.S. consumption (million dollars)	6,923	6,764	7,319	6,576	(2)
	Trade balance (million dollars)	-223	-264	-319	-276	-221
	Ratio of imports to consumption (percent)	9.0	9.7	10.6	11.9	(2)
	Ratio of exports to production (percent)	5.9	6.1	6.5	8.1	(2)

[1]Capacity utilization could not be meaningfully calculated for this industry.
[2]Not available.

Note.–Calculations based on unrounded data.

Table C-9
Electronic products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET016	Office machines:					
	Number of establishments	137	137	137	137	137
	Employees (thousands)	13	13	11	10	8
	Capacity utilization (percent)	60	65	70	51	51
	U.S. shipments (million dollars)	3,065	2,993	2,711	3,072	2,460
	U.S. exports (million dollars)	1,024	967	1,033	1,061	816
	U.S. imports (million dollars)	1,856	1,784	1,892	1,817	1,491
	Apparent U.S. consumption (million dollars)	3,897	3,810	3,570	3,829	3,135
	Trade balance (million dollars)	-832	-817	-859	-757	-675
	Ratio of imports to consumption (percent)	47.6	46.8	53.0	47.5	47.6
	Ratio of exports to shipments (percent)	33.4	32.3	38.1	34.5	33.2
ET017	Telephone and telegraph apparatus:					
	Number of establishments	1,028	1,056	1,030	1,000	980
	Employees (thousands)	248	238	248	231	189
	Capacity utilization (percent)	73	77	75	73	57
	U.S. shipments (million dollars)	72,826	79,544	93,614	80,151	62,718
	U.S. exports (million dollars)	17,192	17,717	20,147	16,506	12,952
	U.S. imports (million dollars)	14,434	20,147	32,130	27,174	27,948
	Apparent U.S. consumption (million dollars)	70,068	81,974	105,596	90,819	77,714
	Trade balance (million dollars)	2,758	-2,430	-11,982	-10,668	-14,996
	Ratio of imports to consumption (percent)	20.6	24.6	30.4	29.9	36.0
	Ratio of exports to shipments (percent)	23.6	22.3	21.5	20.6	20.7
ET018	Consumer electronics (except televisions):					
	Number of establishments	200	210	215	225	(1)
	Employees (thousands)	20	20	21	21	(1)
	Capacity utilization (percent)	64	58	58	57	(1)
	U.S. production (million dollars)	3,895	4,235	4,260	4,200	(1)
	U.S. exports (million dollars)	2,553	2,678	2,969	2,791	2,631
	U.S. imports (million dollars)	16,395	18,282	21,974	19,525	21,455
	Apparent U.S. consumption (million dollars)	17,736	19,839	23,265	20,934	(1)
	Trade balance (million dollars)	-13,841	-15,604	-19,005	-16,734	-18,825
	Ratio of imports to consumption (percent)	92.4	92.2	94.5	93.3	(1)
	Ratio of exports to production (percent)	65.6	63.2	69.7	66.5	(1)
ET019	Blank media:					
	Number of establishments	250	240	230	220	(1)
	Employees (thousands)	19	17	15	13	(1)
	Capacity utilization (percent)	82	73	69	80	(1)
	U.S. production (million dollars)	4,359	3,764	3,402	3,074	(1)
	U.S. exports (million dollars)	2,042	1,692	1,420	1,017	970
	U.S. imports (million dollars)	2,103	2,225	2,415	2,423	2,746
	Apparent U.S. consumption (million dollars)	4,421	4,297	4,397	4,480	(1)
	Trade balance (million dollars)	-62	-533	-995	-1,406	-1,776
	Ratio of imports to consumption (percent)	47.6	51.8	54.9	54.1	(1)
	Ratio of exports to production (percent)	46.8	45.0	41.8	33.1	(1)
ET020	Prerecorded media:					
	Number of establishments	660	670	680	690	(1)
	Employees (thousands)	39	29	29	29	(1)
	Capacity utilization (percent)	85	78	75	66	(1)
	U.S. production (million dollars)	6,205	4,900	5,298	5,728	(1)
	U.S. exports (million dollars)	3,619	3,707	3,636	3,195	3,069
	U.S. imports (million dollars)	1,135	1,252	1,389	1,259	1,308
	Apparent U.S. consumption (million dollars)	3,720	2,445	3,051	3,793	(1)
	Trade balance (million dollars)	2,485	2,455	2,247	1,935	1,761
	Ratio of imports to consumption (percent)	30.5	51.2	45.5	33.2	(1)
	Ratio of exports to production (percent)	58.3	75.7	68.6	55.8	(1)

See footnote(s) at end of table.

Table C-9--*Continued*
Electronic products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET021	Navigational instruments and remote control apparatus:					
	Number of establishments	105	105	107	107	107
	Employees (thousands)	115	115	116	120	119
	Capacity utilization (percent)	75	75	80	80	80
	U.S. shipments (million dollars)	15,100	15,500	18,500	21,275	22,125
	U.S. exports (million dollars)	2,585	2,530	2,626	3,102	2,921
	U.S. imports (million dollars)	1,230	1,361	1,702	1,796	1,858
	Apparent U.S. consumption (million dollars)	13,746	14,331	17,576	19,969	21,062
	Trade balance (million dollars)	1,354	1,169	924	1,306	1,063
	Ratio of imports to consumption (percent)	9.0	9.5	9.7	9.0	8.8
	Ratio of exports to shipments (percent)	17.1	16.3	14.2	14.6	13.2
ET022	Television receivers and video monitors:					
	Number of establishments	14	14	12	10	(1)
	Employees (thousands)	8	8	8	7	(1)
	Capacity utilization (percent)	64	58	58	58	(1)
	U.S. production (million dollars)	3,940	3,950	3,400	3,037	(1)
	U.S. exports (million dollars)	2,142	1,104	1,164	1,237	1,257
	U.S. imports (million dollars)	5,878	6,652	7,713	8,615	10,586
	Apparent U.S. consumption (million dollars)	7,676	9,498	9,949	10,415	(1)
	Trade balance (million dollars)	-3,736	-5,548	-6,549	-7,378	-9,329
	Ratio of imports to consumption (percent)	76.6	70.0	77.5	82.7	(1)
	Ratio of exports to production (percent)	54.4	28.0	34.2	40.7	(1)
ET023	Radio and television broadcasting equipment:					
	Number of establishments	150	155	160	165	170
	Employees (thousands)	15	15	15	15	14
	Capacity utilization (percent)	69	71	73	70	67
	U.S. shipments (million dollars)	3,600	4,000	3,900	3,500	3,200
	U.S. exports (million dollars)	1,379	2,323	2,602	2,321	1,364
	U.S. imports (million dollars)	3,211	4,948	7,178	6,066	4,977
	Apparent U.S. consumption (million dollars)	5,432	6,624	8,476	7,245	6,813
	Trade balance (million dollars)	-1,832	-2,624	-4,576	-3,745	-3,613
	Ratio of imports to consumption (percent)	59.1	74.7	84.7	83.7	73.1
	Ratio of exports to shipments (percent)	38.3	58.1	66.7	66.3	42.6
ET024	Electric sound and visual signaling apparatus:					
	Number of establishments	499	499	499	499	499
	Employees (thousands)	24	24	23	28	26
	Capacity utilization (percent)	66	78	71	66	66
	U.S. shipments (million dollars)	4,189	4,539	4,905	5,571	5,290
	U.S. exports (million dollars)	783	858	851	949	1,042
	U.S. imports (million dollars)	2,064	2,053	2,334	1,968	1,797
	Apparent U.S. consumption (million dollars)	5,470	5,734	6,388	6,591	6,045
	Trade balance (million dollars)	-1,281	-1,195	-1,483	-1,020	-755
	Ratio of imports to consumption (percent)	37.7	35.8	36.5	29.9	29.7
	Ratio of exports to shipments (percent)	18.7	18.9	17.3	17.0	19.7
ET025	Electrical capacitors and resistors:					
	Number of establishments	303	286	276	267	(1)
	Employees (thousands)	29	26	27	24	(1)
	Capacity utilization (percent)	70	75	80	60	(1)
	U.S. production (million dollars)	2,892	3,006	3,768	2,630	(1)
	U.S. exports (million dollars)	2,037	2,393	3,410	2,002	1,706
	U.S. imports (million dollars)	2,015	2,435	4,177	2,333	2,093
	Apparent U.S. consumption (million dollars)	2,870	3,048	4,535	2,961	(1)
	Trade balance (million dollars)	22	-42	-767	-331	-386
	Ratio of imports to consumption (percent)	70.2	79.9	92.1	78.8	(1)
	Ratio of exports to production (percent)	70.4	79.6	90.5	76.1	(1)

See footnote(s) at end of table.

Table C-9--*Continued*
Electronic products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET026	Printed circuits:					
	Number of establishments	768	730	694	641	640
	Employees (thousands)	82	83	86	75	66
	Capacity utilization (percent)	73	78	77	49	49
	U.S. shipments (million dollars)	8,473	9,150	11,892	8,945	7,915
	U.S. exports (million dollars)	2,178	2,386	2,865	2,089	1,853
	U.S. imports (million dollars)	2,045	2,236	2,988	2,141	1,896
	Apparent U.S. consumption (million dollars)	8,340	9,000	12,015	8,998	7,959
	Trade balance (million dollars)	133	150	-123	-53	-44
	Ratio of imports to consumption (percent)	24.5	24.8	24.9	23.8	23.8
	Ratio of exports to shipments (percent)	25.7	26.1	24.1	23.4	23.4
ET027	Circuit apparatus exceeding 1000V:					
	Number of establishments	200	200	210	200	200
	Employees (thousands)	15	15	17	16	15
	Capacity utilization (percent)	75	75	80	60	60
	U.S. shipments (million dollars)	4,700	5,000	5,500	4,150	3,800
	U.S. exports (million dollars)	584	590	701	612	549
	U.S. imports (million dollars)	244	287	386	357	338
	Apparent U.S. consumption (million dollars)	4,360	4,698	5,185	3,895	3,589
	Trade balance (million dollars)	340	302	315	255	211
	Ratio of imports to consumption (percent)	5.6	6.1	7.4	9.2	9.4
	Ratio of exports to shipments (percent)	12.4	11.8	12.7	14.7	14.4
ET028	Circuit apparatus not exceeding 1000V:					
	Number of establishments	600	600	620	600	600
	Employees (thousands)	50	50	55	52	46
	Capacity utilization (percent)	75	75	80	60	60
	U.S. shipments (million dollars)	14,000	15,000	17,000	13,000	11,800
	U.S. exports (million dollars)	4,258	4,991	6,101	5,098	4,478
	U.S. imports (million dollars)	5,103	5,606	6,872	5,280	4,933
	Apparent U.S. consumption (million dollars)	14,845	15,615	17,771	13,182	12,255
	Trade balance (million dollars)	-845	-615	-771	-182	-455
	Ratio of imports to consumption (percent)	34.4	35.9	38.7	40.1	40.2
	Ratio of exports to shipments (percent)	30.4	33.3	35.9	39.2	37.9
ET031	Cathode-ray tubes:					
	Number of establishments	20	18	16	15	(1)
	Employees (thousands)	14	14	13	12	(1)
	Capacity utilization (percent)	76	77	80	80	(1)
	U.S. production (million dollars)	3,367	3,579	3,450	2,250	(1)
	U.S. exports (million dollars)	2,288	2,174	2,435	2,056	1,762
	U.S. imports (million dollars)	774	732	634	612	607
	Apparent U.S. consumption (million dollars)	1,853	2,137	1,649	806	(1)
	Trade balance (million dollars)	1,514	1,442	1,801	1,444	1,155
	Ratio of imports to consumption (percent)	41.8	34.2	38.4	75.9	(1)
	Ratio of exports to production (percent)	68.0	60.7	70.6	91.4	(1)
ET032	Electron tubes other than CRTs:					
	Number of establishments	50	43	40	38	35
	Employees (thousands)	4	4	4	4	4
	Capacity utilization (percent)	76	77	80	64	64
	U.S. shipments (million dollars)	654	696	730	661	628
	U.S. exports (million dollars)	183	215	209	178	180
	U.S. imports (million dollars)	225	190	213	271	247
	Apparent U.S. consumption (million dollars)	696	671	734	754	694
	Trade balance (million dollars)	-42	25	-4	-93	-66
	Ratio of imports to consumption (percent)	32.3	28.4	29.1	36.0	35.5
	Ratio of exports to shipments (percent)	28.0	30.9	28.7	27.0	28.7

See footnote(s) at end of table.

Table C-9--*Continued*
Electronic products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET033	Semiconductors and integrated circuits:					
	Number of establishments	1,331	1,271	1,241	1,194	1,190
	Employees (thousands)	191	197	216	189	180
	Capacity utilization (percent)	73	86	87	57	57
	U.S. shipments (million dollars)	70,494	76,646	85,611	55,149	52,300
	U.S. exports (million dollars)	29,055	36,615	44,828	33,455	31,738
	U.S. imports (million dollars)	33,157	37,158	47,448	30,016	25,651
	Apparent U.S. consumption (million dollars)	74,596	77,188	88,230	51,710	46,213
	Trade balance (million dollars)	-4,102	-542	-2,619	3,439	6,087
	Ratio of imports to consumption (percent)	44.4	48.1	53.8	58.0	55.5
	Ratio of exports to shipments (percent)	41.2	47.8	52.4	60.7	60.7
ET035	Computers, peripherals, and parts:					
	Number of establishments	760	750	750	730	(1)
	Employees (thousands)	240	208	205	193	(1)
	Capacity utilization (percent)	70	69	66	62	(1)
	U.S. production (million dollars)	114,482	113,161	110,028	89,528	(1)
	U.S. exports (million dollars)	39,035	39,300	45,392	38,125	29,534
	U.S. imports (million dollars)	72,635	81,662	90,384	74,547	75,817
	Apparent U.S. consumption (million dollars)	148,081	155,523	155,019	125,950	(1)
	Trade balance (million dollars)	-33,599	-42,362	-44,991	-36,422	-46,283
	Ratio of imports to consumption (percent)	49.1	52.5	58.3	59.2	(1)
	Ratio of exports to production (percent)	34.1	34.7	41.3	42.6	(1)
ET036	Photographic film and paper:					
	Number of establishments	310	310	310	310	310
	Employees (thousands)	36	34	34	33	34
	Capacity utilization (percent)	81	85	80	65	65
	U.S. shipments (million dollars)	10,839	13,080	12,266	11,650	12,960
	U.S. exports (million dollars)	2,108	2,154	2,755	1,953	2,127
	U.S. imports (million dollars)	1,861	2,009	2,205	1,856	1,865
	Apparent U.S. consumption (million dollars)	10,592	12,934	11,716	11,554	12,698
	Trade balance (million dollars)	247	146	550	96	262
	Ratio of imports to consumption (percent)	17.6	15.5	18.8	16.1	14.7
	Ratio of exports to shipments (percent)	19.4	16.5	22.5	16.8	16.4
ET037	Optical fibers, optical fiber bundles and cables:					
	Number of establishments	64	68	72	60	45
	Employees (thousands)	12	14	15	13	8
	Capacity utilization (percent)	95	95	95	88	65
	U.S. shipments (million dollars)	3,712	4,800	5,800	5,300	4,000
	U.S. exports (million dollars)	807	1,081	1,888	1,689	474
	U.S. imports (million dollars)	398	729	1,399	1,244	252
	Apparent U.S. consumption (million dollars)	3,303	4,448	5,312	4,854	3,778
	Trade balance (million dollars)	409	352	488	446	222
	Ratio of imports to consumption (percent)	12.1	16.4	26.3	25.6	6.7
	Ratio of exports to shipments (percent)	21.7	22.5	32.5	31.9	11.8
ET038	Optical goods, including ophthalmic goods:					
	Number of establishments	905	950	1,000	900	850
	Employees (thousands)	60	63	70	60	50
	Capacity utilization (percent)	85	87	92	82	78
	U.S. shipments (million dollars)	5,900	6,550	8,515	7,960	7,700
	U.S. exports (million dollars)	2,438	2,682	3,995	3,727	3,548
	U.S. imports (million dollars)	3,683	4,225	5,881	4,957	4,142
	Apparent U.S. consumption (million dollars)	7,144	8,093	10,402	9,190	8,294
	Trade balance (million dollars)	-1,244	-1,543	-1,887	-1,230	-594
	Ratio of imports to consumption (percent)	51.5	52.2	56.5	53.9	49.9
	Ratio of exports to shipments (percent)	41.3	40.9	46.9	46.8	46.1

See footnote(s) at end of table.

Table C-9--*Continued*
Electronic products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET039	Photographic cameras and equipment:					
	Number of establishments	428	428	428	428	428
	Employees (thousands)	24	20	16	13	11
	Capacity utilization (percent)	76	62	53	54	54
	U.S. shipments (million dollars)	8,809	8,397	5,463	3,567	2,854
	U.S. exports (million dollars)	2,030	1,825	1,800	1,694	1,187
	U.S. imports (million dollars)	6,447	5,843	5,299	3,560	3,029
	Apparent U.S. consumption (million dollars)	13,226	12,415	8,962	5,433	4,696
	Trade balance (million dollars)	-4,417	-4,018	-3,499	-1,866	-1,842
	Ratio of imports to consumption (percent)	48.7	47.1	59.1	65.5	64.5
	Ratio of exports to shipments (percent)	23.0	21.7	32.9	47.5	41.6
ET040	Medical goods:					
	Number of establishments	2,338	2,340	2,345	2,350	2,350
	Employees (thousands)	182	183	185	188	190
	Capacity utilization (percent)	89	91	92	94	94
	U.S. shipments (million dollars)	30,800	31,500	33,075	37,000	41,440
	U.S. exports (million dollars)	11,582	12,455	13,411	14,987	15,059
	U.S. imports (million dollars)	6,934	7,932	9,178	10,869	13,232
	Apparent U.S. consumption (million dollars)	26,152	26,978	28,843	32,881	39,614
	Trade balance (million dollars)	4,648	4,522	4,232	4,119	1,826
	Ratio of imports to consumption (percent)	26.5	29.4	31.8	33.1	33.4
	Ratio of exports to shipments (percent)	37.6	39.5	40.5	40.5	36.3
ET041	Watches and clocks:					
	Number of establishments	145	145	145	145	145
	Employees (thousands)	7	7	7	6	6
	Capacity utilization (percent)	46	62	61	55	55
	U.S. shipments (million dollars)	1,021	1,168	1,151	1,018	920
	U.S. exports (million dollars)	311	335	348	279	235
	U.S. imports (million dollars)	3,100	3,136	3,354	2,957	3,098
	Apparent U.S. consumption (million dollars)	3,810	3,969	4,157	3,696	3,784
	Trade balance (million dollars)	-2,789	-2,801	-3,006	-2,678	-2,864
	Ratio of imports to consumption (percent)	81.4	79.0	80.7	80.0	81.9
	Ratio of exports to shipments (percent)	30.5	28.7	30.3	27.4	25.5
ET042	Drawing, drafting, and calculating instruments:					
	Number of establishments	175	175	175	180	180
	Employees (thousands)	8	10	11	13	13
	Capacity utilization (percent)	75	75	80	80	75
	U.S. shipments (million dollars)	595	605	720	825	875
	U.S. exports (million dollars)	425	415	366	395	368
	U.S. imports (million dollars)	427	431	234	207	192
	Apparent U.S. consumption (million dollars)	597	620	588	637	699
	Trade balance (million dollars)	-2	-15	132	188	176
	Ratio of imports to consumption (percent)	71.5	69.4	39.8	32.6	27.4
	Ratio of exports to shipments (percent)	71.4	68.7	50.8	47.9	42.0

See footnote(s) at end of table.

Table C-9--*Continued*

Electronic products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET043	Measuring, testing, and controlling instruments:					
	Number of establishments	3,235	3,235	3,235	3,235	3,235
	Employees (thousands)	245	245	245	245	242
	Capacity utilization (percent)	75	75	75	75	75
	U.S. shipments (million dollars)	38,400	39,200	44,790	55,000	58,300
	U.S. exports (million dollars)	13,739	14,480	16,629	15,605	14,346
	U.S. imports (million dollars)	8,681	9,656	11,743	11,806	11,595
	Apparent U.S. consumption (million dollars)	33,343	34,376	39,904	51,201	55,549
	Trade balance (million dollars)	5,057	4,824	4,886	3,799	2,751
	Ratio of imports to consumption (percent)	26.0	28.1	29.4	23.1	20.9
	Ratio of exports to shipments (percent)	35.8	36.9	37.1	28.4	24.6

[1]Not available.

Note.–Calculations based on unrounded data.

Table C-10
Miscellaneous manufactures: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM046A	Luggage:					
	Number of establishments	252	223	209	189	183
	Employees (thousands)	10	8	7	6	6
	Capacity utilization (percent)	69	67	67	68	68
	U.S. shipments (million dollars)	1,101	964	972	853	825
	U.S. exports (million dollars)	231	250	253	223	194
	U.S. imports (million dollars)	2,466	2,619	2,741	2,667	2,656
	Apparent U.S. consumption (million dollars)	3,336	3,333	3,461	3,297	3,287
	Trade balance (million dollars)	-2,235	-2,369	-2,489	-2,444	-2,462
	Ratio of imports to consumption (percent)	73.9	78.6	79.2	80.9	80.8
	Ratio of exports to shipments (percent)	20.9	25.9	26.0	26.1	23.5
MM046B	Handbags:					
	Number of establishments	122	107	102	93	90
	Employees (thousands)	3	3	3	3	3
	Capacity utilization (percent)	61	60	60	59	60
	U.S. shipments (million dollars)	228	214	234	229	220
	U.S. exports (million dollars)	41	42	63	58	55
	U.S. imports (million dollars)	1,007	1,004	1,179	1,203	1,301
	Apparent U.S. consumption (million dollars)	1,194	1,177	1,350	1,375	1,467
	Trade balance (million dollars)	-966	-963	-1,116	-1,146	-1,247
	Ratio of imports to consumption (percent)	84.3	85.4	87.3	87.5	88.7
	Ratio of exports to shipments (percent)	17.9	19.5	26.7	25.1	24.9
MM046C	Flat goods:					
	Number of establishments	155	138	129	117	112
	Employees (thousands)	4	3	3	3	3
	Capacity utilization (percent)	68	66	66	64	64
	U.S. shipments (million dollars)	435	381	375	390	375
	U.S. exports (million dollars)	28	32	30	22	25
	U.S. imports (million dollars)	424	428	435	417	433
	Apparent U.S. consumption (million dollars)	831	777	779	786	783
	Trade balance (million dollars)	-396	-396	-404	-396	-408
	Ratio of imports to consumption (percent)	51.0	55.1	55.8	53.1	55.3
	Ratio of exports to shipments (percent)	6.4	8.4	8.1	5.5	6.7
MM047	Certain other leather goods:					
	Number of establishments	450	450	450	450	434
	Employees (thousands)	9	9	9	9	9
	Capacity utilization (percent)	56	60	60	58	58
	U.S. shipments (million dollars)	853	685	669	565	545
	U.S. exports (million dollars)	106	123	173	100	94
	U.S. imports (million dollars)	195	209	242	256	291
	Apparent U.S. consumption (million dollars)	942	771	738	721	742
	Trade balance (million dollars)	-89	-86	-69	-156	-197
	Ratio of imports to consumption (percent)	20.7	27.1	32.8	35.5	39.2
	Ratio of exports to shipments (percent)	12.4	17.9	25.9	17.8	17.3
MM048	Musical instruments and accessories:					
	Number of establishments	570	600	620	600	600
	Employees (thousands)	13	14	15	14	14
	Capacity utilization (percent)	75	80	85	75	75
	U.S. shipments (million dollars)	1,321	1,648	1,794	1,600	1,600
	U.S. exports (million dollars)	392	360	371	398	373
	U.S. imports (million dollars)	1,188	1,256	1,413	1,300	1,306
	Apparent U.S. consumption (million dollars)	2,117	2,544	2,836	2,502	2,533
	Trade balance (million dollars)	-796	-896	-1,042	-902	-933
	Ratio of imports to consumption (percent)	56.1	49.4	49.8	52.0	51.6
	Ratio of exports to shipments (percent)	29.7	21.8	20.7	24.9	23.3

See footnote(s) at end of table.

Table C-10–*Continued*
Miscellaneous manufactures: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM049	Umbrellas, whips, riding crops, and canes:					
	Number of establishments	16	16	16	15	15
	Employees (thousands)	0.5	0.5	0.5	0.5	0.5
	Capacity utilization (percent)	72	72	72	70	70
	U.S. shipments (million dollars)	74	74	77	75	79
	U.S. exports (million dollars)	11	11	11	11	9
	U.S. imports (million dollars)	250	248	284	293	275
	Apparent U.S. consumption (million dollars)	314	311	350	356	345
	Trade balance (million dollars)	-240	-237	-273	-281	-266
	Ratio of imports to consumption (percent)	79.8	79.8	81.1	82.2	79.6
	Ratio of exports to shipments (percent)	14.5	15.0	14.4	15.2	11.0
MM050	Silverware and related articles of precious metal:					
	Number of establishments	40	35	35	30	30
	Employees (thousands)	6	6	5	4	4
	Capacity utilization (percent)	80	75	75	75	75
	U.S. shipments (million dollars)	559	452	451	390	400
	U.S. exports (million dollars)	114	123	165	180	155
	U.S. imports (million dollars)	158	57	68	57	54
	Apparent U.S. consumption (million dollars)	603	386	353	266	299
	Trade balance (million dollars)	-44	66	98	124	101
	Ratio of imports to consumption (percent)	26.2	14.8	19.1	21.3	18.0
	Ratio of exports to shipments (percent)	20.4	27.2	36.7	46.2	38.8
MM051	Precious jewelry and related articles:					
	Number of establishments	2,290	2,290	2,270	2,270	2,270
	Employees (thousands)	33	37	40	39	39
	Capacity utilization (percent)	75	74	73	70	70
	U.S. shipments (million dollars)	4,610	5,745	6,009	5,410	5,800
	U.S. exports (million dollars)	518	822	1,272	1,659	1,826
	U.S. imports (million dollars)	4,592	5,063	5,737	5,533	6,261
	Apparent U.S. consumption (million dollars)	8,683	9,986	10,473	9,284	10,235
	Trade balance (million dollars)	-4,073	-4,241	-4,464	-3,874	-4,435
	Ratio of imports to consumption (percent)	52.9	50.7	54.8	59.6	61.2
	Ratio of exports to shipments (percent)	11.2	14.3	21.2	30.7	31.5
MM052	Costume jewelry and related articles:					
	Number of establishments	810	780	770	700	700
	Employees (thousands)	15	15	15	14	14
	Capacity utilization (percent)	64	64	64	64	64
	U.S. shipments (million dollars)	1,209	1,145	1,061	941	930
	U.S. exports (million dollars)	128	133	127	113	104
	U.S. imports (million dollars)	493	546	619	655	750
	Apparent U.S. consumption (million dollars)	1,573	1,558	1,553	1,483	1,576
	Trade balance (million dollars)	-364	-413	-492	-542	-646
	Ratio of imports to consumption (percent)	31.3	35.1	39.8	44.2	47.6
	Ratio of exports to shipments (percent)	10.6	11.6	12.0	12.0	11.2
MM053	Bicycles and certain parts:					
	Number of establishments	200	160	160	143	141
	Employees (thousands)	6	5	5	4	4
	Capacity utilization (percent)	65	60	60	57	58
	U.S. shipments (million dollars)	1,041	775	665	630	620
	U.S. exports (million dollars)	292	271	235	226	216
	U.S. imports (million dollars)	1,115	1,199	1,348	1,025	1,125
	Apparent U.S. consumption (million dollars)	1,864	1,703	1,778	1,429	1,529
	Trade balance (million dollars)	-823	-928	-1,113	-799	-909
	Ratio of imports to consumption (percent)	59.8	70.4	75.8	71.7	73.6
	Ratio of exports to shipments (percent)	28.1	34.9	35.4	35.9	34.8

See footnote(s) at end of table.

Table C-10–*Continued*
Miscellaneous manufactures: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM054	Furniture:					
	Number of establishments	18,800	18,800	18,000	17,500	17,000
	Employees (thousands)	530	535	535	500	480
	Capacity utilization (percent)	74	75	75	73	71
	U.S. shipments (million dollars)	61,800	66,500	69,800	64,200	62,400
	U.S. exports (million dollars)	2,632	2,597	3,026	2,689	2,409
	U.S. imports (million dollars)	10,417	12,775	15,159	14,839	17,028
	Apparent U.S. consumption (million dollars)	69,585	76,678	81,932	76,350	77,020
	Trade balance (million dollars)	-7,785	-10,178	-12,132	-12,150	-14,620
	Ratio of imports to consumption (percent)	15.0	16.7	18.5	19.4	22.1
	Ratio of exports to shipments (percent)	4.3	3.9	4.3	4.2	3.9
MM055	Writing instruments and related articles:					
	Number of establishments	190	190	190	190	187
	Employees (thousands)	16	16	16	16	15
	Capacity utilization (percent)	76	75	76	77	77
	U.S. shipments (million dollars)	2,818	2,746	2,751	2,510	2,470
	U.S. exports (million dollars)	373	333	288	263	269
	U.S. imports (million dollars)	842	965	1,146	1,027	1,044
	Apparent U.S. consumption (million dollars)	3,286	3,378	3,608	3,274	3,245
	Trade balance (million dollars)	-468	-632	-857	-764	-775
	Ratio of imports to consumption (percent)	25.6	28.6	31.8	31.4	32.2
	Ratio of exports to shipments (percent)	13.3	12.1	10.5	10.5	10.9
MM056	Lamps and lighting fittings:					
	Number of establishments	1,550	1,550	1,550	1,500	1,500
	Employees (thousands)	62	62	62	61	61
	Capacity utilization (percent)	88	87	85	84	85
	U.S. shipments (million dollars)	9,990	10,090	9,500	9,400	9,500
	U.S. exports (million dollars)	619	585	678	648	671
	U.S. imports (million dollars)	3,167	3,858	4,496	4,148	4,605
	Apparent U.S. consumption (million dollars)	12,538	13,362	13,318	12,900	13,434
	Trade balance (million dollars)	-2,548	-3,272	-3,818	-3,500	-3,934
	Ratio of imports to consumption (percent)	25.3	28.9	33.8	32.2	34.3
	Ratio of exports to shipments (percent)	6.2	5.8	7.1	6.9	7.1
MM057	Prefabricated buildings:					
	Number of establishments	1,700	1,700	1,725	1,725	1,716
	Employees (thousands)	95	101	104	104	104
	Capacity utilization (percent)	73	73	74	74	74
	U.S. shipments (million dollars)	14,102	14,341	11,853	10,558	10,500
	U.S. exports (million dollars)	385	327	331	291	275
	U.S. imports (million dollars)	160	221	281	308	341
	Apparent U.S. consumption (million dollars)	13,878	14,234	11,803	10,575	10,566
	Trade balance (million dollars)	224	107	50	-17	-66
	Ratio of imports to consumption (percent)	1.2	1.5	2.4	2.9	3.2
	Ratio of exports to shipments (percent)	2.7	2.3	2.8	2.8	2.6
MM058	Dolls:					
	Number of establishments	150	150	150	150	148
	Employees (thousands)	3	3	2	2	2
	Capacity utilization (percent)	47	47	47	47	47
	U.S. shipments (million dollars)	124	116	108	92	91
	U.S. exports (million dollars)	28	25	30	33	24
	U.S. imports (million dollars)	1,484	1,374	1,475	1,218	1,257
	Apparent U.S. consumption (million dollars)	1,579	1,465	1,553	1,278	1,324
	Trade balance (million dollars)	-1,455	-1,349	-1,445	-1,186	-1,233
	Ratio of imports to consumption (percent)	93.9	93.8	95.0	95.3	94.9
	Ratio of exports to shipments (percent)	22.9	21.3	27.5	35.4	26.2

See footnote(s) at end of table.

Table C-10–*Continued*
Miscellaneous manufactures: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM059	Toys:					
	Number of establishments	333	330	330	330	330
	Employees (thousands)	31	36	30	30	20
	Capacity utilization (percent)	62	62	62	60	60
	U.S. shipments (million dollars)	2,414	2,378	2,392	2,307	2,272
	U.S. exports (million dollars)	540	497	532	489	424
	U.S. imports (million dollars)	7,588	7,978	8,462	7,905	8,292
	Apparent U.S. consumption (million dollars)	9,462	9,859	10,322	9,723	10,140
	Trade balance (million dollars)	-7,048	-7,481	-7,930	-7,416	-7,868
	Ratio of imports to consumption (percent)	80.2	80.9	82.0	81.3	81.8
	Ratio of exports to shipments (percent)	22.4	20.9	22.3	21.2	18.7
MM060	Games:					
	Number of establishments	300	300	300	300	300
	Employees (thousands)	25	23	21	21	21
	Capacity utilization (percent)	79	78	78	80	80
	U.S. shipments (million dollars)	3,155	3,053	2,838	2,794	2,750
	U.S. exports (million dollars)	913	936	944	788	858
	U.S. imports (million dollars)	4,182	4,086	3,879	5,537	5,887
	Apparent U.S. consumption (million dollars)	6,424	6,203	5,773	7,542	7,779
	Trade balance (million dollars)	-3,269	-3,150	-2,935	-4,748	-5,029
	Ratio of imports to consumption (percent)	65.1	65.9	67.2	73.4	75.7
	Ratio of exports to shipments (percent)	28.9	30.7	33.3	28.2	31.2
MM061	Sporting goods:					
	Number of establishments	2,144	2,140	2,140	2,140	2,140
	Employees (thousands)	62	56	51	46	42
	Capacity utilization (percent)	70	68	68	68	68
	U.S. shipments (million dollars)	9,586	9,499	9,412	9,326	9,557
	U.S. exports (million dollars)	1,688	1,621	1,679	1,672	1,537
	U.S. imports (million dollars)	3,041	3,027	3,565	3,632	3,859
	Apparent U.S. consumption (million dollars)	10,939	10,906	11,298	11,286	11,879
	Trade balance (million dollars)	-1,353	-1,407	-1,886	-1,960	-2,322
	Ratio of imports to consumption (percent)	27.8	27.8	31.6	32.2	32.5
	Ratio of exports to shipments (percent)	17.6	17.1	17.8	17.9	16.1
MM062	Smokers' articles:					
	Number of establishments	11	11	10	10	10
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	75	80	80	80	80
	U.S. shipments (million dollars)	200	210	222	230	222
	U.S. exports (million dollars)	71	71	77	77	82
	U.S. imports (million dollars)	145	134	140	163	139
	Apparent U.S. consumption (million dollars)	274	273	285	316	279
	Trade balance (million dollars)	-74	-63	-63	-86	-57
	Ratio of imports to consumption (percent)	53.0	49.0	49.3	51.6	50.0
	Ratio of exports to shipments (percent)	35.6	33.8	34.9	33.5	37.1
MM063A	Brooms and brushes:					
	Number of establishments	180	175	175	175	170
	Employees (thousands)	6	6	6	6	5
	Capacity utilization (percent)	75	75	75	73	70
	U.S. shipments (million dollars)	1,500	1,600	1,875	1,851	1,900
	U.S. exports (million dollars)	160	179	214	187	185
	U.S. imports (million dollars)	478	614	625	697	815
	Apparent U.S. consumption (million dollars)	1,819	2,035	2,285	2,361	2,530
	Trade balance (million dollars)	-319	-435	-410	-510	-630
	Ratio of imports to consumption (percent)	26.3	30.2	27.3	29.5	32.2
	Ratio of exports to shipments (percent)	10.7	11.2	11.4	10.1	9.7

See footnote(s) at end of table.

Table C-10–*Continued*
Miscellaneous manufactures: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM063B	Hair grooming articles, non-electric (except brushes):					
	Number of establishments	95	90	90	88	88
	Employees (thousands)	3	3	3	3	3
	Capacity utilization (percent)	80	80	85	84	85
	U.S. shipments (million dollars)	575	580	585	572	575
	U.S. exports (million dollars)	24	27	28	25	20
	U.S. imports (million dollars)	219	341	234	197	184
	Apparent U.S. consumption (million dollars)	770	895	790	744	739
	Trade balance (million dollars)	-195	-315	-205	-172	-164
	Ratio of imports to consumption (percent)	28.5	38.1	29.6	26.5	24.9
	Ratio of exports to shipments (percent)	4.2	4.6	4.8	4.4	3.5
MM064	Works of art and miscellaneous manufactured goods:					
	Number of establishments	2,950	3,000	3,050	3,100	3,200
	Employees (thousands)	110	115	119	121	125
	Capacity utilization (percent)	73	73	73	72	73
	U.S. shipments (million dollars)	35,270	37,000	38,340	39,100	41,100
	U.S. exports (million dollars)	1,685	1,731	2,142	2,177	1,379
	U.S. imports (million dollars)	7,230	8,463	9,641	9,312	9,274
	Apparent U.S. consumption (million dollars)	40,815	43,732	45,839	46,236	48,995
	Trade balance (million dollars)	-5,545	-6,732	-7,499	-7,136	-7,895
	Ratio of imports to consumption (percent)	17.7	19.4	21.0	20.1	18.9
	Ratio of exports to shipments (percent)	4.8	4.7	5.6	5.6	3.4
MM065	Apparel fasteners:					
	Number of establishments	90	90	90	90	85
	Employees (thousands)	5	5	4.5	4.3	4.5
	Capacity utilization (percent)	90	90	85	83	85
	U.S. shipments (million dollars)	550	570	576	553	570
	U.S. exports (million dollars)	136	140	183	154	157
	U.S. imports (million dollars)	103	89	85	73	65
	Apparent U.S. consumption (million dollars)	517	519	478	472	478
	Trade balance (million dollars)	33	51	98	81	92
	Ratio of imports to consumption (percent)	19.9	17.1	17.8	15.5	13.6
	Ratio of exports to shipments (percent)	24.7	24.5	31.7	27.8	27.6
MM066A	Small arms and ammunition:					
	Number of establishments	300	290	280	280	280
	Employees (thousands)	19	18	17	17	17
	Capacity utilization (percent)	70	70	70	75	75
	U.S. shipments (million dollars)	2,700	2,610	2,500	2,650	2,650
	U.S. exports (million dollars)	571	464	535	558	480
	U.S. imports (million dollars)	520	608	637	679	800
	Apparent U.S. consumption (million dollars)	2,649	2,754	2,602	2,770	2,970
	Trade balance (million dollars)	51	-144	-102	-120	-320
	Ratio of imports to consumption (percent)	19.6	22.1	24.5	24.5	26.9
	Ratio of exports to shipments (percent)	21.2	17.8	21.4	21.1	18.1

See footnote(s) at end of table.

Table C-10–*Continued*
Miscellaneous manufactures: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM067	Seats for motor vehicles and aircraft:					
	Number of establishments	200	200	200	190	190
	Employees (thousands)	23	25	25	23	24
	Capacity utilization (percent)	76	76	75	75	77
	U.S. shipments (million dollars)	6,540	7,520	7,725	7,030	7,400
	U.S. exports (million dollars)	1,881	1,878	1,861	1,808	1,641
	U.S. imports (million dollars)	2,610	3,024	3,209	3,239	3,886
	Apparent U.S. consumption (million dollars)	7,268	8,666	9,073	8,461	9,645
	Trade balance (million dollars)	-728	-1,146	-1,348	-1,431	-2,245
	Ratio of imports to consumption (percent)	35.9	34.9	35.4	38.3	40.3
	Ratio of exports to shipments (percent)	28.8	25.0	24.1	25.7	22.2

Note.–Calculations based on unrounded data.

APPENDIX D
Industry/Commodity Groups with Most Significant Shifts, 2001 and 2002, and Additional Statistical Tables

Table D-1
Domestic export increases: Ranking of top 20 industry/commodity groups, 2001 and 2002

USITC code	Industry/commodity group	U.S. exports 2001	U.S. exports 2002	Change, 2002 from 2001 Absolute	Change, 2002 from 2001 *Percent*
		Million Dollars			
Rank order based on change in absolute value growth:					
ET009	Motor vehicles	22,651	26,209	3,559	15.7
ET002	Internal combustion piston engines, other than for aircraft	12,408	13,069	661	5.3
CH025	Medicinal chemicals	18,169	18,742	573	3.2
CH006	Natural gas and components	1,109	1,675	566	51.0
AG030	Cereals	9,397	9,929	532	5.7
CH010	Organic commodity chemicals	1,494	2,010	515	34.5
AG033	Animal or vegetable fats and oils	1,405	1,917	512	36.4
AG064	Certain specialty papers	618	1,056	439	71.0
CH036	Other plastics in primary forms	6,766	7,189	423	6.3
CH046	Fabrics	6,162	6,485	323	5.2
CH002	Nuclear materials	1,239	1,510	270	21.8
AG020	Edible nuts	1,309	1,542	233	17.8
MM078	Farm and garden machinery and equipment	4,565	4,747	182	4.0
ET036	Photographic film and paper	1,953	2,127	174	8.9
CH031	Polyethylene resins in primary forms	2,416	2,590	173	7.2
MM051	Precious jewelry and related articles	1,659	1,826	167	10.1
MM023	Iron and steel waste and scrap	1,151	1,307	157	13.6
AG032	Oilseeds	5,642	5,790	148	2.6
AG031	Milled grains, malts, and starches	446	594	147	33.0
AG059	Wood pulp and wastepaper	3,711	3,853	142	3.8
Rank order based on change in percentage growth:					
AG048	Wool and other animal hair	11	26	15	133.8
CH007	Major primary olefins	120	245	125	104.2
AG064	Certain specialty papers	618	1,056	439	71.0
CH006	Natural gas and components	1,109	1,675	566	51.0
AG033	Animal or vegetable fats and oils	1,405	1,917	512	36.4
CH010	Organic commodity chemicals	1,494	2,010	515	34.5
AG031	Milled grains, malts, and starches	446	594	147	33.0
CH022	Photographic chemicals and preparations	413	522	109	26.5
MM005	Lead ores, concentrates, and residues	108	133	24	22.4
CH002	Nuclear materials	1,239	1,510	270	21.8
CH009	Primary aromatics	122	148	26	21.5
AG020	Edible nuts	1,309	1,542	233	17.8
CH044	Natural rubber	34	40	6	16.7
AG015	Seeds	768	892	124	16.2
ET009	Motor vehicles	22,651	26,209	3,559	15.7
AG058	Cork and rattan	53	61	8	14.8
MM023	Iron and steel waste and scrap	1,151	1,307	157	13.6
MM006	Zinc ores, concentrates, and residues	299	339	41	13.6
AG056	Tools and tool handles of wood	37	42	5	13.1
CH030	Explosives, propellant powders, and related items	254	286	32	12.7

Note.—Calculations based on unrounded data.

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

Table D-2
Domestic export declines: Ranking of top 20 industry/commodity groups, 2001 and 2002

USITC code	Industry/commodity group	U.S. exports 2001	U.S. exports 2002	Change, 2002 from 2001 Absolute	Change, 2002 from 2001 *Percent*
		Million Dollars			
Rank order based on change in absolute value decline:					
ET035	Computers, peripherals, and parts	38,125	29,534	-8,591	-22.5
ET017	Telephone and telegraph apparatus	16,506	12,952	-3,554	-21.5
MM020	Precious metals and non-numismatic coins	6,826	5,070	-1,756	-25.7
ET033	Semiconductors and integrated circuits	33,455	31,738	-1,717	-5.1
ET043	Measuring, testing, and controlling instruments	15,605	14,346	-1,259	-8.1
ET037	Optical fibers, optical fiber bundles and cables	1,689	474	-1,216	-72.0
MM087	Semiconductor manufacturing equipment and robotics	8,553	7,341	-1,212	-14.2
ET013	Aircraft, spacecraft, and related equipment	42,535	41,447	-1,089	-2.6
CH049	Apparel	6,537	5,491	-1,046	-16.0
ET001	Aircraft engines and gas turbines	16,524	15,498	-1,025	-6.2
ET023	Radio and television broadcasting equipment	2,321	1,364	-957	-41.2
CH001	Electrical energy	1,258	304	-955	-75.9
MM064	Works of art and miscellaneous manufactured goods	2,177	1,379	-798	-36.7
MM091	Electric motors, generators, and related equipment	4,691	3,923	-769	-16.4
AG063	Printing and writing papers	1,308	620	-688	-52.6
AG045	Cigarettes	2,118	1,463	-655	-30.9
MM092	Electrical transformers, static converters, and inductors	2,436	1,784	-652	-26.8
CH011	Organic specialty chemicals	5,678	5,050	-627	-11.1
ET028	Circuit apparatus not exceeding 1000V	5,098	4,478	-621	-12.2
ET014	Ships, tugs, pleasure boats, and similar vessels	1,820	1,234	-587	-32.2
Rank order based on change in percentage decline:					
CH001	Electrical energy	1,258	304	-955	-75.9
ET037	Optical fibers, optical fiber bundles and cables	1,689	474	-1,216	-72.0
AG063	Printing and writing papers	1,308	620	-688	-52.6
CH004	Crude petroleum	177	92	-85	-48.2
AG050	Ethyl alcohol for nonbeverage purposes	125	71	-53	-42.7
ET023	Radio and television broadcasting equipment	2,321	1,364	-957	-41.2
MM064	Works of art and miscellaneous manufactured goods	2,177	1,379	-798	-36.7
ET014	Ships, tugs, pleasure boats, and similar vessels	1,820	1,234	-587	-32.2
MM022	Ferroalloys	74	50	-23	-31.6
CH019	Synthetic dyes and azoic couplers	361	249	-112	-31.0
AG045	Cigarettes	2,118	1,463	-655	-30.9
ET039	Photographic cameras and equipment	1,694	1,187	-507	-29.9
ET008	Rail locomotive and rolling stock	1,422	1,006	-416	-29.3
MM019	Natural and synthetic gemstones	1,840	1,331	-508	-27.6
MM093	Portable electric handtools	291	212	-79	-27.1
MM092	Electrical transformers, static converters, and inductors	2,436	1,784	-652	-26.8
MM058	Dolls	33	24	-9	-26.8
MM007	Certain ores, concentrates, ash, and residues	248	183	-65	-26.4
MM020	Precious metals and non-numismatic coins	6,826	5,070	-1,756	-25.7
MM049	Umbrellas, whips, riding crops, and canes	11	9	-3	-24.1

Note.—Calculations based on unrounded data.

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

Table D-3
Domestic import increases: Ranking of top 20 industry/commodity groups, 2001 and 2002

USITC code	Industry/commodity group	U.S. imports 2001	U.S. imports 2002	Change, 2002 from 2001 Absolute	Change, 2002 from 2001 *Percent*
		Million Dollars			
Rank order based on change in absolute value growth:					
CH025	Medicinal chemicals	33,956	40,699	6,742	19.9
ET009	Motor vehicles	127,257	133,264	6,007	4.7
CH004	Crude petroleum	49,673	54,704	5,030	10.1
ET010	Certain motor-vehicle parts	23,977	27,761	3,784	15.8
ET040	Medical goods	10,869	13,232	2,363	21.7
MM054	Furniture	14,839	17,028	2,189	14.8
ET022	Television receivers and video monitors	8,615	10,586	1,972	22.9
ET018	Consumer electronics (except televisions)	19,525	21,455	1,931	9.9
MM019	Natural and synthetic gemstones	11,577	13,063	1,486	12.8
ET035	Computers, peripherals, and parts	74,547	75,817	1,270	1.7
MM073	Household appliances, including commercial applications	8,356	9,564	1,208	14.5
ET002	Internal combustion piston engines, other than for aircraft	13,657	14,841	1,184	8.7
CH041	Miscellaneous plastic products	12,376	13,459	1,083	8.8
CH048	Home furnishings	3,332	4,226	894	26.8
ET017	Telephone and telegraph apparatus	27,174	27,948	774	2.8
MM051	Precious jewelry and related articles	5,533	6,261	728	13.2
MM031	Miscellaneous products of base metal	7,107	7,773	666	9.4
MM067	Seats for motor vehicles and aircraft	3,239	3,886	648	20.0
MM068	Wiring harnesses for motor vehicles	4,684	5,302	617	13.2
MM071	Air-conditioning equipment and parts	6,081	6,674	593	9.7
Rank order based on change in percentage growth:					
AG049	Cotton, not carded or combed	4	20	16	384.5
MM008	Precious metal ores and concentrates	14	43	29	205.1
MM004	Copper ores and concentrates	58	105	47	81.5
AG011	Eggs	20	28	8	42.6
AG025	Dried fruit other than tropical	63	90	26	41.7
MM023	Iron and steel waste and scrap	284	397	113	40.0
MM006	Zinc ores, concentrates, and residues	38	53	15	38.1
AG065	Miscellaneous paper products	1,295	1,740	444	34.3
AG026	Frozen fruit	117	152	35	30.0
CH020	Synthetic tanning agents	5	7	1	28.9
CH048	Home furnishings	3,332	4,226	894	26.8
MM034	Metal and ceramic sanitary ware	588	742	154	26.2
MM090	Boilers, turbines, and related machinery	1,204	1,514	310	25.8
AG031	Milled grains, malts, and starches	305	379	74	24.4
ET022	Television receivers and video monitors	8,615	10,586	1,972	22.9
CH044	Natural rubber	613	751	138	22.6
ET040	Medical goods	10,869	13,232	2,363	21.7
AG045	Cigarettes	189	230	41	21.7
MM093	Portable electric handtools	1,185	1,434	249	21.1
AG036	Infant formulas, malt extracts, and other edible preparations	659	795	136	20.6

Note.—Calculations based on unrounded data.

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

Table D-4
Domestic import declines: Ranking of top 20 industry/commodity groups, 2001 and 2002

USITC code	Industry/commodity group	U.S. imports 2001	U.S. imports 2002	Change, 2002 from 2001 Absolute	Change, 2002 from 2001 *Percent*
		Million Dollars			
Rank order based on change in absolute value decline:					
CH006	Natural gas and components	23,054	18,609	-4,445	-19.3
ET033	Semiconductors and integrated circuits	30,016	25,651	-4,365	-14.5
CH005	Petroleum products	34,372	30,594	-3,778	-11.0
ET013	Aircraft, spacecraft, and related equipment	21,027	17,636	-3,391	-16.1
ET001	Aircraft engines and gas turbines	13,548	10,993	-2,555	-18.9
MM020	Precious metals and non-numismatic coins	8,193	6,263	-1,930	-23.6
CH001	Electrical energy	2,681	1,160	-1,520	-56.7
ET023	Radio and television broadcasting equipment	6,066	4,977	-1,089	-17.9
ET037	Optical fibers, optical fiber bundles and cables	1,244	252	-992	-79.8
MM084	Metal cutting machine tools and machine tool accessories	3,407	2,558	-849	-24.9
ET038	Optical goods, including ophthalmic goods	4,957	4,142	-815	-16.4
MM087	Semiconductor manufacturing equipment and robotics	4,389	3,679	-710	-16.2
MM036	Copper and related articles	4,296	3,715	-581	-13.5
AG062	Newsprint	3,597	3,039	-558	-15.5
ET039	Photographic cameras and equipment	3,560	3,029	-531	-14.9
MM041	Certain base metals and chemical elements	2,467	1,952	-515	-20.9
MM085	Metal forming machine tools	1,331	846	-485	-36.4
MM091	Electric motors, generators, and related equipment	7,646	7,177	-468	-6.1
CH012	Certain organic chemicals	5,148	4,699	-449	-8.7
CH016	Fertilizers	3,478	3,043	-435	-12.5
Rank order based on change in percentage decline:					
MM005	Lead ores, concentrates, and residues	1	(1)	-1	-98.5
ET037	Optical fibers, optical fiber bundles and cables	1,244	252	-992	-79.8
CH001	Electrical energy	2,681	1,160	-1,520	-56.7
MM085	Metal forming machine tools	1,331	846	-485	-36.4
MM080	Pulp, paper, and paperboard machinery	1,091	719	-373	-34.1
AG048	Wool and other animal hair	57	42	-16	-27.4
CH033	Polyvinyl chloride resins in primary forms	332	247	-84	-25.4
MM039	Lead and related articles	167	125	-42	-25.2
MM084	Metal cutting machine tools and machine tool accessories	3,407	2,558	-849	-24.9
CH015	Chlor-alkali chemicals	219	166	-53	-24.3
MM020	Precious metals and non-numismatic coins	8,193	6,263	-1,930	-23.6
ET008	Rail locomotive and rolling stock	1,357	1,039	-318	-23.4
MM010	Industrial ceramics	640	497	-143	-22.3
MM041	Certain base metals and chemical elements	2,467	1,952	-515	-20.9
CH008	Other olefins	143	113	-30	-20.8
CH006	Natural gas and components	23,054	18,609	-4,445	-19.3
ET001	Aircraft engines and gas turbines	13,548	10,993	-2,555	-18.9
ET016	Office machines	1,817	1,491	-326	-18.0
ET023	Radio and television broadcasting equipment	6,066	4,977	-1,089	-17.9
CH021	Natural tanning and dyeing materials	65	54	-11	-17.2

[1]Less than $500,000.

Note.—Calculations based on unrounded data.

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

Table D-5
U.S. trade position increases: Ranking of top 30 industry/commodity groups, 2001 and 2002

USITC code	Industry/commodity group	U.S. balance 2001	U.S. balance 2002	Change, 2002 from 2001 Absolute	Change, 2002 from 2001 *Percent*
		Million Dollars			
CH006	Natural gas and components	-21,944	-16,934	5,011	22.8
CH005	Petroleum products	-25,436	-21,931	3,504	13.8
ET033	Semiconductors and integrated circuits	3,439	6,087	2,648	77.0
ET013	Aircraft, spacecraft, and related equipment	21,508	23,811	2,302	10.7
ET001	Aircraft engines and gas turbines	2,976	4,505	1,529	51.4
MM084	Metal cutting machine tools and machine tool accessories	-1,598	-924	674	42.2
ET038	Optical goods, including ophthalmic goods	-1,230	-594	636	51.7
AG064	Certain specialty papers	-449	147	597	(1)
CH001	Electrical energy	-1,423	-857	566	39.8
AG030	Cereals	8,636	9,194	558	6.5
AG062	Newsprint	-3,188	-2,709	479	15.0
MM036	Copper and related articles	-2,444	-1,972	473	19.3
CH016	Fertilizers	-1,295	-859	436	33.7
CH010	Organic commodity chemicals	474	898	425	89.7
AG059	Wood pulp and wastepaper	1,061	1,482	421	39.7
MM085	Metal forming machine tools	-588	-194	394	67.0
AG033	Animal or vegetable fats and oils	277	632	355	128.3
CH012	Certain organic chemicals	2,626	2,969	343	13.1
MM041	Certain base metals and chemical elements	-765	-454	311	40.6
ET024	Electric sound and visual signaling apparatus	-1,020	-755	265	26.0
CH031	Polyethylene resins in primary forms	681	938	257	37.7
MM080	Pulp, paper, and paperboard machinery	-414	-159	255	61.5
CH036	Other plastics in primary forms	4,117	4,366	249	6.1
AG020	Edible nuts	639	841	202	31.7
MM020	Precious metals and non-numismatic coins	-1,366	-1,193	174	12.7
ET036	Photographic film and paper	96	262	166	171.9
CH017	Paints, inks, and related items, and certain components thereof	1,455	1,618	163	11.2
CH002	Nuclear materials	-797	-635	162	20.4
AG032	Oilseeds	5,439	5,599	160	2.9
CH022	Photographic chemicals and preparations	-66	87	153	(1)

[1]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data.

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

Table D-6
U.S. trade position declines: Ranking of top 30 industry/commodity groups, 2001 and 2002

USITC code	Industry/commodity group	U.S. balance 2001	U.S. balance 2002	Change, 2002 from 2001 Absolute	Change, 2002 from 2001 *Percent*
		Million Dollars			
ET035	Computers, peripherals, and parts	-36,422	-46,283	-9,861	-27.1
CH025	Medicinal chemicals	-15,788	-21,957	-6,169	-39.1
CH004	Crude petroleum	-49,496	-54,612	-5,116	-10.3
ET017	Telephone and telegraph apparatus	-10,668	-14,996	-4,328	-40.6
ET010	Certain motor-vehicle parts	2,544	-1,110	-3,654	(1)
MM054	Furniture	-12,150	-14,620	-2,470	-20.3
ET009	Motor vehicles	-104,606	-107,054	-2,448	-2.3
ET040	Medical goods	4,119	1,826	-2,292	-55.7
ET018	Consumer electronics (except televisions)	-16,734	-18,825	-2,091	-12.5
MM019	Natural and synthetic gemstones	-9,737	-11,731	-1,994	-20.5
ET022	Television receivers and video monitors	-7,378	-9,329	-1,952	-26.5
MM073	Household appliances, including commercial applications	-3,130	-4,719	-1,589	-50.8
CH041	Miscellaneous plastic products	185	-892	-1,076	(1)
ET043	Measuring, testing, and controlling instruments	3,799	2,751	-1,049	-27.6
CH049	Apparel	-57,458	-58,436	-978	-1.7
MM071	Air-conditioning equipment and parts	-387	-1,356	-969	-250.0
CH048	Home furnishings	-2,929	-3,863	-934	-31.9
MM067	Seats for motor vehicles and aircraft	-1,431	-2,245	-814	-56.9
MM025	Steel mill products	-6,874	-7,670	-796	-11.6
MM064	Works of art and miscellaneous manufactured goods	-7,136	-7,895	-759	-10.6
AG045	Cigarettes	1,930	1,234	-696	-36.1
MM031	Miscellaneous products of base metal	-1,843	-2,491	-647	-35.1
CH039	Pneumatic tires and tubes (new)	-1,864	-2,460	-597	-32.0
ET014	Ships, tugs, pleasure boats, and similar vessels	410	-179	-589	(1)
AG005	Poultry	2,279	1,705	-573	-25.2
MM051	Precious jewelry and related articles	-3,874	-4,435	-561	-14.5
AG066	Printed matter	817	263	-554	-67.8
AG037	Cocoa, chocolate, and confectionery	-1,304	-1,846	-542	-41.6
MM090	Boilers, turbines, and related machinery	-98	-622	-524	-536.6
MM068	Wiring harnesses for motor vehicles	-3,818	-4,341	-523	-13.7

[1]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data.

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

Table D-7
U.S. trade balance deficit: Top 30 industry/commodity groups, ordered by 2002 deficit

USITC code	Industry/commodity group	U.S. balance 2001	U.S. balance 2002	Change, 2002 from 2001 Absolute	Change, 2002 from 2001 *Percent*
		Million Dollars			
ET009	Motor vehicles	-104,606	-107,054	-2,448	-2.3
CH049	Apparel	-57,458	-58,436	-978	-1.7
CH004	Crude petroleum	-49,496	-54,612	-5,116	-10.3
ET035	Computers, peripherals, and parts	-36,422	-46,283	-9,861	-27.1
CH025	Medicinal chemicals	-15,788	-21,957	-6,169	-39.1
CH005	Petroleum products	-25,436	-21,931	3,504	13.8
ET018	Consumer electronics (except televisions)	-16,734	-18,825	-2,091	-12.5
CH006	Natural gas and components	-21,944	-16,934	5,011	22.8
ET017	Telephone and telegraph apparatus	-10,668	-14,996	-4,328	-40.6
CH051	Footwear	-14,611	-14,860	-248	-1.7
MM054	Furniture	-12,150	-14,620	-2,470	-20.3
MM019	Natural and synthetic gemstones	-9,737	-11,731	-1,994	-20.5
ET022	Television receivers and video monitors	-7,378	-9,329	-1,952	-26.5
MM064	Works of art and miscellaneous manufactured goods	-7,136	-7,895	-759	-10.6
MM059	Toys	-7,416	-7,868	-452	-6.1
MM025	Steel mill products	-6,874	-7,670	-796	-11.6
AG009	Shellfish	-5,200	-5,172	27	0.5
MM060	Games	-4,748	-5,029	-280	-5.9
AG052	Lumber	-5,073	-4,927	146	2.9
MM073	Household appliances, including commercial applications	-3,130	-4,719	-1,589	-50.8
MM051	Precious jewelry and related articles	-3,874	-4,435	-561	-14.5
MM068	Wiring harnesses for motor vehicles	-3,818	-4,341	-523	-13.7
MM046	Luggage, handbags, and flat goods	-4,001	-4,134	-133	-3.3
MM056	Lamps and lighting fittings	-3,500	-3,934	-434	-12.4
CH048	Home furnishings	-2,929	-3,863	-934	-31.9
MM037	Unwrought aluminum	-3,825	-3,824	0	([1])
AG063	Printing and writing papers	-3,453	-3,752	-299	-8.7
ET023	Radio and television broadcasting equipment	-3,745	-3,613	132	3.5
MM009	Cement, stone, and related products	-3,085	-3,332	-247	-8.0
MM091	Electric motors, generators, and related equipment	-2,954	-3,255	-300	-10.2

[1]Less than 0.05 percent.

Note.—Calculations based on unrounded data.

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

Table D-8
U.S. trade balance surplus: Top 30 industry/commodity groups, ordered by 2002 surplus

USITC code	Industry/commodity group	U.S. balance 2001	U.S. balance 2002	Change, 2002 from 2001 Absolute	Change, 2002 from 2001 *Percent*
		Million Dollars			
ET013	Aircraft, spacecraft, and related equipment	21,508	23,811	2,302	10.7
AG030	Cereals	8,636	9,194	558	6.5
ET033	Semiconductors and integrated circuits	3,439	6,087	2,648	77.0
AG032	Oilseeds	5,439	5,599	160	2.9
ET001	Aircraft engines and gas turbines	2,976	4,505	1,529	51.4
CH036	Other plastics in primary forms	4,117	4,366	249	6.1
ET004	Construction and mining equipment	4,643	4,202	-441	-9.5
MM087	Semiconductor manufacturing equipment and robotics	4,164	3,662	-502	-12.1
AG013	Animal feeds	3,881	3,518	-363	-9.3
CH012	Certain organic chemicals	2,626	2,969	343	13.1
ET043	Measuring, testing, and controlling instruments	3,799	2,751	-1,049	-27.6
AG049	Cotton, not carded or combed	2,160	1,995	-166	-7.7
ET040	Medical goods	4,119	1,826	-2,292	-55.7
AG036	Infant formulas, malt extracts, and other edible preparations	2,070	1,787	-283	-13.7
AG061	Industrial papers and paperboards	2,127	1,764	-363	-17.1
ET020	Prerecorded media	1,935	1,761	-174	-9.0
AG005	Poultry	2,279	1,705	-573	-25.2
CH017	Paints, inks, and related items, and certain components thereof	1,455	1,618	163	11.2
AG059	Wood pulp and wastepaper	1,061	1,482	421	39.7
AG046	Hides, skins, and leather	1,617	1,456	-162	-10.0
AG045	Cigarettes	1,930	1,234	-696	-36.1
ET031	Cathode-ray tubes	1,444	1,155	-289	-20.0
ET021	Navigational instruments and remote control apparatus	1,306	1,063	-243	-18.6
MM066	Arms and ammunition	1,280	1,040	-240	-18.8
CH028	Soaps, detergents, and surface-active agents	1,107	1,009	-99	-8.9
CH029	Miscellaneous chemicals and specialties	1,006	944	-62	-6.1
CH031	Polyethylene resins in primary forms	681	938	257	37.7
CH032	Polypropylene resins in primary forms	881	929	48	5.4
MM023	Iron and steel waste and scrap	867	911	43	5.0
AG051	Logs and rough wood products	1,039	907	-132	-12.7

Note.—Calculations based on unrounded data.

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

APPENDIX E
Definitions of Selected Country Groups

ASEAN (ASSOCIATION OF SOUTHEAST ASIAN NATIONS)

Brunei
Burma (Myanmar)
Cambodia
Indonesia
Laos
Malaysia
Philippines
Singapore
Thailand
Vietnam

ASIA

Afghanistan
Bangladesh
Bhutan
Brunei
Burma (Myanmar)
Cambodia
China
Hong Kong
India
Indonesia
Japan
Korea
Laos
Macao
Malaysia
Maldive Islands
Mongolia
Nepal
North Korea
Pakistan
Philippines
Singapore
Sri Lanka
Taiwan
Thailand
Vietnam

CBERA (CARIBBEAN BASIN ECONOMIC RECOVERY ACT) BENEFICIARIES

Antigua and Barbuda
Aruba
The Bahamas
Barbados
Belize
British Virgin Islands
Costa Rica
Dominica
Dominican Republic
El Salvador
Grenada
Guatemala
Guyana
Haiti
Honduras
Jamaica
Montserrat
Netherlands Antilles
Nicaragua
Panama
St. Kitts and Nevis
St. Lucia
St. Vincent and the Grenadines
Trinidad and Tobago

CENTRAL AND EASTERN EUROPE

Albania
Bosnia-Hercegovina
Bulgaria
Croatia
Czech Republic
Hungary
Macedonia
Poland
Romania
Slovakia
Slovenia
Yugoslavia (Serbia and Montenegro)

EU/EU-15 (EUROPEAN UNION)

Austria
Belgium
Denmark
Finland
France
Germany
Greece
Ireland
Italy
Luxembourg
Netherlands
Portugal
Spain
Sweden
United Kingdom

LATIN AMERICA

Anguilla
Antigua and Barbuda
Argentina
Aruba
The Bahamas
Barbados
Belize
Bermuda
Bolivia
Brazil
British Virgin Islands
Cayman Islands
Chile
Colombia
Costa Rica
Cuba
Dominica Island
Dominican Republic
Ecuador
El Salvador
Falkland Islands
French Guiana
Grenada
Guadeloupe
Guatemala
Guyana
Haiti
Honduras
Jamaica
Martinique
Mexico
Montserrat
Netherlands Antilles
Nicaragua

LATIN AMERICA–*Continued*

Panama
Paraguay
Peru
St. Kitts and Nevis
St. Lucia
St. Pierre and Miquelon
St. Vincent and the Grenadines
Suriname
Trinidad and Tobago
Turks and Caicos Islands
Uruguay
Venezuela

NAFTA (NORTH AMERICAN FREE TRADE AGREEMENT) PARTNERS

Canada
United States
Mexico

OPEC (ORGANIZATION OF PETROLEUM EXPORTING COUNTRIES)

Algeria
Indonesia
Iran
Iraq
Kuwait
Libya
Nigeria
Qatar
Saudi Arabia
United Arab Emirates
Venezuela

SUB-SAHARAN AFRICA

Angola
Benin
Botswana
Burkina Faso
Burundi
Cameroon
Cape Verde
Central African Republic
Chad
Comoros
Democratic Republic of the Congo (Congo-Kinshasa)
Republic of the Congo (Congo-Brazzaville)
Côte d'Ivoire
Djibouti
Equatorial Guinea
Eritrea
Ethiopia
Gabon
The Gambia
Ghana
Guinea
Guinea-Bissau
Kenya

SUB-SAHARAN AFRICA–*Continued*

Lesotho
Liberia
Madagascar
Malawi
Mali
Mauritania
Mauritius
Mozambique
Namibia
Niger
Nigeria
Rwanda
São Tomé and Príncipe
Senegal
Seychelles
Sierra Leone
Somalia
South Africa
Sudan
Swaziland
Tanzania
Togo
Uganda
Zambia
Zimbabwe

APPENDIX F
Background on Exchange Rate Shifts

Introduction

This appendix provides a general background on exchange rates and is divided into three sections. In the first section, exchange rate stability and convertibility are discussed. A profile of Argentina's current economic situation, which resulted in Argentina's withdrawal from its currency board-based monetary policy of trading foreign exchange for domestic currency, is included in this section. The second section provides a brief overview of exchange rate determinants and the relationship between exchange rates and merchandise (goods) trade flows. The third section presents nominal exchange rates against the dollar on an annual basis during 1998-2002 for selected individual countries and indices of nominal and real exchange rates for the dollar versus the currencies of selected country groups. Exchange rate movements and policy actions by monetary authorities in 2002 are also discussed in the section, with an emphasis on the depreciation of the Japanese yen and the appreciation of the euro.

Exchange Rate Stability and Convertibility

Exchange rates are dependent on basic macroeconomic factors, domestic monetary and fiscal policies, independence of the country's central bank, exchange controls and openness of its capital market,[1] and the country's exchange rate arrangements (the mechanisms by which the exchange rate is established), which range from market-determined exchange rates (freely floating exchange rates or "clean" float) to fixed-rate systems.[2] Under a system of flexible or floating exchange rates, market or nominal exchange rates[3] (reported in the financial pages of major newspapers) of freely convertible currencies are determined by the supply of and demand for those currencies in the foreign exchange market.[4] The supply of and demand for foreign currencies depends upon the demand for international transactions of goods, services, and assets. Foreign demand for U.S. dollars is based on foreigners' purchases of U.S. goods and services, investments in the United States, and holdings of dollar balances. Likewise, the supply of U.S. dollars outside the United States is based on U.S. citizens' purchases of foreign goods and services, investments abroad, and holdings of balances in foreign currencies.

Under a floating exchange rate system, macroeconomic changes and shifts in other determinants of supply and demand show up directly as exchange rate movements; however, with a fixed exchange rate, the same changes take place in foreign currency reserves. If the economic fundamentals cause the reserves to get too small, it can lead to a speculative crisis and sudden devaluation, or abandonment of the fixed exchange rate system. The U.S. dollar is a freely floating currency.

Many governments intervene in foreign exchange markets, and for a variety of reasons.[5] U.S. authorities purchase dollars from time to time to resist downward pressure on the dollar exchange rate and occasionally sell dollars to resist upward pressure. During 1998, U.S. monetary authorities intervened in the foreign-exchange markets on one occasion to prop up the Japanese yen, on June 17, selling a total of $833

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[1] For a definition of exchange convertibility and restrictions on convertibility, by country, see International Monetary Fund (IMF), *Exchange Arrangements and Exchange Restrictions, Annual Report 1999* (Washington, DC: IMF, Aug. 27, 2000).

[2] For a description of the types of exchange-rate arrangements that exist, each of which represents efforts by the central bank to stabilize the country's exchange rate against those of its trade partners, see Ibid., Appendix 1. Also, for a chart of exchange rate arrangements, see IMF, *International Financial Statistics*, monthly series, p. 8.

[3] Nominal exchange rates, unlike real exchange rates (discussed later), are not adjusted for inflation.

[4] Macroeconomic factors (including monetary and fiscal policies) influence the supply and demand for currencies.

[5] Foreign-exchange market intervention consists of the official purchases and sales of foreign exchange that nations undertake through their central banks to influence the values of their currencies. For motives behind why countries intervene in the foreign exchange market, see IMF, *Exchange Arrangements and Exchange Restrictions, Annual Report 1999*.

million and buying Japanese yen.[6] On September 22, 2000, in coordination with the European Central Bank (ECB) and the monetary authorities of Canada, Japan, and the United Kingdom, the United States purchased 1.5 billion euros. Following the terrorist attacks on September 11, 2001, the Federal Reserve established 30-day reciprocal swap arrangements with the ECB, the Bank of England, and the Bank of Canada to facilitate the functioning of financial markets and provide liquidity in U.S. dollars. The ECB drew on this swap facility three times.[7] The U.S. monetary authorities did not intervene in the foreign exchange markets during 1999 or 2002.[8]

Most of the leading U.S. trade partners also maintain floating exchange rates, and their central banks intervene selectively or not at all.[9] Several others prefer to maintain an organized floating exchange rate, or a managed float. For example, the People's Bank of China announces a daily reference rate against the U.S. dollar, the Hong Kong dollar, and the Japanese yen based on the weighted-average price of foreign-exchange transactions of the previous day. This reference rate establishes the current day's maximum trading limits in the interbank foreign-exchange market. The central banks of several other countries have announced their intentions to intervene should they consider market conditions disorderly[10] or if their currency's foreign-exchange value fluctuates beyond a stated range of parity against other currencies or a basket of currencies. Other countries have chosen to maintain the value of their currency through such arrangements as dollarization (see text box below) and currency boards.

Currency Boards

Under a currency-board arrangement, monetary authorities commit to trade foreign exchange for domestic currency on demand at a fixed rate.[11] The domestic currency is backed by corresponding reserves of foreign exchange, usually at 100 percent or more.[12] Trading foreign exchange for domestic currency is the only way the central bank can increase money supply, as it may not print money without having an equal amount of foreign-exchange reserves. There is also a long-term commitment to the currency-board system, often set into the central-bank law. Table F-1 provides a list of country that have adopted a currency board.

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[6] The mark, the yen, and the euro have been the only three currencies in which the United States has conducted its intervention operations.

[7] Drawing on a swap facility refers to borrowing money that was previously set aside for that purpose. The ECB repaid this money by the end of 2001. Federal Reserve Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations*, Jul.-Sep. 2001, p. 1.

[8] Ibid. (various issues).

[9] Those allowing their currency's exchange value to float freely include the European Monetary Union, Canada, Japan, Korea, Mexico, Singapore, and Taiwan.

[10] Economic actors, such as central bankers and government officials, within a country who do not believe the market has full information about the country's economic situation or who do not believe the market prices the currency at its true value may consider the foreign exchange market to be disorderly. Disorderly markets also refer to markets with excessive fluctuations.

[11] Kurt Schuler, *Introduction to Currency Boards*, p. 1, found at *http://users.erols.com/kurrency/intro.htm*, retrieved Feb. 19, 2002.

[12] Having more than 100 percent of a country's money supply backed by reserves permits a "safety margin" and allows for limited intervention in the case of unexpected economic or banking system difficulties without violating currency board rules. Charles Enoch and Anne-Marie Gulde, "Are Currency Boards a Cure for All Monetary Problems?," *Finance & Development*, Vol. 35, No. 4, Dec. 1998, p. 5.

Dollarization

Dollarization is a process in which a country officially or unofficially uses a foreign currency (such as the U.S. dollar) as its domestic currency or as a unit of account alongside its domestic currency.[1] When the term is used to refer to the dollar's total replacement of the domestic currency, it is referred to as full dollarization. The primary attraction of dollarization is one of confidence. Under full dollarization, all values, including the entire monetary accounting system, are converted to a dollar basis. As the preferred international monetary asset, the dollar is perceived to ensure currency stability, at least more so than other national currencies. Adoption of the dollar fixes the exchange rate, hence reducing transactions costs and risks that discourage trade and investment.[2] Moreover, risk premiums[3] and historical tendencies toward inflation are reduced or eliminated and fiscal-policy discipline is encouraged as the central bank can no longer print money.

However, the loss of monetary autonomy is one of the principal drawbacks of dollarization because it also means a loss of an independent monetary policy. If a country adopts a foreign currency, then its monetary policy is the monetary policy of the foreign country.[4] Conversion to the U.S. dollar (a foreign currency) may imply an appreciation of the real exchange rate relative to that which would have prevailed under an independent domestic currency. There is also the loss of the central bank's function as a lender of last resort. In a monetary crisis, the central bank cannot as easily obtain sufficient funds to rescue domestic commercial banks.[5] Profits from seigniorage, the difference between the cost of printing money and its face value, are lost; any such profits would be gained by the United States, although seigniorage is generally a very small amount in the United States.[6] When a country is first undertaking dollarization, the price competitiveness of the newly dollarized country's goods in foreign markets may decrease and exports may be discouraged, as the U.S. dollar (as currently) and most other foreign currencies that may be adopted are worth more than most other currencies. Moreover, dollarization does not exempt a country from the market forces it would otherwise be exposed to. If foreigners fail to demand domestic goods and assets to sufficiently cover import demands, the result is a decreased domestic supply of dollars with a corresponding loss in liquidity and a drop in domestic prices. With an independent currency, the same set of conditions is experienced as a depreciation (for a floating currency) or as an exhaustion of reserves, speculative attack and eventual devaluation (for a fixed currency).

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[1] However, dollarization does not occur when a currency is simply pegged to a foreign currency such as the U.S. dollar. In recent publications by the Federal Reserve and the Joint Economic Committee, the term "dollarization" has been increasingly used to refer to all instances in which the domestic currency was replaced by or co-exists with a foreign currency and not only those in which the U.S. dollar was adopted to replace or co-exist with the domestic currency.

[2] Jeffrey A. Frankel, "Dollarization: Fad or Future for Latin America," *IMF Economic Forum*, June 24, 1999, p. 3.

[3] Risk premiums are extra returns on investments that investors expect to receive due to high uncertainty. For example, an investor would expect to receive a higher return from common stocks than from bonds. In the United States, a risk premium is usually measured by subtracting the interest rate on short-term Treasury bills (the risk-free asset) from the rate of return on another, riskier investment.

[4] David D. Hale, "Should Argentina Dollarize? No Way," *The International Economy*, May/June 1999, p. 58.

[5] The central bank can arrange for lines of credit from foreign sources, or branches of foreign banks can provide this liquidity. Studies have suggested that this loss may even be a benefit as dollarized countries have had systemwide problems that were weathered at less taxpayer expense than countries with central banks. Kurt Schuler, "Basics of Dollarization," *Joint Economic Committee Staff Report*, U.S. Congress, Jan. 2000, p. 15.

[6] These seigniorage profits amount to about 1 percent of gross domestic product (GDP) per year in the United States. Kurt Schuler, *Introduction to Currency Boards*, p. 2, found at *http://users.erols.com/kurrency/intro.htm*, retrieved Feb. 19, 2002.

Table F-1
Countries and territories that officially adopted a currency board, as of June 2002

Linked currency	Country
U.S. dollar	Bermuda, Cayman Islands, Djibouti, Hong Kong
Euro	Bosnia, Bulgaria, Estonia, Lithuania
Singapore dollar	Brunei
British pound	Falkland Islands, Gibraltar
Danish krone	Faroe Islands

Note.–Bosnia, Brunei, Bulgaria, Djibouti, Estonia, and Lithuania are currency board-like systems, while the other countries are orthodox currency boards.

Source: Kurt Schuler, Currency Boards and Dollarization, found at *http://users.erols.com/kurrency/intro.htm*, retrieved Feb. 11, 2003; and other public sources.

Currency boards have certain advantages, including the assurance of convertibility, a macroeconomic discipline that limits budget deficits and inflation, and enhanced confidence in the country's monetary system as each unit of domestic currency is backed by foreign currency.[13] Low inflation and lower interest rates are also often advantages of currency board arrangements.[14] A currency board also generates seigniorage from the difference between the interest earned on its reserve assets less the expense of maintaining its notes and coins in circulation.

However, there are also disadvantages associated with currency boards. Setting up a currency board may be costly, as it may prove difficult to gather enough foreign reserves to back the monetary base 100 percent. There is also a cost associated with gathering foreign currency. A currency board does not allow a country to pursue monetary policy to stabilize the domestic economy; governments can only finance their spending through borrowing and taxation. It also may not act as a lender of last resort to troubled banks, so the banking system within the country must be strong and stable.[15]

Unlike pure currency-board systems, the domestic currency of countries with currency board-like systems is not backed 100 percent by foreign reserves of the selected currency. A currency board-like system is a central bank that retains many of its old powers, but is constrained by rules regarding the exchange rate and reserves like currency boards. A potential problem with this type of currency board system is that loopholes allow the central banks discretionary power.[16] Argentina had a currency board-like system during 1991-2001.

Argentina's Convertibility Law, which took effect in 1991 to restore confidence in Argentina's economy and check hyperinflation, set up a currency board-like system. Although this system guaranteed the convertibility of pesos into U.S. dollars at a one-to-one fixed rate,[17] The law required an official foreign reserve ratio of only 66 percent. As the actual foreign reserve ratio of that country was about 90 percent, 24 percent above that required by law, the central bank had freedom to conduct discretionary monetary policy.

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[13] John Williamson, *Currency Boards Are Not The Answer,* Institute for International Economics, News Release, found at *http://www.iie.com/press/cboard.htm*, retrieved Feb. 19, 2002.

[14] Enoch and Gulde, "Are Currency Boards a Cure for All Monetary Problems?," p. 2.

[15] Williamson, *Currency Boards Are Not The Answer.*

[16] See next section on Argentina's economic crisis for more on currency board-like systems.

[17] J. F. Hornbeck, "The Argentine Financial Crisis: A Chronology of Events," *CRS Report for Congress*, Jan. 31, 2002.

According to testimony before the United States Congress, the Argentine Government retained the power to regulate banks and served as an unofficial lender of last resort,[18] much like a central bank. The Government reportedly manipulated the exchange rate[19] and restricted convertibility,[20] causing investor concern as to the long-term commitment of Argentina to the currency board-like system. This aspect of Argentina's currency board system, according to the testimony, left it open to speculative attacks and may have played a part in its crisis.

Argentina's economy grew quickly in the early 1990s and then more moderately throughout subsequent years. According to one observer, the country coped well with a series of external shocks, including economic crises in Mexico and Brazil that impacted Argentina's trade relationship with these major trading partners.[21] Although many experts assert that the Argentine peso was overvalued, other experts claim that it was not, as Argentina's exports increased almost every year (except in 1999) under the Convertibility Law.[22] Reportedly, however, Argentina did experience high government spending, contributing to a fiscal deficit, even during years of healthy economic growth. Another observer points out that the country had weaknesses in the banking system, as banks were permitted to hold government debt as part of their reserve requirement, exposing them to the public sector.[23] The Argentine Government reportedly attempted to reduce the public sector deficit by raising income taxes in 2000 and adding a financial transaction tax in 2001, even though the economy had been in recession since 1998; tax revenues actually fell, making the government's debt even more of a problem.

Political instability heightened the economic crisis, with the resignation of the Vice President in the latter half of 2000 and the removal of a popular central bank governor known for stable policies in spring 2001.[24] The International Monetary Fund (IMF) pledged $3 billion in aid and the Argentine government arranged a $30 billion debt swap in the first half of 2001.[25] The Argentine government announced a preferential exchange rate for exports in June 2001, reportedly violating the terms of the currency board.[26] Although the IMF pledged additional funds in August 2001, Argentine public debt rescheduling was announced in September 2001and a series of events led to the termination of the Convertibility Law and "pesofication" of the economy.[27] In the last 2 months of the year, a run on banks forced the government to

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[18] Steve H. Hanke, Cato Institute, "Argentina's Current Political-Economic Crisis," Statement before the Subcommittee on International Monetary Policy and Trade, Committee on Financial Services, U.S. House of Representatives, Mar. 5, 2002.

[19] Minister of the Economy Cavallo changed the peso's anchor from the dollar to a 50-50 basket of the dollar and the euro in April 2001. Ibid.

[20] A freeze on bank deposits was announced in December 2001. Steve H. Hanke, "Argentina's Current Political-Economic Crisis," Statement before the Subcommittee on International Monetary Policy and Trade, Committee on Financial Services, U.S. House of Representatives, Mar. 5, 2002.

[21] J. F. Hornbeck, *The Argentine Financial Crisis: A Chronology of Events,* CRS Report for Congress, Jan 31, 2002.

[22] The devaluation of the Brazilian real and the subsequent economic downfall in that country caused Argentina's export decrease in 1999, as Brazil is Argentina's largest trading partner. Steve H. Hanke, "Argentina's Current Political-Economic Crisis," Statement before the Subcommittee on International Monetary Policy and Trade, Committee on Financial Services, U.S. House of Representatives, Mar. 5, 2002.

[23] Mark Spiegel, "Argentina's Currency Crisis: Lessons for Asia," *FRBSF Economic Letter Number 2002-25*, Aug. 23, 2002.

[24] Michael Mussa, *Argentina and the Fund: from Triumph to Tragedy.* Institute for International Economics, July 2002.

[25] Ibid.

[26] Kurt Schuler, "Fixing Argentina," *Policy Analysis No. 445*, July 16, 2002.

[27] Under pesofication, dollar reserves were seized from banks and, along with dollar deposits, converted into pesos at 1.4 pesos per dollar, while bank loans made in dollars were converted at one peso per dollar. As the peso

(continued...)

close them and impose a withdrawal limit of $250 per week before reopening. Riots ensued, forcing President de la Rua and Minister of the Economy Cavallo to resign. After three interim presidents in 10 days, President Duhalde was appointed and quickly announced sovereign default, suspended debt service payments to external creditors, established exchange controls, 'pesofied' the economy, and declared an official end to the Convertibility Law.[28] The recession worsened, as peso interest rates climbed to about 50 percent and roughly $20 billion in capital fled the country in 2001.[29]

According to Congressional testimony, since the peso was floated on February 12, 2002, it has lost more than half of its former value.[30] At the time of writing, the crisis is not yet over, as investors and Argentine citizens alike have little confidence in the Argentine government. Many economists, such as Steve Hanke and Kurt Schuler, are in favor of dollarization for Argentina to restore this confidence. Others argue that Argentina needs to reestablish a floating exchange rate regime.

Exchange Rate Determinants and Trade

Exchange rate shifts can significantly affect trade flows because they alter the relative prices of goods and services. For example, if demand for U.S. products rises, then U.S. exports will increase. This would cause the dollar to appreciate. This U.S. dollar appreciation (foreign currency depreciation) would raise the relative price of U.S. goods in foreign markets, thus discouraging U.S. exports, and likewise lower the relative price of foreign goods in the U.S. market, thus encouraging U.S. imports. The converse is true when the dollar depreciates.[31] If the value of the U.S. dollar falls (depreciates), the price competitiveness of U.S. goods in foreign markets is enhanced and the price competitiveness of foreign goods in the U.S. market is diminished.[32]

A significant source of uncertainty in conducting international transactions arises from exchange rate fluctuations as the relative value between the buyer's and the seller's currencies may change between the time a transaction is concluded and the time payment is received, posing a gain to one party and a loss to the other (absent hedging[33] by either party). There are several ways to reduce or transfer the risk of an adverse price change. One of the simplest is for an exporter/importer to quote prices and establish payment terms in one's own currency, thus placing the burden and risk on the other party. This is a practical approach when one's own currency is freely convertible and stable. Hence, U.S. companies derive a number of benefits from the fact that the U.S. dollar is the preferred international currency for both international trade and financial transactions. Benefits include the convenience factor enabling U.S. exporters, importers, borrowers, and

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[27] (...continued)
was depreciating against the dollar, this Law essentially confiscated the property of peso holders. The Argentine courts subsequently ruled this pesofication illegal in September 2002. Steve Hanke, *Argentina: Caveat Lector*, speech prepared for the Cato Institute's 20th Annual Monetary Conference , Oct. 17, 2002.

[28] Ibid.

[29] Ibid.

[30] Steve H. Hanke, "Argentina's Current Political-Economic Crisis," Statement before the Subcommittee on International Monetary Policy and Trade, Committee on Financial Services, U.S. House of Representatives, Mar. 5, 2002.

[31] Although this discussion has focused on merchandise trade, exchange rate changes also affect international capital flows by altering the present value of cash flows from capital investments and from purchases and sales of foreign intangible assets.

[32] This effect takes some time to operate. In fact, as prices may shift before trade volumes do, trade data (based on value) can show the opposite of the expected effect for a period of months.

[33] Hedging is another way to reduce or transfer currency risk.

lenders to deal in their own currency; increased business for U.S. banks and other financial institutions; and the ability to borrow in international capital markets in their home currency.[34]

Changes in the Nominal and Real Value of the Dollar

Annual averages of nominal exchange rates for selected foreign currencies against the U.S. dollar during 1998-2002 are shown in table F-2. Over this period, currencies of some selected trade partners depreciated against the dollar and, thus, made U.S. goods more expensive in certain foreign markets, while others appreciated against the dollar. The Brazilian real depreciated by 24.2 percent in 2002, following a 28.6-percent depreciation in 2001. The Mexican peso and the Canadian dollar also depreciated against the U.S. dollar in 2002, as both currencies were impacted by the weaker performance of the U.S. economy.[35] In contrast, the Korean won and the British pound appreciated against the dollar, by 3.2 percent and 4.2 percent, respectively, due to resilient domestic demand despite a global downturn.[36] The euro appreciated by 5.3 percent against the dollar, while the Japanese yen depreciated by 3.0 percent.

The annual real (inflation-adjusted) value of the dollar decreased 1.0 percent against an index of seven major currencies[37] in 2002 (table F-3) due to weak economic performance, low interest rates and stock prices, concerns about corporate governance, and fears of a possible war with Iraq.[38] The average annual foreign-exchange value of the U.S. dollar against a broad group of 26 trade partners' currencies rose in 2002, as the dollar appreciated by 0.9 percent in nominal terms and by 1.9 percent in real terms.

Yen depreciation

The Japanese currency depreciated by 3.0 percent in 2002 on an average annual basis, following a 12.8-percent depreciation in 2001 (see table F-2) due to weaknesses in the Japanese economy.[39] In contrast, the yen appreciated 11.0 percent against the dollar from the beginning to the end of 2002, as shown in the following tabulation:[40]

Time frame	**Exchange rate** (*yen per dollar*)
Beginning of 2002	132.02
First quarter (average)	132.42
Second quarter (average)	126.92
Third quarter (average)	119.27
Fourth quarter (average)	122.52
End of year	118.75
Low (February 8)	134.77
High (July 16)	115.71

[34] Council of Economic Advisors (CEA), *Economic Report of the President,* together with the *Annual Report of the Council of Economic Advisors,* Feb. 1999, pp. 299-300.

[35] Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, Aug. 2002.

[36] Ibid.

[37] Major currencies are those that circulate widely outside the issuing economy; see footnote 2 of table F-4.

[38] Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, Aug. 2002, and Federal Reserve Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations*, (various issues).

[39] Federal Reserve Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations*, Jan.-Mar. 2001, p. 2.

[40] Federal Reserve Board, *Federal Reserve Bulletin*, (various months) 2000-2001; and compiled from official statistics of the Federal Reserve found at *http://www.federalreserve.gov/releases/H10/hist/dat96_ja.txt*.

Table F-2
Nominal exchange rates for selected trade partners, annual averages, 1998-2002

Country (currency)	1998	1999	2000	2001	2002
	Exchange rate (foreign currency per U.S. dollar)[1]				
Brazil (real)	1.1605	1.8207	1.8301	2.3527	2.9213
Canada (dollar)	1.4836	1.4858	1.4855	1.5487	1.5704
China (yuan)	8.3008	8.2781	8.2784	8.2770	8.2770
European Monetary Union (euro)	([2])	0.9392	1.0850	1.1171	1.0578
Japan (yen)	130.99	113.73	107.80	121.57	125.22
Korea (won)	1,400.40	1,189.84	1,130.90	1,292.01	1250.31
Malaysia (ringgit)	3.9254	3.8000	3.8000	3.8000	3.8000
Mexico (peso)	9.152	9.553	9.459	9.337	9.663
Thailand (baht)	41.262	37.887	40.210	44.532	43.019
United Kingdom (pound)	0.6037	0.6185	0.6609	0.6946	0.6656
	Change over the preceding period *(percent)*				
Brazil (real)	7.7	56.9	0.5	28.6	24.2
Canada (dollar)	7.1	0.1	([3])	4.3	1.4
China (yuan)	-0.2	-0.3	([3])	([3])	0
European Monetary Union (euro)	([2])	([2])	15.5	2.9	-5.3
Japan (yen)	8.2	-13.2	-5.2	12.8	3.0
Korea (won)	47.8	-15.0	-5.0	14.3	-3.2
Malaysia (ringgit)	39.3	-3.2	0	0	0
Mexico (peso)	15.6	4.4	-1.0	-1.3	3.5
Thailand (baht)	32.8	-8.2	6.1	10.7	-3.4
United Kingdom (pound)	-1.1	2.5	6.9	5.1	-4.2

[1] Each country's currency is displayed to the number of decimal places as reported in the reference source, rather than being rounded to a common decimal place, to avoid any loss of significant digits for particular currencies.
[2] The euro was introduced in January 1999 as a replacement for certain EU national currencies. More information on the conversion exchange rates can be found at the European Central Bank web site, *www.ecb.int.*.
[3] Less than 0.05 percent.

Source: Calculated from official statistics of the Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, (various months) 2001-02.

Table F-3
Nominal and real weighted average indexes of foreign-exchange value of the U.S. dollar versus currencies of groups of trade partners, annual averages, 1998-2002

Index (base period = 100)	**1998**	**1999**	**2000**	**2001**	**2002**
			Nominal		
Broad[1] (Jan. 1997=100)	116.48	116.87	119.93	126.09	127.26
Major currencies[2] (Mar. 1973=100)	95.79	94.07	98.34	104.32	103.09
Other important trading partners[3] (Jan. 1997=100)	126.03	129.94	130.26	136.34	141.20
	Nominal change over the preceding period *(percent)*				
Broad[1] (Jan. 1997=100)	11.5	0.3	2.6	5.1	0.9
Major currencies[2] (Mar. 1973=100)	5.0	-1.8	4.5	6.1	-1.2
Other important trading partners[3] (Jan. 1997=100)	20.4	3.1	0.2	4.7	3.6
			Real		
Broad[1] (Mar. 1973=100)	99.21	98.53	102.19	108.90	110.91
Major currencies[2] (Mar. 1973=100)	97.24	96.68	102.86	110.68	109.55
Other important trading partners[3] (Mar. 1973=100)	108.10	107.22	107.67	114.58	122.01
	Real change over the preceding period *(percent)*				
Broad[1] (Mar. 1973=100)	8.6	-0.7	3.7	6.6	1.9
Major currencies[2] (Mar. 1973=100)	5.4	-0.6	6.4	7.6	-1.0
Other important trading partners[3] (Mar. 1973=100)	12.8	-0.8	0.4	6.4	6.5

[1] Trade-weighted average of the foreign-exchange value of the U.S. dollar against the currencies of a broad group of U.S. trade partners. The weight for each currency is computed as an average of U.S. bilateral import shares from and export shares to the issuing partner and of a measure of the importance to U.S. exporters of that partner's trade in third-party markets. The broad index consists of 26 currencies (35 before the introduction of euro on Jan. 1, 1999) of both the major currencies index and other important trading partners index.

[2] Trade-weighted average of the foreign-exchange value of the U.S. dollar against a subset of broad index currencies that circulate widely outside the issuing partner's economy. The weight for each currency is its broad index weight scaled so that the weights of the subset of currencies in the index sum to one. The major currencies index consists of 7 currencies (16 before the introduction of the euro on Jan. 1, 1999): euro-area countries (Austria, Belgium-Luxembourg (treated as a single currency), Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, and Spain) and Australia, Canada, Japan, Sweden, Switzerland, and the United Kingdom.

[3] Trade-weighted average of the foreign-exchange value of the U.S. dollar against a subset of broad index currencies that do not circulate widely outside the issuing partner's economy. The weight for each currency is its broad index weight scaled so that the weights of the subset of currencies in the index sum to one. The other important trading partners index consists of 19 currencies (Argentina, Brazil, Chile, China, Colombia, Hong Kong, India, Indonesia, Israel, Korea, Malaysia, Mexico, the Philippines, Singapore, Taiwan, Thailand, Russia, Saudi Arabia, and Venezuela).

Source: Calculated from official statistics of the Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, (various months) 2001-02.

During the first quarter of 2002, the yen depreciated by 0.5 percent against the dollar,[41] following a sell-off of the yen in January-February due to reduced expectations for the use of public funds to recapitalize banks, the upcoming removal of the government guarantee for bank time deposits, and Standard & Poor's downgrade of several major Japanese banks.[42] As the Japanese government expressed a commitment to stabilize markets, investor confidence grew and the yen began to appreciate in the second half of the quarter.[43]

The yen continued its rising trend in the second quarter, appreciating 10.1 percent. Although there was a mild increase in Japanese economic activity during April-June, most of this increase can be attributed to the broad depreciation of the dollar.[44]

In the third quarter of 2002, the yen depreciated 1.4 percent, as concerns grew that slowing global growth would delay an economic recovery in Japan.[45] Investors focused on the heightened policy debate in Japan regarding measures to address deflation and financial sector problems, as the Government of Japan announced a cabinet reshuffle, a study of measures that may help stabilize financial markets, and a new anti-deflation package.[46]

The yen appreciated by 3.2 percent against the dollar in the fourth quarter. However, the yen depreciated against many other currencies, hitting an all-time low against the euro in late December 2002. The dollar's depreciation can be explained by fears of a possible war with Iraq, renewed concerns over the pace of the U.S. economic recovery, and rising oil prices.[47]

Euro appreciation

The euro appreciated by 5.3 percent in 2002 on an average annual basis, after continually depreciating from its inception at the beginning of 1999 through 2001 (see table F-2).[48] The EU's currency appreciated 16.1 percent against the dollar from the beginning to the end of 2002, as shown by the following tabulation:[49]

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[41] Percent change in the value of the currency is measured from the start of the quarter until the final day of the quarter, and is not based on average quarterly values.

[42] Ibid., p. 5.

[43] Federal Reserve Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations*, Jan.-Mar. 2002, p. 6.

[44] Federal Reserve Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations*, Apr.-June 2002, p. 6.

[45] Ibid., July-Sept. 2002, p. 5.

[46] Ibid., Oct.-Dec. 2002, p. 7.

[47] Ibid, pp. 3-4.

[48] For information about the performance of the euro in 1999, see Robert Hughes, "Background on Exchange Rate Shifts," *Shifts in Merchandise Trade in 1999*, Investigation No. 332-345, USITC publication 3353, Sept. 2000, pp. G-1 through G-13.

[49] Federal Reserve Board, *Federal Reserve Bulletin*, (various months) 2000-2001; and compiled from official statistics of the Federal Reserve found at *http://www.federalreserve.gov/releases/H10/hist/dat96_eu.txt*.

Time frame	Exchange rate (*euros per dollar*)
Beginning of 2002	1.1073
First quarter (average)	1.1402
Second quarter (average)	1.0887
Third quarter (average)	1.0161
Fourth quarter (average)	0.9997
End of year	0.9537
Low (January 31)	1.1636
High (December 31)	0.9537

The value of the euro at its creation was just under $1.1668 or 0.8570 euros per dollar.[50] However, it soon began to weaken against the dollar amidst indications of slower economic growth in the euro-area.[51] Weakening of the euro in 2000 was broad based as investors diversified away from the euro area.[52] This trend continued into 2001. In 2002, however, the euro appreciated greatly against the dollar, as investors looked to diversify their assets away from the United States.

In the first quarter of 2002, the euro depreciated by 3.6 percent against the dollar, despite initial support because of the introduction of euro notes and coins. Investor expectations that economic recovery in the euro area would be slower than that in the United States, as well as concerns over how fiscal imbalances would be managed in the euro area after the European Commission's warning to Germany and Portugal over their widening budget deficits, worked toward the depreciation of the euro in the quarter.[53]

The exchange rate grew 10.7 percent in the second quarter, based on a steep fall of the dollar due to a sluggish economic recovery, a large and growing current account deficit, sharp declines in U.S. stock prices, and low short-term U.S. interest rates. Increasing interest rates differentials between the euro area and the United States supported the euro during the period.[54]

In the third quarter, the euro depreciated slightly, by 0.1 percent against the dollar. The euro rose above the 1.0 euros per dollar early in the quarter, before falling due to damage from summer floods, rising oil prices, and concern over the financial health of the insurance and banking sectors in the euro-area.[55] Concerns associated with the anniversary of the September 11,2001 terrorist attacks and the possibility of military conflict with Iraq sparked investor nervousness across markets, as did sharp equity market declines, and an increasingly negative outlook for U.S. and global growth.[56]

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[50] European Commission, "Official ECU Exchange Rates Calculated and Published by the European Commission," found at *http://www.europa.eu.int/comm/economy_finance/xecud.htm*, retrieved Aug. 4, 2000.

[51] Institute for International Economics, Hot Topics in International Economics, *The Weak Euro*, found at *http://www.iie.com/topics/euro/hoteuro.htm*

[52] Federal Reserve Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations*, Jan.-Mar. 2000, p. 3.

[53] Federal Reserve Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations*, Jan.-Mar. 2002, p. 4.

[54] Ibid., Apr.-June 2002, pp. 1-4.

[55] Ibid, July-Sept. 2002, p. 6.

[56] Ibid., p. 1.

The euro appreciated by almost 6.0 percent against the dollar during the fourth quarter, with most of this rise occurring in December. The euro again benefitted from the higher interest rates in the euro area compared with those of the United States, whereas the dollar lost value due in part to security concerns.

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APPENDIX G
Status of WTO Cases Involving the United States

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Table G-1
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS2	Standards for Reformulated and Conventional Gasoline	January 1995	Venezuela	United States	Completed-Compliance Notified
WT/DS3	Measures Affecting the Testing and Inspection of Agricultural Products	April 1995	United States	Korea	Inactive
WT/DS4	Standards for Reformulated and Conventional Gasoline	January 1995	Brazil	United States	Completed-Compliance Notified
WT/DS5	Measures Concerning the Shelf-Life of Products	May 1995	United States	Korea	Settled
WT/DS6	Imposition of Import Duties on Automobiles from Japan under Sections 301 and 304 of the Trade Act of 1974	July 1995	Japan	United States	Settled
WT/DS11	Taxes on Alcoholic Beverages	September 1995	United States	Japan	Completed-Compliance Notified
WT/DS13	Duties on Imports of Grains	July 1995	United States	European Union	Settled
WT/DS16	Regime for the Importation, Sale, and Distribution of Bananas	September 1995	Guatemala, Honduras, Mexico, United States	European Union	Inactive
WT/DS21	Measures Affecting the Importation of Salmonids	November 1995	United States	Australia	Settled
WT/DS24	Restrictions on Imports of Cotton and Man-Made Fibre Underwear	November 1996	Costa Rica	United States	Completed-Compliance Notified
WT/DS26	Measures Affecting Meat and Meat Products (Hormones)	April 1996	United States	European Union	Completed-Retaliation Authorized
WT/DS27	Regime for the Importation, Sale, and Distribution of Bananas	February 1996	Ecuador, Guatemala, Honduras, Mexico, United States	European Union	Completed-Compliance Pending
WT/DS28	Measures Concerning Sound Recordings	February 1996	United States	Japan	Settled

See footnote at end of table.

Table G-1–*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS31	Certain Measures Concerning Periodicals	March 1996	United States	Canada	Completed-Compliance Notified
WT/DS32	Measures Affecting Imports of Women's and Girls' Wool Coats	March 1996	India	United States	Settled
WT/DS33	Measure Affecting Imports of Woven Wool Shirts and Blouses	March 1996	India	United States	Completed-No Compliance Needed
WT/DS35	Export Subsidies in Respect of Agricultural Products	March 1996	Argentina, Australia, Canada, New Zealand, Thailand, United States	Hungary	Settled
WT/DS36	Patent Protection for Pharmaceutical and Agricultural and Chemical Products	April 1996	United States	Pakistan	Settled
WT/DS37	Patent Protection Under the Industrial Property Act	April 1996	United States	Portugal	Settled
WT/DS38	The Cuban Liberty and Democratic Solidarity Act	May 1996	European Union	United States	Inactive
WT/DS39	Tariff Increases on Products from the European Communities	April 1996	European Union	United States	Inactive
WT/DS41	Measures Affecting the Testing and Inspection of Agricultural Products	May 1996	United States	Korea	Inactive
WT/DS43	Taxation of Foreign Film Revenues	June 1996	United States	Turkey	Settled
WT/DS44	Measures Affecting Consumer Photographic Film and Paper	June 1996	United States	Japan	Completed-No Compliance Needed
WT/DS45	Measures Affecting Distribution Services	June 1996	United States	Japan	Inactive
WT/DS49	Anti-Dumping Investigation Regarding Imports of Fresh or Chilled Tomatoes from Mexico	July 1996	Mexico	United States	Settled

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS50	Patent Protection for Pharmaceutical and Agricultural Chemical Products	July 1996	United States	India	Completed-Compliance Notified
WT/DS52	Certain Measures Affecting Trade and Investment in the Automotive Sector	August 1996	United States	Brazil	Settled
WT/DS56	Certain Measures Affecting Imports of Footwear, Textiles, Apparel, and Other Items	October 1996	United States	Argentina	Completed-Compliance Notified
WT/DS57	Textiles, Clothing, and Footwear Import Credit Scheme	October 1996	United States	Australia	Settled
WT/DS58	Import Prohibition of Certain Shrimp and Shrimp Products	October 1996	India, Malaysia, Pakistan, Thailand	United States	Completed-Compliance Notified
WT/DS59	Certain Measures Affecting the Automobile Industry	October 1996	United States	Indonesia	Completed-Compliance Notified
WT/DS61	Import Prohibition of Certain Shrimp and Shrimp Products	October 1996	Philippines	United States	Inactive
WT/DS62	Customs Classification of Certain Computer Equipment	November 1996	United States	European Union	Completed-No Compliance Needed
WT/DS63	Antidumping Measures on Imports of Solid Urea from the Former German Democratic Republic	December 1996	European Union	United States	Inactive
WT/DS65	Certain Measures Affecting Trade and Investment in the Automotive Sector	January 1997	United States	Brazil	Settled
WT/DS67	Customs Classification of Certain Computer Equipment	February 1997	United States	United Kingdom	Completed-No Compliance Needed
WT/DS68	Customs Classification of Certain Computer Equipment	February 1997	United States	Ireland	Completed-No Compliance Needed
WT/DS74	Measures Affecting Pork and Poultry	April 1997	United States	Philippines	Settled
WT/DS76	Measures Affecting Agricultural Products	April 1997	United States	Japan	Completed-Compliance Notified

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS78	Safeguard Measures Against Imports of Broom Corn Brooms	April 1997	Colombia	United States	Inactive
WT/DS80	Measures Affecting Commercial Telephone Directory Services	May 1997	United States	Belgium	Inactive
WT/DS82	Measures Affecting the Grant of Copyright and Neighboring Rights	May 1997	United States	Ireland	Settled
WT/DS83	Measures Affecting the Enforcement of Intellectual Property Rights	May 1997	United States	Denmark	Settled
WT/DS84	Taxes on Alcoholic Beverages	May 1997	United States	Korea	Completed-Compliance Notified
WT/DS85	Measures Affecting Textiles and Apparel Products	May 1997	European Union	United States	Settled
WT/DS86	Measures Affecting the Enforcement of Intellectual Property Rights	May 1997	United States	Sweden	Settled
WT/DS88	Measures Affecting Government Procurement	June 1997	European Union	United States	Inactive
WT/DS89	Antidumping Duties on Imports of Color Television Receivers from Korea	July 1997	Korea	United States	Inactive
WT/DS90	Quantitative Restrictions on Imports of Agricultural, Textile, and Industrial Products	July 1997	United States	India	Completed-Compliance Notified
WT/DS95	Measures Affecting Government Procurement	July 1997	Japan	United States	Inactive
WT/DS97	Countervailing Duty Investigation of Imports of Salmon from Chile	August 1997	Chile	United States	Inactive
WT/DS99	Anti-Dumping Duty on Dynamic Random Access Memory Semiconductors (DRAMS) of One Megabit or Above from Korea	August 1997	Korea	United States	Completed-Compliance Notified
WT/DS100	Measures Affecting Imports of Poultry Products	August 1997	European Union	United States	Inactive

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS101	Antidumping Investigation of High Fructose Corn Syrup (HFCS) from the United States	September 1997	United States	Mexico	Inactive
WT/DS102	Measures Affecting Pork and Poultry	October 1997	United States	Philippines	Settled
WT/DS103	Measures Affecting the Importation of Milk and the Exportation of Dairy Products	October 1997	United States	Canada	Completed-Compliance Pending
WT/DS104	Measures Affecting the Exportation of Processed Cheese	October 1997	United States	European Union	Inactive
WT/DS106	Subsidies Provided to Producers and Exporters of Automotive Leather	November 1997	United States	Australia	Inactive
WT/DS108	Tax Treatment for "Foreign Sales Corporations"	November 1997	European Union	United States	Completed-Retaliation Authorized
WT/DS109	Taxes on Alcoholic Beverages	December 1997	United States	Chile	Inactive
WT/DS111	Tariff Rate Quota for Imports of Groundnuts	December 1997	Argentina	United States	Inactive
WT/DS115	Measures Affecting the Grant of Copyright and Neighboring Rights	January 1998	United States	European Union	Settled
WT/DS118	Harbour Maintenance Tax	February 1998	European Union	United States	Inactive
WT/DS124	Enforcement of Intellectual Property Rights for Motion Pictures and Television Programs	April 1998	United States	European Union	Settled
WT/DS125	Enforcement of Intellectual Property Rights for Motion Pictures and Television Programs	April 1998	United States	Greece	Settled
WT/DS126	Subsidies Provided to Producers and Exporters of Automotive Leather	May 1998	United States	Australia	Completed-Compliance Notified
WT/DS127	Certain Income Tax Measures Constituting Subsidies	May 1998	United States	Belgium	Inactive
WT/DS128	Certain Income Tax Measures Constituting Subsidies	May 1998	United States	Netherlands	Inactive

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS129	Certain Income Tax Measures Constituting Subsidies	May 1998	United States	Greece	Inactive
WT/DS130	Certain Income Tax Measures Constituting Subsidies	May 1998	United States	Ireland	Inactive
WT/DS131	Certain Income Tax Measures Constituting Subsidies	May 1998	United States	France	Inactive
WT/DS132	Antidumping Investigation of High Fructose Corn Syrup (HFCS) from the United States	May 1998	United States	Mexico	Completed-Compliance Notified
WT/DS136	Anti-Dumping Act of 1916	June 1998	European Union	United States	Completed-Compliance Pending
WT/DS138	Imposition of Countervailing Duties on Certain Hot-Rolled Lead and Bismuth Carbon Steel Products Originating in the United Kingdom	June 1998	European Union	United States	Completed-No Compliance Needed
WT/DS144	Certain Measures Affecting the Import of Cattle, Swine, and Grain from Canada	September 1998	Canada	United States	Settled
WT/DS151	Measures Affecting Textiles and Apparel Products	November 1998	European Union	United States	Settled
WT/DS152	Sections 301-310 of the Trade Act of 1974	November 1998	European Union	United States	Completed-No Compliance Needed
WT/DS158	Regime for the Importation, Sale, and Distribution of Bananas II	January 1999	Guatemala, Honduras, Mexico, Panama, United States	European Union	Completed-Compliance Pending
WT/DS160	Section 110(5) of the U.S. Copyright Act	January 1999	European Union	United States	Completed-Retaliation Pending
WT/DS161	Measures Affecting Imports of Fresh, Chilled, and Frozen Beef	February 1999	United States	Korea	Completed-Compliance Notified
WT/DS162	Anti-Dumping Act of 1916	February 1999	Japan	United States	Completed-Compliance Pending

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS163	Measures Affecting Government Procurement	February 1999	United States	Korea	Completed-No Compliance Needed
WT/DS164	Measures Affecting Imports of Footwear	March 1999	United States	Argentina	Inactive
WT/DS165	Import Measures on Certain Products from the European Communities	March 1999	European Union	United States	Completed-No Compliance Needed
WT/DS166	Definitive Safeguard Measures on Imports of Wheat Gluten from the European Communities	March 1999	European Union	United States	Completed-Compliance Notified
WT/DS167	Countervailing Duty Investigation with Respect to Live Cattle from Canada	March 1999	Canada	United States	Inactive
WT/DS170	Patent Protection Term	May 1999	United States	Canada	Completed-Compliance Notified
WT/DS171	Patent Protection for Pharmaceuticals and Test Data Protection for Agricultural Chemicals	May 1999	United States	Argentina	Settled
WT/DS172	Measures Relating to the Development of a Flight Management System	May 1999	United States	European Union	Inactive
WT/DS173	Measures Relating to the Development of a Flight Management System	May 1999	United States	France	Inactive
WT/DS174	Protection of Trademarks and Geographical Indications for Agricultural Products and Foodstuffs	June 1999	United States	European Union	Inactive
WT/DS175	Measures Relating to Trade and Investment in the Motor Vehicle Sector	May 1999	United States	India	Completed-Compliance Notified
WT/DS176	Section 211 of the Omnibus Appropriations Act	July 1999	European Union	United States	Completed-Compliance Pending
WT/DS177	Safeguard Measure on Imports of Fresh, Chilled, or Frozen Lamb from New Zealand	July 1999	New Zealand	United States	Completed-Compliance Notified

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS178	Safeguard Measure on Imports of Fresh, Chilled, or Frozen Lamb from Australia	July 1999	Australia	United States	Completed-Compliance Notified
WT/DS179	Anti-Dumping Measure on Stainless Steel in Coils and Stainless Steel Sheet and Strip from Korea	July 1999	Korea	United States	Completed-Compliance Notified
WT/DS180	Reclassification of Certain Sugar Syrup	September 1999	Canada	United States	Inactive
WT/DS184	Anti-Dumping Measures on Certain Hot-Rolled Steel Products from Japan	November 1999	Japan	United States	Completed-Compliance Pending
WT/DS186	Section 337 of the Tariff Act of 1930 and Amendments Thereto	January 2000	European Union	United States	Inactive
WT/DS192	Transitional Safeguard Measure on Combed Cotton Yarn from Pakistan	April 2000	Pakistan	United States	Completed-Compliance Notified
WT/DS194	Measures Treating Export Restraints as Subsidies	May 2000	Canada	United States	Completed-No Compliance Needed
WT/DS195	Measures Affecting Trade and Investment in the Motor Vehicle Sector	May 2000	United States	Philippines	Settled
WT/DS196	Certain Measures on the Protection of Patents and Test Data	May 2000	United States	Argentina	Settled
WT/DS197	Measures on Minimum Import Prices	May 2000	United States	Brazil	Inactive
WT/DS198	Measures on Minimum Import Prices	May 2000	United States	Romania	Settled
WT/DS199	Measures Affecting Patent Protection	May 2000	United States	Brazil	Settled
WT/DS200	Section 306 of the Trade Act of 1974 and Amendments Thereto	June 2000	European Union	United States	Inactive
WT/DS202	Definitive Safeguard Measures on Imports of Circular Welded Carbon Quality Line Pipe from Korea	June 2000	Korea	United States	Completed-Compliance Notified

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS203	Measures Affecting Trade in Live Swine	July 2000	United States	Mexico	Inactive
WT/DS204	Measures Affecting Telecommunications Services	August 2000	United States	Mexico	Panel Proceeding
WT/DS206	Anti-Dumping and Countervailing Measures on Steel Plate from India	October 2000	India	United States	Completed-Compliance Pending
WT/DS210	Administration of Measures Establishing Customs Duties for Rice	October 2000	United States	Belgium	Settled
WT/DS212	Countervailing Measures Concerning Certain Products from the European Communities	November 2000	European Union	United States	Completed-Compliance Pending
WT/DS213	Countervailing Duties on Certain Corrosion-Resistant Carbon Steel Flat Products from Germany	November 2000	European Union	United States	Completed-Compliance Pending
WT/DS214	Definitive Safeguard Measures on Imports of Steel Wire Rod and Circular Welded Carbon Quality Line Pipe	November 2000	European Union	United States	Panel Proceeding / Inactive
WT/DS217	Continued Dumping and Subsidy Offset Act of 2000	December 2000	Australia, Brazil, Chile, European Union, India, Indonesia, Japan, Korea, Thailand	United States	Completed-Compliance Pending
WT/DS218	Countervailing Duties on Certain Carbon Steel Products from Brazil	December 2000	Brazil	United States	Inactive
WT/DS221	Section 129(c)(1) of the Uruguay Round Agreements Act	January 2001	Canada	United States	Completed-No Compliance Needed
WT/DS223	Tariff-Rate Quota on Corn Gluten Feed from the United States	January 2001	United States	European Union	Settled
WT/DS224	U.S. Patents Code	January 2001	Brazil	United States	Inactive
WT/DS225	Anti-Dumping Duties on Seamless Pipe from Italy	February 2001	European Union	United States	Inactive

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS234	Continued Dumping and Subsidy Offset Act of 2000	May 2001	Canada, Mexico	United States	Completed-Compliance Pending
WT/DS236	Preliminary Determinations With Respect to Softwood Lumber from Canada	August 2001	Canada	United States	Completed-Compliance Notified
WT/DS239	Certain Measures Regarding Anti-Dumping Methodology	September 2001	Brazil	United States	Pending Consultations
WT/DS243	Rules of Origin for Textiles and Apparel Products	January 2002	India	United States	Panel Report Issued
WT/DS244	Sunset Review of Anti-Dumping Duties on Corrosion-Resistant Carbon Steel-Flat Products from Japan	January 2002	Japan	United States	Panel Proceeding
WT/DS245	Measures Affecting the Importation of Apples	March 2002	United States	Japan	Panel Proceeding
WT/DS247	Provisional Anti-Dumping Measure on Imports of Certain Softwood Lumber from Canada	March 2002	Canada	United States	Pending Consultations
WT/DS248	Definitive Safeguard Measures on Imports of Certain Steel Products	March 2002	European Union	United States	Panel Proceeding
WT/DS249	Definitive Safeguard Measures on Imports of Certain Steel Products	March 2002	Japan	United States	Panel Proceeding
WT/DS250	Equalizing Excise Tax Imposed by Florida on Processed Orange and Grapefruit Products	March 2002	Brazil	United States	Panel Proceeding
WT/DS251	Definitive Safeguard Measures on Imports of Certain Steel Products	March 2002	Korea	United States	Panel Proceeding
WT/DS252	Definitive Safeguard Measures on Imports of Certain Steel Products	March 2002	China	United States	Panel Proceeding
WT/DS253	Definitive Safeguard Measures on Imports of Certain Steel Products	April 2002	Switzerland	United States	Panel Proceeding
WT/DS254	Definitive Safeguard Measures on Imports of Certain Steel Products	April 2002	Norway	United States	Panel Proceeding

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS257	Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada	May 2002	Canada	United States	Panel Proceeding
WT/DS258	Definitive Safeguard Measures on Imports of Certain Steel Products	May 2002	New Zealand	United States	Panel Proceeding
WT/DS259	Definitive Safeguard Measures on Imports of Certain Steel Products	May 2002	Brazil	United States	Panel Proceeding
WT/DS260	Provisional Safeguard Measures on Imports of Certain Steel Products	June 2002	United States	European Union	Panel Proceeding
WT/DS262	Sunset Reviews of Anti-Dumping and Countervailing Duties on Certain Steel Products from France and Germany	July 2002	European Union	United States	Pending Consultations
WT/DS264	Final Dumping Determination on Softwood Lumber from Canada	September 2002	Canada	United States	Panel Proceeding
WT/DS267	Subsidies on Upland Cotton	September 2002	Brazil	United States	Panel Proceeding
WT/DS268	Sunset Reviews of Anti-Dumping Measures on Oil Country Tubular Goods from Argentina	October 2002	Argentina	United States	Pending Consultations
WT/DS274	Definitive Safeguard Measures on Imports of Certain Steel Products	November 2002	Taiwan	United States	Pending Consultations
WT/DS275	Import Licensing Measures on Certain Agricultural Products	November 2002	United States	Venezuela	Pending Consultations
WT/DS276	Measures Relating to Exports of Wheat and Treatment of Imported Grain	December 2002	United States	Canada	Panel Proceeding
WT/DS277	Investigation of the International Trade Commission in Softwood Lumber from Canada	December 2002	Canada	United States	Pending Consultations
WT/DS280	Countervailing Duties on Imports of Steel Plate from Mexico	January 2003	Mexico	United States	Pending Consultations
WT/DS281	Anti-Dumping Measures on Imports of Cement from Mexico	February 2003	Mexico	United States	Pending Consultations

See footnote at end of table.

Table G-1–*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS282	Anti-Dumping Measures on Oil Country Tubular Goods (OCTG) from Mexico	February 2003	Mexico	United States	Pending Consultations
WT/DS285	Measures Affecting the Cross-Border Supply of Gambling and Betting Services	March 2003	Antigua and Barbuda	United States	Panel Proceeding
WT/DS291	Measures Affecting the Approval and Marketing of Biotech Products	May 2003	United States	European Union	Pending Consultations
WT/DS294	Law, Regulations and Methodology for Calculating Dumping Margins ("Zeroing")	June 2003	European Union	United States	Pending Consultations

[1] Status of WTO dispute settlement cases involving the United States:

Pending Consultations . . . . . The complainant country files its request for consultations with the WTO.
Panel Proceeding . . . . . The complainant country submits its first request for the formation of a panel.
Panel Report Issued . . . . . The panel publicly issues its final report.
Panel Report Adopted . . . . . The report is adopted by the Dispute Settlement Body.
Panel Report Appealed . . . . . The appealing party files its notice of appeal of the panel report.
AB Report Issued . . . . . The Appellate Body publicly issues its report.
Completed (No Compliance Needed) . . . . . The Dispute Settlement Body adopts the panel report and no announced appeal is forthcoming and the respondent has no obligation to take any compliance action; or adopts the Appellate Body report and the respondent has no obligation to take any compliance action.
Completed (Compliance Pending) . . . . . The Dispute Settlement Body adopts the panel report and no announced appeal is forthcoming and the respondent has an obligation to comply; or adopts the Appellate Body report and the respondent has an obligation to comply.
Completed (Compliance Notified) . . . . . The parties agree that the respondent has complied, the respondent states it has complied and the complainant does not dispute the compliance, or the complainant has no further recourse to appeal compliance.
Completed (Retaliation Pending) . . . . . The complainant requests authorization from the WTO for retaliation.
Completed (Retaliation Authorized) . . . . . Retaliation is authorized by the WTO.
Settled . . . . . At least one party publicly indicates that the dispute has been settled and any opposing party does not dispute that assertion, occurring before the completion of any formal panel reporting procedure.
Inactive . . . . . The Pending Consultations status has continued for more than 2 years without the convening of a panel.

Sources: World Trade Organization (WTO) Secretariat, *Overview of the State-of-Play of WTO Disputes* (Geneva: WTO Secretariat, February 2003), located at *www.wto.org*. Status of disputes compiled by Commission staff from *Overview of the State-of-Play of WTO Disputes*; individual dispute notices at the WTO Web site, located at *www.wto.org*; various reporting services; various notices posted on the Office of the United State Trade Representative (USTR) Web site, located at *www.ustr.gov*; and USTR's Dispute Settlement Update, located at *http://www.ustr.gov/enforcement/update.html* (various periodic updates).

Table C-1
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG002	Cattle and beef:					
	Number of establishments	1,151,823	1,100,098	1,080,969	1,053,284	1,035,970
	Employees (thousands)	1,220	1,168	1,150	1,122	1,105
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	39,454	45,278	48,632	50,152	48,762
	U.S. exports (million dollars)	2,860	3,290	3,859	3,335	2,952
	U.S. imports (million dollars)	2,810	2,983	3,443	4,062	4,038
	Apparent U.S. consumption (million dollars)	39,404	44,970	48,216	50,879	49,848
	Trade balance (million dollars)	50	308	416	-727	-1,086
	Ratio of imports to consumption (percent)	7.1	6.6	7.1	8.0	8.1
	Ratio of exports to production (percent)	7.2	7.3	7.9	6.6	6.1
AG003	Swine and pork:					
	Number of establishments	117,226	101,800	89,438	83,920	78,359
	Employees (thousands)	218	217	204	196	198
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	18,468	19,085	21,673	22,545	19,802
	U.S. exports (million dollars)	1,042	1,021	1,267	1,364	1,286
	U.S. imports (million dollars)	721	723	996	1,129	1,026
	Apparent U.S. consumption (million dollars)	18,147	18,787	21,402	22,310	19,542
	Trade balance (million dollars)	321	298	271	235	260
	Ratio of imports to consumption (percent)	4.0	3.8	4.7	5.1	5.3
	Ratio of exports to production (percent)	5.6	5.3	5.8	6.1	6.5
AG004	Sheep and meat of sheep:					
	Number of establishments	70,020	67,940	67,820	65,658	64,695
	Employees (thousands)	70	68	68	66	65
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	373	423	420	341	337
	U.S. exports (million dollars)	35	25	23	25	26
	U.S. imports (million dollars)	166	179	206	238	275
	Apparent U.S. consumption (million dollars)	504	578	603	554	586
	Trade balance (million dollars)	-131	-155	-183	-213	-249
	Ratio of imports to consumption (percent)	32.9	31.1	34.2	42.9	47.0
	Ratio of exports to shipments (percent)	9.4	5.9	5.6	7.2	7.8
AG005	Poultry:					
	Number of establishments	440	430	420	417	415
	Employees (thousands)	185	180	175	170	170
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. production (million dollars)	17,200	17,300	17,400	17,600	17,700
	U.S. exports (million dollars)	2,255	1,878	2,055	2,376	1,817
	U.S. imports (million dollars)	46	57	71	97	111
	Apparent U.S. consumption (million dollars)	14,990	15,479	15,416	15,321	15,995
	Trade balance (million dollars)	2,210	1,821	1,984	2,279	1,705
	Ratio of imports to consumption (percent)	0.3	0.4	0.5	0.6	0.7
	Ratio of exports to production (percent)	13.1	10.9	11.8	13.5	10.3
AG006	Fresh or frozen fish:					
	Number of establishments	1,400	1,400	1,450	1,380	1,400
	Employees (thousands)	39	40	41	39	40
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	5,224	5,051	5,550	5,200	5,350
	U.S. exports (million dollars)	1,289	1,634	1,705	2,016	1,947
	U.S. imports (million dollars)	2,641	2,945	3,103	2,958	3,158
	Apparent U.S. consumption (million dollars)	6,577	6,361	6,948	6,143	6,561
	Trade balance (million dollars)	-1,353	-1,310	-1,398	-943	-1,211
	Ratio of imports to consumption (percent)	40.2	46.3	44.7	48.2	48.1
	Ratio of exports to shipments (percent)	24.7	32.4	30.7	38.8	36.4

See footnote(s) at end of table.

Table C-1--*Continued*

Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG007	Canned fish:					
	Number of establishments	36	36	34	30	30
	Employees (thousands)	7	7	6	5	5
	Capacity utilization (percent)	60	65	75	75	75
	U.S. shipments (million dollars)	1,416	1,527	1,334	1,111	1,200
	U.S. exports (million dollars)	170	222	170	202	181
	U.S. imports (million dollars)	530	611	538	568	664
	Apparent U.S. consumption (million dollars)	1,776	1,916	1,703	1,478	1,682
	Trade balance (million dollars)	-360	-389	-369	-367	-482
	Ratio of imports to consumption (percent)	29.9	31.9	31.6	38.5	39.4
	Ratio of exports to shipments (percent)	12.0	14.5	12.7	18.1	15.1
AG008	Cured and other fish:					
	Number of establishments	114	114	120	120	120
	Employees (thousands)	9	9	10	10	10
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	300	300	300	320	320
	U.S. exports (million dollars)	146	166	168	193	159
	U.S. imports (million dollars)	252	277	294	298	300
	Apparent U.S. consumption (million dollars)	406	411	426	424	461
	Trade balance (million dollars)	-106	-111	-126	-104	-141
	Ratio of imports to consumption (percent)	62.1	67.4	69.0	70.2	65.1
	Ratio of exports to shipments (percent)	48.8	55.4	56.0	60.4	49.7
AG009	Shellfish:					
	Number of establishments	725	700	700	715	690
	Employees (thousands)	60	60	59	60	56
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	2,000	2,200	2,400	2,650	2,500
	U.S. exports (million dollars)	589	752	799	708	737
	U.S. imports (million dollars)	4,654	5,072	6,007	5,908	5,910
	Apparent U.S. consumption (million dollars)	6,065	6,519	7,608	7,850	7,672
	Trade balance (million dollars)	-4,065	-4,319	-5,208	-5,200	-5,172
	Ratio of imports to consumption (percent)	76.7	77.8	79.0	75.3	77.0
	Ratio of exports to production (percent)	29.5	34.2	33.3	26.7	29.5
AG010	Dairy produce:					
	Number of establishments	140,000	130,000	125,000	124,000	122,000
	Employees (thousands)	630	620	610	600	590
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	62,000	63,000	64,000	66,000	67,000
	U.S. exports (million dollars)	592	591	664	723	618
	U.S. imports (million dollars)	1,325	1,387	1,474	1,574	1,488
	Apparent U.S. consumption (million dollars)	62,733	63,796	64,810	66,851	67,870
	Trade balance (million dollars)	-733	-796	-810	-851	-870
	Ratio of imports to consumption (percent)	2.1	2.2	2.3	2.4	2.2
	Ratio of exports to shipments (percent)	1.0	0.9	1.0	1.1	0.9
AG011	Eggs:					
	Number of establishments	67	65	64	64	64
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. production (million dollars)	6,659	6,700	6,800	6,850	6,900
	U.S. exports (million dollars)	207	155	159	162	155
	U.S. imports (million dollars)	14	20	18	20	28
	Apparent U.S. consumption (million dollars)	6,466	6,566	6,659	6,708	6,773
	Trade balance (million dollars)	193	134	141	142	127
	Ratio of imports to consumption (percent)	0.2	0.3	0.3	0.3	0.4
	Ratio of exports to production (percent)	3.1	2.3	2.3	2.4	2.3

See footnote(s) at end of table.

Table C-1--*Continued*

Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG012A	Sugar:					
	Number of establishments	70	70	70	70	70
	Employees (thousands)	17	17	17	17	17
	Capacity utilization (percent)	89	90	92	92	92
	U.S. production (million dollars)	3,543	3,696	3,328	3,583	3,600
	U.S. exports (million dollars)	73	70	64	90	74
	U.S. imports (million dollars)	809	639	551	547	569
	Apparent U.S. consumption (million dollars)	4,279	4,265	3,816	4,040	4,095
	Trade balance (million dollars)	-736	-569	-488	-457	-495
	Ratio of imports to consumption (percent)	18.9	15.0	14.4	13.6	13.9
	Ratio of exports to production (percent)	2.0	1.9	1.9	2.5	2.1
AG012B	High fructose corn sweetener:					
	Number of establishments	20	23	22	22	22
	Employees (thousands)	11	11	11	11	11
	Capacity utilization (percent)	80	81	81	80	80
	U.S. production (million dollars)	2,269	2,558	2,743	3,055	3,200
	U.S. exports (million dollars)	123	103	101	83	63
	U.S. imports (million dollars)	33	34	32	39	34
	Apparent U.S. consumption (million dollars)	2,179	2,489	2,673	3,011	3,171
	Trade balance (million dollars)	90	69	70	44	29
	Ratio of imports to consumption (percent)	1.5	1.4	1.2	1.3	1.1
	Ratio of exports to production (percent)	5.4	4.0	3.7	2.7	2.0
AG013	Animal feeds:					
	Number of establishments	1,800	1,800	1,800	1,800	1,790
	Employees (thousands)	53	56	56	56	54
	Capacity utilization (percent)	72	79	79	79	80
	U.S. shipments (million dollars)	37,486	36,500	37,000	37,370	39,612
	U.S. exports (million dollars)	4,307	3,621	4,061	4,508	4,189
	U.S. imports (million dollars)	661	604	641	626	670
	Apparent U.S. consumption (million dollars)	33,840	33,483	33,581	33,489	36,094
	Trade balance (million dollars)	3,646	3,017	3,419	3,881	3,518
	Ratio of imports to consumption (percent)	2.0	1.8	1.9	1.9	1.9
	Ratio of exports to shipments (percent)	11.5	9.9	11.0	12.1	10.6
AG014	Live plants:					
	Number of establishments	28,000	30,000	30,000	30,000	30,000
	Employees (thousands)	130	139	140	140	140
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	11,744	12,175	12,800	13,440	13,571
	U.S. exports (million dollars)	142	144	132	116	113
	U.S. imports (million dollars)	387	428	460	495	503
	Apparent U.S. consumption (million dollars)	11,989	12,460	13,129	13,819	13,960
	Trade balance (million dollars)	-245	-285	-329	-379	-389
	Ratio of imports to consumption (percent)	3.2	3.4	3.5	3.6	3.6
	Ratio of exports to shipments (percent)	1.2	1.2	1.0	0.9	0.8
AG015	Seeds:					
	Number of establishments	12,479	12,561	12,500	12,500	12,500
	Employees (thousands)	(2)	(2)	(2)	(2)	(2)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	(2)	(2)	(2)	(2)	(2)
	U.S. exports (million dollars)	856	812	783	768	892
	U.S. imports (million dollars)	461	485	501	436	431
	Apparent U.S. consumption (million dollars)	(2)	(2)	(2)	(2)	(2)
	Trade balance (million dollars)	395	327	282	332	461
	Ratio of imports to consumption (percent)	(2)	(2)	(2)	(2)	(2)
	Ratio of exports to production (percent)	(2)	(2)	(2)	(2)	(2)

See footnote(s) at end of table.

Table C-1--*Continued*
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG016	Cut flowers:					
	Number of establishments	2,400	2,200	2,000	1,800	1,800
	Employees (thousands)	34	32	30	26	26
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	437	451	460	455	460
	U.S. exports (million dollars)	45	41	40	39	36
	U.S. imports (million dollars)	614	592	611	565	541
	Apparent U.S. consumption (million dollars)	1,007	1,001	1,032	981	965
	Trade balance (million dollars)	-570	-550	-572	-526	-505
	Ratio of imports to consumption (percent)	61.0	59.1	59.2	57.6	56.1
	Ratio of exports to shipments (percent)	10.2	9.2	8.6	8.7	7.9
AG017	Miscellaneous vegetable substances:					
	Number of establishments	9,000	9,000	9,000	9,000	9,000
	Employees (thousands)	(2)	(2)	(2)	(2)	(2)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	900	900	900	900	900
	U.S. exports (million dollars)	459	453	485	505	476
	U.S. imports (million dollars)	956	839	790	794	760
	Apparent U.S. consumption (million dollars)	1,397	1,286	1,205	1,188	1,184
	Trade balance (million dollars)	-497	-386	-305	-288	-284
	Ratio of imports to consumption (percent)	68.4	65.3	65.5	66.8	64.2
	Ratio of exports to production (percent)	51.0	50.4	53.9	56.1	52.9
AG018	Fresh, chilled, or frozen vegetables:					
	Number of establishments	33,500	31,000	30,000	30,100	29,500
	Employees (thousands)	43	40	39	40	39
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	4,200	4,300	4,450	4,500	4,600
	U.S. exports (million dollars)	1,195	1,198	1,346	1,304	1,353
	U.S. imports (million dollars)	2,283	2,207	2,320	2,628	2,758
	Apparent U.S. consumption (million dollars)	5,289	5,309	5,423	5,824	6,005
	Trade balance (million dollars)	-1,089	-1,009	-973	-1,324	-1,405
	Ratio of imports to consumption (percent)	43.2	41.6	42.8	45.1	45.9
	Ratio of exports to production (percent)	28.4	27.9	30.3	29.0	29.4
AG019	Prepared or preserved vegetables, mushrooms, and olives:					
	Number of establishments	1,620	1,600	1,550	1,500	1,600
	Employees (thousands)	4	4	4	4	5
	Capacity utilization (percent)	87	89	88	87	85
	U.S. production (million dollars)	8,350	8,400	8,450	8,200	8,300
	U.S. exports (million dollars)	1,586	1,535	1,451	1,387	1,365
	U.S. imports (million dollars)	1,210	1,384	1,408	1,493	1,574
	Apparent U.S. consumption (million dollars)	7,973	8,250	8,407	8,306	8,509
	Trade balance (million dollars)	377	150	43	-106	-209
	Ratio of imports to consumption (percent)	15.2	16.8	16.7	18.0	18.5
	Ratio of exports to production (percent)	19.0	18.3	17.2	16.9	16.4
AG020	Edible nuts:					
	Number of establishments	37,000	37,000	37,000	37,000	37,000
	Employees (thousands)	380	380	380	380	380
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	2,477	2,404	2,326	2,606	2,506
	U.S. exports (million dollars)	1,392	1,212	1,361	1,309	1,542
	U.S. imports (million dollars)	660	794	808	670	701
	Apparent U.S. consumption (million dollars)	1,745	1,986	1,773	1,967	1,665
	Trade balance (million dollars)	732	418	553	639	841
	Ratio of imports to consumption (percent)	37.8	40.0	45.6	34.1	42.1
	Ratio of exports to shipments (percent)	56.2	50.4	58.5	50.2	61.5

See footnote(s) at end of table.

Table C-1--*Continued*
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG021	Tropical fruit:					
	Number of establishments	9,000	8,500	8,500	8,500	8,500
	Employees (thousands)	25	20	20	20	20
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	387	498	545	496	534
	U.S. exports (million dollars)	60	64	57	49	46
	U.S. imports (million dollars)	1,495	1,574	1,548	1,616	1,705
	Apparent U.S. consumption (million dollars)	1,821	2,008	2,035	2,063	2,193
	Trade balance (million dollars)	-1,434	-1,510	-1,490	-1,567	-1,659
	Ratio of imports to consumption (percent)	82.1	78.4	76.0	78.3	77.7
	Ratio of exports to shipments (percent)	15.6	12.8	10.5	9.8	8.6
AG022	Citrus fruit:					
	Number of establishments	17,562	17,450	17,450	17,300	17,200
	Employees (thousands)	92	91	91	90	90
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	2,600	2,500	2,640	2,262	2,605
	U.S. exports (million dollars)	672	498	635	613	636
	U.S. imports (million dollars)	211	331	311	308	325
	Apparent U.S. consumption (million dollars)	2,139	2,333	2,316	1,957	2,294
	Trade balance (million dollars)	461	167	324	305	311
	Ratio of imports to consumption (percent)	9.9	14.2	13.4	15.8	14.2
	Ratio of exports to production (percent)	25.9	19.9	24.1	27.1	24.4
AG023	Deciduous fruit:					
	Number of establishments	82,000	81,000	81,000	81,000	81,000
	Employees (thousands)	160	155	155	155	155
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,886	2,058	2,101	2,134	2,723
	U.S. exports (million dollars)	665	743	797	832	788
	U.S. imports (million dollars)	177	268	247	270	294
	Apparent U.S. consumption (million dollars)	1,398	1,583	1,550	1,572	2,229
	Trade balance (million dollars)	488	475	551	562	494
	Ratio of imports to consumption (percent)	12.7	16.9	15.9	17.2	13.2
	Ratio of exports to shipments (percent)	35.3	36.1	38.0	39.0	28.9
AG024	Other fresh fruit:					
	Number of establishments	60,000	55,000	55,000	55,000	55,000
	Employees (thousands)	120	115	115	115	115
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	2,222	2,383	2,199	2,521	3,018
	U.S. exports (million dollars)	484	562	638	674	708
	U.S. imports (million dollars)	890	1,031	1,024	1,065	1,183
	Apparent U.S. consumption (million dollars)	2,628	2,852	2,585	2,913	3,494
	Trade balance (million dollars)	-406	-469	-386	-392	-476
	Ratio of imports to consumption (percent)	33.9	36.1	39.6	36.6	33.9
	Ratio of exports to shipments (percent)	21.8	23.6	29.0	26.7	23.5
AG025	Dried fruit other than tropical:					
	Number of establishments	40	40	40	40	40
	Employees (thousands)	9	9	9	9	9
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	826	1,149	1,166	799	960
	U.S. exports (million dollars)	385	379	342	349	338
	U.S. imports (million dollars)	60	78	63	63	90
	Apparent U.S. consumption (million dollars)	501	848	887	514	712
	Trade balance (million dollars)	325	301	279	285	248
	Ratio of imports to consumption (percent)	12.0	9.2	7.1	12.3	12.6
	Ratio of exports to shipments (percent)	46.6	33.0	29.4	43.6	35.2

See footnote(s) at end of table.

Table C-1--*Continued*
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG026	Frozen fruit:					
	Number of establishments	40	40	40	40	40
	Employees (thousands)	6	6	6	6	6
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	664	701	669	692	775
	U.S. exports (million dollars)	92	89	86	80	80
	U.S. imports (million dollars)	89	125	122	117	152
	Apparent U.S. consumption (million dollars)	661	738	705	729	847
	Trade balance (million dollars)	3	-37	-36	-37	-72
	Ratio of imports to consumption (percent)	13.4	17.0	17.3	16.0	17.9
	Ratio of exports to shipments (percent)	13.8	12.7	12.8	11.6	10.3
AG027	Prepared or preserved fruit:					
	Number of establishments	200	200	200	200	200
	Employees (thousands)	20	20	20	20	20
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	4,411	4,499	4,724	4,960	5,209
	U.S. exports (million dollars)	185	180	190	195	184
	U.S. imports (million dollars)	484	576	547	559	622
	Apparent U.S. consumption (million dollars)	4,710	4,895	5,080	5,324	5,646
	Trade balance (million dollars)	-299	-396	-356	-364	-437
	Ratio of imports to consumption (percent)	10.3	11.8	10.8	10.5	11.0
	Ratio of exports to shipments (percent)	4.2	4.0	4.0	3.9	3.5
AG028	Coffee and tea:					
	Number of establishments	247	247	247	247	247
	Employees (thousands)	8	8	7	7	7
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	7,153	7,116	6,300	4,855	4,855
	U.S. exports (million dollars)	263	284	298	314	297
	U.S. imports (million dollars)	3,656	3,114	2,921	1,915	1,942
	Apparent U.S. consumption (million dollars)	10,546	9,946	8,923	6,456	6,500
	Trade balance (million dollars)	-3,393	-2,830	-2,623	-1,601	-1,645
	Ratio of imports to consumption (percent)	34.7	31.3	32.7	29.7	29.9
	Ratio of exports to shipments (percent)	3.7	4.0	4.7	6.5	6.1
AG029	Spices:					
	Number of establishments	274	274	274	274	274
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	1,636	1,765	1,800	1,836	1,731
	U.S. exports (million dollars)	70	72	80	76	70
	U.S. imports (million dollars)	493	530	552	517	549
	Apparent U.S. consumption (million dollars)	2,059	2,223	2,272	2,277	2,211
	Trade balance (million dollars)	-423	-458	-472	-441	-480
	Ratio of imports to consumption (percent)	23.9	23.8	24.3	22.7	24.8
	Ratio of exports to shipments (percent)	4.2	4.1	4.4	4.1	4.0
AG030	Cereals:					
	Number of establishments	298,000	282,000	265,000	250,000	235,000
	Employees (thousands)	(2)	(2)	(2)	(2)	(2)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	35,600	28,770	25,760	26,900	26,800
	U.S. exports (million dollars)	9,989	10,128	9,467	9,397	9,929
	U.S. imports (million dollars)	771	730	660	761	735
	Apparent U.S. consumption (million dollars)	26,382	19,371	16,952	18,264	17,606
	Trade balance (million dollars)	9,218	9,399	8,808	8,636	9,194
	Ratio of imports to consumption (percent)	2.9	3.8	3.9	4.2	4.2
	Ratio of exports to production (percent)	28.1	35.2	36.8	34.9	37.1

See footnote(s) at end of table.

Table C-1--*Continued*

Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG031	Milled grains, malts, and starches:					
	Number of establishments	510	515	515	500	500
	Employees (thousands)	21	21	21	20	20
	Capacity utilization (percent)	83	77	78	85	87
	U.S. shipments (million dollars)	12,532	12,753	12,500	12,125	12,125
	U.S. exports (million dollars)	417	439	402	446	594
	U.S. imports (million dollars)	258	261	304	305	379
	Apparent U.S. consumption (million dollars)	12,373	12,575	12,402	11,983	11,910
	Trade balance (million dollars)	159	178	98	142	215
	Ratio of imports to consumption (percent)	2.1	2.1	2.5	2.5	3.2
	Ratio of exports to shipments (percent)	3.3	3.4	3.2	3.7	4.9
AG032	Oilseeds:					
	Number of establishments	298,000	282,000	265,000	250,000	235,000
	Employees (thousands)	(2)	(2)	(2)	(2)	(2)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	18,900	14,900	13,300	13,600	13,800
	U.S. exports (million dollars)	5,053	4,694	5,419	5,642	5,790
	U.S. imports (million dollars)	294	238	231	203	191
	Apparent U.S. consumption (million dollars)	14,140	10,443	8,112	8,161	8,201
	Trade balance (million dollars)	4,760	4,457	5,188	5,439	5,599
	Ratio of imports to consumption (percent)	2.1	2.3	2.8	2.5	2.3
	Ratio of exports to production (percent)	26.7	31.5	40.7	41.5	42.0
AG033	Animal or vegetable fats and oils:					
	Number of establishments	515	510	506	502	500
	Employees (thousands)	32	29	27	28	28
	Capacity utilization (percent)	84	84	87	90	90
	U.S. shipments (million dollars)	9,350	8,430	7,400	7,000	8,600
	U.S. exports (million dollars)	2,763	1,947	1,450	1,405	1,917
	U.S. imports (million dollars)	1,475	1,348	1,311	1,128	1,285
	Apparent U.S. consumption (million dollars)	8,061	7,831	7,261	6,723	7,968
	Trade balance (million dollars)	1,289	599	139	277	632
	Ratio of imports to consumption (percent)	18.3	17.2	18.1	16.8	16.1
	Ratio of exports to shipments (percent)	29.6	23.1	19.6	20.1	22.3
AG034	Pasta, cereals, and other bakery goods:					
	Number of establishments	4,450	4,450	4,450	4,450	4,425
	Employees (thousands)	290	297	303	310	303
	Capacity utilization (percent)	71	72	70	73	75
	U.S. shipments (million dollars)	59,910	62,731	64,751	66,837	68,174
	U.S. exports (million dollars)	1,051	1,044	1,092	1,153	1,184
	U.S. imports (million dollars)	1,461	1,637	1,755	1,902	2,191
	Apparent U.S. consumption (million dollars)	60,320	63,324	65,413	67,585	69,182
	Trade balance (million dollars)	-410	-593	-662	-748	-1,008
	Ratio of imports to consumption (percent)	2.4	2.6	2.7	2.8	3.2
	Ratio of exports to shipments (percent)	1.8	1.7	1.7	1.7	1.7
AG035	Sauces, condiments, and soups:					
	Number of establishments	250	255	255	255	255
	Employees (thousands)	30	30	30	30	30
	Capacity utilization (percent)	68	68	60	65	70
	U.S. shipments (million dollars)	15,514	15,828	16,065	16,390	17,210
	U.S. exports (million dollars)	529	587	641	737	761
	U.S. imports (million dollars)	396	457	502	576	670
	Apparent U.S. consumption (million dollars)	15,381	15,698	15,926	16,229	17,119
	Trade balance (million dollars)	133	130	139	161	91
	Ratio of imports to consumption (percent)	2.6	2.9	3.2	3.5	3.9
	Ratio of exports to shipments (percent)	3.4	3.7	4.0	4.5	4.4

See footnote(s) at end of table.

Table C-1--*Continued*
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG036	Infant formulas, malt extracts, and other edible preparations:					
	Number of establishments	1,400	1,400	1,400	1,400	1,400
	Employees (thousands)	105	105	105	105	105
	Capacity utilization (percent)	72	72	70	75	75
	U.S. shipments (million dollars)	32,613	33,675	34,685	36,419	37,147
	U.S. exports (million dollars)	2,044	2,412	2,401	2,729	2,582
	U.S. imports (million dollars)	459	556	556	659	795
	Apparent U.S. consumption (million dollars)	31,028	31,819	32,840	34,349	35,360
	Trade balance (million dollars)	1,585	1,856	1,845	2,070	1,787
	Ratio of imports to consumption (percent)	1.5	1.7	1.7	1.9	2.2
	Ratio of exports to shipments (percent)	6.3	7.2	6.9	7.5	6.9
AG037	Cocoa, chocolate, and confectionery:					
	Number of establishments	1,010	1,200	1,300	1,300	1,350
	Employees (thousands)	74	80	90	90	90
	Capacity utilization (percent)	72	85	87	87	87
	U.S. shipments (million dollars)	12,800	14,000	16,000	16,000	16,500
	U.S. exports (million dollars)	655	697	851	997	817
	U.S. imports (million dollars)	2,284	2,238	2,178	2,301	2,662
	Apparent U.S. consumption (million dollars)	14,429	15,540	17,328	17,304	18,346
	Trade balance (million dollars)	-1,629	-1,540	-1,328	-1,304	-1,846
	Ratio of imports to consumption (percent)	15.8	14.4	12.6	13.3	14.5
	Ratio of exports to shipments (percent)	5.1	5.0	5.3	6.2	4.9
AG038	Fruit and vegetable juices:					
	Number of establishments	97	95	94	92	90
	Employees (thousands)	147	145	144	140	140
	Capacity utilization (percent)	83	83	83	83	83
	U.S. shipments (million dollars)	2,750	2,900	3,100	3,000	3,000
	U.S. exports (million dollars)	668	748	713	665	682
	U.S. imports (million dollars)	677	796	767	661	675
	Apparent U.S. consumption (million dollars)	2,759	2,948	3,153	2,995	2,993
	Trade balance (million dollars)	-9	-48	-53	5	7
	Ratio of imports to consumption (percent)	24.5	27.0	24.3	22.1	22.5
	Ratio of exports to shipments (percent)	24.3	25.8	23.0	22.2	22.7
AG039	Nonalcoholic beverages, excluding fruit and vegetable juices:					
	Number of establishments	3,200	3,200	3,200	3,200	3,200
	Employees (thousands)	110	110	110	110	110
	Capacity utilization (percent)	67	67	67	67	67
	U.S. shipments (million dollars)	61,000	62,000	63,000	65,000	70,370
	U.S. exports (million dollars)	302	328	312	312	334
	U.S. imports (million dollars)	568	625	683	745	823
	Apparent U.S. consumption (million dollars)	61,266	62,298	63,371	65,434	70,859
	Trade balance (million dollars)	-266	-298	-371	-434	-489
	Ratio of imports to consumption (percent)	0.9	1.0	1.1	1.1	1.2
	Ratio of exports to shipments (percent)	0.5	0.5	0.5	0.5	0.5

See footnote(s) at end of table.

Table C-1--*Continued*
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG040	Malt beverages:					
	Number of establishments	529	529	529	529	529
	Employees (thousands)	32	30	31	33	33
	Capacity utilization (percent)	82	80	79	80	80
	U.S. shipments (million dollars)	18,020	16,907	16,544	16,925	16,925
	U.S. exports (million dollars)	254	201	169	191	171
	U.S. imports (million dollars)	1,699	1,881	2,166	2,333	2,566
	Apparent U.S. consumption (million dollars)	19,465	18,587	18,540	19,067	19,320
	Trade balance (million dollars)	-1,445	-1,680	-1,996	-2,142	-2,395
	Ratio of imports to consumption (percent)	8.7	10.1	11.7	12.2	13.3
	Ratio of exports to shipments (percent)	1.4	1.2	1.0	1.1	1.0
AG041	Wine and certain other fermented beverages:					
	Number of establishments	1,994	2,000	2,646	2,646	2,646
	Employees (thousands)	20	21	22	23	24
	Capacity utilization (percent)	79	79	80	82	82
	U.S. shipments (million dollars)	6,719	6,618	7,208	7,854	7,854
	U.S. exports (million dollars)	532	541	551	531	541
	U.S. imports (million dollars)	1,881	2,210	2,259	2,316	2,740
	Apparent U.S. consumption (million dollars)	8,068	8,287	8,916	9,639	10,053
	Trade balance (million dollars)	-1,349	-1,669	-1,708	-1,785	-2,199
	Ratio of imports to consumption (percent)	23.3	26.7	25.3	24.0	27.3
	Ratio of exports to shipments (percent)	7.9	8.2	7.6	6.8	6.9
AG042	Distilled spirits:					
	Number of establishments	57	57	57	57	57
	Employees (thousands)	6	6	6	8	7
	Capacity utilization (percent)	60	63	63	68	68
	U.S. shipments (million dollars)	3,439	3,063	3,860	3,929	3,929
	U.S. exports (million dollars)	506	480	483	534	555
	U.S. imports (million dollars)	2,086	2,383	2,727	2,848	3,111
	Apparent U.S. consumption (million dollars)	5,019	4,965	6,104	6,242	6,485
	Trade balance (million dollars)	-1,580	-1,902	-2,244	-2,313	-2,556
	Ratio of imports to consumption (percent)	41.6	48.0	44.7	45.6	48.0
	Ratio of exports to shipments (percent)	14.7	15.7	12.5	13.6	14.1
AG043	Unmanufactured tobacco:					
	Number of establishments	21	21	21	20	20
	Employees (thousands)	6	4	4	4	4
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	3,447	2,370	2,122	2,187	2,300
	U.S. exports (million dollars)	1,459	1,294	1,222	1,268	1,050
	U.S. imports (million dollars)	771	711	628	680	716
	Apparent U.S. consumption (million dollars)	2,759	1,787	1,528	1,599	1,966
	Trade balance (million dollars)	688	583	594	588	334
	Ratio of imports to consumption (percent)	27.9	39.8	41.1	42.5	36.4
	Ratio of exports to production (percent)	42.3	54.6	57.6	58.0	45.6
AG044	Cigars and certain other manufactured tobacco:					
	Number of establishments	57	57	57	57	57
	Employees (thousands)	3	3	3	3	3
	Capacity utilization (percent)	75	75	74	73	72
	U.S. shipments (million dollars)	1,316	1,235	1,193	1,100	1,010
	U.S. exports (million dollars)	661	651	709	616	485
	U.S. imports (million dollars)	377	301	290	285	299
	Apparent U.S. consumption (million dollars)	1,032	885	774	769	825
	Trade balance (million dollars)	284	350	419	331	185
	Ratio of imports to consumption (percent)	36.6	34.0	37.5	37.1	36.3
	Ratio of exports to shipments (percent)	50.2	52.7	59.4	56.0	48.0

See footnote(s) at end of table.

Table C-1--*Continued*
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG045	Cigarettes:					
	Number of establishments	11	10	10	10	10
	Employees (thousands)	21	18	17	15	15
	Capacity utilization (percent)	71	71	70	71	70
	U.S. shipments (million dollars)	32,800	39,686	39,686	42,787	45,696
	U.S. exports (million dollars)	4,166	3,232	3,308	2,118	1,463
	U.S. imports (million dollars)	59	112	212	189	230
	Apparent U.S. consumption (million dollars)	28,694	36,566	36,590	40,857	44,462
	Trade balance (million dollars)	4,106	3,120	3,096	1,930	1,234
	Ratio of imports to consumption (percent)	0.2	0.3	0.6	0.5	0.5
	Ratio of exports to shipments (percent)	12.7	8.1	8.3	5.0	3.2
AG046	Hides, skins, and leather:					
	Number of establishments	1,220	1,220	1,220	1,220	1,220
	Employees (thousands)	18	18	17	16	16
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	5,041	5,228	5,253	5,255	5,085
	U.S. exports (million dollars)	1,934	1,850	2,330	2,650	2,390
	U.S. imports (million dollars)	1,124	1,052	1,167	1,032	935
	Apparent U.S. consumption (million dollars)	4,232	4,430	4,090	3,638	3,629
	Trade balance (million dollars)	809	798	1,163	1,617	1,456
	Ratio of imports to consumption (percent)	26.6	23.7	28.5	28.4	25.8
	Ratio of exports to shipments (percent)	38.4	35.4	44.4	50.4	47.0
AG047	Furskins:					
	Number of establishments	438	398	350	325	318
	Employees (thousands)	3	2	2	2	2
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	205	157	151	166	128
	U.S. exports (million dollars)	196	141	158	173	173
	U.S. imports (million dollars)	86	73	87	96	87
	Apparent U.S. consumption (million dollars)	96	90	81	89	43
	Trade balance (million dollars)	109	67	70	77	85
	Ratio of imports to consumption (percent)	90.2	81.6	(3)108.1	(3)107.7	(3)204.6
	Ratio of exports to shipments (percent)	95.4	89.5	(3)104.4	(3)104.1	(3)134.8
AG048	Wool and other animal hair:					
	Number of establishments	70,020	67,940	67,800	65,658	64,695
	Employees (thousands)	(2)	(2)	(2)	(2)	(2)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	42	28	26	20	25
	U.S. exports (million dollars)	13	22	19	11	26
	U.S. imports (million dollars)	141	70	74	57	42
	Apparent U.S. consumption (million dollars)	170	76	81	66	41
	Trade balance (million dollars)	-128	-48	-55	-46	-16
	Ratio of imports to consumption (percent)	82.7	92.5	90.9	86.3	(3)101.4
	Ratio of exports to production (percent)	30.0	79.8	71.8	54.7	(3)102.3
AG049	Cotton, not carded or combed:					
	Number of establishments	30,785	30,114	30,000	30,000	30,000
	Employees (thousands)	170	166	160	160	160
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	4,141	3,810	4,260	3,384	4,678
	U.S. exports (million dollars)	2,545	968	1,883	2,164	2,015
	U.S. imports (million dollars)	14	136	21	4	20
	Apparent U.S. consumption (million dollars)	1,609	2,978	2,398	1,224	2,683
	Trade balance (million dollars)	2,532	832	1,862	2,160	1,995
	Ratio of imports to consumption (percent)	0.8	4.6	0.9	0.3	0.7
	Ratio of exports to production (percent)	61.5	25.4	44.2	64.0	43.1

See footnote(s) at end of table.

Table C-1--*Continued*
Agricultural products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG050	Ethyl alcohol for nonbeverage purposes:					
	Number of establishments	47	57	62	61	60
	Employees (thousands)	7	7	8	8	8
	Capacity utilization (percent)	80	78	87	75	79
	U.S. production (million dollars)	1,600	2,000	2,000	1,742	2,000
	U.S. exports (million dollars)	58	58	91	125	71
	U.S. imports (million dollars)	124	130	162	178	170
	Apparent U.S. consumption (million dollars)	1,666	2,073	2,070	1,795	2,099
	Trade balance (million dollars)	-66	-73	-70	-53	-99
	Ratio of imports to consumption (percent)	7.4	6.3	7.8	9.9	8.1
	Ratio of exports to production (percent)	3.6	2.9	4.6	7.2	3.6

[1]Capacity utilization could not be meaningfully calculated for this industry.
[2]Not available.
[3]Inventory changes, for which data are not available, likely account for ratios that exceed 100 percent.

Note.–Calculations based on unrounded data.

Table C-2
Forest products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG051	Logs and rough wood products:					
	Number of establishments	13,500	13,800	13,500	13,500	13,500
	Employees (thousands)	85	85	83	84	84
	Capacity utilization (percent)	92	92	95	93	93
	U.S. shipments (million dollars)	48,600	48,600	51,200	44,500	45,600
	U.S. exports (million dollars)	1,927	1,885	1,941	1,622	1,490
	U.S. imports (million dollars)	423	495	576	582	582
	Apparent U.S. consumption (million dollars)	47,097	47,210	49,835	43,461	44,693
	Trade balance (million dollars)	1,503	1,390	1,365	1,039	907
	Ratio of imports to consumption (percent)	0.9	1.0	1.2	1.3	1.3
	Ratio of exports to shipments (percent)	4.0	3.9	3.8	3.6	3.3
AG052	Lumber:					
	Number of establishments	5,400	5,300	5,200	5,000	5,000
	Employees (thousands)	116	118	117	116	116
	Capacity utilization (percent)	90	92	92	89	89
	U.S. shipments (million dollars)	22,500	24,700	23,400	21,500	22,100
	U.S. exports (million dollars)	2,002	2,184	2,210	1,781	1,720
	U.S. imports (million dollars)	6,743	7,820	7,071	6,854	6,647
	Apparent U.S. consumption (million dollars)	27,241	30,336	28,260	26,573	27,027
	Trade balance (million dollars)	-4,741	-5,636	-4,860	-5,073	-4,927
	Ratio of imports to consumption (percent)	24.8	25.8	25.0	25.8	24.6
	Ratio of exports to shipments (percent)	8.9	8.8	9.4	8.3	7.8
AG053	Moldings, millwork, and joinery:					
	Number of establishments	5,300	5,300	5,200	5,200	5,200
	Employees (thousands)	146	154	154	162	167
	Capacity utilization (percent)	87	87	90	90	90
	U.S. shipments (million dollars)	18,500	20,100	21,000	21,000	22,600
	U.S. exports (million dollars)	548	545	553	467	443
	U.S. imports (million dollars)	1,924	2,521	2,518	2,521	2,866
	Apparent U.S. consumption (million dollars)	19,876	22,076	22,966	23,054	25,023
	Trade balance (million dollars)	-1,376	-1,976	-1,966	-2,054	-2,423
	Ratio of imports to consumption (percent)	9.7	11.4	11.0	10.9	11.5
	Ratio of exports to shipments (percent)	3.0	2.7	2.6	2.2	2.0
AG054	Wood veneer and wood panels:					
	Number of establishments	810	810	800	780	780
	Employees (thousands)	72	72	76	74	74
	Capacity utilization (percent)	82	82	83	85	85
	U.S. production (million dollars)	13,600	14,800	14,200	12,500	13,600
	U.S. exports (million dollars)	929	958	1,029	889	928
	U.S. imports (million dollars)	2,767	3,574	3,471	3,280	3,730
	Apparent U.S. consumption (million dollars)	15,438	17,415	16,643	14,891	16,401
	Trade balance (million dollars)	-1,838	-2,615	-2,443	-2,391	-2,801
	Ratio of imports to consumption (percent)	17.9	20.5	20.9	22.0	22.7
	Ratio of exports to production (percent)	6.8	6.5	7.2	7.1	6.8
AG055	Wooden containers:					
	Number of establishments	2,900	2,800	2,800	2,800	2,800
	Employees (thousands)	53	50	51	51	50
	Capacity utilization (percent)	82	82	85	85	85
	U.S. production (million dollars)	4,500	4,700	5,000	5,200	4,800
	U.S. exports (million dollars)	138	172	197	150	135
	U.S. imports (million dollars)	419	471	565	555	612
	Apparent U.S. consumption (million dollars)	4,781	4,999	5,369	5,605	5,277
	Trade balance (million dollars)	-281	-299	-369	-405	-477
	Ratio of imports to consumption (percent)	8.8	9.4	10.5	9.9	11.6
	Ratio of exports to production (percent)	3.1	3.7	3.9	2.9	2.8

See footnote(s) at end of table.

Table C-2--*Continued*
Forest products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG056	Tools and tool handles of wood:					
	Number of establishments	125	125	120	110	110
	Employees (thousands)	3	3	3	3	3
	Capacity utilization (percent)	78	78	75	75	75
	U.S. production (million dollars)	134	138	141	130	138
	U.S. exports (million dollars)	36	44	53	37	42
	U.S. imports (million dollars)	117	120	136	130	131
	Apparent U.S. consumption (million dollars)	215	213	223	223	227
	Trade balance (million dollars)	-81	-75	-82	-93	-89
	Ratio of imports to consumption (percent)	54.6	56.0	60.7	58.2	57.6
	Ratio of exports to production (percent)	27.2	32.0	37.8	28.4	30.2
AG058	Cork and rattan:					
	Number of establishments	30	30	30	30	30
	Employees (thousands)	2	2	2	2	2
	Capacity utilization (percent)	80	80	80	80	80
	U.S. production (million dollars)	110	110	115	120	120
	U.S. exports (million dollars)	85	90	86	53	61
	U.S. imports (million dollars)	447	450	485	522	570
	Apparent U.S. consumption (million dollars)	472	469	514	589	629
	Trade balance (million dollars)	-362	-359	-399	-469	-509
	Ratio of imports to consumption (percent)	94.6	95.8	94.3	88.7	90.6
	Ratio of exports to production (percent)	77.0	82.0	74.5	44.4	51.0
AG059	Wood pulp and wastepaper:					
	Number of establishments	70	68	68	67	66
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	91	86	91	85	88
	U.S. production (million dollars)	7,300	7,900	9,300	7,300	7,900
	U.S. exports (million dollars)	3,452	3,540	4,619	3,711	3,853
	U.S. imports (million dollars)	2,447	2,604	3,388	2,650	2,371
	Apparent U.S. consumption (million dollars)	6,295	6,964	8,069	6,239	6,418
	Trade balance (million dollars)	1,005	936	1,231	1,061	1,482
	Ratio of imports to consumption (percent)	38.9	37.4	42.0	42.5	36.9
	Ratio of exports to production (percent)	47.3	44.8	49.7	50.8	48.8
AG060	Paper boxes and bags:					
	Number of establishments	2,997	3,013	3,029	3,045	3,062
	Employees (thousands)	227	228	230	232	234
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. production (million dollars)	42,700	43,600	47,700	45,700	48,300
	U.S. exports (million dollars)	1,345	1,416	1,500	1,445	1,315
	U.S. imports (million dollars)	745	802	940	1,011	1,121
	Apparent U.S. consumption (million dollars)	42,100	42,985	47,139	45,265	48,105
	Trade balance (million dollars)	600	615	561	435	195
	Ratio of imports to consumption (percent)	1.8	1.9	2.0	2.2	2.3
	Ratio of exports to production (percent)	3.1	3.2	3.1	3.2	2.7
AG061A	Paperboard:					
	Number of establishments	222	216	212	206	203
	Employees (thousands)	54	51	51	49	48
	Capacity utilization (percent)	93	96	90	86	84
	U.S. production (million dollars)	24,900	25,500	25,600	23,200	23,700
	U.S. exports (million dollars)	3,589	3,328	3,621	3,165	3,538
	U.S. imports (million dollars)	1,277	1,468	1,662	1,591	1,829
	Apparent U.S. consumption (million dollars)	22,587	23,640	23,641	21,626	21,991
	Trade balance (million dollars)	2,313	1,860	1,959	1,574	1,709
	Ratio of imports to consumption (percent)	5.7	6.2	7.0	7.4	8.3
	Ratio of exports to production (percent)	14.4	13.0	14.1	13.6	14.9

See footnote(s) at end of table.

Table C-2--*Continued*
Forest products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG061B	Tissue and tissue products:					
	Number of establishments	86	81	84	82	82
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	96	96	94	92	97
	U.S. production (million dollars)	13,700	14,600	14,500	14,900	14,200
	U.S. exports (million dollars)	872	1,005	1,119	1,283	1,211
	U.S. imports (million dollars)	643	768	906	1,082	1,237
	Apparent U.S. consumption (million dollars)	13,471	14,363	14,286	14,699	14,226
	Trade balance (million dollars)	229	237	214	201	-26
	Ratio of imports to consumption (percent)	4.8	5.4	6.3	7.4	8.7
	Ratio of exports to production (percent)	6.4	6.9	7.7	8.6	8.5
AG061C	Industrial paper:					
	Number of establishments	77	75	73	71	70
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	87	90	84	79	79
	U.S. production (million dollars)	4,900	5,300	5,300	5,100	5,200
	U.S. exports (million dollars)	848	837	919	954	480
	U.S. imports (million dollars)	522	561	589	602	398
	Apparent U.S. consumption (million dollars)	4,574	5,023	4,970	4,748	5,119
	Trade balance (million dollars)	326	277	330	352	81
	Ratio of imports to consumption (percent)	11.4	11.2	11.9	12.7	7.8
	Ratio of exports to production (percent)	17.3	15.8	17.3	18.7	9.2
AG062	Newsprint:					
	Number of establishments	25	24	24	24	20
	Employees (thousands)	13	11	10	10	8
	Capacity utilization (percent)	97	97	97	90	83
	U.S. shipments (million dollars)	4,147	3,316	3,495	3,209	2,440
	U.S. exports (million dollars)	460	423	492	409	330
	U.S. imports (million dollars)	3,766	3,517	3,789	3,597	3,039
	Apparent U.S. consumption (million dollars)	7,452	6,410	6,792	6,397	5,149
	Trade balance (million dollars)	-3,305	-3,094	-3,297	-3,188	-2,709
	Ratio of imports to consumption (percent)	50.5	54.9	55.8	56.2	59.0
	Ratio of exports to shipments (percent)	11.1	12.8	14.1	12.7	13.5
AG063	Printing and writing papers:					
	Number of establishments	120	120	115	115	105
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	92	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	23,723	23,379	24,267	21,511	21,600
	U.S. exports (million dollars)	1,225	1,338	1,522	1,308	620
	U.S. imports (million dollars)	4,115	4,337	4,977	4,761	4,372
	Apparent U.S. consumption (million dollars)	26,613	26,379	27,722	24,964	25,352
	Trade balance (million dollars)	-2,890	-3,000	-3,455	-3,453	-3,752
	Ratio of imports to consumption (percent)	15.5	16.4	18.0	19.1	17.2
	Ratio of exports to shipments (percent)	5.2	5.7	6.3	6.1	2.9
AG064	Certain specialty papers:					
	Number of establishments	(1)	(1)	(1)	(1)	(1)
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	5,091	5,300	5,564	5,600	5,700
	U.S. exports (million dollars)	701	641	689	618	1,056
	U.S. imports (million dollars)	845	971	1,138	1,067	909
	Apparent U.S. consumption (million dollars)	5,235	5,630	6,013	6,049	5,553
	Trade balance (million dollars)	-144	-330	-449	-449	147
	Ratio of imports to consumption (percent)	16.1	17.2	18.9	17.6	16.4
	Ratio of exports to shipments (percent)	13.8	12.1	12.4	11.0	18.5

See footnote(s) at end of table.

Table C-2--*Continued*
Forest products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
AG066	Printed matter:					
	Number of establishments	70,000	62,000	62,000	62,000	60,000
	Employees (thousands)	1,500	1,500	1,500	1,500	1,400
	Capacity utilization (percent)	74	76	75	71	([1])
	U.S. shipments (million dollars)	217,000	229,000	240,000	243,000	246,000
	U.S. exports (million dollars)	4,308	4,195	4,306	4,353	4,006
	U.S. imports (million dollars)	2,923	3,161	3,489	3,536	3,742
	Apparent U.S. consumption (million dollars)	215,615	227,966	239,183	242,183	245,737
	Trade balance (million dollars)	1,385	1,034	817	817	263
	Ratio of imports to consumption (percent)	1.4	1.4	1.5	1.5	1.5
	Ratio of exports to shipments (percent)	2.0	1.8	1.8	1.8	1.6

[1]Not available.
[2]Capacity utilization could not be meaningfully calculated for this industry.

Note.–Calculations based on unrounded data.

Table C-3
Chemicals and related products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH007	Major primary olefins:					
	Number of establishments	37	37	37	37	37
	Employees (thousands)	5	5	5	5	5
	Capacity utilization (percent)	97	98	97	92	95
	U.S. shipments (million dollars)	15,500	17,000	18,500	17,500	19,000
	U.S. exports (million dollars)	169	181	299	120	245
	U.S. imports (million dollars)	1,360	1,798	3,552	2,913	3,397
	Apparent U.S. consumption (million dollars)	16,691	18,617	21,753	20,293	22,152
	Trade balance (million dollars)	-1,191	-1,617	-3,253	-2,793	-3,152
	Ratio of imports to consumption (percent)	8.1	9.7	16.3	14.4	15.3
	Ratio of exports to shipments (percent)	1.1	1.1	1.6	0.7	1.3
CH008	Other olefins:					
	Number of establishments	23	23	23	23	23
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	97	98	97	95	97
	U.S. shipments (million dollars)	1,220	1,350	1,500	1,500	1,650
	U.S. exports (million dollars)	211	208	264	311	260
	U.S. imports (million dollars)	82	91	156	143	113
	Apparent U.S. consumption (million dollars)	1,091	1,233	1,392	1,332	1,503
	Trade balance (million dollars)	129	117	108	168	147
	Ratio of imports to consumption (percent)	7.5	7.4	11.2	10.7	7.5
	Ratio of exports to shipments (percent)	17.3	15.4	17.6	20.7	15.7
CH009	Primary aromatics:					
	Number of establishments	31	31	31	31	31
	Employees (thousands)	2	2	2	2	2
	Capacity utilization (percent)	80	80	85	85	85
	U.S. shipments (million dollars)	4,000	4,250	5,300	4,900	5,000
	U.S. exports (million dollars)	56	91	105	122	148
	U.S. imports (million dollars)	704	815	1,563	1,122	1,159
	Apparent U.S. consumption (million dollars)	4,647	4,974	6,759	5,900	6,011
	Trade balance (million dollars)	-647	-724	-1,459	-1,000	-1,011
	Ratio of imports to consumption (percent)	15.1	16.4	23.1	19.0	19.3
	Ratio of exports to shipments (percent)	1.4	2.1	2.0	2.5	3.0
CH014	Inorganic acids:					
	Number of establishments	(1)	(1)	(1)	(1)	(1)
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	(1)	(1)	2,276	1,852	(1)
	U.S. exports (million dollars)	186	204	246	242	214
	U.S. imports (million dollars)	282	238	251	252	246
	Apparent U.S. consumption (million dollars)	(1)	(1)	2,281	1,861	(1)
	Trade balance (million dollars)	-95	-34	-5	-9	-32
	Ratio of imports to consumption (percent)	(1)	(1)	11.0	13.5	(1)
	Ratio of exports to shipments (percent)	(1)	(1)	10.8	13.1	(1)
CH015	Chlor-alkali chemicals:					
	Number of establishments	(1)	(1)	(1)	(1)	(1)
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	(1)	(1)	(1)	(1)	(1)
	U.S. exports (million dollars)	834	781	862	1,054	851
	U.S. imports (million dollars)	191	126	162	219	166
	Apparent U.S. consumption (million dollars)	(1)	(1)	(1)	(1)	(1)
	Trade balance (million dollars)	642	655	700	835	685
	Ratio of imports to consumption (percent)	(1)	(1)	(1)	(1)	(1)
	Ratio of exports to shipments (percent)	(1)	(1)	(1)	(1)	(1)

See footnote(s) at end of table.

Table C-3--*Continued*
Chemicals and related products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH016	Fertilizers:					
	Number of establishments	350	350	350	350	350
	Employees (thousands)	23	23	22	22	22
	Capacity utilization (percent)	92	90	78	76	82
	U.S. shipments (million dollars)	9,400	8,000	7,500	7,000	7,500
	U.S. exports (million dollars)	3,346	3,036	2,388	2,183	2,184
	U.S. imports (million dollars)	2,472	2,486	3,224	3,478	3,043
	Apparent U.S. consumption (million dollars)	8,526	7,450	8,336	8,295	8,359
	Trade balance (million dollars)	874	550	-836	-1,295	-859
	Ratio of imports to consumption (percent)	29.0	33.4	38.7	41.9	36.4
	Ratio of exports to shipments (percent)	35.6	37.9	31.8	31.2	29.1
CH017	Paints, inks, and related items, and certain components thereof:					
	Number of establishments	1,500	1,490	1,475	1,470	1,450
	Employees (thousands)	15	15	16	16	15
	Capacity utilization (percent)	85	85	88	85	85
	U.S. shipments (million dollars)	22,800	24,000	25,000	25,600	26,000
	U.S. exports (million dollars)	3,112	3,327	3,802	3,546	3,614
	U.S. imports (million dollars)	1,755	1,959	2,119	2,090	1,996
	Apparent U.S. consumption (million dollars)	21,443	22,632	23,317	24,145	24,382
	Trade balance (million dollars)	1,357	1,368	1,683	1,455	1,618
	Ratio of imports to consumption (percent)	8.2	8.7	9.1	8.7	8.2
	Ratio of exports to shipments (percent)	13.6	13.9	15.2	13.9	13.9
CH018	Synthetic organic pigments:					
	Number of establishments	32	32	32	32	32
	Employees (thousands)	6	6	6	6	6
	Capacity utilization (percent)	85	85	85	80	80
	U.S. shipments (million dollars)	959	1,050	1,100	1,100	1,110
	U.S. exports (million dollars)	349	360	373	329	331
	U.S. imports (million dollars)	402	404	358	301	319
	Apparent U.S. consumption (million dollars)	1,012	1,093	1,084	1,071	1,098
	Trade balance (million dollars)	-53	-43	16	29	12
	Ratio of imports to consumption (percent)	39.7	36.9	33.0	28.1	29.0
	Ratio of exports to shipments (percent)	36.4	34.3	33.9	29.9	29.8
CH019	Synthetic dyes and azoic couplers:					
	Number of establishments	32	32	32	32	32
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	85	85	85	80	80
	U.S. shipments (million dollars)	1,122	1,230	1,320	1,320	1,320
	U.S. exports (million dollars)	453	404	436	361	249
	U.S. imports (million dollars)	555	527	481	378	393
	Apparent U.S. consumption (million dollars)	1,224	1,353	1,365	1,336	1,463
	Trade balance (million dollars)	-102	-123	-45	-16	-143
	Ratio of imports to consumption (percent)	45.3	38.9	35.3	28.3	26.8
	Ratio of exports to shipments (percent)	40.3	32.8	33.0	27.4	18.9
CH020	Synthetic tanning agents:					
	Number of establishments	5	5	5	5	5
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	85	85	85	80	80
	U.S. shipments (million dollars)	20	22	24	24	24
	U.S. exports (million dollars)	19	13	18	17	18
	U.S. imports (million dollars)	6	7	7	5	7
	Apparent U.S. consumption (million dollars)	7	16	13	12	12
	Trade balance (million dollars)	13	6	11	12	12
	Ratio of imports to consumption (percent)	81.6	45.3	55.5	41.4	53.6
	Ratio of exports to shipments (percent)	93.1	60.4	76.3	70.2	76.5

See footnote(s) at end of table.

Table C-3--*Continued*
Chemicals and related products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH021	Natural tanning and dyeing materials:					
	Number of establishments	10	10	10	10	10
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	85	85	85	80	80
	U.S. shipments (million dollars)	30	30	30	30	30
	U.S. exports (million dollars)	21	21	24	26	27
	U.S. imports (million dollars)	66	71	73	65	54
	Apparent U.S. consumption (million dollars)	75	80	79	70	57
	Trade balance (million dollars)	-45	-50	-49	-40	-27
	Ratio of imports to consumption (percent)	87.8	88.6	91.9	93.9	95.4
	Ratio of exports to shipments (percent)	69.6	69.7	78.6	85.8	91.3
CH022	Photographic chemicals and preparations:					
	Number of establishments	5	5	5	5	5
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	85	85	85	80	80
	U.S. shipments (million dollars)	(1)	(1)	(1)	(1)	(1)
	U.S. exports (million dollars)	449	433	507	413	522
	U.S. imports (million dollars)	633	564	555	479	435
	Apparent U.S. consumption (million dollars)	(1)	(1)	(1)	(1)	(1)
	Trade balance (million dollars)	-184	-131	-48	-66	87
	Ratio of imports to consumption (percent)	(1)	(1)	(1)	(1)	(1)
	Ratio of exports to shipments (percent)	(1)	(1)	(1)	(1)	(1)
CH023	Pesticide products and formulations:					
	Number of establishments	55	55	55	55	55
	Employees (thousands)	14	14	14	14	14
	Capacity utilization (percent)	88	85	85	85	85
	U.S. shipments (million dollars)	11,420	10,260	9,790	9,350	9,350
	U.S. exports (million dollars)	2,397	2,212	2,038	2,166	2,028
	U.S. imports (million dollars)	1,335	1,217	1,117	1,318	1,185
	Apparent U.S. consumption (million dollars)	10,358	9,265	8,869	8,502	8,508
	Trade balance (million dollars)	1,062	995	921	848	842
	Ratio of imports to consumption (percent)	12.9	13.1	12.6	15.5	13.9
	Ratio of exports to shipments (percent)	21.0	21.6	20.8	23.2	21.7
CH024	Adhesives and glues:					
	Number of establishments	500	500	500	500	500
	Employees (thousands)	10	10	10	10	10
	Capacity utilization (percent)	85	85	85	85	80
	U.S. shipments (million dollars)	4,888	5,000	5,100	5,200	5,000
	U.S. exports (million dollars)	477	502	602	565	588
	U.S. imports (million dollars)	159	181	194	176	206
	Apparent U.S. consumption (million dollars)	4,570	4,679	4,692	4,812	4,618
	Trade balance (million dollars)	318	321	408	388	382
	Ratio of imports to consumption (percent)	3.5	3.9	4.1	3.7	4.5
	Ratio of exports to shipments (percent)	9.7	10.0	11.8	10.9	11.8
CH025	Medicinal chemicals:					
	Number of establishments	718	718	718	718	715
	Employees (thousands)	208	208	208	208	208
	Capacity utilization (percent)	85	85	85	85	85
	U.S. shipments (million dollars)	81,300	91,800	105,600	107,000	107,000
	U.S. exports (million dollars)	11,975	13,701	15,772	18,169	18,742
	U.S. imports (million dollars)	17,953	23,782	29,112	33,956	40,699
	Apparent U.S. consumption (million dollars)	87,278	101,881	118,940	122,788	128,957
	Trade balance (million dollars)	-5,978	-10,081	-13,340	-15,788	-21,957
	Ratio of imports to consumption (percent)	20.6	23.3	24.5	27.7	31.6
	Ratio of exports to shipments (percent)	14.7	14.9	14.9	17.0	17.5

See footnote(s) at end of table.

Table C-3--*Continued*
Chemicals and related products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH026	Essential oils and other flavoring materials:					
	Number of establishments	53	53	53	53	53
	Employees (thousands)	50	51	50	50	50
	Capacity utilization (percent)	80	82	82	82	82
	U.S. shipments (million dollars)	3,200	3,400	3,500	3,500	3,700
	U.S. exports (million dollars)	916	948	1,034	1,109	1,211
	U.S. imports (million dollars)	836	754	775	736	786
	Apparent U.S. consumption (million dollars)	3,120	3,206	3,242	3,127	3,275
	Trade balance (million dollars)	80	194	258	373	425
	Ratio of imports to consumption (percent)	26.8	23.5	23.9	23.5	24.0
	Ratio of exports to shipments (percent)	28.6	27.9	29.5	31.7	32.7
CH027	Perfumes, cosmetics, and toiletries:					
	Number of establishments	650	650	650	650	650
	Employees (thousands)	58	59	60	59	60
	Capacity utilization (percent)	87	88	87	87	87
	U.S. shipments (million dollars)	20,000	21,500	23,000	23,300	23,000
	U.S. exports (million dollars)	2,572	2,578	2,851	3,187	3,160
	U.S. imports (million dollars)	1,629	1,864	2,192	2,443	2,716
	Apparent U.S. consumption (million dollars)	19,057	20,786	22,341	22,556	22,556
	Trade balance (million dollars)	943	714	659	744	444
	Ratio of imports to consumption (percent)	8.6	9.0	9.8	10.8	12.0
	Ratio of exports to shipments (percent)	12.9	12.0	12.4	13.7	13.7
CH028	Soaps, detergents, and surface-active agents:					
	Number of establishments	950	950	950	950	950
	Employees (thousands)	50	52	52	52	52
	Capacity utilization (percent)	87	88	87	87	87
	U.S. shipments (million dollars)	17,000	17,700	18,500	19,500	19,800
	U.S. exports (million dollars)	1,961	2,138	2,331	2,223	2,282
	U.S. imports (million dollars)	875	948	1,050	1,115	1,273
	Apparent U.S. consumption (million dollars)	15,914	16,510	17,220	18,393	18,791
	Trade balance (million dollars)	1,086	1,190	1,280	1,107	1,009
	Ratio of imports to consumption (percent)	5.5	5.7	6.1	6.1	6.8
	Ratio of exports to shipments (percent)	11.5	12.1	12.6	11.4	11.5
CH030	Explosives, propellant powders, and related items:					
	Number of establishments	127	125	122	120	118
	Employees (thousands)	13	13	13	13	13
	Capacity utilization (percent)	88	87	85	84	85
	U.S. shipments (million dollars)	1,930	2,000	2,080	2,110	2,200
	U.S. exports (million dollars)	292	264	314	254	286
	U.S. imports (million dollars)	248	267	265	285	302
	Apparent U.S. consumption (million dollars)	1,886	2,003	2,031	2,141	2,217
	Trade balance (million dollars)	44	-3	49	-31	-17
	Ratio of imports to consumption (percent)	13.2	13.3	13.0	13.3	13.6
	Ratio of exports to shipments (percent)	15.2	13.2	15.1	12.0	13.0
CH031	Polyethylene resins in primary forms:					
	Number of establishments	44	45	46	46	46
	Employees (thousands)	21	22	22	22	22
	Capacity utilization (percent)	88	89	88	80	85
	U.S. shipments (million dollars)	8,800	9,400	10,500	9,100	9,500
	U.S. exports (million dollars)	2,134	2,249	2,688	2,416	2,590
	U.S. imports (million dollars)	1,150	1,329	1,650	1,735	1,651
	Apparent U.S. consumption (million dollars)	7,816	8,480	9,462	8,419	8,562
	Trade balance (million dollars)	984	920	1,038	681	938
	Ratio of imports to consumption (percent)	14.7	15.7	17.4	20.6	19.3
	Ratio of exports to shipments (percent)	24.3	23.9	25.6	26.6	27.3

See footnote(s) at end of table.

Table C-3--*Continued*
Chemicals and related products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH032	Polypropylene resins in primary forms:					
	Number of establishments	26	26	27	28	28
	Employees (thousands)	6	6	6	6	6
	Capacity utilization (percent)	90	91	88	84	89
	U.S. shipments (million dollars)	3,800	4,400	4,500	4,000	4,500
	U.S. exports (million dollars)	760	863	1,131	1,100	1,188
	U.S. imports (million dollars)	220	232	251	219	259
	Apparent U.S. consumption (million dollars)	3,260	3,770	3,620	3,119	3,571
	Trade balance (million dollars)	540	630	880	881	929
	Ratio of imports to consumption (percent)	6.8	6.2	6.9	7.0	7.2
	Ratio of exports to shipments (percent)	20.0	19.6	25.1	27.5	26.4
CH033	Polyvinyl chloride resins in primary forms:					
	Number of establishments	28	28	28	28	28
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	90	95	84	81	84
	U.S. shipments (million dollars)	3,700	3,700	4,200	3,500	4,000
	U.S. exports (million dollars)	767	626	716	1,004	781
	U.S. imports (million dollars)	247	235	331	332	247
	Apparent U.S. consumption (million dollars)	3,180	3,309	3,815	2,828	3,466
	Trade balance (million dollars)	520	391	385	672	534
	Ratio of imports to consumption (percent)	7.8	7.1	8.7	11.7	7.1
	Ratio of exports to shipments (percent)	20.7	16.9	17.1	28.7	19.5
CH034	*Styrene polymers in primary forms:*					
	Number of establishments	69	69	69	70	71
	Employees (thousands)	11	11	11	11	12
	Capacity utilization (percent)	85	89	94	80	82
	U.S. shipments (million dollars)	5,300	5,500	5,900	5,200	5,700
	U.S. exports (million dollars)	779	753	848	731	752
	U.S. imports (million dollars)	418	427	572	579	580
	Apparent U.S. consumption (million dollars)	4,939	5,174	5,624	5,048	5,528
	Trade balance (million dollars)	361	326	276	152	172
	Ratio of imports to consumption (percent)	*8.5*	*8.2*	*10.2*	*11.5*	*10.5*
	Ratio of exports to shipments (percent)	14.7	13.7	14.4	14.0	13.2
CH035	Saturated polyester resins:					
	Number of establishments	52	52	52	52	54
	Employees (thousands)	6	6	6	6	7
	Capacity utilization (percent)	85	82	85	85	85
	U.S. shipments (million dollars)	4,600	4,800	5,500	5,200	5,500
	U.S. exports (million dollars)	626	566	629	798	712
	U.S. imports (million dollars)	451	448	522	502	537
	Apparent U.S. consumption (million dollars)	*4,425*	*4,682*	*5,393*	*4,904*	*5,325*
	Trade balance (million dollars)	175	118	107	296	175
	Ratio of imports to consumption (percent)	10.2	9.6	9.7	10.2	10.1
	Ratio of exports to shipments (percent)	13.6	11.8	11.4	15.3	13.0
CH037	Styrene-butadiene rubber in primary forms:					
	Number of establishments	11	11	11	11	11
	Employees (thousands)	5	5	5	5	5
	Capacity utilization (percent)	90	88	88	90	90
	U.S. shipments (million dollars)	1,340	1,390	1,460	1,430	1,430
	U.S. exports (million dollars)	*322*	*309*	*344*	*297*	*273*
	U.S. imports (million dollars)	175	173	232	258	232
	Apparent U.S. consumption (million dollars)	1,194	1,253	1,348	1,391	1,389
	Trade balance (million dollars)	146	137	112	39	41
	Ratio of imports to consumption (percent)	14.7	13.8	17.2	18.6	16.7
	Ratio of exports to shipments (percent)	24.0	22.2	23.6	20.8	19.1

See footnote(s) at end of table.

Table C-3--*Continued*
Chemicals and related products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH038	Other synthetic rubber:					
	Number of establishments	34	34	34	34	34
	Employees (thousands)	11	11	11	11	11
	Capacity utilization (percent)	82	82	83	83	83
	U.S. shipments (million dollars)	4,000	4,180	4,380	4,290	4,300
	U.S. exports (million dollars)	1,064	1,079	1,317	1,328	1,361
	U.S. imports (million dollars)	669	697	778	734	725
	Apparent U.S. consumption (million dollars)	3,605	3,798	3,841	3,696	3,664
	Trade balance (million dollars)	395	382	539	594	636
	Ratio of imports to consumption (percent)	18.6	18.4	20.2	19.9	19.8
	Ratio of exports to shipments (percent)	26.6	25.8	30.1	31.0	31.7
CH039	Pneumatic tires and tubes (new):					
	Number of establishments	42	42	42	42	42
	Employees (thousands)	65	64	66	63	64
	Capacity utilization (percent)	95	92	93	90	92
	U.S. shipments (million dollars)	14,320	13,950	14,600	13,400	14,000
	U.S. exports (million dollars)	2,532	2,366	2,414	2,282	2,233
	U.S. imports (million dollars)	4,011	4,559	4,700	4,146	4,694
	Apparent U.S. consumption (million dollars)	15,799	16,143	16,886	15,264	16,460
	Trade balance (million dollars)	-1,479	-2,193	-2,286	-1,864	-2,460
	Ratio of imports to consumption (percent)	25.4	28.2	27.8	27.2	28.5
	Ratio of exports to shipments (percent)	17.7	17.0	16.5	17.0	16.0
CH040	Other tires:					
	Number of establishments	1,400	1,400	1,400	1,400	1,400
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	90	90	90	90	90
	U.S. shipments (million dollars)	1,000	990	1,000	1,100	1,150
	U.S. exports (million dollars)	93	111	89	96	94
	U.S. imports (million dollars)	143	129	137	122	123
	Apparent U.S. consumption (million dollars)	1,050	1,008	1,048	1,126	1,179
	Trade balance (million dollars)	-50	-18	-48	-26	-29
	Ratio of imports to consumption (percent)	13.6	12.8	13.1	10.8	10.4
	Ratio of exports to shipments (percent)	9.3	11.2	8.9	8.8	8.2
CH044	Natural rubber:					
	Number of establishments	(1)	(1)	(1)	(1)	(1)
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	(1)	(1)	(1)	(1)	(1)
	U.S. exports (million dollars)	36	41	39	34	40
	U.S. imports (million dollars)	977	704	842	613	751
	Apparent U.S. consumption (million dollars)	(1)	(1)	(1)	(1)	(1)
	Trade balance (million dollars)	-941	-664	-803	-579	-712
	Ratio of imports to consumption (percent)	(1)	(1)	(1)	(1)	(1)
	Ratio of exports to shipments (percent)	(1)	(1)	(1)	(1)	(1)

[1]Not available.

Note.--Calculations based on unrounded data.

Table C-4
Energy-related products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH001	Electrical energy:					
	Number of establishments	3,225	3,225	3,225	3,225	3,225
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	100	100	100	100	100
	U.S. shipments (million dollars)	199,510	219,460	218,610	220,824	229,664
	U.S. exports (million dollars)	185	206	398	1,258	304
	U.S. imports (million dollars)	1,039	1,334	2,711	2,681	1,160
	Apparent U.S. consumption (million dollars)	200,364	220,587	220,923	222,247	230,521
	Trade balance (million dollars)	-854	-1,127	-2,313	-1,423	-857
	Ratio of imports to consumption (percent)	0.5	0.6	1.2	1.2	0.5
	Ratio of exports to shipments (percent)	0.1	0.1	0.2	0.6	0.1
CH003	Coal, coke, and related chemical products:					
	Number of establishments	520	520	520	520	520
	Employees (thousands)	150	150	150	150	150
	Capacity utilization (percent)	85	90	90	90	90
	U.S. shipments (million dollars)	29,965	32,965	32,606	34,320	38,496
	U.S. exports (million dollars)	3,635	2,671	2,718	2,354	2,188
	U.S. imports (million dollars)	1,570	1,741	2,460	2,411	2,589
	Apparent U.S. consumption (million dollars)	27,900	32,035	32,349	34,377	38,897
	Trade balance (million dollars)	2,065	930	257	-57	-401
	Ratio of imports to consumption (percent)	5.6	5.4	7.6	7.0	6.7
	Ratio of exports to shipments (percent)	12.1	8.1	8.3	6.9	5.7
CH004	Crude petroleum:					
	Number of establishments	18,000	18,000	18,000	18,000	18,000
	Employees (thousands)	204	204	204	204	204
	Capacity utilization (percent)	100	100	100	100	100
	U.S. shipments (million dollars)	28,344	34,602	57,499	46,960	55,203
	U.S. exports (million dollars)	670	772	444	177	92
	U.S. imports (million dollars)	25,467	31,642	56,546	49,673	54,704
	Apparent U.S. consumption (million dollars)	53,141	65,472	113,602	96,456	109,815
	Trade balance (million dollars)	-24,797	-30,870	-56,103	-49,496	-54,612
	Ratio of imports to consumption (percent)	47.9	48.3	49.8	51.5	49.8
	Ratio of exports to shipments (percent)	2.4	2.2	0.8	0.4	0.2
CH005	Petroleum products:					
	Number of establishments	190	190	190	190	190
	Employees (thousands)	75	75	75	75	75
	Capacity utilization (percent)	90	90	90	90	90
	U.S. shipments (million dollars)	85,580	113,231	213,475	140,162	193,710
	U.S. exports (million dollars)	6,233	6,599	9,562	8,936	8,662
	U.S. imports (million dollars)	17,584	22,079	39,787	34,372	30,594
	Apparent U.S. consumption (million dollars)	96,931	128,711	243,699	165,598	215,641
	Trade balance (million dollars)	-11,351	-15,480	-30,224	-25,436	-21,931
	Ratio of imports to consumption (percent)	18.1	17.2	16.3	20.8	14.2
	Ratio of exports to shipments (percent)	7.3	5.8	4.5	6.4	4.5

See footnote(s) at end of table.

Table C-4--*Continued*
Energy-related products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH006	Natural gas and components:					
	Number of establishments	([1])	([1])	([1])	([1])	([1])
	Employees (thousands)	200	200	200	200	200
	Capacity utilization (percent)	80	80	80	80	80
	U.S. shipments (million dollars)	65,000	69,000	120,000	150,000	115,000
	U.S. exports (million dollars)	581	759	1,286	1,109	1,675
	U.S. imports (million dollars)	9,212	11,042	19,157	23,054	18,609
	Apparent U.S. consumption (million dollars)	73,630	79,282	137,870	171,944	131,934
	Trade balance (million dollars)	-8,630	-10,282	-17,870	-21,944	-16,934
	Ratio of imports to consumption (percent)	12.5	13.9	13.9	13.4	14.1
	Ratio of exports to shipments (percent)	0.9	1.1	1.1	0.7	1.5

[1]Not available.

Note.–Calculations based on unrounded data.

Table C-5
Textiles, apparel, and footwear: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH045	Fibers and yarns, except raw cotton and raw wool:					
	Number of establishments	844	871	904	900	896
	Employees (thousands)	171	166	162	150	140
	Capacity utilization (percent)	77	69	77	75	69
	U.S. shipments (million dollars)	25,308	23,540	22,630	21,675	20,801
	U.S. exports (million dollars)	2,969	2,830	3,126	2,640	2,656
	U.S. imports (million dollars)	2,498	2,547	2,771	2,545	2,641
	Apparent U.S. consumption (million dollars)	24,837	23,258	22,275	21,580	20,785
	Trade balance (million dollars)	471	282	355	95	16
	Ratio of imports to consumption (percent)	10.1	11.0	12.4	11.8	12.7
	Ratio of exports to shipments (percent)	11.7	12.0	13.8	12.2	12.8
CH046	Fabrics:					
	Number of establishments	3,735	3,695	3,658	3,300	3,005
	Employees (thousands)	257	237	222	195	174
	Capacity utilization (percent)	73	79	76	71	67
	U.S. shipments (million dollars)	38,763	36,175	34,190	29,061	25,270
	U.S. exports (million dollars)	4,886	5,170	6,067	6,162	6,485
	U.S. imports (million dollars)	5,662	5,563	6,052	5,466	5,922
	Apparent U.S. consumption (million dollars)	39,539	36,568	34,175	28,365	24,707
	Trade balance (million dollars)	-776	-393	15	696	563
	Ratio of imports to consumption (percent)	14.3	15.2	17.7	19.3	24.0
	Ratio of exports to shipments (percent)	12.6	14.3	17.7	21.2	25.7
CH047	Carpets and rugs:					
	Number of establishments	483	478	441	437	433
	Employees (thousands)	64	65	66	63	60
	Capacity utilization (percent)	76	83	79	77	75
	U.S. shipments (million dollars)	11,063	11,690	11,983	12,114	12,247
	U.S. exports (million dollars)	826	772	791	711	684
	U.S. imports (million dollars)	1,109	1,248	1,464	1,410	1,531
	Apparent U.S. consumption (million dollars)	11,346	12,165	12,657	12,813	13,093
	Trade balance (million dollars)	-283	-475	-674	-699	-846
	Ratio of imports to consumption (percent)	9.8	10.3	11.6	11.0	11.7
	Ratio of exports to shipments (percent)	7.5	6.6	6.6	5.9	5.6
CH048	Home furnishings:					
	Number of establishments	2,733	2,627	2,522	2,491	2,461
	Employees (thousands)	74	75	73	64	57
	Capacity utilization (percent)	84	82	79	78	77
	U.S. shipments (million dollars)	8,589	9,433	9,744	10,066	10,398
	U.S. exports (million dollars)	442	398	418	403	363
	U.S. imports (million dollars)	2,271	2,652	3,215	3,332	4,226
	Apparent U.S. consumption (million dollars)	10,418	11,687	12,541	12,995	14,261
	Trade balance (million dollars)	-1,829	-2,254	-2,797	-2,929	-3,863
	Ratio of imports to consumption (percent)	21.8	22.7	25.6	25.6	29.6
	Ratio of exports to shipments (percent)	5.1	4.2	4.3	4.0	3.5
CH049	Apparel:					
	Number of establishments	17,432	16,721	15,485	14,200	13,112
	Employees (thousands)	766	692	633	565	510
	Capacity utilization (percent)	69	77	75	74	73
	U.S. shipments (million dollars)	58,069	58,419	55,498	55,000	54,509
	U.S. exports (million dollars)	8,514	7,964	8,177	6,537	5,491
	U.S. imports (million dollars)	53,874	56,565	64,402	63,995	63,927
	Apparent U.S. consumption (million dollars)	103,430	107,020	111,723	112,458	112,945
	Trade balance (million dollars)	-45,361	-48,601	-56,225	-57,458	-58,436
	Ratio of imports to consumption (percent)	52.1	52.9	57.6	56.9	56.6
	Ratio of exports to shipments (percent)	14.7	13.6	14.7	11.9	10.1

See footnote(s) at end of table.

Table C-5--*Continued*
Textiles, apparel, and footwear: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
CH051	Footwear:					
	Number of establishments	417	400	369	340	315
	Employees (thousands)	44	39	34	29	25
	Capacity utilization (percent)	70	67	64	62	60
	U.S. shipments (million dollars)	3,764	3,797	3,765	3,627	3,498
	U.S. exports (million dollars)	720	693	664	638	520
	U.S. imports (million dollars)	13,879	14,074	14,856	15,249	15,379
	Apparent U.S. consumption (million dollars)	16,923	17,177	17,957	18,238	18,358
	Trade balance (million dollars)	-13,159	-13,380	-14,192	-14,611	-14,860
	Ratio of imports to consumption (percent)	82.0	81.9	82.7	83.6	83.8
	Ratio of exports to shipments (percent)	19.1	18.3	17.6	17.6	14.9

Note.–Calculations based on unrounded data.

Table C-6
Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM001	Clays and related mineral products:					
	Number of establishments	238	233	230	230	240
	Employees (thousands)	9	9	9	9	7
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,670	1,570	1,520	1,470	1,500
	U.S. exports (million dollars)	993	952	1,040	973	941
	U.S. imports (million dollars)	190	168	195	179	158
	Apparent U.S. consumption (million dollars)	867	787	675	676	718
	Trade balance (million dollars)	803	783	845	794	782
	Ratio of imports to consumption (percent)	21.9	21.4	28.9	26.5	22.1
	Ratio of exports to shipments (percent)	59.4	60.6	68.4	66.2	62.7
MM003	Iron ores and concentrates:					
	Number of establishments	12	13	13	13	12
	Employees (thousands)	7	7	7	6	5
	Capacity utilization (percent)	98	89	97	83	90
	U.S. shipments (million dollars)	2,600	2,300	2,500	1,900	1,850
	U.S. exports (million dollars)	244	243	246	229	249
	U.S. imports (million dollars)	527	399	420	293	313
	Apparent U.S. consumption (million dollars)	2,883	2,456	2,674	1,964	1,914
	Trade balance (million dollars)	-283	-156	-174	-64	-64
	Ratio of imports to consumption (percent)	18.3	16.2	15.7	14.9	16.3
	Ratio of exports to shipments (percent)	9.4	10.6	9.8	12.1	13.4
MM004	Copper ores and concentrates:					
	Number of establishments	35	35	30	25	22
	Employees (thousands)	13	10.3	9.1	8.2	7
	Capacity utilization (percent)	90	80	84	82	72
	U.S. shipments (million dollars)	2,578	2,142	2,556	1,817	1,554
	U.S. exports (million dollars)	63	81	173	84	79
	U.S. imports (million dollars)	228	82	(2)	58	105
	Apparent U.S. consumption (million dollars)	2,743	2,144	2,383	1,791	1,580
	Trade balance (million dollars)	-165	-2	173	26	-26
	Ratio of imports to consumption (percent)	8.3	3.8	(3)	3.2	6.7
	Ratio of exports to shipments (percent)	2.4	3.8	6.8	4.6	5.1
MM005A	Lead ores and concentrates:					
	Number of establishments	17	19	19	12	12
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	89	95	85	85	82
	U.S. shipments (million dollars)	158	160	149	143	140
	U.S. exports (million dollars)	58	41	54	106	117
	U.S. imports (million dollars)	8	3	8	(2)	(2)
	Apparent U.S. consumption (million dollars)	108	122	103	38	23
	Trade balance (million dollars)	50	38	46	105	117
	Ratio of imports to consumption (percent)	7.3	2.8	7.6	1.2	(3)
	Ratio of exports to shipments (percent)	36.9	25.8	36.4	74.0	83.8
MM006A	Zinc ores and concentrates:					
	Number of establishments	19	17	19	12	12
	Employees (thousands)	2	3	3	2	2
	Capacity utilization (percent)	79	90	90	89	78
	U.S. shipments (million dollars)	453	527	563	433	346
	U.S. exports (million dollars)	296	346	308	290	328
	U.S. imports (million dollars)	24	40	27	32	45
	Apparent U.S. consumption (million dollars)	181	221	282	174	63
	Trade balance (million dollars)	272	306	281	259	283
	Ratio of imports to consumption (percent)	13.1	18.3	9.5	18.1	70.8
	Ratio of exports to shipments (percent)	65.3	65.7	54.7	67.0	94.7

See footnote(s) at end of table.

Table C-6--*Continued*
Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM007A	Molybdenum ores and concentrates:					
	Number of establishments	11	8	8	7	6
	Employees (thousands)	1.2	1.1	0.8	0.6	0.6
	Capacity utilization (percent)	73	59	57	56	50
	U.S. shipments (million dollars)	314	250	232	199	270
	U.S. exports (million dollars)	211	129	104	110	112
	U.S. imports (million dollars)	47	35	35	33	37
	Apparent U.S. consumption (million dollars)	150	156	164	122	194
	Trade balance (million dollars)	164	94	68	77	76
	Ratio of imports to consumption (percent)	31.4	22.7	21.5	26.9	18.9
	Ratio of exports to shipments (percent)	67.2	51.7	44.6	55.3	41.6
MM008A	Gold ores and concentrates:					
	Number of establishments	304	296	289	283	279
	Employees (thousands)	14	11	11	10	10
	Capacity utilization (percent)	88	86	89	88	85
	U.S. shipments (million dollars)	2,779	2,445	2,534	2,335	2,392
	U.S. exports (million dollars)	6	2	10	7	10
	U.S. imports (million dollars)	11	1	1	1	28
	Apparent U.S. consumption (million dollars)	2,784	2,445	2,524	2,329	2,410
	Trade balance (million dollars)	-5	(2)	10	6	-18
	Ratio of imports to consumption (percent)	0.4	(3)	(3)	0.1	1.1
	Ratio of exports to shipments (percent)	0.2	0.1	0.4	0.3	0.4
MM008B	Silver ores and concentrates:					
	Number of establishments	16	16	15	14	14
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	88	86	89	88	85
	U.S. shipments (million dollars)	257	229	207	171	152
	U.S. exports (million dollars)	4	37	21	72	57
	U.S. imports (million dollars)	35	2	(2)	3	13
	Apparent U.S. consumption (million dollars)	288	194	186	102	108
	Trade balance (million dollars)	-31	35	21	69	44
	Ratio of imports to consumption (percent)	12.0	1.1	0.1	2.7	12.2
	Ratio of exports to shipments (percent)	1.4	16.1	10.2	42.2	37.8
MM009A	Cement:					
	Number of establishments	116	116	116	116	116
	Employees (thousands)	18	18	18	18	18
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	6,500	7,400	7,200	7,100	7,000
	U.S. exports (million dollars)	57	55	64	56	58
	U.S. imports (million dollars)	963	1,145	1,074	987	939
	Apparent U.S. consumption (million dollars)	7,406	8,489	8,210	8,031	7,881
	Trade balance (million dollars)	-906	-1,089	-1,010	-931	-881
	Ratio of imports to consumption (percent)	13.0	13.5	13.1	12.3	11.9
	Ratio of exports to production (percent)	0.9	0.7	0.9	0.8	0.8
MM010	Industrial ceramics:					
	Number of establishments	205	200	200	200	190
	Employees (thousands)	12	12	12	12	11
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	2,950	3,040	3,000	2,950	2,800
	U.S. exports (million dollars)	668	663	748	711	645
	U.S. imports (million dollars)	545	648	827	640	497
	Apparent U.S. consumption (million dollars)	2,827	3,026	3,080	2,879	2,652
	Trade balance (million dollars)	123	14	-80	71	148
	Ratio of imports to consumption (percent)	19.3	21.4	26.9	22.2	18.7
	Ratio of exports to shipments (percent)	22.6	21.8	24.9	24.1	23.0

See footnote(s) at end of table.

Table C-6--*Continued*
Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM011	Ceramic bricks and similar articles:					
	Number of establishments	225	225	225	225	225
	Employees (thousands)	14	14	14	14	14
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,525	1,700	1,775	1,775	1,805
	U.S. exports (million dollars)	26	20	23	23	23
	U.S. imports (million dollars)	20	24	35	31	34
	Apparent U.S. consumption (million dollars)	1,518	1,705	1,786	1,783	1,817
	Trade balance (million dollars)	7	-5	-11	-8	-12
	Ratio of imports to consumption (percent)	1.3	1.4	1.9	1.7	1.9
	Ratio of exports to shipments (percent)	1.7	1.2	1.3	1.3	1.3
MM012	Ceramic floor and wall tiles:					
	Number of establishments	122	122	122	122	122
	Employees (thousands)	9	9	9	9	9
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	837	843	867	776	816
	U.S. exports (million dollars)	27	24	26	27	28
	U.S. imports (million dollars)	860	1,019	1,118	1,112	1,290
	Apparent U.S. consumption (million dollars)	1,671	1,838	1,959	1,862	2,078
	Trade balance (million dollars)	-834	-995	-1,092	-1,086	-1,262
	Ratio of imports to consumption (percent)	51.5	55.4	57.1	59.7	62.1
	Ratio of exports to shipments (percent)	3.2	2.8	3.0	3.4	3.4
MM013	Ceramic household articles:					
	Number of establishments	63	63	63	60	60
	Employees (thousands)	6	6	6	6	6
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	421	396	344	330	320
	U.S. exports (million dollars)	103	109	115	96	83
	U.S. imports (million dollars)	1,716	1,671	1,797	1,635	1,691
	Apparent U.S. consumption (million dollars)	2,034	1,959	2,027	1,869	1,928
	Trade balance (million dollars)	-1,613	-1,563	-1,683	-1,539	-1,608
	Ratio of imports to consumption (percent)	84.4	85.3	88.7	87.5	87.7
	Ratio of exports to shipments (percent)	24.5	27.5	33.3	29.1	25.9
MM014	Flat glass:					
	Number of establishments	900	900	900	900	900
	Employees (thousands)	44	45	46	44	46
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	7,800	8,400	9,100	8,500	8,800
	U.S. exports (million dollars)	1,416	1,506	1,807	1,791	1,694
	U.S. imports (million dollars)	1,120	1,268	1,473	1,500	1,553
	Apparent U.S. consumption (million dollars)	7,504	8,162	8,766	8,209	8,660
	Trade balance (million dollars)	296	238	334	291	140
	Ratio of imports to consumption (percent)	14.9	15.5	16.8	18.3	17.9
	Ratio of exports to shipments (percent)	18.2	17.9	19.9	21.1	19.2
MM015	Glass containers:					
	Number of establishments	61	61	61	61	61
	Employees (thousands)	20	19	17	16	16
	Capacity utilization (percent)	95	91	92	94	(1)
	U.S. shipments (million dollars)	4,189	4,190	4,106	4,209	4,200
	U.S. exports (million dollars)	173	173	174	211	165
	U.S. imports (million dollars)	452	526	585	538	608
	Apparent U.S. consumption (million dollars)	4,468	4,543	4,517	4,536	4,643
	Trade balance (million dollars)	-279	-353	-411	-327	-443
	Ratio of imports to consumption (percent)	10.1	11.6	13.0	11.9	13.1
	Ratio of exports to shipments (percent)	4.1	4.1	4.2	5.0	3.9

See footnote(s) at end of table.

Table C-6--*Continued*

Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM016	Household glassware:					
	Number of establishments	240	240	240	240	240
	Employees (thousands)	13	13	14	13	13
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,900	1,900	2,000	1,800	1,900
	U.S. exports (million dollars)	179	183	195	209	177
	U.S. imports (million dollars)	864	937	930	835	888
	Apparent U.S. consumption (million dollars)	2,585	2,654	2,735	2,425	2,611
	Trade balance (million dollars)	-685	-754	-735	-625	-711
	Ratio of imports to consumption (percent)	33.4	35.3	34.0	34.4	34.0
	Ratio of exports to shipments (percent)	9.4	9.6	9.7	11.6	9.3
MM018	Fiberglass insulation products:					
	Number of establishments	298	298	298	298	298
	Employees (thousands)	19	18	17	17	18
	Capacity utilization (percent)	93	88	83	86	(1)
	U.S. shipments (million dollars)	3,600	3,800	3,700	3,700	3,900
	U.S. exports (million dollars)	74	71	59	74	75
	U.S. imports (million dollars)	71	139	137	124	131
	Apparent U.S. consumption (million dollars)	3,597	3,869	3,778	3,750	3,956
	Trade balance (million dollars)	3	-69	-78	-50	-56
	Ratio of imports to consumption (percent)	2.0	3.6	3.6	3.3	3.3
	Ratio of exports to shipments (percent)	2.1	1.9	1.6	2.0	1.9
MM019	Natural and synthetic gemstones:					
	Number of establishments	235	235	235	235	235
	Employees (thousands)	2	2	2	2	2
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	475	620	540	340	430
	U.S. exports (million dollars)	217	447	1,466	1,840	1,331
	U.S. imports (million dollars)	9,449	11,021	13,234	11,577	13,063
	Apparent U.S. consumption (million dollars)	9,708	11,195	12,308	10,077	12,161
	Trade balance (million dollars)	-9,233	-10,575	-11,768	-9,737	-11,731
	Ratio of imports to consumption (percent)	97.3	98.5	[4]107.5	[4]114.9	[4]107.4
	Ratio of exports to production (percent)	45.6	72.0	[4]271.5	[4]541.0	[4]309.6
MM020A	Unrefined and refined gold:					
	Number of establishments	24	24	24	24	24
	Employees (thousands)	2	2	2	2	2
	Capacity utilization (percent)	69	73	77	69	68
	U.S. shipments (million dollars)	7,964	6,157	7,096	5,898	4,261
	U.S. exports (million dollars)	4,912	4,795	5,099	4,186	2,639
	U.S. imports (million dollars)	2,913	2,519	2,262	1,700	2,143
	Apparent U.S. consumption (million dollars)	5,965	3,881	4,260	3,412	3,765
	Trade balance (million dollars)	1,999	2,276	2,836	2,486	496
	Ratio of imports to consumption (percent)	48.8	64.9	53.1	49.8	56.9
	Ratio of exports to shipments (percent)	61.7	77.9	71.9	71.0	61.9
MM021	Primary iron products:					
	Number of establishments	23	23	23	21	16
	Employees (thousands)	22	22	22	20	15
	Capacity utilization (percent)	88	85	88	79	84
	U.S. shipments (million dollars)	8,400	7,300	7,300	6,300	5,000
	U.S. exports (million dollars)	17	14	13	7	7
	U.S. imports (million dollars)	856	643	759	632	729
	Apparent U.S. consumption (million dollars)	9,238	7,929	8,046	6,924	5,722
	Trade balance (million dollars)	-838	-629	-746	-624	-722
	Ratio of imports to consumption (percent)	9.3	8.1	9.4	9.1	12.7
	Ratio of exports to shipments (percent)	0.2	0.2	0.2	0.1	0.1

See footnote(s) at end of table.

Table C-6--*Continued*

Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM022	Ferroalloys:					
	Number of establishments	23	23	23	23	20
	Employees (thousands)	4	3	3	3	3
	Capacity utilization (percent)	(5)	(5)	(5)	(1)	(1)
	U.S. shipments (million dollars)	1,433	941	968	820	689
	U.S. exports (million dollars)	103	80	96	74	50
	U.S. imports (million dollars)	1,018	960	1,104	660	713
	Apparent U.S. consumption (million dollars)	2,347	1,821	1,976	1,406	1,352
	Trade balance (million dollars)	-914	-880	-1,008	-586	-663
	Ratio of imports to consumption (percent)	43.3	52.7	55.9	46.9	52.8
	Ratio of exports to shipments (percent)	7.2	8.5	9.9	9.0	7.3
MM023	Iron and steel waste and scrap:					
	Number of establishments	5,000	5,000	5,000	5,000	5,000
	Employees (thousands)	28	28	28	28	28
	Capacity utilization (percent)	85	80	75	75	75
	U.S. shipments (million dollars)	5,800	4,800	5,200	4,100	4,900
	U.S. exports (million dollars)	817	750	1,030	1,151	1,307
	U.S. imports (million dollars)	418	390	393	284	397
	Apparent U.S. consumption (million dollars)	5,401	4,440	4,563	3,233	3,989
	Trade balance (million dollars)	399	360	637	867	911
	Ratio of imports to consumption (percent)	7.7	8.8	8.6	8.8	9.9
	Ratio of exports to shipments (percent)	14.1	15.6	19.8	28.1	26.7
MM024A	Abrasive products:					
	Number of establishments	50	50	50	50	50
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	4,038	3,835	3,781	3,202	3,000
	U.S. exports (million dollars)	292	298	315	289	284
	U.S. imports (million dollars)	453	480	552	473	505
	Apparent U.S. consumption (million dollars)	4,200	4,017	4,018	3,386	3,222
	Trade balance (million dollars)	-162	-182	-237	-184	-222
	Ratio of imports to consumption (percent)	10.8	12.0	13.7	14.0	15.7
	Ratio of exports to shipments (percent)	7.2	7.8	8.3	9.0	9.5
MM025	Steel mill products:					
	Number of establishments	850	850	820	820	810
	Employees (thousands)	205	195	193	186	170
	Capacity utilization (percent)	87	84	86	79	89
	U.S. shipments (million dollars)	65,500	59,200	60,300	51,074	54,584
	U.S. exports (million dollars)	4,636	4,291	4,911	4,756	4,533
	U.S. imports (million dollars)	16,434	12,749	15,026	11,630	12,203
	Apparent U.S. consumption (million dollars)	77,298	67,658	70,414	57,948	62,254
	Trade balance (million dollars)	-11,798	-8,458	-10,114	-6,874	-7,670
	Ratio of imports to consumption (percent)	21.3	18.8	21.3	20.1	19.6
	Ratio of exports to shipments (percent)	7.1	7.2	8.1	9.3	8.3
MM026	Steel pipe and tube fittings and certain cast products:					
	Number of establishments	62	62	62	62	62
	Employees (thousands)	12	12	12	12	12
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	2,000	2,100	2,100	2,100	2,100
	U.S. exports (million dollars)	809	662	767	707	669
	U.S. imports (million dollars)	591	584	706	697	669
	Apparent U.S. consumption (million dollars)	1,781	2,022	2,039	2,090	2,100
	Trade balance (million dollars)	219	78	61	10	(2)
	Ratio of imports to consumption (percent)	33.2	28.9	34.6	33.3	31.9
	Ratio of exports to shipments (percent)	40.5	31.5	36.5	33.7	31.8

See footnote(s) at end of table.

Table C-6--*Continued*
Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM027	Fabricated structurals:					
	Number of establishments	2,777	2,791	2,803	2,888	2,844
	Employees (thousands)	96	102	99	94	88
	Capacity utilization (percent)	75	75	73	64	62
	U.S. shipments (million dollars)	15,224	15,596	16,450	16,105	16,043
	U.S. exports (million dollars)	151	186	204	184	166
	U.S. imports (million dollars)	328	432	534	638	627
	Apparent U.S. consumption (million dollars)	15,401	15,841	16,779	16,559	16,503
	Trade balance (million dollars)	-177	-245	-329	-454	-460
	Ratio of imports to consumption (percent)	2.1	2.7	3.2	3.9	3.8
	Ratio of exports to shipments (percent)	1.0	1.2	1.2	1.1	1.0
MM028	Metal construction components:					
	Number of establishments	2,795	2,711	2,650	2,530	2,500
	Employees (thousands)	141	151	157	150	154
	Capacity utilization (percent)	67	65	70	67	70
	U.S. shipments (million dollars)	17,809	18,888	19,666	18,800	19,400
	U.S. exports (million dollars)	611	579	533	505	497
	U.S. imports (million dollars)	562	693	922	990	1,135
	Apparent U.S. consumption (million dollars)	17,760	19,003	20,054	19,285	20,038
	Trade balance (million dollars)	49	-115	-388	-485	-638
	Ratio of imports to consumption (percent)	3.2	3.6	4.6	5.1	5.7
	Ratio of exports to shipments (percent)	3.4	3.1	2.7	2.7	2.6
MM029	Metallic containers:					
	Number of establishments	520	520	520	520	520
	Employees (thousands)	58	58	54	52	50
	Capacity utilization (percent)	82	82	82	82	80
	U.S. shipments (million dollars)	18,340	18,285	18,486	17,414	16,900
	U.S. exports (million dollars)	819	690	697	666	661
	U.S. imports (million dollars)	463	527	549	570	645
	Apparent U.S. consumption (million dollars)	17,984	18,123	18,338	17,318	16,884
	Trade balance (million dollars)	356	162	148	96	16
	Ratio of imports to consumption (percent)	2.6	2.9	3.0	3.3	3.8
	Ratio of exports to shipments (percent)	4.5	3.8	3.8	3.8	3.9
MM030	Wire products of base metal:					
	Number of establishments	1,500	1,500	1,500	1,470	1,470
	Employees (thousands)	96	96	96	92	94
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	17,363	16,700	17,300	16,500	17,000
	U.S. exports (million dollars)	756	674	826	718	732
	U.S. imports (million dollars)	1,231	1,354	1,419	1,355	1,416
	Apparent U.S. consumption (million dollars)	17,838	17,381	17,893	17,137	17,684
	Trade balance (million dollars)	-475	-681	-593	-637	-684
	Ratio of imports to consumption (percent)	6.9	7.8	7.9	7.9	8.0
	Ratio of exports to shipments (percent)	4.4	4.0	4.8	4.3	4.3
MM032	Industrial fasteners of base metal:					
	Number of establishments	923	925	920	880	860
	Employees (thousands)	47	47	47	45	46
	Capacity utilization (percent)	78	73	74	71	73
	U.S. shipments (million dollars)	7,180	6,940	7,009	6,700	7,000
	U.S. exports (million dollars)	1,470	1,535	1,663	1,481	1,496
	U.S. imports (million dollars)	2,020	2,019	2,325	2,006	2,085
	Apparent U.S. consumption (million dollars)	7,730	7,424	7,672	7,225	7,589
	Trade balance (million dollars)	-550	-484	-663	-525	-589
	Ratio of imports to consumption (percent)	26.1	27.2	30.3	27.8	27.5
	Ratio of exports to shipments (percent)	20.5	22.1	23.7	22.1	21.4

See footnote(s) at end of table.

Table C-6--*Continued*
Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM033	Cooking and kitchen ware:					
	Number of establishments	87	87	87	87	88
	Employees (thousands)	8	8	7	6	6
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,400	1,500	1,500	1,500	1,500
	U.S. exports (million dollars)	244	214	271	260	201
	U.S. imports (million dollars)	1,393	1,585	1,798	1,743	1,933
	Apparent U.S. consumption (million dollars)	2,549	2,871	3,027	2,983	3,232
	Trade balance (million dollars)	-1,149	-1,371	-1,527	-1,483	-1,732
	Ratio of imports to consumption (percent)	54.7	55.2	59.4	58.4	59.8
	Ratio of exports to shipments (percent)	17.5	14.3	18.1	17.3	13.4
MM034	Metal and ceramic sanitary ware:					
	Number of establishments	140	140	140	140	140
	Employees (thousands)	18	18	18	17	17
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	2,700	2,600	2,800	2,600	2,700
	U.S. exports (million dollars)	147	132	141	124	134
	U.S. imports (million dollars)	403	473	533	588	742
	Apparent U.S. consumption (million dollars)	2,957	2,941	3,193	3,064	3,308
	Trade balance (million dollars)	-257	-341	-393	-464	-608
	Ratio of imports to consumption (percent)	13.6	16.1	16.7	19.2	22.4
	Ratio of exports to shipments (percent)	5.4	5.1	5.0	4.8	4.9
MM035	Construction castings and other cast-iron articles:					
	Number of establishments	50	50	50	50	50
	Employees (thousands)	7	7	5	6	5
	Capacity utilization (percent)	85	85	85	85	85
	U.S. shipments (million dollars)	1,100	1,000	800	900	800
	U.S. exports (million dollars)	37	27	32	24	25
	U.S. imports (million dollars)	110	120	123	110	112
	Apparent U.S. consumption (million dollars)	1,173	1,092	891	986	887
	Trade balance (million dollars)	-73	-92	-91	-86	-87
	Ratio of imports to consumption (percent)	9.4	11.0	13.8	11.1	12.6
	Ratio of exports to shipments (percent)	3.3	2.7	4.0	2.7	3.2
MM036A	Unrefined and refined copper:					
	Number of establishments	38	32	28	26	22
	Employees (thousands)	6.9	5.3	4.4	4.4	3.9
	Capacity utilization (percent)	92	81	68	69	62
	U.S. shipments (million dollars)	4,358	3,602	3,540	3,011	2,600
	U.S. exports (million dollars)	174	89	202	69	92
	U.S. imports (million dollars)	1,454	1,667	2,223	2,140	1,740
	Apparent U.S. consumption (million dollars)	5,638	5,180	5,561	5,081	4,248
	Trade balance (million dollars)	-1,280	-1,578	-2,021	-2,070	-1,648
	Ratio of imports to consumption (percent)	25.8	32.2	40.0	42.1	41.0
	Ratio of exports to shipments (percent)	4.0	2.5	5.7	2.3	3.6
MM036B	Copper alloy plate, sheet, and strip:					
	Number of establishments	20	20	20	20	18
	Employees (thousands)	5.6	5.7	5.3	5.5	5
	Capacity utilization (percent)	88	90	86	83	75
	U.S. shipments (million dollars)	1,009	1,047	1,175	1,027	929
	U.S. exports (million dollars)	218	156	208	155	117
	U.S. imports (million dollars)	101	116	182	145	118
	Apparent U.S. consumption (million dollars)	892	1,007	1,149	1,018	930
	Trade balance (million dollars)	117	40	26	9	-1
	Ratio of imports to consumption (percent)	11.4	11.5	15.9	14.3	12.7
	Ratio of exports to shipments (percent)	21.6	14.9	17.7	15.1	12.6

See footnote(s) at end of table.

Table C-6--*Continued*
Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM037A	Primary and secondary aluminum:					
	Number of establishments	103	106	108	98	100
	Employees (thousands)	25	25	25	23	21
	Capacity utilization (percent)	88	86	77	69	69
	U.S. shipments (million dollars)	7,535	7,750	8,286	5,835	5,589
	U.S. exports (million dollars)	553	613	636	466	431
	U.S. imports (million dollars)	3,775	3,969	4,297	4,085	4,188
	Apparent U.S. consumption (million dollars)	10,757	11,106	11,946	9,454	9,346
	Trade balance (million dollars)	-3,222	-3,356	-3,660	-3,619	-3,757
	Ratio of imports to consumption (percent)	35.1	35.7	36.0	43.2	44.8
	Ratio of exports to shipments (percent)	7.3	7.9	7.7	8.0	7.7
MM038	Aluminum mill products:					
	Number of establishments	362	358	363	379	372
	Employees (thousands)	59	57	57	59	58
	Capacity utilization (percent)	83	86	80	79	80
	U.S. shipments (million dollars)	19,678	19,316	19,632	17,489	17,960
	U.S. exports (million dollars)	3,046	2,943	3,130	2,784	2,519
	U.S. imports (million dollars)	2,181	2,283	2,674	2,305	2,516
	Apparent U.S. consumption (million dollars)	18,812	18,656	19,176	17,010	17,957
	Trade balance (million dollars)	866	660	456	479	3
	Ratio of imports to consumption (percent)	11.6	12.2	13.9	13.6	14.0
	Ratio of exports to shipments (percent)	15.5	15.2	15.9	15.9	14.0
MM039A	Refined lead:					
	Number of establishments	32	31	30	29	25
	Employees (thousands)	2	2	2	2	2
	Capacity utilization (percent)	88	88	89	87	85
	U.S. shipments (million dollars)	1,395	1,358	1,366	1,278	1,261
	U.S. exports (million dollars)	15	11	16	8	14
	U.S. imports (million dollars)	122	113	117	90	82
	Apparent U.S. consumption (million dollars)	1,502	1,460	1,467	1,361	1,329
	Trade balance (million dollars)	-107	-102	-101	-83	-68
	Ratio of imports to consumption (percent)	8.1	7.7	8.0	6.6	6.2
	Ratio of exports to shipments (percent)	1.0	0.8	1.2	0.6	1.1
MM040A	Unwrought zinc:					
	Number of establishments	11	11	15	15	15
	Employees (thousands)	2	2	2	1	1
	Capacity utilization (percent)	82	83	83	69	76
	U.S. shipments (million dollars)	417	439	455	302	300
	U.S. exports (million dollars)	3	2	3	1	1
	U.S. imports (million dollars)	961	1,066	1,104	786	731
	Apparent U.S. consumption (million dollars)	1,375	1,502	1,556	1,087	1,030
	Trade balance (million dollars)	-958	-1,063	-1,101	-785	-730
	Ratio of imports to consumption (percent)	69.9	70.9	71.0	72.3	71.0
	Ratio of exports to shipments (percent)	0.7	0.5	0.7	0.4	0.4
MM041A	Titanium ingot:					
	Number of establishments	12	9	9	5	5
	Employees (thousands)	0.3	0.3	0.3	0.3	0.3
	Capacity utilization (percent)	57	44	43	49	45
	U.S. shipments (million dollars)	926	718	870	600	420
	U.S. exports (million dollars)	9	13	12	22	12
	U.S. imports (million dollars)	37	14	17	27	13
	Apparent U.S. consumption (million dollars)	954	720	875	606	421
	Trade balance (million dollars)	-28	-2	-5	-6	-1
	Ratio of imports to consumption (percent)	3.9	2.0	1.9	4.5	3.1
	Ratio of exports to shipments (percent)	1.0	1.8	1.4	3.6	3.0

See footnote(s) at end of table.

Table C-6--*Continued*
Minerals and metals: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM042	Nonpowered handtools:					
	Number of establishments	1,150	1,100	1,000	950	900
	Employees (thousands)	122	121	120	115	110
	Capacity utilization (percent)	75	70	71	70	70
	U.S. shipments (million dollars)	13,984	13,931	14,139	12,433	11,812
	U.S. exports (million dollars)	2,060	2,031	2,263	2,119	2,038
	U.S. imports (million dollars)	2,885	2,917	3,163	2,996	3,284
	Apparent U.S. consumption (million dollars)	14,809	14,818	15,040	13,309	13,058
	Trade balance (million dollars)	-825	-887	-901	-876	-1,246
	Ratio of imports to consumption (percent)	19.5	19.7	21.0	22.5	25.1
	Ratio of exports to shipments (percent)	14.7	14.6	16.0	17.0	17.3
MM043	Certain cutlery, sewing implements, and related products:					
	Number of establishments	173	175	176	177	178
	Employees (thousands)	10	10	10	9	9
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	2,100	2,000	2,000	1,900	1,800
	U.S. exports (million dollars)	511	583	546	556	551
	U.S. imports (million dollars)	781	856	888	865	912
	Apparent U.S. consumption (million dollars)	2,371	2,273	2,342	2,209	2,161
	Trade balance (million dollars)	-271	-273	-342	-309	-361
	Ratio of imports to consumption (percent)	33.0	37.7	37.9	39.2	42.2
	Ratio of exports to shipments (percent)	24.3	29.2	27.3	29.3	30.6
MM044	Table flatware and related products:					
	Number of establishments	5	5	5	5	5
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	95	95	90	90	90
	U.S. shipments (million dollars)	45	44	42	41	41
	U.S. exports (million dollars)	24	26	25	28	29
	U.S. imports (million dollars)	327	425	507	463	478
	Apparent U.S. consumption (million dollars)	348	443	523	476	491
	Trade balance (million dollars)	-303	-399	-481	-435	-450
	Ratio of imports to consumption (percent)	94.1	96.0	96.8	97.2	97.5
	Ratio of exports to shipments (percent)	54.3	59.5	59.7	67.7	69.9
MM045	Certain builders' hardware:					
	Number of establishments	294	290	286	282	278
	Employees (thousands)	42	40	40	39	36
	Capacity utilization (percent)	71	76	75	71	68
	U.S. shipments (million dollars)	6,095	5,843	5,898	5,797	5,454
	U.S. exports (million dollars)	807	823	1,084	961	907
	U.S. imports (million dollars)	1,531	1,696	1,973	1,948	2,197
	Apparent U.S. consumption (million dollars)	6,818	6,716	6,787	6,784	6,743
	Trade balance (million dollars)	-723	-873	-889	-987	-1,289
	Ratio of imports to consumption (percent)	22.4	25.3	29.1	28.7	32.6
	Ratio of exports to shipments (percent)	13.2	14.1	18.4	16.6	16.6

[1]Not available.
[2]Less than 500,000.
[3]Less than 0.05 percent.
[4]Inventory changes, for which data are not available, likely account for ratios that exceed 100 percent.
[5]Capacity utilization could not be meaningfully calculated for this industry.

Note.--Calculations based on unrounded data.

Table C-7
Machinery: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM068	Wiring harnesses for motor vehicles:					
	Number of establishments	(1)	(1)	(1)	(1)	(1)
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	5,460	6,150	6,240	5,740	6,450
	U.S. exports (million dollars)	1,315	993	938	866	961
	U.S. imports (million dollars)	4,408	4,868	5,132	4,684	5,302
	Apparent U.S. consumption (million dollars)	8,552	10,025	10,434	9,558	10,791
	Trade balance (million dollars)	-3,092	-3,875	-4,194	-3,818	-4,341
	Ratio of imports to consumption (percent)	51.5	48.6	49.2	49.0	49.1
	Ratio of exports to shipments (percent)	24.1	16.1	15.0	15.1	14.9
MM069	Pumps for motor vehicles:					
	Number of establishments	192	202	195	215	225
	Employees (thousands)	27	27	25	28	30
	Capacity utilization (percent)	72	72	72	76	78
	U.S. shipments (million dollars)	2,840	2,982	3,012	3,223	3,384
	U.S. exports (million dollars)	556	546	680	642	681
	U.S. imports (million dollars)	780	776	863	788	913
	Apparent U.S. consumption (million dollars)	3,063	3,212	3,195	3,370	3,616
	Trade balance (million dollars)	-223	-230	-183	-147	-232
	Ratio of imports to consumption (percent)	25.5	24.2	27.0	23.4	25.3
	Ratio of exports to shipments (percent)	19.6	18.3	22.6	19.9	20.1
MM070	Pumps for liquids:					
	Number of establishments	425	450	460	485	475
	Employees (thousands)	32	36	37	37	35
	Capacity utilization (percent)	68	69	70	70	69
	U.S. shipments (million dollars)	6,289	6,603	6,800	6,936	6,867
	U.S. exports (million dollars)	2,340	2,325	2,461	2,561	2,393
	U.S. imports (million dollars)	1,587	1,643	1,809	1,801	1,883
	Apparent U.S. consumption (million dollars)	5,536	5,920	6,148	6,176	6,357
	Trade balance (million dollars)	753	683	652	760	510
	Ratio of imports to consumption (percent)	28.7	27.7	29.4	29.2	29.6
	Ratio of exports to shipments (percent)	37.2	35.2	36.2	36.9	34.8
MM071	Air-conditioning equipment and parts:					
	Number of establishments	1,205	1,225	1,262	1,295	1,240
	Employees (thousands)	140	148	151	155	142
	Capacity utilization (percent)	75	73	75	76	71
	U.S. shipments (million dollars)	25,528	26,500	27,030	28,111	23,894
	U.S. exports (million dollars)	5,471	5,641	5,884	5,694	5,318
	U.S. imports (million dollars)	4,945	5,604	6,332	6,081	6,674
	Apparent U.S. consumption (million dollars)	25,002	26,463	27,479	28,498	25,250
	Trade balance (million dollars)	526	37	-449	-387	-1,356
	Ratio of imports to consumption (percent)	19.8	21.2	23.0	21.3	26.4
	Ratio of exports to shipments (percent)	21.4	21.3	21.8	20.3	22.3
MM072	Industrial thermal-processing equipment and furnaces:					
	Number of establishments	290	329	331	320	325
	Employees (thousands)	32	33	34	32	32
	Capacity utilization (percent)	68	67	68	66	67
	U.S. shipments (million dollars)	3,610	3,715	3,752	3,564	3,599
	U.S. exports (million dollars)	2,352	2,292	2,631	2,496	2,111
	U.S. imports (million dollars)	1,351	1,483	1,663	1,641	1,694
	Apparent U.S. consumption (million dollars)	2,609	2,906	2,784	2,709	3,182
	Trade balance (million dollars)	1,001	809	968	855	417
	Ratio of imports to consumption (percent)	51.8	51.0	59.7	60.6	53.2
	Ratio of exports to shipments (percent)	65.2	61.7	70.1	70.0	58.7

See footnote(s) at end of table.

Table C-7--*Continued*
Machinery: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM073	Household appliances, including commercial applications:					
	Number of establishments	96	100	87	98	95
	Employees (thousands)	54	57	50	55	53
	Capacity utilization (percent)	69	71	67	70	69
	U.S. shipments (million dollars)	15,569	15,867	15,111	15,741	15,427
	U.S. exports (million dollars)	5,571	5,216	5,563	5,226	4,845
	U.S. imports (million dollars)	5,961	6,718	7,689	8,356	9,564
	Apparent U.S. consumption (million dollars)	15,959	17,370	17,237	18,871	20,146
	Trade balance (million dollars)	-390	-1,503	-2,126	-3,130	-4,719
	Ratio of imports to consumption (percent)	37.4	38.7	44.6	44.3	47.5
	Ratio of exports to shipments (percent)	35.8	32.9	36.8	33.2	31.4
MM073A	Major household appliances and parts:					
	Number of establishments	225	197	238	251	255
	Employees (thousands)	72	66	73	75	76
	Capacity utilization (percent)	69	67	69	70	71
	U.S. shipments (million dollars)	13,742	13,171	13,981	14,259	14,544
	U.S. exports (million dollars)	1,844	1,652	1,717	1,708	1,610
	U.S. imports (million dollars)	1,208	1,477	1,642	1,986	2,444
	Apparent U.S. consumption (million dollars)	13,105	12,995	13,906	14,537	15,378
	Trade balance (million dollars)	637	176	75	-278	-834
	Ratio of imports to consumption (percent)	9.2	11.4	11.8	13.7	15.9
	Ratio of exports to shipments (percent)	13.4	12.5	12.3	12.0	11.1
MM075	Wrapping, packaging, and can-sealing machinery:					
	Number of establishments	727	756	784	813	813
	Employees (thousands)	32	31	29	28	29
	Capacity utilization (percent)	71	67	62	59	75
	U.S. shipments (million dollars)	4,286	4,119	4,202	3,939	4,085
	U.S. exports (million dollars)	791	766	804	711	639
	U.S. imports (million dollars)	1,072	1,117	1,246	1,302	1,333
	Apparent U.S. consumption (million dollars)	4,567	4,470	4,644	4,530	4,779
	Trade balance (million dollars)	-281	-351	-442	-591	-694
	Ratio of imports to consumption (percent)	23.5	25.0	26.8	28.7	27.9
	Ratio of exports to shipments (percent)	18.5	18.6	19.1	18.1	15.6
MM076	Scales and weighing machinery:					
	Number of establishments	119	119	118	118	117
	Employees (thousands)	4.8	4.9	4.5	4.3	4.2
	Capacity utilization (percent)	60	66	56	57	58
	U.S. shipments (million dollars)	698	752	765	778	791
	U.S. exports (million dollars)	147	145	163	175	164
	U.S. imports (million dollars)	223	265	294	279	293
	Apparent U.S. consumption (million dollars)	774	873	896	882	920
	Trade balance (million dollars)	-76	-121	-131	-104	-129
	Ratio of imports to consumption (percent)	28.8	30.4	32.8	31.6	31.9
	Ratio of exports to shipments (percent)	21.1	19.3	21.4	22.5	20.8
MM077	Mineral processing machinery:					
	Number of establishments	90	90	90	90	90
	Employees (thousands)	7	7	7	7	7
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,528	1,563	1,542	1,542	1,286
	U.S. exports (million dollars)	764	590	582	582	485
	U.S. imports (million dollars)	574	667	723	576	565
	Apparent U.S. consumption (million dollars)	1,339	1,641	1,684	1,536	1,367
	Trade balance (million dollars)	189	-78	-142	6	-81
	Ratio of imports to consumption (percent)	42.9	40.7	43.0	37.5	41.4
	Ratio of exports to shipments (percent)	50.0	37.7	37.7	37.7	37.7

See footnote(s) at end of table.

Table C-7--*Continued*
Machinery: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM078	Farm and garden machinery and equipment:					
	Number of establishments	1,890	1,870	1,800	1,700	1,500
	Employees (thousands)	105	98	97	95	90
	Capacity utilization (percent)	70	63	67	67	67
	U.S. shipments (million dollars)	22,085	18,013	19,676	18,582	17,653
	U.S. exports (million dollars)	5,835	4,757	4,945	4,565	4,747
	U.S. imports (million dollars)	4,311	3,396	3,740	3,602	3,898
	Apparent U.S. consumption (million dollars)	20,561	16,652	18,471	17,619	16,805
	Trade balance (million dollars)	1,524	1,361	1,205	963	848
	Ratio of imports to consumption (percent)	21.0	20.4	20.2	20.4	23.2
	Ratio of exports to shipments (percent)	26.4	26.4	25.1	24.6	26.9
MM079	Industrial food-processing and related machinery:					
	Number of establishments	573	582	591	600	615
	Employees (thousands)	19	19	18	18	18
	Capacity utilization (percent)	70	72	67	66	68
	U.S. shipments (million dollars)	2,593	2,614	2,563	2,404	2,514
	U.S. exports (million dollars)	688	611	627	576	606
	U.S. imports (million dollars)	619	621	543	537	570
	Apparent U.S. consumption (million dollars)	2,523	2,623	2,480	2,364	2,478
	Trade balance (million dollars)	70	-9	83	40	36
	Ratio of imports to consumption (percent)	24.5	23.7	21.9	22.7	23.0
	Ratio of exports to shipments (percent)	26.5	23.4	24.5	24.0	24.1
MM080	Pulp, paper, and paperboard machinery:					
	Number of establishments	358	351	330	308	287
	Employees (thousands)	17.4	16.4	15.8	15.8	14.8
	Capacity utilization (percent)	70	60	64	72	82
	U.S. shipments (million dollars)	3,185	2,941	2,761	2,581	2,402
	U.S. exports (million dollars)	813	743	779	678	560
	U.S. imports (million dollars)	1,037	1,003	1,127	1,091	719
	Apparent U.S. consumption (million dollars)	3,409	3,201	3,109	2,995	2,561
	Trade balance (million dollars)	-224	-260	-348	-414	-159
	Ratio of imports to consumption (percent)	30.4	31.3	36.2	36.4	28.1
	Ratio of exports to shipments (percent)	25.5	25.3	28.2	26.3	23.3
MM081	Printing and related machinery:					
	Number of establishments	554	523	579	592	605
	Employees (thousands)	21.1	19.6	20	16.5	13
	Capacity utilization (percent)	69	67	69	63	59
	U.S. shipments (million dollars)	3,963	3,605	3,827	4,048	4,270
	U.S. exports (million dollars)	1,455	1,347	1,583	1,232	1,136
	U.S. imports (million dollars)	2,231	2,304	2,157	1,929	2,001
	Apparent U.S. consumption (million dollars)	4,739	4,563	4,401	4,745	5,135
	Trade balance (million dollars)	-776	-958	-574	-697	-865
	Ratio of imports to consumption (percent)	47.1	50.5	49.0	40.7	39.0
	Ratio of exports to shipments (percent)	36.7	37.4	41.4	30.4	26.6
MM082	Textile machinery:					
	Number of establishments	500	500	500	500	500
	Employees (thousands)	14	13	13	12	12
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,724	1,546	1,648	1,417	1,377
	U.S. exports (million dollars)	1,082	974	978	897	871
	U.S. imports (million dollars)	2,608	2,073	1,873	1,411	1,314
	Apparent U.S. consumption (million dollars)	3,250	2,645	2,543	1,932	1,819
	Trade balance (million dollars)	-1,526	-1,099	-895	-515	-442
	Ratio of imports to consumption (percent)	80.2	78.4	73.6	73.1	72.2
	Ratio of exports to shipments (percent)	62.7	63.0	59.3	63.3	63.3

See footnote(s) at end of table.

Table C-7--*Continued*
Machinery: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM083	Metal rolling mills:					
	Number of establishments	15	15	15	15	15
	Employees (thousands)	3	3	3	3	3
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	840	511	545	699	584
	U.S. exports (million dollars)	252	153	164	210	169
	U.S. imports (million dollars)	514	321	261	180	163
	Apparent U.S. consumption (million dollars)	1,102	679	642	669	577
	Trade balance (million dollars)	-262	-168	-97	30	7
	Ratio of imports to consumption (percent)	46.6	47.3	40.7	26.9	28.2
	Ratio of exports to shipments (percent)	30.0	30.0	30.0	30.1	29.0
MM084	Metal cutting machine tools and machine tool accessories:					
	Number of establishments	720	700	650	600	400
	Employees (thousands)	87	84	81	75	66
	Capacity utilization (percent)	70	70	68	63	60
	U.S. shipments (million dollars)	7,685	6,825	6,933	5,877	3,838
	U.S. exports (million dollars)	1,985	1,773	2,264	1,809	1,634
	U.S. imports (million dollars)	4,590	3,921	4,240	3,407	2,558
	Apparent U.S. consumption (million dollars)	10,290	8,973	8,910	7,475	4,762
	Trade balance (million dollars)	-2,605	-2,148	-1,977	-1,598	-924
	Ratio of imports to consumption (percent)	44.6	43.7	47.6	45.6	53.7
	Ratio of exports to shipments (percent)	25.8	26.0	32.6	30.8	42.6
MM085	Metal forming machine tools:					
	Number of establishments	300	250	250	220	200
	Employees (thousands)	30	28	27	20	15
	Capacity utilization (percent)	80	75	66	62	60
	U.S. shipments (million dollars)	3,234	2,980	2,890	2,185	1,647
	U.S. exports (million dollars)	984	934	876	743	652
	U.S. imports (million dollars)	1,409	1,312	1,474	1,331	846
	Apparent U.S. consumption (million dollars)	3,660	3,358	3,488	2,773	1,841
	Trade balance (million dollars)	-426	-378	-598	-588	-194
	Ratio of imports to consumption (percent)	38.5	39.1	42.3	48.0	46.0
	Ratio of exports to shipments (percent)	30.4	31.3	30.3	34.0	39.6
MM086	Non-metalworking machine tools:					
	Number of establishments	290	280	260	240	200
	Employees (thousands)	41	41	42	36	34
	Capacity utilization (percent)	80	80	77	75	70
	U.S. shipments (million dollars)	6,104	6,170	6,320	5,396	5,126
	U.S. exports (million dollars)	595	772	1,080	807	768
	U.S. imports (million dollars)	1,229	1,318	1,524	1,276	1,242
	Apparent U.S. consumption (million dollars)	6,738	6,716	6,763	5,864	5,600
	Trade balance (million dollars)	-634	-546	-443	-468	-474
	Ratio of imports to consumption (percent)	18.2	19.6	22.5	21.7	22.2
	Ratio of exports to shipments (percent)	9.8	12.5	17.1	15.0	15.0
MM087A	Semiconductor manufacturing machinery:					
	Number of establishments	380	390	410	405	400
	Employees (thousands)	44	37	48	36	34
	Capacity utilization (percent)	70	75	90	72	81
	U.S. shipments (million dollars)	9,246	11,231	16,846	11,850	10,200
	U.S. exports (million dollars)	7,786	7,907	13,866	8,044	6,972
	U.S. imports (million dollars)	2,588	2,600	4,597	3,947	3,304
	Apparent U.S. consumption (million dollars)	4,048	5,924	7,577	7,754	6,532
	Trade balance (million dollars)	5,198	5,307	9,269	4,096	3,668
	Ratio of imports to consumption (percent)	63.9	43.9	60.7	50.9	50.6
	Ratio of exports to shipments (percent)	84.2	70.4	82.3	67.9	68.4

See footnote(s) at end of table.

Table C-7--*Continued*

Machinery: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM088	Taps, cocks, valves, and similar devices:					
	Number of establishments	825	797	785	725	695
	Employees (thousands)	72	70	70	67	64
	Capacity utilization (percent)	75	75	74	70	68
	U.S. shipments (million dollars)	11,033	11,687	11,804	11,450	11,221
	U.S. exports (million dollars)	2,836	2,959	3,284	3,351	3,202
	U.S. imports (million dollars)	3,974	4,335	5,021	4,809	5,156
	Apparent U.S. consumption (million dollars)	12,171	13,063	13,541	12,908	13,175
	Trade balance (million dollars)	-1,138	-1,376	-1,737	-1,458	-1,954
	Ratio of imports to consumption (percent)	32.7	33.2	37.1	37.3	39.1
	Ratio of exports to shipments (percent)	25.7	25.3	27.8	29.3	28.5
MM089	Mechanical power transmission equipment:					
	Number of establishments	210	200	170	140	130
	Employees (thousands)	40	37	37	35	32
	Capacity utilization (percent)	69	65	62	62	60
	U.S. shipments (million dollars)	5,145	4,942	5,051	4,441	4,219
	U.S. exports (million dollars)	1,011	942	1,029	939	936
	U.S. imports (million dollars)	1,843	2,008	2,134	2,004	1,994
	Apparent U.S. consumption (million dollars)	5,977	6,008	6,156	5,507	5,276
	Trade balance (million dollars)	-832	-1,066	-1,105	-1,066	-1,057
	Ratio of imports to consumption (percent)	30.8	33.4	34.7	36.4	37.8
	Ratio of exports to shipments (percent)	19.7	19.1	20.4	21.1	22.2
MM090	Boilers, turbines, and related machinery:					
	Number of establishments	28	28	28	28	28
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	70	65	65	65	70
	U.S. shipments (million dollars)	1,604	1,465	1,543	1,648	2,240
	U.S. exports (million dollars)	1,495	1,290	1,117	1,106	892
	U.S. imports (million dollars)	370	484	833	1,204	1,514
	Apparent U.S. consumption (million dollars)	479	659	1,259	1,746	2,862
	Trade balance (million dollars)	1,125	806	284	-98	-622
	Ratio of imports to consumption (percent)	77.3	73.5	66.2	68.9	52.9
	Ratio of exports to shipments (percent)	93.2	88.1	72.4	67.1	39.8
MM091	Electric motors, generators, and related equipment:					
	Number of establishments	515	510	505	505	500
	Employees (thousands)	95	95	93	95	92
	Capacity utilization (percent)	76	75	73	76	72
	U.S. shipments (million dollars)	19,100	19,150	19,020	20,540	18,700
	U.S. exports (million dollars)	3,955	3,728	3,748	4,691	3,923
	U.S. imports (million dollars)	4,748	6,089	6,494	7,646	7,177
	Apparent U.S. consumption (million dollars)	19,893	21,512	21,766	23,494	21,955
	Trade balance (million dollars)	-793	-2,362	-2,746	-2,954	-3,255
	Ratio of imports to consumption (percent)	23.9	28.3	29.8	32.5	32.7
	Ratio of exports to shipments (percent)	20.7	19.5	19.7	22.8	21.0
MM092	Electrical transformers, static converters, and inductors:					
	Number of establishments	415	420	415	410	405
	Employees (thousands)	58	57	55	53	52
	Capacity utilization (percent)	74	76	73	71	70
	U.S. shipments (million dollars)	8,570	8,600	8,470	7,625	6,520
	U.S. exports (million dollars)	2,304	2,379	2,752	2,436	1,784
	U.S. imports (million dollars)	4,485	4,950	6,156	5,134	4,707
	Apparent U.S. consumption (million dollars)	10,751	11,171	11,874	10,323	9,443
	Trade balance (million dollars)	-2,181	-2,571	-3,404	-2,698	-2,923
	Ratio of imports to consumption (percent)	41.7	44.3	51.8	49.7	49.8
	Ratio of exports to shipments (percent)	26.9	27.7	32.5	31.9	27.4

See footnote(s) at end of table.

Table C-7--*Continued*
Machinery: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM093	Portable electric handtools:					
	Number of establishments	30	28	27	25	24
	Employees (thousands)	9	9	9	8	7
	Capacity utilization (percent)	82	81	83	80	75
	U.S. shipments (million dollars)	2,150	2,280	2,390	2,080	1,950
	U.S. exports (million dollars)	383	392	359	291	212
	U.S. imports (million dollars)	834	992	1,166	1,185	1,434
	Apparent U.S. consumption (million dollars)	2,601	2,880	3,198	2,974	3,172
	Trade balance (million dollars)	-451	-600	-808	-894	-1,222
	Ratio of imports to consumption (percent)	32.1	34.5	36.5	39.8	45.2
	Ratio of exports to shipments (percent)	17.8	17.2	15.0	14.0	10.9
MM094	Nonelectrically powered handtools and parts thereof:					
	Number of establishments	38	38	35	30	25
	Employees (thousands)	11	12	13	13	12
	Capacity utilization (percent)	77	78	77	75	70
	U.S. shipments (million dollars)	1,709	1,878	1,974	1,916	1,840
	U.S. exports (million dollars)	553	537	563	563	549
	U.S. imports (million dollars)	782	890	933	901	961
	Apparent U.S. consumption (million dollars)	1,939	2,231	2,344	2,254	2,252
	Trade balance (million dollars)	-230	-353	-370	-338	-412
	Ratio of imports to consumption (percent)	40.4	39.9	39.8	40.0	42.7
	Ratio of exports to shipments (percent)	32.3	28.6	28.5	29.4	29.8
MM095	Electric lamps (bulbs) and portable electric lights:					
	Number of establishments	120	120	115	110	105
	Employees (thousands)	24	22	21	20	19
	Capacity utilization (percent)	73	70	68	65	64
	U.S. shipments (million dollars)	3,650	3,400	3,500	3,300	3,250
	U.S. exports (million dollars)	896	894	897	799	750
	U.S. imports (million dollars)	1,287	1,454	1,579	1,785	1,687
	Apparent U.S. consumption (million dollars)	4,041	3,961	4,182	4,286	4,187
	Trade balance (million dollars)	-391	-561	-682	-986	-937
	Ratio of imports to consumption (percent)	31.8	36.7	37.8	41.7	40.3
	Ratio of exports to shipments (percent)	24.5	26.3	25.6	24.2	23.1
MM096	Welding and soldering equipment:					
	Number of establishments	245	250	250	240	225
	Employees (thousands)	17	18	18	17	16
	Capacity utilization (percent)	78	78	78	77	75
	U.S. shipments (million dollars)	4,300	4,500	4,770	4,250	3,930
	U.S. exports (million dollars)	810	989	1,050	703	635
	U.S. imports (million dollars)	781	702	803	803	761
	Apparent U.S. consumption (million dollars)	4,271	4,213	4,523	4,351	4,056
	Trade balance (million dollars)	29	287	247	-101	-126
	Ratio of imports to consumption (percent)	18.3	16.7	17.7	18.5	18.8
	Ratio of exports to shipments (percent)	18.8	22.0	22.0	16.5	16.2
MM097	Nonautomotive insulated electrical wire and related products:					
	Number of establishments	530	525	520	500	490
	Employees (thousands)	92	91	90	85	83
	Capacity utilization (percent)	85	80	78	73	71
	U.S. shipments (million dollars)	16,000	16,750	17,500	15,000	13,380
	U.S. exports (million dollars)	2,950	3,102	4,040	3,286	2,856
	U.S. imports (million dollars)	2,814	3,078	3,566	3,203	3,076
	Apparent U.S. consumption (million dollars)	15,865	16,726	17,026	14,917	13,600
	Trade balance (million dollars)	135	24	474	83	-220
	Ratio of imports to consumption (percent)	17.7	18.4	20.9	21.5	22.6
	Ratio of exports to shipments (percent)	18.4	18.5	23.1	21.9	21.3

See footnote(s) at end of table.

Table C-7--*Continued*
Machinery: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM099	Molds and molding machinery:					
	Number of establishments	120	120	120	120	120
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	5,750	5,233	5,929	5,001	4,486
	U.S. exports (million dollars)	1,896	1,879	2,129	1,791	1,605
	U.S. imports (million dollars)	3,512	3,723	3,613	2,803	2,969
	Apparent U.S. consumption (million dollars)	7,367	7,077	7,413	6,013	5,849
	Trade balance (million dollars)	-1,617	-1,844	-1,484	-1,012	-1,363
	Ratio of imports to consumption (percent)	47.7	52.6	48.7	46.6	50.8
	Ratio of exports to shipments (percent)	33.0	35.9	35.9	35.8	35.8

[1]Not available.

Note.–Calculations based on unrounded data.

Table C-8
Transportation equipment: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET001	Aircraft engines and gas turbines:					
	Number of establishments	30	28	28	27	27
	Employees (thousands)	113	110	103	109	99
	Capacity utilization (percent)	95	(1)	(1)	80	75
	U.S. shipments (million dollars)	23,536	26,642	29,226	35,051	45,000
	U.S. exports (million dollars)	13,115	14,218	15,011	16,524	15,498
	U.S. imports (million dollars)	10,404	10,328	10,939	13,548	10,993
	Apparent U.S. consumption (million dollars)	20,825	22,753	25,154	32,075	40,495
	Trade balance (million dollars)	2,711	3,889	4,072	2,976	4,505
	Ratio of imports to consumption (percent)	50.0	45.4	43.5	42.2	27.1
	Ratio of exports to shipments (percent)	55.7	53.4	51.4	47.1	34.4
ET002	Internal combustion piston engines, other than for aircraft:					
	Number of establishments	1,500	1,500	1,500	1,450	(2)
	Employees (thousands)	155	157	157	156	(2)
	Capacity utilization (percent)	75	83	75	75	(2)
	U.S. production (million dollars)	50,000	54,000	54,000	48,000	(2)
	U.S. exports (million dollars)	11,015	12,522	13,808	12,408	13,069
	U.S. imports (million dollars)	11,478	14,052	15,532	13,657	14,841
	Apparent U.S. consumption (million dollars)	50,463	55,530	55,724	49,249	(2)
	Trade balance (million dollars)	-463	-1,530	-1,724	-1,249	-1,771
	Ratio of imports to consumption (percent)	22.7	25.3	27.9	27.7	(2)
	Ratio of exports to production (percent)	22.0	23.2	25.6	25.9	(2)
ET003	Forklift trucks and similar industrial vehicles:					
	Number of establishments	455	453	451	451	(2)
	Employees (thousands)	27	27	26	26	(2)
	Capacity utilization (percent)	78	67	64	60	(2)
	U.S. production (million dollars)	5,819	5,155	5,493	4,763	(2)
	U.S. exports (million dollars)	1,188	1,243	1,332	1,341	1,090
	U.S. imports (million dollars)	1,456	1,527	1,668	1,423	1,266
	Apparent U.S. consumption (million dollars)	6,087	5,439	5,830	4,845	(2)
	Trade balance (million dollars)	-268	-284	-337	-82	-176
	Ratio of imports to consumption (percent)	23.9	28.1	28.6	29.4	(2)
	Ratio of exports to production (percent)	20.4	24.1	24.2	28.2	(2)
ET004	Construction and mining equipment:					
	Number of establishments	1,661	1,664	1,667	1,655	1,655
	Employees (thousands)	147	140	137	130	130
	Capacity utilization (percent)	87	63	61	59	58
	U.S. shipments (million dollars)	28,001	25,783	26,112	25,169	23,911
	U.S. exports (million dollars)	10,944	8,646	9,507	9,903	9,504
	U.S. imports (million dollars)	6,299	5,919	5,643	5,260	5,302
	Apparent U.S. consumption (million dollars)	23,356	23,056	22,248	20,526	19,709
	Trade balance (million dollars)	4,645	2,727	3,864	4,643	4,202
	Ratio of imports to consumption (percent)	27.0	25.7	25.4	25.6	26.9
	Ratio of exports to shipments (percent)	39.1	33.5	36.4	39.3	39.7
ET005	Ball and rollers bearings:					
	Number of establishments	183	183	183	183	181
	Employees (thousands)	37	37	36	36	35
	Capacity utilization (percent)	82	80	73	74	62
	U.S. shipments (million dollars)	6,468	6,331	6,500	5,766	5,881
	U.S. exports (million dollars)	1,141	1,098	1,242	1,197	1,249
	U.S. imports (million dollars)	1,719	1,622	1,804	1,579	1,598
	Apparent U.S. consumption (million dollars)	7,046	6,855	7,062	6,147	6,230
	Trade balance (million dollars)	-578	-524	-562	-381	-349
	Ratio of imports to consumption (percent)	24.4	23.7	25.5	25.7	25.6
	Ratio of exports to shipments (percent)	17.6	17.3	19.1	20.8	21.2

See footnote(s) at end of table.

Table C-8--*Continued*

Transportation equipment: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET006	Primary cells and batteries and electric storage batteries:					
	Number of establishments	180	180	180	170	(2)
	Employees (thousands)	31	32	32	30	(2)
	Capacity utilization (percent)	80	81	71	71	(2)
	U.S. production (million dollars)	6,900	7,600	7,800	7,000	(2)
	U.S. exports (million dollars)	2,309	2,307	2,655	2,270	1,807
	U.S. imports (million dollars)	2,056	2,392	2,656	2,342	2,196
	Apparent U.S. consumption (million dollars)	6,647	7,684	7,801	7,072	(2)
	Trade balance (million dollars)	253	-84	-1	-72	-389
	Ratio of imports to consumption (percent)	30.9	31.1	34.0	33.1	(2)
	Ratio of exports to production (percent)	33.5	30.4	34.0	32.4	(2)
ET007	Ignition, starting, lighting, and other electrical equipment:					
	Number of establishments	700	700	700	670	(2)
	Employees (thousands)	77	77	80	80	(2)
	Capacity utilization (percent)	78	79	73	73	(2)
	U.S. production (million dollars)	15,300	17,600	17,500	15,600	(2)
	U.S. exports (million dollars)	1,725	1,947	1,986	1,824	1,894
	U.S. imports (million dollars)	2,363	2,817	3,076	3,052	3,467
	Apparent U.S. consumption (million dollars)	15,937	18,470	18,590	16,828	(2)
	Trade balance (million dollars)	-637	-870	-1,090	-1,228	-1,574
	Ratio of imports to consumption (percent)	14.8	15.3	16.5	18.1	(2)
	Ratio of exports to production (percent)	11.3	11.1	11.3	11.7	(2)
ET008	Rail locomotive and rolling stock:					
	Number of establishments	190	190	190	180	180
	Employees (thousands)	31	32	30	26	27
	Capacity utilization (percent)	87	76	69	65	66
	U.S. shipments (million dollars)	7,100	7,600	7,400	4,500	4,600
	U.S. exports (million dollars)	1,694	1,558	1,336	1,422	1,006
	U.S. imports (million dollars)	2,156	2,307	1,828	1,357	1,039
	Apparent U.S. consumption (million dollars)	7,562	8,349	7,892	4,435	4,633
	Trade balance (million dollars)	-462	-749	-492	65	-33
	Ratio of imports to consumption (percent)	28.5	27.6	23.2	30.6	22.4
	Ratio of exports to shipments (percent)	23.9	20.5	18.0	31.6	21.9
ET009	Motor vehicles:					
	Number of establishments	1,288	1,290	1,295	1,300	1,305
	Employees (thousands)	297	297	293	272	280
	Capacity utilization (percent)	88	96	95	84	85
	U.S. shipments (million dollars)	240,135	279,018	251,031	227,002	242,892
	U.S. exports (million dollars)	22,594	22,116	22,865	22,651	26,209
	U.S. imports (million dollars)	99,833	119,675	129,568	127,257	133,264
	Apparent U.S. consumption (million dollars)	317,374	376,577	357,734	331,608	349,946
	Trade balance (million dollars)	-77,239	-97,559	-106,703	-104,606	-107,054
	Ratio of imports to consumption (percent)	31.5	31.8	36.2	38.4	38.1
	Ratio of exports to shipments (percent)	9.4	7.9	9.1	10.0	10.8

See footnote(s) at end of table.

Table C-8--*Continued*
Transportation equipment: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET010	Certain motor-vehicle parts:					
	Number of establishments	3,300	3,300	3,300	3,150	(2)
	Employees (thousands)	550	550	550	545	(2)
	Capacity utilization (percent)	76	81	75	75	(2)
	U.S. production (million dollars)	124,000	135,000	137,000	122,000	(2)
	U.S. exports (million dollars)	25,666	26,997	28,917	26,521	26,651
	U.S. imports (million dollars)	18,623	22,615	25,011	23,977	27,761
	Apparent U.S. consumption (million dollars)	116,957	130,618	133,093	119,456	(2)
	Trade balance (million dollars)	7,043	4,382	3,907	2,544	-1,110
	Ratio of imports to consumption (percent)	15.9	17.3	18.8	20.1	(2)
	Ratio of exports to production (percent)	20.7	20.0	21.1	21.7	(2)
ET011	Motorcycles, mopeds, and parts:					
	Number of establishments	48	50	55	60	(2)
	Employees (thousands)	8	9	10	11	(2)
	Capacity utilization (percent)	90	90	85	85	(2)
	U.S. production (million dollars)	2,500	3,000	3,500	4,200	(2)
	U.S. exports (million dollars)	626	468	563	742	793
	U.S. imports (million dollars)	1,293	1,755	2,519	2,870	2,927
	Apparent U.S. consumption (million dollars)	3,167	4,287	5,456	6,328	(2)
	Trade balance (million dollars)	-667	-1,287	-1,956	-2,128	-2,134
	Ratio of imports to consumption (percent)	40.8	40.9	46.2	45.3	(2)
	Ratio of exports to production (percent)	25.0	15.6	16.1	17.7	(2)
ET012	Miscellaneous vehicles and transportation-related equipment:					
	Number of establishments	1,202	1,203	1,203	1,210	1,213
	Employees (thousands)	57	61	61	62	64
	Capacity utilization (percent)	63	67	58	60	64
	U.S. shipments (million dollars)	12,975	13,830	14,092	14,205	14,915
	U.S. exports (million dollars)	2,958	2,759	2,939	2,658	2,725
	U.S. imports (million dollars)	1,664	2,056	2,982	2,364	2,744
	Apparent U.S. consumption (million dollars)	11,681	13,127	14,135	13,912	14,934
	Trade balance (million dollars)	1,294	703	-43	293	-19
	Ratio of imports to consumption (percent)	14.2	15.7	21.1	17.0	18.4
	Ratio of exports to shipments (percent)	22.8	19.9	20.9	18.7	18.3
ET013	Aircraft, spacecraft, and related equipment:					
	Number of establishments	250	230	230	200	210
	Employees (thousands)	454	425	394	390	359
	Capacity utilization (percent)	95	95	(1)	75	75
	U.S. shipments (million dollars)	71,350	73,693	61,868	64,395	49,043
	U.S. exports (million dollars)	50,248	47,762	39,696	42,535	41,447
	U.S. imports (million dollars)	12,748	14,592	18,019	21,027	17,636
	Apparent U.S. consumption (million dollars)	33,850	40,522	40,191	42,887	25,232
	Trade balance (million dollars)	37,500	33,171	21,677	21,508	23,811
	Ratio of imports to consumption (percent)	37.7	36.0	44.8	49.0	69.9
	Ratio of exports to shipments (percent)	70.4	64.8	64.2	66.1	84.5
ET014	Ships, tugs, pleasure boats, and similar vessels:					
	Number of establishments	1,600	1,600	1,600	1,600	1,600
	Employees (thousands)	113	113	119	112	113
	Capacity utilization (percent)	62	55	56	56	57
	U.S. shipments (million dollars)	13,600	14,200	15,200	14,000	14,100
	U.S. exports (million dollars)	1,765	1,682	1,083	1,820	1,234
	U.S. imports (million dollars)	1,090	1,246	1,223	1,411	1,413
	Apparent U.S. consumption (million dollars)	12,925	13,763	15,340	13,590	14,279
	Trade balance (million dollars)	675	437	-140	410	-179
	Ratio of imports to consumption (percent)	8.4	9.1	8.0	10.4	9.9
	Ratio of exports to shipments (percent)	13.0	11.8	7.1	13.0	8.8

See footnote(s) at end of table.

Table C-8--*Continued*
Transportation equipment: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET015	Motors and engines, except internal combustion, aircraft, or electric:					
	Number of establishments	350	350	350	335	([2])
	Employees (thousands)	42	40	40	40	([2])
	Capacity utilization (percent)	72	72	68	68	([2])
	U.S. production (million dollars)	6,700	6,500	7,000	6,300	([2])
	U.S. exports (million dollars)	397	394	453	508	479
	U.S. imports (million dollars)	621	658	772	784	700
	Apparent U.S. consumption (million dollars)	6,923	6,764	7,319	6,576	([2])
	Trade balance (million dollars)	-223	-264	-319	-276	-221
	Ratio of imports to consumption (percent)	9.0	9.7	10.6	11.9	([2])
	Ratio of exports to production (percent)	5.9	6.1	6.5	8.1	([2])

[1]Capacity utilization could not be meaningfully calculated for this industry.
[2]*Not available.*

Note.--Calculations based on unrounded data.

Table C-9
Electronic products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET016	Office machines:					
	Number of establishments	137	137	137	137	137
	Employees (thousands)	13	13	11	10	8
	Capacity utilization (percent)	60	65	70	51	51
	U.S. shipments (million dollars)	3,065	2,993	2,711	3,072	2,460
	U.S. exports (million dollars)	1,024	967	1,033	1,061	816
	U.S. imports (million dollars)	1,856	1,784	1,892	1,817	1,491
	Apparent U.S. consumption (million dollars)	3,897	3,810	3,570	3,829	3,135
	Trade balance (million dollars)	-832	-817	-859	-757	-675
	Ratio of imports to consumption (percent)	47.6	46.8	53.0	47.5	47.6
	Ratio of exports to shipments (percent)	33.4	32.3	38.1	34.5	33.2
ET017	Telephone and telegraph apparatus:					
	Number of establishments	1,028	1,056	1,030	1,000	980
	Employees (thousands)	248	238	248	231	189
	Capacity utilization (percent)	73	77	75	73	57
	U.S. shipments (million dollars)	72,826	79,544	93,614	80,151	62,718
	U.S. exports (million dollars)	17,192	17,717	20,147	16,506	12,952
	U.S. imports (million dollars)	14,434	20,147	32,130	27,174	27,948
	Apparent U.S. consumption (million dollars)	70,068	81,974	105,596	90,819	77,714
	Trade balance (million dollars)	2,758	-2,430	-11,982	-10,668	-14,996
	Ratio of imports to consumption (percent)	20.6	24.6	30.4	29.9	36.0
	Ratio of exports to shipments (percent)	23.6	22.3	21.5	20.6	20.7
ET018	Consumer electronics (except televisions):					
	Number of establishments	200	210	215	225	(1)
	Employees (thousands)	20	20	21	21	(1)
	Capacity utilization (percent)	64	58	58	57	(1)
	U.S. production (million dollars)	3,895	4,235	4,260	4,200	(1)
	U.S. exports (million dollars)	2,553	2,678	2,969	2,791	2,631
	U.S. imports (million dollars)	16,395	18,282	21,974	19,525	21,455
	Apparent U.S. consumption (million dollars)	17,736	19,839	23,265	20,934	(1)
	Trade balance (million dollars)	-13,841	-15,604	-19,005	-16,734	-18,825
	Ratio of imports to consumption (percent)	92.4	92.2	94.5	93.3	(1)
	Ratio of exports to production (percent)	65.6	63.2	69.7	66.5	(1)
ET019	Blank media:					
	Number of establishments	250	240	230	220	(1)
	Employees (thousands)	19	17	15	13	(1)
	Capacity utilization (percent)	82	73	69	80	(1)
	U.S. production (million dollars)	4,359	3,764	3,402	3,074	(1)
	U.S. exports (million dollars)	2,042	1,692	1,420	1,017	970
	U.S. imports (million dollars)	2,103	2,225	2,415	2,423	2,746
	Apparent U.S. consumption (million dollars)	4,421	4,297	4,397	4,480	(1)
	Trade balance (million dollars)	-62	-533	-995	-1,406	-1,776
	Ratio of imports to consumption (percent)	47.6	51.8	54.9	54.1	(1)
	Ratio of exports to production (percent)	46.8	45.0	41.8	33.1	(1)
ET020	Prerecorded media:					
	Number of establishments	660	670	680	690	(1)
	Employees (thousands)	39	29	29	29	(1)
	Capacity utilization (percent)	85	78	75	66	(1)
	U.S. production (million dollars)	6,205	4,900	5,298	5,728	(1)
	U.S. exports (million dollars)	3,619	3,707	3,636	3,195	3,069
	U.S. imports (million dollars)	1,135	1,252	1,389	1,259	1,308
	Apparent U.S. consumption (million dollars)	3,720	2,445	3,051	3,793	(1)
	Trade balance (million dollars)	2,485	2,455	2,247	1,935	1,761
	Ratio of imports to consumption (percent)	30.5	51.2	45.5	33.2	(1)
	Ratio of exports to production (percent)	58.3	75.7	68.6	55.8	(1)

See footnote(s) at end of table.

Table C-9--*Continued*
Electronic products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET021	Navigational instruments and remote control apparatus:					
	Number of establishments	105	105	107	107	107
	Employees (thousands)	115	115	116	120	119
	Capacity utilization (percent)	75	75	80	80	80
	U.S. shipments (million dollars)	15,100	15,500	18,500	21,275	22,125
	U.S. exports (million dollars)	2,585	2,530	2,626	3,102	2,921
	U.S. imports (million dollars)	1,230	1,361	1,702	1,796	1,858
	Apparent U.S. consumption (million dollars)	13,746	14,331	17,576	19,969	21,062
	Trade balance (million dollars)	1,354	1,169	924	1,306	1,063
	Ratio of imports to consumption (percent)	9.0	9.5	9.7	9.0	8.8
	Ratio of exports to shipments (percent)	17.1	16.3	14.2	14.6	13.2
ET022	Television receivers and video monitors:					
	Number of establishments	14	14	12	10	(1)
	Employees (thousands)	8	8	8	7	(1)
	Capacity utilization (percent)	64	58	58	58	(1)
	U.S. production (million dollars)	3,940	3,950	3,400	3,037	(1)
	U.S. exports (million dollars)	2,142	1,104	1,164	1,237	1,257
	U.S. imports (million dollars)	5,878	6,652	7,713	8,615	10,586
	Apparent U.S. consumption (million dollars)	7,676	9,498	9,949	10,415	(1)
	Trade balance (million dollars)	-3,736	-5,548	-6,549	-7,378	-9,329
	Ratio of imports to consumption (percent)	76.6	70.0	77.5	82.7	(1)
	Ratio of exports to production (percent)	54.4	28.0	34.2	40.7	(1)
ET023	Radio and television broadcasting equipment:					
	Number of establishments	150	155	160	165	170
	Employees (thousands)	15	15	15	15	14
	Capacity utilization (percent)	69	71	73	70	67
	U.S. shipments (million dollars)	3,600	4,000	3,900	3,500	3,200
	U.S. exports (million dollars)	1,379	2,323	2,602	2,321	1,364
	U.S. imports (million dollars)	3,211	4,948	7,178	6,066	4,977
	Apparent U.S. consumption (million dollars)	5,432	6,624	8,476	7,245	6,813
	Trade balance (million dollars)	-1,832	-2,624	-4,576	-3,745	-3,613
	Ratio of imports to consumption (percent)	59.1	74.7	84.7	83.7	73.1
	Ratio of exports to shipments (percent)	38.3	58.1	66.7	66.3	42.6
ET024	Electric sound and visual signaling apparatus:					
	Number of establishments	499	499	499	499	499
	Employees (thousands)	24	24	23	28	26
	Capacity utilization (percent)	66	78	71	66	66
	U.S. shipments (million dollars)	4,189	4,539	4,905	5,571	5,290
	U.S. exports (million dollars)	783	858	851	949	1,042
	U.S. imports (million dollars)	2,064	2,053	2,334	1,968	1,797
	Apparent U.S. consumption (million dollars)	5,470	5,734	6,388	6,591	6,045
	Trade balance (million dollars)	-1,281	-1,195	-1,483	-1,020	-755
	Ratio of imports to consumption (percent)	37.7	35.8	36.5	29.9	29.7
	Ratio of exports to shipments (percent)	18.7	18.9	17.3	17.0	19.7
ET025	Electrical capacitors and resistors:					
	Number of establishments	303	286	276	267	(1)
	Employees (thousands)	29	26	27	24	(1)
	Capacity utilization (percent)	70	75	80	60	(1)
	U.S. production (million dollars)	2,892	3,006	3,768	2,630	(1)
	U.S. exports (million dollars)	2,037	2,393	3,410	2,002	1,706
	U.S. imports (million dollars)	2,015	2,435	4,177	2,333	2,093
	Apparent U.S. consumption (million dollars)	2,870	3,048	4,535	2,961	(1)
	Trade balance (million dollars)	22	-42	-767	-331	-386
	Ratio of imports to consumption (percent)	70.2	79.9	92.1	78.8	(1)
	Ratio of exports to production (percent)	70.4	79.6	90.5	76.1	(1)

See footnote(s) at end of table.

Table C-9--*Continued*
Electronic products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET026	Printed circuits:					
	Number of establishments	768	730	694	641	640
	Employees (thousands)	82	83	86	75	66
	Capacity utilization (percent)	73	78	77	49	49
	U.S. shipments (million dollars)	8,473	9,150	11,892	8,945	7,915
	U.S. exports (million dollars)	2,178	2,386	2,865	2,089	1,853
	U.S. imports (million dollars)	2,045	2,236	2,988	2,141	1,896
	Apparent U.S. consumption (million dollars)	8,340	9,000	12,015	8,998	7,959
	Trade balance (million dollars)	133	150	-123	-53	-44
	Ratio of imports to consumption (percent)	24.5	24.8	24.9	23.8	23.8
	Ratio of exports to shipments (percent)	25.7	26.1	24.1	23.4	23.4
ET027	Circuit apparatus exceeding 1000V:					
	Number of establishments	200	200	210	200	200
	Employees (thousands)	15	15	17	16	15
	Capacity utilization (percent)	75	75	80	60	60
	U.S. shipments (million dollars)	4,700	5,000	5,500	4,150	3,800
	U.S. exports (million dollars)	584	590	701	612	549
	U.S. imports (million dollars)	244	287	386	357	338
	Apparent U.S. consumption (million dollars)	4,360	4,698	5,185	3,895	3,589
	Trade balance (million dollars)	340	302	315	255	211
	Ratio of imports to consumption (percent)	5.6	6.1	7.4	9.2	9.4
	Ratio of exports to shipments (percent)	12.4	11.8	12.7	14.7	14.4
ET028	Circuit apparatus not exceeding 1000V:					
	Number of establishments	600	600	620	600	600
	Employees (thousands)	50	50	55	52	46
	Capacity utilization (percent)	75	75	80	60	60
	U.S. shipments (million dollars)	14,000	15,000	17,000	13,000	11,800
	U.S. exports (million dollars)	4,258	4,991	6,101	5,098	4,478
	U.S. imports (million dollars)	5,103	5,606	6,872	5,280	4,933
	Apparent U.S. consumption (million dollars)	14,845	15,615	17,771	13,182	12,255
	Trade balance (million dollars)	-845	-615	-771	-182	-455
	Ratio of imports to consumption (percent)	34.4	35.9	38.7	40.1	40.2
	Ratio of exports to shipments (percent)	30.4	33.3	35.9	39.2	37.9
ET031	Cathode-ray tubes:					
	Number of establishments	20	18	16	15	(1)
	Employees (thousands)	14	14	13	12	(1)
	Capacity utilization (percent)	76	77	80	80	(1)
	U.S. production (million dollars)	3,367	3,579	3,450	2,250	(1)
	U.S. exports (million dollars)	2,288	2,174	2,435	2,056	1,762
	U.S. imports (million dollars)	774	732	634	612	607
	Apparent U.S. consumption (million dollars)	1,853	2,137	1,649	806	(1)
	Trade balance (million dollars)	1,514	1,442	1,801	1,444	1,155
	Ratio of imports to consumption (percent)	41.8	34.2	38.4	75.9	(1)
	Ratio of exports to production (percent)	68.0	60.7	70.6	91.4	(1)
ET032	Electron tubes other than CRTs:					
	Number of establishments	50	43	40	38	35
	Employees (thousands)	4	4	4	4	4
	Capacity utilization (percent)	76	77	80	64	64
	U.S. shipments (million dollars)	654	696	730	661	628
	U.S. exports (million dollars)	183	215	209	178	180
	U.S. imports (million dollars)	225	190	213	271	247
	Apparent U.S. consumption (million dollars)	696	671	734	754	694
	Trade balance (million dollars)	-42	25	-4	-93	-66
	Ratio of imports to consumption (percent)	32.3	28.4	29.1	36.0	35.5
	Ratio of exports to shipments (percent)	28.0	30.9	28.7	27.0	28.7

See footnote(s) at end of table.

Table C-9--*Continued*
Electronic products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET033	Semiconductors and integrated circuits:					
	Number of establishments	1,331	1,271	1,241	1,194	1,190
	Employees (thousands)	191	197	216	189	180
	Capacity utilization (percent)	73	86	87	57	57
	U.S. shipments (million dollars)	70,494	76,646	85,611	55,149	52,300
	U.S. exports (million dollars)	29,055	36,615	44,828	33,455	31,738
	U.S. imports (million dollars)	33,157	37,158	47,448	30,016	25,651
	Apparent U.S. consumption (million dollars)	74,596	77,188	88,230	51,710	46,213
	Trade balance (million dollars)	-4,102	-542	-2,619	3,439	6,087
	Ratio of imports to consumption (percent)	44.4	48.1	53.8	58.0	55.5
	Ratio of exports to shipments (percent)	41.2	47.8	52.4	60.7	60.7
ET035	Computers, peripherals, and parts:					
	Number of establishments	760	750	750	730	(1)
	Employees (thousands)	240	208	205	193	(1)
	Capacity utilization (percent)	70	69	66	62	(1)
	U.S. production (million dollars)	114,482	113,161	110,028	89,528	(1)
	U.S. exports (million dollars)	39,035	39,300	45,392	38,125	29,534
	U.S. imports (million dollars)	72,635	81,662	90,384	74,547	75,817
	Apparent U.S. consumption (million dollars)	148,081	155,523	155,019	125,950	(1)
	Trade balance (million dollars)	-33,599	-42,362	-44,991	-36,422	-46,283
	Ratio of imports to consumption (percent)	49.1	52.5	58.3	59.2	(1)
	Ratio of exports to production (percent)	34.1	34.7	41.3	42.6	(1)
ET036	Photographic film and paper:					
	Number of establishments	310	310	310	310	310
	Employees (thousands)	36	34	34	33	34
	Capacity utilization (percent)	81	85	80	65	65
	U.S. shipments (million dollars)	10,839	13,080	12,266	11,650	12,960
	U.S. exports (million dollars)	2,108	2,154	2,755	1,953	2,127
	U.S. imports (million dollars)	1,861	2,009	2,205	1,856	1,865
	Apparent U.S. consumption (million dollars)	10,592	12,934	11,716	11,554	12,698
	Trade balance (million dollars)	247	146	550	96	262
	Ratio of imports to consumption (percent)	17.6	15.5	18.8	16.1	14.7
	Ratio of exports to shipments (percent)	19.4	16.5	22.5	16.8	16.4
ET037	Optical fibers, optical fiber bundles and cables:					
	Number of establishments	64	68	72	60	45
	Employees (thousands)	12	14	15	13	8
	Capacity utilization (percent)	95	95	95	88	65
	U.S. shipments (million dollars)	3,712	4,800	5,800	5,300	4,000
	U.S. exports (million dollars)	807	1,081	1,888	1,689	474
	U.S. imports (million dollars)	398	729	1,399	1,244	252
	Apparent U.S. consumption (million dollars)	3,303	4,448	5,312	4,854	3,778
	Trade balance (million dollars)	409	352	488	446	222
	Ratio of imports to consumption (percent)	12.1	16.4	26.3	25.6	6.7
	Ratio of exports to shipments (percent)	21.7	22.5	32.5	31.9	11.8
ET038	Optical goods, including ophthalmic goods:					
	Number of establishments	905	950	1,000	900	850
	Employees (thousands)	60	63	70	60	50
	Capacity utilization (percent)	85	87	92	82	78
	U.S. shipments (million dollars)	5,900	6,550	8,515	7,960	7,700
	U.S. exports (million dollars)	2,438	2,682	3,995	3,727	3,548
	U.S. imports (million dollars)	3,683	4,225	5,881	4,957	4,142
	Apparent U.S. consumption (million dollars)	7,144	8,093	10,402	9,190	8,294
	Trade balance (million dollars)	-1,244	-1,543	-1,887	-1,230	-594
	Ratio of imports to consumption (percent)	51.5	52.2	56.5	53.9	49.9
	Ratio of exports to shipments (percent)	41.3	40.9	46.9	46.8	46.1

See footnote(s) at end of table.

Table C-9--*Continued*
Electronic products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET039	Photographic cameras and equipment:					
	Number of establishments	428	428	428	428	428
	Employees (thousands)	24	20	16	13	11
	Capacity utilization (percent)	76	62	53	54	54
	U.S. shipments (million dollars)	8,809	8,397	5,463	3,567	2,854
	U.S. exports (million dollars)	2,030	1,825	1,800	1,694	1,187
	U.S. imports (million dollars)	6,447	5,843	5,299	3,560	3,029
	Apparent U.S. consumption (million dollars)	13,226	12,415	8,962	5,433	4,696
	Trade balance (million dollars)	-4,417	-4,018	-3,499	-1,866	-1,842
	Ratio of imports to consumption (percent)	48.7	47.1	59.1	65.5	64.5
	Ratio of exports to shipments (percent)	23.0	21.7	32.9	47.5	41.6
ET040	Medical goods:					
	Number of establishments	2,338	2,340	2,345	2,350	2,350
	Employees (thousands)	182	183	185	188	190
	Capacity utilization (percent)	89	91	92	94	94
	U.S. shipments (million dollars)	30,800	31,500	33,075	37,000	41,440
	U.S. exports (million dollars)	11,582	12,455	13,411	14,987	15,059
	U.S. imports (million dollars)	6,934	7,932	9,178	10,869	13,232
	Apparent U.S. consumption (million dollars)	26,152	26,978	28,843	32,881	39,614
	Trade balance (million dollars)	4,648	4,522	4,232	4,119	1,826
	Ratio of imports to consumption (percent)	26.5	29.4	31.8	33.1	33.4
	Ratio of exports to shipments (percent)	37.6	39.5	40.5	40.5	36.3
ET041	Watches and clocks:					
	Number of establishments	145	145	145	145	145
	Employees (thousands)	7	7	7	6	6
	Capacity utilization (percent)	46	62	61	55	55
	U.S. shipments (million dollars)	1,021	1,168	1,151	1,018	920
	U.S. exports (million dollars)	311	335	348	279	235
	U.S. imports (million dollars)	3,100	3,136	3,354	2,957	3,098
	Apparent U.S. consumption (million dollars)	3,810	3,969	4,157	3,696	3,784
	Trade balance (million dollars)	-2,789	-2,801	-3,006	-2,678	-2,864
	Ratio of imports to consumption (percent)	81.4	79.0	80.7	80.0	81.9
	Ratio of exports to shipments (percent)	30.5	28.7	30.3	27.4	25.5
ET042	Drawing, drafting, and calculating instruments:					
	Number of establishments	175	175	175	180	180
	Employees (thousands)	8	10	11	13	13
	Capacity utilization (percent)	75	75	80	80	75
	U.S. shipments (million dollars)	595	605	720	825	875
	U.S. exports (million dollars)	425	415	366	395	368
	U.S. imports (million dollars)	427	431	234	207	192
	Apparent U.S. consumption (million dollars)	597	620	588	637	699
	Trade balance (million dollars)	-2	-15	132	188	176
	Ratio of imports to consumption (percent)	71.5	69.4	39.8	32.6	27.4
	Ratio of exports to shipments (percent)	71.4	68.7	50.8	47.9	42.0

See footnote(s) at end of table.

Table C-9--*Continued*
Electronic products: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
ET043	Measuring, testing, and controlling instruments:					
	Number of establishments	3,235	3,235	3,235	3,235	3,235
	Employees (thousands)	245	245	245	245	242
	Capacity utilization (percent)	75	75	75	75	75
	U.S. shipments (million dollars)	38,400	39,200	44,790	55,000	58,300
	U.S. exports (million dollars)	13,739	14,480	16,629	15,605	14,346
	U.S. imports (million dollars)	8,681	9,656	11,743	11,806	11,595
	Apparent U.S. consumption (million dollars)	33,343	34,376	39,904	51,201	55,549
	Trade balance (million dollars)	5,057	4,824	4,886	3,799	2,751
	Ratio of imports to consumption (percent)	26.0	28.1	29.4	23.1	20.9
	Ratio of exports to shipments (percent)	35.8	36.9	37.1	28.4	24.6

[1]Not available.

Note.–Calculations based on unrounded data.

Table C-10
Miscellaneous manufactures: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM046A	Luggage:					
	Number of establishments	252	223	209	189	183
	Employees (thousands)	10	8	7	6	6
	Capacity utilization (percent)	69	67	67	68	68
	U.S. shipments (million dollars)	1,101	964	972	853	825
	U.S. exports (million dollars)	231	250	253	223	194
	U.S. imports (million dollars)	2,466	2,619	2,741	2,667	2,656
	Apparent U.S. consumption (million dollars)	3,336	3,333	3,461	3,297	3,287
	Trade balance (million dollars)	-2,235	-2,369	-2,489	-2,444	-2,462
	Ratio of imports to consumption (percent)	73.9	78.6	79.2	80.9	80.8
	Ratio of exports to shipments (percent)	20.9	25.9	26.0	26.1	23.5
MM046B	Handbags:					
	Number of establishments	122	107	102	93	90
	Employees (thousands)	3	3	3	3	3
	Capacity utilization (percent)	61	60	60	59	60
	U.S. shipments (million dollars)	228	214	234	229	220
	U.S. exports (million dollars)	41	42	63	58	55
	U.S. imports (million dollars)	1,007	1,004	1,179	1,203	1,301
	Apparent U.S. consumption (million dollars)	1,194	1,177	1,350	1,375	1,467
	Trade balance (million dollars)	-966	-963	-1,116	-1,146	-1,247
	Ratio of imports to consumption (percent)	84.3	85.4	87.3	87.5	88.7
	Ratio of exports to shipments (percent)	17.9	19.5	26.7	25.1	24.9
MM046C	Flat goods:					
	Number of establishments	155	138	129	117	112
	Employees (thousands)	4	3	3	3	3
	Capacity utilization (percent)	68	66	66	64	64
	U.S. shipments (million dollars)	435	381	375	390	375
	U.S. exports (million dollars)	28	32	30	22	25
	U.S. imports (million dollars)	424	428	435	417	433
	Apparent U.S. consumption (million dollars)	831	777	779	786	783
	Trade balance (million dollars)	-396	-396	-404	-396	-408
	Ratio of imports to consumption (percent)	51.0	55.1	55.8	53.1	55.3
	Ratio of exports to shipments (percent)	6.4	8.4	8.1	5.5	6.7
MM047	Certain other leather goods:					
	Number of establishments	450	450	450	450	434
	Employees (thousands)	9	9	9	9	9
	Capacity utilization (percent)	56	60	60	58	58
	U.S. shipments (million dollars)	853	685	669	565	545
	U.S. exports (million dollars)	106	123	173	100	94
	U.S. imports (million dollars)	195	209	242	256	291
	Apparent U.S. consumption (million dollars)	942	771	738	721	742
	Trade balance (million dollars)	-89	-86	-69	-156	-197
	Ratio of imports to consumption (percent)	20.7	27.1	32.8	35.5	39.2
	Ratio of exports to shipments (percent)	12.4	17.9	25.9	17.8	17.3
MM048	Musical instruments and accessories:					
	Number of establishments	570	600	620	600	600
	Employees (thousands)	13	14	15	14	14
	Capacity utilization (percent)	75	80	85	75	75
	U.S. shipments (million dollars)	1,321	1,648	1,794	1,600	1,600
	U.S. exports (million dollars)	392	360	371	398	373
	U.S. imports (million dollars)	1,188	1,256	1,413	1,300	1,306
	Apparent U.S. consumption (million dollars)	2,117	2,544	2,836	2,502	2,533
	Trade balance (million dollars)	-796	-896	-1,042	-902	-933
	Ratio of imports to consumption (percent)	56.1	49.4	49.8	52.0	51.6
	Ratio of exports to shipments (percent)	29.7	21.8	20.7	24.9	23.3

See footnote(s) at end of table.

Table C-10–*Continued*

Miscellaneous manufactures: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM049	Umbrellas, whips, riding crops, and canes:					
	Number of establishments	16	16	16	15	15
	Employees (thousands)	0.5	0.5	0.5	0.5	0.5
	Capacity utilization (percent)	72	72	72	70	70
	U.S. shipments (million dollars)	74	74	77	75	79
	U.S. exports (million dollars)	11	11	11	11	9
	U.S. imports (million dollars)	250	248	284	293	275
	Apparent U.S. consumption (million dollars)	314	311	350	356	345
	Trade balance (million dollars)	-240	-237	-273	-281	-266
	Ratio of imports to consumption (percent)	79.8	79.8	81.1	82.2	79.6
	Ratio of exports to shipments (percent)	14.5	15.0	14.4	15.2	11.0
MM050	Silverware and related articles of precious metal:					
	Number of establishments	40	35	35	30	30
	Employees (thousands)	6	6	5	4	4
	Capacity utilization (percent)	80	75	75	75	75
	U.S. shipments (million dollars)	559	452	451	390	400
	U.S. exports (million dollars)	114	123	165	180	155
	U.S. imports (million dollars)	158	57	68	57	54
	Apparent U.S. consumption (million dollars)	603	386	353	266	299
	Trade balance (million dollars)	-44	66	98	124	101
	Ratio of imports to consumption (percent)	26.2	14.8	19.1	21.3	18.0
	Ratio of exports to shipments (percent)	20.4	27.2	36.7	46.2	38.8
MM051	Precious jewelry and related articles:					
	Number of establishments	2,290	2,290	2,270	2,270	2,270
	Employees (thousands)	33	37	40	39	39
	Capacity utilization (percent)	75	74	73	70	70
	U.S. shipments (million dollars)	4,610	5,745	6,009	5,410	5,800
	U.S. exports (million dollars)	518	822	1,272	1,659	1,826
	U.S. imports (million dollars)	4,592	5,063	5,737	5,533	6,261
	Apparent U.S. consumption (million dollars)	8,683	9,986	10,473	9,284	10,235
	Trade balance (million dollars)	-4,073	-4,241	-4,464	-3,874	-4,435
	Ratio of imports to consumption (percent)	52.9	50.7	54.8	59.6	61.2
	Ratio of exports to shipments (percent)	11.2	14.3	21.2	30.7	31.5
MM052	Costume jewelry and related articles:					
	Number of establishments	810	780	770	700	700
	Employees (thousands)	15	15	15	14	14
	Capacity utilization (percent)	64	64	64	64	64
	U.S. shipments (million dollars)	1,209	1,145	1,061	941	930
	U.S. exports (million dollars)	128	133	127	113	104
	U.S. imports (million dollars)	493	546	619	655	750
	Apparent U.S. consumption (million dollars)	1,573	1,558	1,553	1,483	1,576
	Trade balance (million dollars)	-364	-413	-492	-542	-646
	Ratio of imports to consumption (percent)	31.3	35.1	39.8	44.2	47.6
	Ratio of exports to shipments (percent)	10.6	11.6	12.0	12.0	11.2
MM053	Bicycles and certain parts:					
	Number of establishments	200	160	160	143	141
	Employees (thousands)	6	5	5	4	4
	Capacity utilization (percent)	65	60	60	57	58
	U.S. shipments (million dollars)	1,041	775	665	630	620
	U.S. exports (million dollars)	292	271	235	226	216
	U.S. imports (million dollars)	1,115	1,199	1,348	1,025	1,125
	Apparent U.S. consumption (million dollars)	1,864	1,703	1,778	1,429	1,529
	Trade balance (million dollars)	-823	-928	-1,113	-799	-909
	Ratio of imports to consumption (percent)	59.8	70.4	75.8	71.7	73.6
	Ratio of exports to shipments (percent)	28.1	34.9	35.4	35.9	34.8

See footnote(s) at end of table.

Table C-10–*Continued*
Miscellaneous manufactures: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM054	Furniture:					
	Number of establishments	18,800	18,800	18,000	17,500	17,000
	Employees (thousands)	530	535	535	500	480
	Capacity utilization (percent)	74	75	75	73	71
	U.S. shipments (million dollars)	61,800	66,500	69,800	64,200	62,400
	U.S. exports (million dollars)	2,632	2,597	3,026	2,689	2,409
	U.S. imports (million dollars)	10,417	12,775	15,159	14,839	17,028
	Apparent U.S. consumption (million dollars)	69,585	76,678	81,932	76,350	77,020
	Trade balance (million dollars)	-7,785	-10,178	-12,132	-12,150	-14,620
	Ratio of imports to consumption (percent)	15.0	16.7	18.5	19.4	22.1
	Ratio of exports to shipments (percent)	4.3	3.9	4.3	4.2	3.9
MM055	Writing instruments and related articles:					
	Number of establishments	190	190	190	190	187
	Employees (thousands)	16	16	16	16	15
	Capacity utilization (percent)	76	75	76	77	77
	U.S. shipments (million dollars)	2,818	2,746	2,751	2,510	2,470
	U.S. exports (million dollars)	373	333	288	263	269
	U.S. imports (million dollars)	842	965	1,146	1,027	1,044
	Apparent U.S. consumption (million dollars)	3,286	3,378	3,608	3,274	3,245
	Trade balance (million dollars)	-468	-632	-857	-764	-775
	Ratio of imports to consumption (percent)	25.6	28.6	31.8	31.4	32.2
	Ratio of exports to shipments (percent)	13.3	12.1	10.5	10.5	10.9
MM056	Lamps and lighting fittings:					
	Number of establishments	1,550	1,550	1,550	1,500	1,500
	Employees (thousands)	62	62	62	61	61
	Capacity utilization (percent)	88	87	85	84	85
	U.S. shipments (million dollars)	9,990	10,090	9,500	9,400	9,500
	U.S. exports (million dollars)	619	585	678	648	671
	U.S. imports (million dollars)	3,167	3,858	4,496	4,148	4,605
	Apparent U.S. consumption (million dollars)	12,538	13,362	13,318	12,900	13,434
	Trade balance (million dollars)	-2,548	-3,272	-3,818	-3,500	-3,934
	Ratio of imports to consumption (percent)	25.3	28.9	33.8	32.2	34.3
	Ratio of exports to shipments (percent)	6.2	5.8	7.1	6.9	7.1
MM057	Prefabricated buildings:					
	Number of establishments	1,700	1,700	1,725	1,725	1,716
	Employees (thousands)	95	101	104	104	104
	Capacity utilization (percent)	73	73	74	74	74
	U.S. shipments (million dollars)	14,102	14,341	11,853	10,558	10,500
	U.S. exports (million dollars)	385	327	331	291	275
	U.S. imports (million dollars)	160	221	281	308	341
	Apparent U.S. consumption (million dollars)	13,878	14,234	11,803	10,575	10,566
	Trade balance (million dollars)	224	107	50	-17	-66
	Ratio of imports to consumption (percent)	1.2	1.5	2.4	2.9	3.2
	Ratio of exports to shipments (percent)	2.7	2.3	2.8	2.8	2.6
MM058	Dolls:					
	Number of establishments	150	150	150	150	148
	Employees (thousands)	3	3	2	2	2
	Capacity utilization (percent)	47	47	47	47	47
	U.S. shipments (million dollars)	124	116	108	92	91
	U.S. exports (million dollars)	28	25	30	33	24
	U.S. imports (million dollars)	1,484	1,374	1,475	1,218	1,257
	Apparent U.S. consumption (million dollars)	1,579	1,465	1,553	1,278	1,324
	Trade balance (million dollars)	-1,455	-1,349	-1,445	-1,186	-1,233
	Ratio of imports to consumption (percent)	93.9	93.8	95.0	95.3	94.9
	Ratio of exports to shipments (percent)	22.9	21.3	27.5	35.4	26.2

See footnote(s) at end of table.

Table C-10–*Continued*
Miscellaneous manufactures: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM059	Toys:					
	Number of establishments	333	330	330	330	330
	Employees (thousands)	31	36	30	30	20
	Capacity utilization (percent)	62	62	62	60	60
	U.S. shipments (million dollars)	2,414	2,378	2,392	2,307	2,272
	U.S. exports (million dollars)	540	497	532	489	424
	U.S. imports (million dollars)	7,588	7,978	8,462	7,905	8,292
	Apparent U.S. consumption (million dollars)	9,462	9,859	10,322	9,723	10,140
	Trade balance (million dollars)	-7,048	-7,481	-7,930	-7,416	-7,868
	Ratio of imports to consumption (percent)	80.2	80.9	82.0	81.3	81.8
	Ratio of exports to shipments (percent)	22.4	20.9	22.3	21.2	18.7
MM060	Games:					
	Number of establishments	300	300	300	300	300
	Employees (thousands)	25	23	21	21	21
	Capacity utilization (percent)	79	78	78	80	80
	U.S. shipments (million dollars)	3,155	3,053	2,838	2,794	2,750
	U.S. exports (million dollars)	913	936	944	788	858
	U.S. imports (million dollars)	4,182	4,086	3,879	5,537	5,887
	Apparent U.S. consumption (million dollars)	6,424	6,203	5,773	7,542	7,779
	Trade balance (million dollars)	-3,269	-3,150	-2,935	-4,748	-5,029
	Ratio of imports to consumption (percent)	65.1	65.9	67.2	73.4	75.7
	Ratio of exports to shipments (percent)	28.9	30.7	33.3	28.2	31.2
MM061	Sporting goods:					
	Number of establishments	2,144	2,140	2,140	2,140	2,140
	Employees (thousands)	62	56	51	46	42
	Capacity utilization (percent)	70	68	68	68	68
	U.S. shipments (million dollars)	9,586	9,499	9,412	9,326	9,557
	U.S. exports (million dollars)	1,688	1,621	1,679	1,672	1,537
	U.S. imports (million dollars)	3,041	3,027	3,565	3,632	3,859
	Apparent U.S. consumption (million dollars)	10,939	10,906	11,298	11,286	11,879
	Trade balance (million dollars)	-1,353	-1,407	-1,886	-1,960	-2,322
	Ratio of imports to consumption (percent)	27.8	27.8	31.6	32.2	32.5
	Ratio of exports to shipments (percent)	17.6	17.1	17.8	17.9	16.1
MM062	Smokers' articles:					
	Number of establishments	11	11	10	10	10
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	75	80	80	80	80
	U.S. shipments (million dollars)	200	210	222	230	222
	U.S. exports (million dollars)	71	71	77	77	82
	U.S. imports (million dollars)	145	134	140	163	139
	Apparent U.S. consumption (million dollars)	274	273	285	316	279
	Trade balance (million dollars)	-74	-63	-63	-86	-57
	Ratio of imports to consumption (percent)	53.0	49.0	49.3	51.6	50.0
	Ratio of exports to shipments (percent)	35.6	33.8	34.9	33.5	37.1
MM063A	Brooms and brushes:					
	Number of establishments	180	175	175	175	170
	Employees (thousands)	6	6	6	6	5
	Capacity utilization (percent)	75	75	75	73	70
	U.S. shipments (million dollars)	1,500	1,600	1,875	1,851	1,900
	U.S. exports (million dollars)	160	179	214	187	185
	U.S. imports (million dollars)	478	614	625	697	815
	Apparent U.S. consumption (million dollars)	1,819	2,035	2,285	2,361	2,530
	Trade balance (million dollars)	-319	-435	-410	-510	-630
	Ratio of imports to consumption (percent)	26.3	30.2	27.3	29.5	32.2
	Ratio of exports to shipments (percent)	10.7	11.2	11.4	10.1	9.7

See footnote(s) at end of table.

Table C-10–*Continued*

Miscellaneous manufactures: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM063B	Hair grooming articles, non-electric (except brushes):					
	Number of establishments	95	90	90	88	88
	Employees (thousands)	3	3	3	3	3
	Capacity utilization (percent)	80	80	85	84	85
	U.S. shipments (million dollars)	575	580	585	572	575
	U.S. exports (million dollars)	24	27	28	25	20
	U.S. imports (million dollars)	219	341	234	197	184
	Apparent U.S. consumption (million dollars)	770	895	790	744	739
	Trade balance (million dollars)	-195	-315	-205	-172	-164
	Ratio of imports to consumption (percent)	28.5	38.1	29.6	26.5	24.9
	Ratio of exports to shipments (percent)	4.2	4.6	4.8	4.4	3.5
MM064	Works of art and miscellaneous manufactured goods:					
	Number of establishments	2,950	3,000	3,050	3,100	3,200
	Employees (thousands)	110	115	119	121	125
	Capacity utilization (percent)	73	73	73	72	73
	U.S. shipments (million dollars)	35,270	37,000	38,340	39,100	41,100
	U.S. exports (million dollars)	1,685	1,731	2,142	2,177	1,379
	U.S. imports (million dollars)	7,230	8,463	9,641	9,312	9,274
	Apparent U.S. consumption (million dollars)	40,815	43,732	45,839	46,236	48,995
	Trade balance (million dollars)	-5,545	-6,732	-7,499	-7,136	-7,895
	Ratio of imports to consumption (percent)	17.7	19.4	21.0	20.1	18.9
	Ratio of exports to shipments (percent)	4.8	4.7	5.6	5.6	3.4
MM065	Apparel fasteners:					
	Number of establishments	90	90	90	90	85
	Employees (thousands)	5	5	4.5	4.3	4.5
	Capacity utilization (percent)	90	90	85	83	85
	U.S. shipments (million dollars)	550	570	576	553	570
	U.S. exports (million dollars)	136	140	183	154	157
	U.S. imports (million dollars)	103	89	85	73	65
	Apparent U.S. consumption (million dollars)	517	519	478	472	478
	Trade balance (million dollars)	33	51	98	81	92
	Ratio of imports to consumption (percent)	19.9	17.1	17.8	15.5	13.6
	Ratio of exports to shipments (percent)	24.7	24.5	31.7	27.8	27.6
MM066A	Small arms and ammunition:					
	Number of establishments	300	290	280	280	280
	Employees (thousands)	19	18	17	17	17
	Capacity utilization (percent)	70	70	70	75	75
	U.S. shipments (million dollars)	2,700	2,610	2,500	2,650	2,650
	U.S. exports (million dollars)	571	464	535	558	480
	U.S. imports (million dollars)	520	608	637	679	800
	Apparent U.S. consumption (million dollars)	2,649	2,754	2,602	2,770	2,970
	Trade balance (million dollars)	51	-144	-102	-120	-320
	Ratio of imports to consumption (percent)	19.6	22.1	24.5	24.5	26.9
	Ratio of exports to shipments (percent)	21.2	17.8	21.4	21.1	18.1

See footnote(s) at end of table.

Table C-10–*Continued*
Miscellaneous manufactures: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 1998-2002

USITC code	Industry/commodity group	1998	1999	2000	2001	2002
MM067	Seats for motor vehicles and aircraft:					
	Number of establishments	200	200	200	190	190
	Employees (thousands)	23	25	25	23	24
	Capacity utilization (percent)	76	76	75	75	77
	U.S. shipments (million dollars)	6,540	7,520	7,725	7,030	7,400
	U.S. exports (million dollars)	1,881	1,878	1,861	1,808	1,641
	U.S. imports (million dollars)	2,610	3,024	3,209	3,239	3,886
	Apparent U.S. consumption (million dollars)	7,268	8,666	9,073	8,461	9,645
	Trade balance (million dollars)	-728	-1,146	-1,348	-1,431	-2,245
	Ratio of imports to consumption (percent)	35.9	34.9	35.4	38.3	40.3
	Ratio of exports to shipments (percent)	28.8	25.0	24.1	25.7	22.2

Note.–Calculations based on unrounded data.

APPENDIX D
Industry/Commodity Groups with Most Significant Shifts, 2001 and 2002, and Additional Statistical Tables

Table D-1
Domestic export increases: Ranking of top 20 industry/commodity groups, 2001 and 2002

USITC code	Industry/commodity group	U.S. exports 2001	U.S. exports 2002	Change, 2002 from 2001 Absolute	Change, 2002 from 2001 *Percent*
		Million Dollars			
Rank order based on change in absolute value growth:					
ET009	Motor vehicles	22,651	26,209	3,559	15.7
ET002	Internal combustion piston engines, other than for aircraft	12,408	13,069	661	5.3
CH025	Medicinal chemicals	18,169	18,742	573	3.2
CH006	Natural gas and components	1,109	1,675	566	51.0
AG030	Cereals	9,397	9,929	532	5.7
CH010	Organic commodity chemicals	1,494	2,010	515	34.5
AG033	Animal or vegetable fats and oils	1,405	1,917	512	36.4
AG064	Certain specialty papers	618	1,056	439	71.0
CH036	Other plastics in primary forms	6,766	7,189	423	6.3
CH046	Fabrics	6,162	6,485	323	5.2
CH002	Nuclear materials	1,239	1,510	270	21.8
AG020	Edible nuts	1,309	1,542	233	17.8
MM078	Farm and garden machinery and equipment	4,565	4,747	182	4.0
ET036	Photographic film and paper	1,953	2,127	174	8.9
CH031	Polyethylene resins in primary forms	2,416	2,590	173	7.2
MM051	Precious jewelry and related articles	1,659	1,826	167	10.1
MM023	Iron and steel waste and scrap	1,151	1,307	157	13.6
AG032	Oilseeds	5,642	5,790	148	2.6
AG031	Milled grains, malts, and starches	446	594	147	33.0
AG059	Wood pulp and wastepaper	3,711	3,853	142	3.8
Rank order based on change in percentage growth:					
AG048	Wool and other animal hair	11	26	15	133.8
CH007	Major primary olefins	120	245	125	104.2
AG064	Certain specialty papers	618	1,056	439	71.0
CH006	Natural gas and components	1,109	1,675	566	51.0
AG033	Animal or vegetable fats and oils	1,405	1,917	512	36.4
CH010	Organic commodity chemicals	1,494	2,010	515	34.5
AG031	Milled grains, malts, and starches	446	594	147	33.0
CH022	Photographic chemicals and preparations	413	522	109	26.5
MM005	Lead ores, concentrates, and residues	108	133	24	22.4
CH002	Nuclear materials	1,239	1,510	270	21.8
CH009	Primary aromatics	122	148	26	21.5
AG020	Edible nuts	1,309	1,542	233	17.8
CH044	Natural rubber	34	40	6	16.7
AG015	Seeds	768	892	124	16.2
ET009	Motor vehicles	22,651	26,209	3,559	15.7
AG058	Cork and rattan	53	61	8	14.8
MM023	Iron and steel waste and scrap	1,151	1,307	157	13.6
MM006	Zinc ores, concentrates, and residues	299	339	41	13.6
AG056	Tools and tool handles of wood	37	42	5	13.1
CH030	Explosives, propellant powders, and related items	254	286	32	12.7

Note.—Calculations based on unrounded data.

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

Table D-2
Domestic export declines: Ranking of top 20 industry/commodity groups, 2001 and 2002

USITC code	Industry/commodity group	U.S. exports 2001	U.S. exports 2002	Change, 2002 from 2001 Absolute	Change, 2002 from 2001 *Percent*
		Million Dollars			
Rank order based on change in absolute value decline:					
ET035	Computers, peripherals, and parts	38,125	29,534	-8,591	-22.5
ET017	Telephone and telegraph apparatus	16,506	12,952	-3,554	-21.5
MM020	Precious metals and non-numismatic coins	6,826	5,070	-1,756	-25.7
ET033	Semiconductors and integrated circuits	33,455	31,738	-1,717	-5.1
ET043	Measuring, testing, and controlling instruments	15,605	14,346	-1,259	-8.1
ET037	Optical fibers, optical fiber bundles and cables	1,689	474	-1,216	-72.0
MM087	Semiconductor manufacturing equipment and robotics	8,553	7,341	-1,212	-14.2
ET013	Aircraft, spacecraft, and related equipment	42,535	41,447	-1,089	-2.6
CH049	Apparel	6,537	5,491	-1,046	-16.0
ET001	Aircraft engines and gas turbines	16,524	15,498	-1,025	-6.2
ET023	Radio and television broadcasting equipment	2,321	1,364	-957	-41.2
CH001	Electrical energy	1,258	304	-955	-75.9
MM064	Works of art and miscellaneous manufactured goods	2,177	1,379	-798	-36.7
MM091	Electric motors, generators, and related equipment	4,691	3,923	-769	-16.4
AG063	Printing and writing papers	1,308	620	-688	-52.6
AG045	Cigarettes	2,118	1,463	-655	-30.9
MM092	Electrical transformers, static converters, and inductors	2,436	1,784	-652	-26.8
CH011	Organic specialty chemicals	5,678	5,050	-627	-11.1
ET028	Circuit apparatus not exceeding 1000V	5,098	4,478	-621	-12.2
ET014	Ships, tugs, pleasure boats, and similar vessels	1,820	1,234	-587	-32.2
Rank order based on change in percentage decline:					
CH001	Electrical energy	1,258	304	-955	-75.9
ET037	Optical fibers, optical fiber bundles and cables	1,689	474	-1,216	-72.0
AG063	Printing and writing papers	1,308	620	-688	-52.6
CH004	Crude petroleum	177	92	-85	-48.2
AG050	Ethyl alcohol for nonbeverage purposes	125	71	-53	-42.7
ET023	Radio and television broadcasting equipment	2,321	1,364	-957	-41.2
MM064	Works of art and miscellaneous manufactured goods	2,177	1,379	-798	-36.7
ET014	Ships, tugs, pleasure boats, and similar vessels	1,820	1,234	-587	-32.2
MM022	Ferroalloys	74	50	-23	-31.6
CH019	Synthetic dyes and azoic couplers	361	249	-112	-31.0
AG045	Cigarettes	2,118	1,463	-655	-30.9
ET039	Photographic cameras and equipment	1,694	1,187	-507	-29.9
ET008	Rail locomotive and rolling stock	1,422	1,006	-416	-29.3
MM019	Natural and synthetic gemstones	1,840	1,331	-508	-27.6
MM093	Portable electric handtools	291	212	-79	-27.1
MM092	Electrical transformers, static converters, and inductors	2,436	1,784	-652	-26.8
MM058	Dolls	33	24	-9	-26.8
MM007	Certain ores, concentrates, ash, and residues	248	183	-65	-26.4
MM020	Precious metals and non-numismatic coins	6,826	5,070	-1,756	-25.7
MM049	Umbrellas, whips, riding crops, and canes	11	9	-3	-24.1

Note.—Calculations based on unrounded data.

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

Table D-3
Domestic import increases: Ranking of top 20 industry/commodity groups, 2001 and 2002

USITC code	Industry/commodity group	U.S. imports 2001	U.S. imports 2002	Change, 2002 from 2001 Absolute	Change, 2002 from 2001 *Percent*
		Million Dollars			
Rank order based on change in absolute value growth:					
CH025	Medicinal chemicals	33,956	40,699	6,742	19.9
ET009	Motor vehicles	127,257	133,264	6,007	4.7
CH004	Crude petroleum	49,673	54,704	5,030	10.1
ET010	Certain motor-vehicle parts	23,977	27,761	3,784	15.8
ET040	Medical goods	10,869	13,232	2,363	21.7
MM054	Furniture	14,839	17,028	2,189	14.8
ET022	Television receivers and video monitors	8,615	10,586	1,972	22.9
ET018	Consumer electronics (except televisions)	19,525	21,455	1,931	9.9
MM019	Natural and synthetic gemstones	11,577	13,063	1,486	12.8
ET035	Computers, peripherals, and parts	74,547	75,817	1,270	1.7
MM073	Household appliances, including commercial applications	8,356	9,564	1,208	14.5
ET002	Internal combustion piston engines, other than for aircraft	13,657	14,841	1,184	8.7
CH041	Miscellaneous plastic products	12,376	13,459	1,083	8.8
CH048	Home furnishings	3,332	4,226	894	26.8
ET017	Telephone and telegraph apparatus	27,174	27,948	774	2.8
MM051	Precious jewelry and related articles	5,533	6,261	728	13.2
MM031	Miscellaneous products of base metal	7,107	7,773	666	9.4
MM067	Seats for motor vehicles and aircraft	3,239	3,886	648	20.0
MM068	Wiring harnesses for motor vehicles	4,684	5,302	617	13.2
MM071	Air-conditioning equipment and parts	6,081	6,674	593	9.7
Rank order based on change in percentage growth:					
AG049	Cotton, not carded or combed	4	20	16	384.5
MM008	Precious metal ores and concentrates	14	43	29	205.1
MM004	Copper ores and concentrates	58	105	47	81.5
AG011	Eggs	20	28	8	42.6
AG025	Dried fruit other than tropical	63	90	26	41.7
MM023	Iron and steel waste and scrap	284	397	113	40.0
MM006	Zinc ores, concentrates, and residues	38	53	15	38.1
AG065	Miscellaneous paper products	1,295	1,740	444	34.3
AG026	Frozen fruit	117	152	35	30.0
CH020	Synthetic tanning agents	5	7	1	28.9
CH048	Home furnishings	3,332	4,226	894	26.8
MM034	Metal and ceramic sanitary ware	588	742	154	26.2
MM090	Boilers, turbines, and related machinery	1,204	1,514	310	25.8
AG031	Milled grains, malts, and starches	305	379	74	24.4
ET022	Television receivers and video monitors	8,615	10,586	1,972	22.9
CH044	Natural rubber	613	751	138	22.6
ET040	Medical goods	10,869	13,232	2,363	21.7
AG045	Cigarettes	189	230	41	21.7
MM093	Portable electric handtools	1,185	1,434	249	21.1
AG036	Infant formulas, malt extracts, and other edible preparations	659	795	136	20.6

Note.—Calculations based on unrounded data.

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

Table D-4
Domestic import declines: Ranking of top 20 industry/commodity groups, 2001 and 2002

USITC code	Industry/commodity group	U.S. imports 2001	U.S. imports 2002	Change, 2002 from 2001 Absolute	Change, 2002 from 2001 *Percent*
		Million Dollars			
Rank order based on change in absolute value decline:					
CH006	Natural gas and components	23,054	18,609	-4,445	-19.3
ET033	Semiconductors and integrated circuits	30,016	25,651	-4,365	-14.5
CH005	Petroleum products	34,372	30,594	-3,778	-11.0
ET013	Aircraft, spacecraft, and related equipment	21,027	17,636	-3,391	-16.1
ET001	Aircraft engines and gas turbines	13,548	10,993	-2,555	-18.9
MM020	Precious metals and non-numismatic coins	8,193	6,263	-1,930	-23.6
CH001	Electrical energy	2,681	1,160	-1,520	-56.7
ET023	Radio and television broadcasting equipment	6,066	4,977	-1,089	-17.9
ET037	Optical fibers, optical fiber bundles and cables	1,244	252	-992	-79.8
MM084	Metal cutting machine tools and machine tool accessories	3,407	2,558	-849	-24.9
ET038	Optical goods, including ophthalmic goods	4,957	4,142	-815	-16.4
MM087	Semiconductor manufacturing equipment and robotics	4,389	3,679	-710	-16.2
MM036	Copper and related articles	4,296	3,715	-581	-13.5
AG062	Newsprint	3,597	3,039	-558	-15.5
ET039	Photographic cameras and equipment	3,560	3,029	-531	-14.9
MM041	Certain base metals and chemical elements	2,467	1,952	-515	-20.9
MM085	Metal forming machine tools	1,331	846	-485	-36.4
MM091	Electric motors, generators, and related equipment	7,646	7,177	-468	-6.1
CH012	Certain organic chemicals	5,148	4,699	-449	-8.7
CH016	Fertilizers	3,478	3,043	-435	-12.5
Rank order based on change in percentage decline:					
MM005	Lead ores, concentrates, and residues	1	(1)	-1	-98.5
ET037	Optical fibers, optical fiber bundles and cables	1,244	252	-992	-79.8
CH001	Electrical energy	2,681	1,160	-1,520	-56.7
MM085	Metal forming machine tools	1,331	846	-485	-36.4
MM080	Pulp, paper, and paperboard machinery	1,091	719	-373	-34.1
AG048	Wool and other animal hair	57	42	-16	-27.4
CH033	Polyvinyl chloride resins in primary forms	332	247	-84	-25.4
MM039	Lead and related articles	167	125	-42	-25.2
MM084	Metal cutting machine tools and machine tool accessories	3,407	2,558	-849	-24.9
CH015	Chlor-alkali chemicals	219	166	-53	-24.3
MM020	Precious metals and non-numismatic coins	8,193	6,263	-1,930	-23.6
ET008	Rail locomotive and rolling stock	1,357	1,039	-318	-23.4
MM010	Industrial ceramics	640	497	-143	-22.3
MM041	Certain base metals and chemical elements	2,467	1,952	-515	-20.9
CH008	Other olefins	143	113	-30	-20.8
CH006	Natural gas and components	23,054	18,609	-4,445	-19.3
ET001	Aircraft engines and gas turbines	13,548	10,993	-2,555	-18.9
ET016	Office machines	1,817	1,491	-326	-18.0
ET023	Radio and television broadcasting equipment	6,066	4,977	-1,089	-17.9
CH021	Natural tanning and dyeing materials	65	54	-11	-17.2

[1]Less than $500,000.

Note.—Calculations based on unrounded data.

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

Table D-5
U.S. trade position increases: Ranking of top 30 industry/commodity groups, 2001 and 2002

USITC code	Industry/commodity group	U.S. balance 2001	U.S. balance 2002	Change, 2002 from 2001 Absolute	Change, 2002 from 2001 *Percent*
		Million Dollars			
CH006	Natural gas and components	-21,944	-16,934	5,011	22.8
CH005	Petroleum products	-25,436	-21,931	3,504	13.8
ET033	Semiconductors and integrated circuits	3,439	6,087	2,648	77.0
ET013	Aircraft, spacecraft, and related equipment	21,508	23,811	2,302	10.7
ET001	Aircraft engines and gas turbines	2,976	4,505	1,529	51.4
MM084	Metal cutting machine tools and machine tool accessories	-1,598	-924	674	42.2
ET038	Optical goods, including ophthalmic goods	-1,230	-594	636	51.7
AG064	Certain specialty papers	-449	147	597	(1)
CH001	Electrical energy	-1,423	-857	566	39.8
AG030	Cereals	8,636	9,194	558	6.5
AG062	Newsprint	-3,188	-2,709	479	15.0
MM036	Copper and related articles	-2,444	-1,972	473	19.3
CH016	Fertilizers	-1,295	-859	436	33.7
CH010	Organic commodity chemicals	474	898	425	89.7
AG059	Wood pulp and wastepaper	1,061	1,482	421	39.7
MM085	Metal forming machine tools	-588	-194	394	67.0
AG033	Animal or vegetable fats and oils	277	632	355	128.3
CH012	Certain organic chemicals	2,626	2,969	343	13.1
MM041	Certain base metals and chemical elements	-765	-454	311	40.6
ET024	Electric sound and visual signaling apparatus	-1,020	-755	265	26.0
CH031	Polyethylene resins in primary forms	681	938	257	37.7
MM080	Pulp, paper, and paperboard machinery	-414	-159	255	61.5
CH036	Other plastics in primary forms	4,117	4,366	249	6.1
AG020	Edible nuts	639	841	202	31.7
MM020	Precious metals and non-numismatic coins	-1,366	-1,193	174	12.7
ET036	Photographic film and paper	96	262	166	171.9
CH017	Paints, inks, and related items, and certain components thereof	1,455	1,618	163	11.2
CH002	Nuclear materials	-797	-635	162	20.4
AG032	Oilseeds	5,439	5,599	160	2.9
CH022	Photographic chemicals and preparations	-66	87	153	(1)

[1]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data.

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

Table D-6
U.S. trade position declines: Ranking of top 30 industry/commodity groups, 2001 and 2002

USITC code	Industry/commodity group	U.S. balance 2001	U.S. balance 2002	Change, 2002 from 2001 Absolute	Change, 2002 from 2001 *Percent*
		Million Dollars			
ET035	Computers, peripherals, and parts	-36,422	-46,283	-9,861	-27.1
CH025	Medicinal chemicals	-15,788	-21,957	-6,169	-39.1
CH004	Crude petroleum	-49,496	-54,612	-5,116	-10.3
ET017	Telephone and telegraph apparatus	-10,668	-14,996	-4,328	-40.6
ET010	Certain motor-vehicle parts	2,544	-1,110	-3,654	(1)
MM054	Furniture	-12,150	-14,620	-2,470	-20.3
ET009	Motor vehicles	-104,606	-107,054	-2,448	-2.3
ET040	Medical goods	4,119	1,826	-2,292	-55.7
ET018	Consumer electronics (except televisions)	-16,734	-18,825	-2,091	-12.5
MM019	Natural and synthetic gemstones	-9,737	-11,731	-1,994	-20.5
ET022	Television receivers and video monitors	-7,378	-9,329	-1,952	-26.5
MM073	Household appliances, including commercial applications	-3,130	-4,719	-1,589	-50.8
CH041	Miscellaneous plastic products	185	-892	-1,076	(1)
ET043	Measuring, testing, and controlling instruments	3,799	2,751	-1,049	-27.6
CH049	Apparel	-57,458	-58,436	-978	-1.7
MM071	Air-conditioning equipment and parts	-387	-1,356	-969	-250.0
CH048	Home furnishings	-2,929	-3,863	-934	-31.9
MM067	Seats for motor vehicles and aircraft	-1,431	-2,245	-814	-56.9
MM025	Steel mill products	-6,874	-7,670	-796	-11.6
MM064	Works of art and miscellaneous manufactured goods	-7,136	-7,895	-759	-10.6
AG045	Cigarettes	1,930	1,234	-696	-36.1
MM031	Miscellaneous products of base metal	-1,843	-2,491	-647	-35.1
CH039	Pneumatic tires and tubes (new)	-1,864	-2,460	-597	-32.0
ET014	Ships, tugs, pleasure boats, and similar vessels	410	-179	-589	(1)
AG005	Poultry	2,279	1,705	-573	-25.2
MM051	Precious jewelry and related articles	-3,874	-4,435	-561	-14.5
AG066	Printed matter	817	263	-554	-67.8
AG037	Cocoa, chocolate, and confectionery	-1,304	-1,846	-542	-41.6
MM090	Boilers, turbines, and related machinery	-98	-622	-524	-536.6
MM068	Wiring harnesses for motor vehicles	-3,818	-4,341	-523	-13.7

[1]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data.

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

Table D-7
U.S. trade balance deficit: Top 30 industry/commodity groups, ordered by 2002 deficit

USITC code	Industry/commodity group	U.S. balance 2001	U.S. balance 2002	Change, 2002 from 2001 Absolute	Change, 2002 from 2001 *Percent*
		Million Dollars			
ET009	Motor vehicles	-104,606	-107,054	-2,448	-2.3
CH049	Apparel	-57,458	-58,436	-978	-1.7
CH004	Crude petroleum	-49,496	-54,612	-5,116	-10.3
ET035	Computers, peripherals, and parts	-36,422	-46,283	-9,861	-27.1
CH025	Medicinal chemicals	-15,788	-21,957	-6,169	-39.1
CH005	Petroleum products	-25,436	-21,931	3,504	13.8
ET018	Consumer electronics (except televisions)	-16,734	-18,825	-2,091	-12.5
CH006	Natural gas and components	-21,944	-16,934	5,011	22.8
ET017	Telephone and telegraph apparatus	-10,668	-14,996	-4,328	-40.6
CH051	Footwear	-14,611	-14,860	-248	-1.7
MM054	Furniture	-12,150	-14,620	-2,470	-20.3
MM019	Natural and synthetic gemstones	-9,737	-11,731	-1,994	-20.5
ET022	Television receivers and video monitors	-7,378	-9,329	-1,952	-26.5
MM064	Works of art and miscellaneous manufactured goods	-7,136	-7,895	-759	-10.6
MM059	Toys	-7,416	-7,868	-452	-6.1
MM025	Steel mill products	-6,874	-7,670	-796	-11.6
AG009	Shellfish	-5,200	-5,172	27	0.5
MM060	Games	-4,748	-5,029	-280	-5.9
AG052	Lumber	-5,073	-4,927	146	2.9
MM073	Household appliances, including commercial applications	-3,130	-4,719	-1,589	-50.8
MM051	Precious jewelry and related articles	-3,874	-4,435	-561	-14.5
MM068	Wiring harnesses for motor vehicles	-3,818	-4,341	-523	-13.7
MM046	Luggage, handbags, and flat goods	-4,001	-4,134	-133	-3.3
MM056	Lamps and lighting fittings	-3,500	-3,934	-434	-12.4
CH048	Home furnishings	-2,929	-3,863	-934	-31.9
MM037	Unwrought aluminum	-3,825	-3,824	0	([1])
AG063	Printing and writing papers	-3,453	-3,752	-299	-8.7
ET023	Radio and television broadcasting equipment	-3,745	-3,613	132	3.5
MM009	Cement, stone, and related products	-3,085	-3,332	-247	-8.0
MM091	Electric motors, generators, and related equipment	-2,954	-3,255	-300	-10.2

[1]Less than 0.05 percent.

Note.—Calculations based on unrounded data.

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

Table D-8
U.S. trade balance surplus: Top 30 industry/commodity groups, ordered by 2002 surplus

USITC code	Industry/commodity group	U.S. balance 2001	U.S. balance 2002	Change, 2002 from 2001 Absolute	Change, 2002 from 2001 *Percent*
		Million Dollars			
ET013	Aircraft, spacecraft, and related equipment	21,508	23,811	2,302	10.7
AG030	Cereals	8,636	9,194	558	6.5
ET033	Semiconductors and integrated circuits	3,439	6,087	2,648	77.0
AG032	Oilseeds	5,439	5,599	160	2.9
ET001	Aircraft engines and gas turbines	2,976	4,505	1,529	51.4
CH036	Other plastics in primary forms	4,117	4,366	249	6.1
ET004	Construction and mining equipment	4,643	4,202	-441	-9.5
MM087	Semiconductor manufacturing equipment and robotics	4,164	3,662	-502	-12.1
AG013	Animal feeds	3,881	3,518	-363	-9.3
CH012	Certain organic chemicals	2,626	2,969	343	13.1
ET043	Measuring, testing, and controlling instruments	3,799	2,751	-1,049	-27.6
AG049	Cotton, not carded or combed	2,160	1,995	-166	-7.7
ET040	Medical goods	4,119	1,826	-2,292	-55.7
AG036	Infant formulas, malt extracts, and other edible preparations	2,070	1,787	-283	-13.7
AG061	Industrial papers and paperboards	2,127	1,764	-363	-17.1
ET020	Prerecorded media	1,935	1,761	-174	-9.0
AG005	Poultry	2,279	1,705	-573	-25.2
CH017	Paints, inks, and related items, and certain components thereof	1,455	1,618	163	11.2
AG059	Wood pulp and wastepaper	1,061	1,482	421	39.7
AG046	Hides, skins, and leather	1,617	1,456	-162	-10.0
AG045	Cigarettes	1,930	1,234	-696	-36.1
ET031	Cathode-ray tubes	1,444	1,155	-289	-20.0
ET021	Navigational instruments and remote control apparatus	1,306	1,063	-243	-18.6
MM066	Arms and ammunition	1,280	1,040	-240	-18.8
CH028	Soaps, detergents, and surface-active agents	1,107	1,009	-99	-8.9
CH029	Miscellaneous chemicals and specialties	1,006	944	-62	-6.1
CH031	Polyethylene resins in primary forms	681	938	257	37.7
CH032	Polypropylene resins in primary forms	881	929	48	5.4
MM023	Iron and steel waste and scrap	867	911	43	5.0
AG051	Logs and rough wood products	1,039	907	-132	-12.7

Note.—Calculations based on unrounded data.

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

APPENDIX E
Definitions of Selected Country Groups

ASEAN (ASSOCIATION OF SOUTHEAST ASIAN NATIONS)

Brunei
Burma (Myanmar)
Cambodia
Indonesia
Laos
Malaysia
Philippines
Singapore
Thailand
Vietnam

ASIA

Afghanistan
Bangladesh
Bhutan
Brunei
Burma (Myanmar)
Cambodia
China
Hong Kong
India
Indonesia
Japan
Korea
Laos
Macao
Malaysia
Maldive Islands
Mongolia
Nepal
North Korea
Pakistan
Philippines
Singapore
Sri Lanka
Taiwan
Thailand
Vietnam

CBERA (CARIBBEAN BASIN ECONOMIC RECOVERY ACT) BENEFICIARIES

Antigua and Barbuda
Aruba
The Bahamas
Barbados
Belize
British Virgin Islands
Costa Rica
Dominica
Dominican Republic
El Salvador
Grenada
Guatemala
Guyana
Haiti
Honduras
Jamaica
Montserrat
Netherlands Antilles
Nicaragua
Panama
St. Kitts and Nevis
St. Lucia
St. Vincent and the Grenadines
Trinidad and Tobago

CENTRAL AND EASTERN EUROPE

Albania
Bosnia-Hercegovina
Bulgaria
Croatia
Czech Republic
Hungary
Macedonia
Poland
Romania
Slovakia
Slovenia
Yugoslavia (Serbia and Montenegro)

EU/EU-15 (EUROPEAN UNION)

Austria
Belgium
Denmark
Finland
France
Germany
Greece
Ireland
Italy
Luxembourg
Netherlands
Portugal
Spain
Sweden
United Kingdom

LATIN AMERICA

Anguilla
Antigua and Barbuda
Argentina
Aruba
The Bahamas
Barbados
Belize
Bermuda
Bolivia
Brazil
British Virgin Islands
Cayman Islands
Chile
Colombia
Costa Rica
Cuba
Dominica Island
Dominican Republic
Ecuador
El Salvador
Falkland Islands
French Guiana
Grenada
Guadeloupe
Guatemala
Guyana
Haiti
Honduras
Jamaica
Martinique
Mexico
Montserrat
Netherlands Antilles
Nicaragua

LATIN AMERICA–*Continued*

Panama
Paraguay
Peru
St. Kitts and Nevis
St. Lucia
St. Pierre and Miquelon
St. Vincent and the Grenadines
Suriname
Trinidad and Tobago
Turks and Caicos Islands
Uruguay
Venezuela

NAFTA (NORTH AMERICAN FREE TRADE AGREEMENT) PARTNERS

Canada
United States
Mexico

OPEC (ORGANIZATION OF PETROLEUM EXPORTING COUNTRIES)

Algeria
Indonesia
Iran
Iraq
Kuwait
Libya
Nigeria
Qatar
Saudi Arabia
United Arab Emirates
Venezuela

SUB-SAHARAN AFRICA

Angola
Benin
Botswana
Burkina Faso
Burundi
Cameroon
Cape Verde
Central African Republic
Chad
Comoros
Democratic Republic of the Congo (Congo-Kinshasa)
Republic of the Congo (Congo-Brazzaville)
Côte d'Ivoire
Djibouti
Equatorial Guinea
Eritrea
Ethiopia
Gabon
The Gambia
Ghana
Guinea
Guinea-Bissau
Kenya

SUB-SAHARAN AFRICA–*Continued*

Lesotho
Liberia
Madagascar
Malawi
Mali
Mauritania
Mauritius
Mozambique
Namibia
Niger
Nigeria
Rwanda
São Tomé and Príncipe
Senegal
Seychelles
Sierra Leone
Somalia
South Africa
Sudan
Swaziland
Tanzania
Togo
Uganda
Zambia
Zimbabwe

APPENDIX F
Background on Exchange Rate Shifts

Introduction

This appendix provides a general background on exchange rates and is divided into three sections. In the first section, exchange rate stability and convertibility are discussed. A profile of Argentina's current economic situation, which resulted in Argentina's withdrawal from its currency board-based monetary policy of trading foreign exchange for domestic currency, is included in this section. The second section provides a brief overview of exchange rate determinants and the relationship between exchange rates and merchandise (goods) trade flows. The third section presents nominal exchange rates against the dollar on an annual basis during 1998-2002 for selected individual countries and indices of nominal and real exchange rates for the dollar versus the currencies of selected country groups. Exchange rate movements and policy actions by monetary authorities in 2002 are also discussed in the section, with an emphasis on the depreciation of the Japanese yen and the appreciation of the euro.

Exchange Rate Stability and Convertibility

Exchange rates are dependent on basic macroeconomic factors, domestic monetary and fiscal policies, independence of the country's central bank, exchange controls and openness of its capital market,[1] and the country's exchange rate arrangements (the mechanisms by which the exchange rate is established), which range from market-determined exchange rates (freely floating exchange rates or "clean" float) to fixed-rate systems.[2] Under a system of flexible or floating exchange rates, market or nominal exchange rates[3] (reported in the financial pages of major newspapers) of freely convertible currencies are determined by the supply of and demand for those currencies in the foreign exchange market.[4] The supply of and demand for foreign currencies depends upon the demand for international transactions of goods, services, and assets. Foreign demand for U.S. dollars is based on foreigners' purchases of U.S. goods and services, investments in the United States, and holdings of dollar balances. Likewise, the supply of U.S. dollars outside the United States is based on U.S. citizens' purchases of foreign goods and services, investments abroad, and holdings of balances in foreign currencies.

Under a floating exchange rate system, macroeconomic changes and shifts in other determinants of supply and demand show up directly as exchange rate movements; however, with a fixed exchange rate, the same changes take place in foreign currency reserves. If the economic fundamentals cause the reserves to get too small, it can lead to a speculative crisis and sudden devaluation, or abandonment of the fixed exchange rate system. The U.S. dollar is a freely floating currency.

Many governments intervene in foreign exchange markets, and for a variety of reasons.[5] U.S. authorities purchase dollars from time to time to resist downward pressure on the dollar exchange rate and occasionally sell dollars to resist upward pressure. During 1998, U.S. monetary authorities intervened in the foreign-exchange markets on one occasion to prop up the Japanese yen, on June 17, selling a total of $833

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[1] For a definition of exchange convertibility and restrictions on convertibility, by country, see International Monetary Fund (IMF), *Exchange Arrangements and Exchange Restrictions, Annual Report 1999* (Washington, DC: IMF, Aug. 27, 2000).

[2] For a description of the types of exchange-rate arrangements that exist, each of which represents efforts by the central bank to stabilize the country's exchange rate against those of its trade partners, see Ibid., Appendix 1. Also, for a chart of exchange rate arrangements, see IMF, *International Financial Statistics*, monthly series, p. 8.

[3] Nominal exchange rates, unlike real exchange rates (discussed later), are not adjusted for inflation.

[4] Macroeconomic factors (including monetary and fiscal policies) influence the supply and demand for currencies.

[5] Foreign-exchange market intervention consists of the official purchases and sales of foreign exchange that nations undertake through their central banks to influence the values of their currencies. For motives behind why countries intervene in the foreign exchange market, see IMF, *Exchange Arrangements and Exchange Restrictions, Annual Report 1999*.

million and buying Japanese yen.[6] On September 22, 2000, in coordination with the European Central Bank (ECB) and the monetary authorities of Canada, Japan, and the United Kingdom, the United States purchased 1.5 billion euros. Following the terrorist attacks on September 11, 2001, the Federal Reserve established 30-day reciprocal swap arrangements with the ECB, the Bank of England, and the Bank of Canada to facilitate the functioning of financial markets and provide liquidity in U.S. dollars. The ECB drew on this swap facility three times.[7] The U.S. monetary authorities did not intervene in the foreign exchange markets during 1999 or 2002.[8]

Most of the leading U.S. trade partners also maintain floating exchange rates, and their central banks intervene selectively or not at all.[9] Several others prefer to maintain an organized floating exchange rate, or a managed float. For example, the People's Bank of China announces a daily reference rate against the U.S. dollar, the Hong Kong dollar, and the Japanese yen based on the weighted-average price of foreign-exchange transactions of the previous day. This reference rate establishes the current day's maximum trading limits in the interbank foreign-exchange market. The central banks of several other countries have announced their intentions to intervene should they consider market conditions disorderly[10] or if their currency's foreign-exchange value fluctuates beyond a stated range of parity against other currencies or a basket of currencies. Other countries have chosen to maintain the value of their currency through such arrangements as dollarization (see text box below) and currency boards.

Currency Boards

Under a currency-board arrangement, monetary authorities commit to trade foreign exchange for domestic currency on demand at a fixed rate.[11] The domestic currency is backed by corresponding reserves of foreign exchange, usually at 100 percent or more.[12] Trading foreign exchange for domestic currency is the only way the central bank can increase money supply, as it may not print money without having an equal amount of foreign-exchange reserves. There is also a long-term commitment to the currency-board system, often set into the central-bank law. Table F-1 provides a list of country that have adopted a currency board.

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[6] The mark, the yen, and the euro have been the only three currencies in which the United States has conducted its intervention operations.

[7] Drawing on a swap facility refers to borrowing money that was previously set aside for that purpose. The ECB repaid this money by the end of 2001. Federal Reserve Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations*, Jul.-Sep. 2001, p. 1.

[8] Ibid. (various issues).

[9] Those allowing their currency's exchange value to float freely include the European Monetary Union, Canada, Japan, Korea, Mexico, Singapore, and Taiwan.

[10] Economic actors, such as central bankers and government officials, within a country who do not believe the market has full information about the country's economic situation or who do not believe the market prices the currency at its true value may consider the foreign exchange market to be disorderly. Disorderly markets also refer to markets with excessive fluctuations.

[11] Kurt Schuler, *Introduction to Currency Boards*, p. 1, found at *http://users.erols.com/kurrency/intro.htm*, retrieved Feb. 19, 2002.

[12] Having more than 100 percent of a country's money supply backed by reserves permits a "safety margin" and allows for limited intervention in the case of unexpected economic or banking system difficulties without violating currency board rules. Charles Enoch and Anne-Marie Gulde, "Are Currency Boards a Cure for All Monetary Problems?," *Finance & Development*, Vol. 35, No. 4, Dec. 1998, p. 5.

Dollarization

Dollarization is a process in which a country officially or unofficially uses a foreign currency (such as the U.S. dollar) as its domestic currency or as a unit of account alongside its domestic currency.[1] When the term is used to refer to the dollar's total replacement of the domestic currency, it is referred to as full dollarization. The primary attraction of dollarization is one of confidence. Under full dollarization, all values, including the entire monetary accounting system, are converted to a dollar basis. As the preferred international monetary asset, the dollar is perceived to ensure currency stability, at least more so than other national currencies. Adoption of the dollar fixes the exchange rate, hence reducing transactions costs and risks that discourage trade and investment.[2] Moreover, risk premiums[3] and historical tendencies toward inflation are reduced or eliminated and fiscal-policy discipline is encouraged as the central bank can no longer print money.

However, the loss of monetary autonomy is one of the principal drawbacks of dollarization because it also means a loss of an independent monetary policy. If a country adopts a foreign currency, then its monetary policy is the monetary policy of the foreign country.[4] Conversion to the U.S. dollar (a foreign currency) may imply an appreciation of the real exchange rate relative to that which would have prevailed under an independent domestic currency. There is also the loss of the central bank's function as a lender of last resort. In a monetary crisis, the central bank cannot as easily obtain sufficient funds to rescue domestic commercial banks.[5] Profits from seigniorage, the difference between the cost of printing money and its face value, are lost; any such profits would be gained by the United States, although seigniorage is generally a very small amount in the United States.[6] When a country is first undertaking dollarization, the price competitiveness of the newly dollarized country's goods in foreign markets may decrease and exports may be discouraged, as the U.S. dollar (as currently) and most other foreign currencies that may be adopted are worth more than most other currencies. Moreover, dollarization does not exempt a country from the market forces it would otherwise be exposed to. If foreigners fail to demand domestic goods and assets to sufficiently cover import demands, the result is a decreased domestic supply of dollars with a corresponding loss in liquidity and a drop in domestic prices. With an independent currency, the same set of conditions is experienced as a depreciation (for a floating currency) or as an exhaustion of reserves, speculative attack and eventual devaluation (for a fixed currency).

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[1] However, dollarization does not occur when a currency is simply pegged to a foreign currency such as the U.S. dollar. In recent publications by the Federal Reserve and the Joint Economic Committee, the term "dollarization" has been increasingly used to refer to all instances in which the domestic currency was replaced by or co-exists with a foreign currency and not only those in which the U.S. dollar was adopted to replace or co-exist with the domestic currency.

[2] Jeffrey A. Frankel, "Dollarization: Fad or Future for Latin America," *IMF Economic Forum*, June 24, 1999, p. 3.

[3] Risk premiums are extra returns on investments that investors expect to receive due to high uncertainty. For example, an investor would expect to receive a higher return from common stocks than from bonds. In the United States, a risk premium is usually measured by subtracting the interest rate on short-term Treasury bills (the risk-free asset) from the rate of return on another, riskier investment.

[4] David D. Hale, "Should Argentina Dollarize? No Way," *The International Economy*, May/June 1999, p. 58.

[5] The central bank can arrange for lines of credit from foreign sources, or branches of foreign banks can provide this liquidity. Studies have suggested that this loss may even be a benefit as dollarized countries have had systemwide problems that were weathered at less taxpayer expense than countries with central banks. Kurt Schuler, "Basics of Dollarization," *Joint Economic Committee Staff Report*, U.S. Congress, Jan. 2000, p. 15.

[6] These seigniorage profits amount to about 1 percent of gross domestic product (GDP) per year in the United States. Kurt Schuler, *Introduction to Currency Boards*, p. 2, found at *http://users.erols.com/kurrency/intro.htm*, retrieved Feb. 19, 2002.

Table F-1
Countries and territories that officially adopted a currency board, as of June 2002

Linked currency	Country
U.S. dollar	Bermuda, Cayman Islands, Djibouti, Hong Kong
Euro	Bosnia, Bulgaria, Estonia, Lithuania
Singapore dollar	Brunei
British pound	Falkland Islands, Gibraltar
Danish krone	Faroe Islands

Note.–Bosnia, Brunei, Bulgaria, Djibouti, Estonia, and Lithuania are currency board-like systems, while the other countries are orthodox currency boards.

Source: Kurt Schuler, Currency Boards and Dollarization, found at *http://users.erols.com/kurrency/intro.htm*, retrieved Feb. 11, 2003; and other public sources.

Currency boards have certain advantages, including the assurance of convertibility, a macroeconomic discipline that limits budget deficits and inflation, and enhanced confidence in the country's monetary system as each unit of domestic currency is backed by foreign currency.[13] Low inflation and lower interest rates are also often advantages of currency board arrangements.[14] A currency board also generates seigniorage from the difference between the interest earned on its reserve assets less the expense of maintaining its notes and coins in circulation.

However, there are also disadvantages associated with currency boards. Setting up a currency board may be costly, as it may prove difficult to gather enough foreign reserves to back the monetary base 100 percent. There is also a cost associated with gathering foreign currency. A currency board does not allow a country to pursue monetary policy to stabilize the domestic economy; governments can only finance their spending through borrowing and taxation. It also may not act as a lender of last resort to troubled banks, so the banking system within the country must be strong and stable.[15]

Unlike pure currency-board systems, the domestic currency of countries with currency board-like systems is not backed 100 percent by foreign reserves of the selected currency. A currency board-like system is a central bank that retains many of its old powers, but is constrained by rules regarding the exchange rate and reserves like currency boards. A potential problem with this type of currency board system is that loopholes allow the central banks discretionary power.[16] Argentina had a currency board-like system during 1991-2001.

Argentina's Convertibility Law, which took effect in 1991 to restore confidence in Argentina's economy and check hyperinflation, set up a currency board-like system. Although this system guaranteed the convertibility of pesos into U.S. dollars at a one-to-one fixed rate,[17] The law required an official foreign reserve ratio of only 66 percent. As the actual foreign reserve ratio of that country was about 90 percent, 24 percent above that required by law, the central bank had freedom to conduct discretionary monetary policy.

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[13] John Williamson, *Currency Boards Are Not The Answer*, Institute for International Economics, News Release, found at *http://www.iie.com/press/cboard.htm*, retrieved Feb. 19, 2002.

[14] Enoch and Gulde, "Are Currency Boards a Cure for All Monetary Problems?," p. 2.

[15] Williamson, *Currency Boards Are Not The Answer*.

[16] See next section on Argentina's economic crisis for more on currency board-like systems.

[17] J. F. Hornbeck, "The Argentine Financial Crisis: A Chronology of Events," *CRS Report for Congress*, Jan. 31, 2002.

According to testimony before the United States Congress, the Argentine Government retained the power to regulate banks and served as an unofficial lender of last resort,[18] much like a central bank. The Government reportedly manipulated the exchange rate[19] and restricted convertibility,[20] causing investor concern as to the long-term commitment of Argentina to the currency board-like system. This aspect of Argentina's currency board system, according to the testimony, left it open to speculative attacks and may have played a part in its crisis.

Argentina's economy grew quickly in the early 1990s and then more moderately throughout subsequent years. According to one observer, the country coped well with a series of external shocks, including economic crises in Mexico and Brazil that impacted Argentina's trade relationship with these major trading partners.[21] Although many experts assert that the Argentine peso was overvalued, other experts claim that it was not, as Argentina's exports increased almost every year (except in 1999) under the Convertibility Law.[22] Reportedly, however, Argentina did experience high government spending, contributing to a fiscal deficit, even during years of healthy economic growth. Another observer points out that the country had weaknesses in the banking system, as banks were permitted to hold government debt as part of their reserve requirement, exposing them to the public sector.[23] The Argentine Government reportedly attempted to reduce the public sector deficit by raising income taxes in 2000 and adding a financial transaction tax in 2001, even though the economy had been in recession since 1998; tax revenues actually fell, making the government's debt even more of a problem.

Political instability heightened the economic crisis, with the resignation of the Vice President in the latter half of 2000 and the removal of a popular central bank governor known for stable policies in spring 2001.[24] The International Monetary Fund (IMF) pledged $3 billion in aid and the Argentine government arranged a $30 billion debt swap in the first half of 2001.[25] The Argentine government announced a preferential exchange rate for exports in June 2001, reportedly violating the terms of the currency board.[26] Although the IMF pledged additional funds in August 2001, Argentine public debt rescheduling was announced in September 2001and a series of events led to the termination of the Convertibility Law and "pesofication" of the economy.[27] In the last 2 months of the year, a run on banks forced the government to

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[18] Steve H. Hanke, Cato Institute, "Argentina's Current Political-Economic Crisis," Statement before the Subcommittee on International Monetary Policy and Trade, Committee on Financial Services, U.S. House of Representatives, Mar. 5, 2002.

[19] Minister of the Economy Cavallo changed the peso's anchor from the dollar to a 50-50 basket of the dollar and the euro in April 2001. Ibid.

[20] A freeze on bank deposits was announced in December 2001. Steve H. Hanke, "Argentina's Current Political-Economic Crisis," Statement before the Subcommittee on International Monetary Policy and Trade, Committee on Financial Services, U.S. House of Representatives, Mar. 5, 2002.

[21] J. F. Hornbeck, *The Argentine Financial Crisis: A Chronology of Events,* CRS Report for Congress, Jan 31, 2002.

[22] The devaluation of the Brazilian real and the subsequent economic downfall in that country caused Argentina's export decrease in 1999, as Brazil is Argentina's largest trading partner. Steve H. Hanke, "Argentina's Current Political-Economic Crisis," Statement before the Subcommittee on International Monetary Policy and Trade, Committee on Financial Services, U.S. House of Representatives, Mar. 5, 2002.

[23] Mark Spiegel, "Argentina's Currency Crisis: Lessons for Asia," *FRBSF Economic Letter Number 2002-25*, Aug. 23, 2002.

[24] Michael Mussa, *Argentina and the Fund: from Triumph to Tragedy.* Institute for International Economics, July 2002.

[25] Ibid.

[26] Kurt Schuler, "Fixing Argentina," *Policy Analysis No. 445*, July 16, 2002.

[27] Under pesofication, dollar reserves were seized from banks and, along with dollar deposits, converted into pesos at 1.4 pesos per dollar, while bank loans made in dollars were converted at one peso per dollar. As the peso

(continued...)

close them and impose a withdrawal limit of $250 per week before reopening. Riots ensued, forcing President de la Rua and Minister of the Economy Cavallo to resign. After three interim presidents in 10 days, President Duhalde was appointed and quickly announced sovereign default, suspended debt service payments to external creditors, established exchange controls, 'pesofied' the economy, and declared an official end to the Convertibility Law.[28] The recession worsened, as peso interest rates climbed to about 50 percent and roughly $20 billion in capital fled the country in 2001.[29]

According to Congressional testimony, since the peso was floated on February 12, 2002, it has lost more than half of its former value.[30] At the time of writing, the crisis is not yet over, as investors and Argentine citizens alike have little confidence in the Argentine government. Many economists, such as Steve Hanke and Kurt Schuler, are in favor of dollarization for Argentina to restore this confidence. Others argue that Argentina needs to reestablish a floating exchange rate regime.

Exchange Rate Determinants and Trade

Exchange rate shifts can significantly affect trade flows because they alter the relative prices of goods and services. For example, if demand for U.S. products rises, then U.S. exports will increase. This would cause the dollar to appreciate. This U.S. dollar appreciation (foreign currency depreciation) would raise the relative price of U.S. goods in foreign markets, thus discouraging U.S. exports, and likewise lower the relative price of foreign goods in the U.S. market, thus encouraging U.S. imports. The converse is true when the dollar depreciates.[31] If the value of the U.S. dollar falls (depreciates), the price competitiveness of U.S. goods in foreign markets is enhanced and the price competitiveness of foreign goods in the U.S. market is diminished.[32]

A significant source of uncertainty in conducting international transactions arises from exchange rate fluctuations as the relative value between the buyer's and the seller's currencies may change between the time a transaction is concluded and the time payment is received, posing a gain to one party and a loss to the other (absent hedging[33] by either party). There are several ways to reduce or transfer the risk of an adverse price change. One of the simplest is for an exporter/importer to quote prices and establish payment terms in one's own currency, thus placing the burden and risk on the other party. This is a practical approach when one's own currency is freely convertible and stable. Hence, U.S. companies derive a number of benefits from the fact that the U.S. dollar is the preferred international currency for both international trade and financial transactions. Benefits include the convenience factor enabling U.S. exporters, importers, borrowers, and

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[27] (...continued)
was depreciating against the dollar, this Law essentially confiscated the property of peso holders. The Argentine courts subsequently ruled this pesofication illegal in September 2002. Steve Hanke, *Argentina: Caveat Lector*, speech prepared for the Cato Institute's 20th Annual Monetary Conference , Oct. 17, 2002.

[28] Ibid.

[29] Ibid.

[30] Steve H. Hanke, "Argentina's Current Political-Economic Crisis," Statement before the Subcommittee on International Monetary Policy and Trade, Committee on Financial Services, U.S. House of Representatives, Mar. 5, 2002.

[31] Although this discussion has focused on merchandise trade, exchange rate changes also affect international capital flows by altering the present value of cash flows from capital investments and from purchases and sales of foreign intangible assets.

[32] This effect takes some time to operate. In fact, as prices may shift before trade volumes do, trade data (based on value) can show the opposite of the expected effect for a period of months.

[33] Hedging is another way to reduce or transfer currency risk.

lenders to deal in their own currency; increased business for U.S. banks and other financial institutions; and the ability to borrow in international capital markets in their home currency.[34]

Changes in the Nominal and Real Value of the Dollar

Annual averages of nominal exchange rates for selected foreign currencies against the U.S. dollar during 1998-2002 are shown in table F-2. Over this period, currencies of some selected trade partners depreciated against the dollar and, thus, made U.S. goods more expensive in certain foreign markets, while others appreciated against the dollar. The Brazilian real depreciated by 24.2 percent in 2002, following a 28.6-percent depreciation in 2001. The Mexican peso and the Canadian dollar also depreciated against the U.S. dollar in 2002, as both currencies were impacted by the weaker performance of the U.S. economy.[35] In contrast, the Korean won and the British pound appreciated against the dollar, by 3.2 percent and 4.2 percent, respectively, due to resilient domestic demand despite a global downturn.[36] The euro appreciated by 5.3 percent against the dollar, while the Japanese yen depreciated by 3.0 percent.

The annual real (inflation-adjusted) value of the dollar decreased 1.0 percent against an index of seven major currencies[37] in 2002 (table F-3) due to weak economic performance, low interest rates and stock prices, concerns about corporate governance, and fears of a possible war with Iraq.[38] The average annual foreign-exchange value of the U.S. dollar against a broad group of 26 trade partners' currencies rose in 2002, as the dollar appreciated by 0.9 percent in nominal terms and by 1.9 percent in real terms.

Yen depreciation

The Japanese currency depreciated by 3.0 percent in 2002 on an average annual basis, following a 12.8-percent depreciation in 2001 (see table F-2) due to weaknesses in the Japanese economy.[39] In contrast, the yen appreciated 11.0 percent against the dollar from the beginning to the end of 2002, as shown in the following tabulation:[40]

Time frame	Exchange rate (*yen per dollar*)
Beginning of 2002	132.02
First quarter (average)	132.42
Second quarter (average)	126.92
Third quarter (average)	119.27
Fourth quarter (average)	122.52
End of year	118.75
Low (February 8)	134.77
High (July 16)	115.71

[34] Council of Economic Advisors (CEA), *Economic Report of the President,* together with the *Annual Report of the Council of Economic Advisors,* Feb. 1999, pp. 299-300.

[35] Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, Aug. 2002.

[36] Ibid.

[37] Major currencies are those that circulate widely outside the issuing economy; see footnote 2 of table F-4.

[38] Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, Aug. 2002, and Federal Reserve Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations*, (various issues).

[39] Federal Reserve Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations*, Jan.-Mar. 2001, p. 2.

[40] Federal Reserve Board, *Federal Reserve Bulletin*, (various months) 2000-2001; and compiled from official statistics of the Federal Reserve found at *http://www.federalreserve.gov/releases/H10/hist/dat96_ja.txt.*

Table F-2
Nominal exchange rates for selected trade partners, annual averages, 1998-2002

Country (currency)	1998	1999	2000	2001	2002
	Exchange rate (foreign currency per U.S. dollar)[1]				
Brazil (real)	1.1605	1.8207	1.8301	2.3527	2.9213
Canada (dollar)	1.4836	1.4858	1.4855	1.5487	1.5704
China (yuan)	8.3008	8.2781	8.2784	8.2770	8.2770
European Monetary Union (euro)	(2)	0.9392	1.0850	1.1171	1.0578
Japan (yen)	130.99	113.73	107.80	121.57	125.22
Korea (won)	1,400.40	1,189.84	1,130.90	1,292.01	1250.31
Malaysia (ringgit)	3.9254	3.8000	3.8000	3.8000	3.8000
Mexico (peso)	9.152	9.553	9.459	9.337	9.663
Thailand (baht)	41.262	37.887	40.210	44.532	43.019
United Kingdom (pound)	0.6037	0.6185	0.6609	0.6946	0.6656
	Change over the preceding period *(percent)*				
Brazil (real)	7.7	56.9	0.5	28.6	24.2
Canada (dollar)	7.1	0.1	(3)	4.3	1.4
China (yuan)	-0.2	-0.3	(3)	(3)	0
European Monetary Union (euro)	(2)	(2)	15.5	2.9	-5.3
Japan (yen)	8.2	-13.2	-5.2	12.8	3.0
Korea (won)	47.8	-15.0	-5.0	14.3	-3.2
Malaysia (ringgit)	39.3	-3.2	0	0	0
Mexico (peso)	15.6	4.4	-1.0	-1.3	3.5
Thailand (baht)	32.8	-8.2	6.1	10.7	-3.4
United Kingdom (pound)	-1.1	2.5	6.9	5.1	-4.2

[1] Each country's currency is displayed to the number of decimal places as reported in the reference source, rather than being rounded to a common decimal place, to avoid any loss of significant digits for particular currencies.
[2] The euro was introduced in January 1999 as a replacement for certain EU national currencies. More information on the conversion exchange rates can be found at the European Central Bank web site, *www.ecb.int.*.
[3] Less than 0.05 percent.

Source: Calculated from official statistics of the Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, (various months) 2001-02.

Table F-3
Nominal and real weighted average indexes of foreign-exchange value of the U.S. dollar versus currencies of groups of trade partners, annual averages, 1998-2002

Index (base period = 100)	**1998**	**1999**	**2000**	**2001**	**2002**
			Nominal		
Broad[1] (Jan. 1997=100)	116.48	116.87	119.93	126.09	127.26
Major currencies[2] (Mar. 1973=100)	95.79	94.07	98.34	104.32	103.09
Other important trading partners[3] (Jan. 1997=100)	126.03	129.94	130.26	136.34	141.20
	Nominal change over the preceding period *(percent)*				
Broad[1] (Jan. 1997=100)	11.5	0.3	2.6	5.1	0.9
Major currencies[2] (Mar. 1973=100)	5.0	-1.8	4.5	6.1	-1.2
Other important trading partners[3] (Jan. 1997=100)	20.4	3.1	0.2	4.7	3.6
			Real		
Broad[1] (Mar. 1973=100)	99.21	98.53	102.19	108.90	110.91
Major currencies[2] (Mar. 1973=100)	97.24	96.68	102.86	110.68	109.55
Other important trading partners[3] (Mar. 1973=100)	108.10	107.22	107.67	114.58	122.01
	Real change over the preceding period *(percent)*				
Broad[1] (Mar. 1973=100)	8.6	-0.7	3.7	6.6	1.9
Major currencies[2] (Mar. 1973=100)	5.4	-0.6	6.4	7.6	-1.0
Other important trading partners[3] (Mar. 1973=100)	12.8	-0.8	0.4	6.4	6.5

[1] Trade-weighted average of the foreign-exchange value of the U.S. dollar against the currencies of a broad group of U.S. trade partners. The weight for each currency is computed as an average of U.S. bilateral import shares from and export shares to the issuing partner and of a measure of the importance to U.S. exporters of that partner's trade in third-party markets. The broad index consists of 26 currencies (35 before the introduction of euro on Jan. 1, 1999) of both the major currencies index and other important trading partners index.

[2] Trade-weighted average of the foreign-exchange value of the U.S. dollar against a subset of broad index currencies that circulate widely outside the issuing partner's economy. The weight for each currency is its broad index weight scaled so that the weights of the subset of currencies in the index sum to one. The major currencies index consists of 7 currencies (16 before the introduction of the euro on Jan. 1, 1999): euro-area countries (Austria, Belgium-Luxembourg (treated as a single currency), Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, and Spain) and Australia, Canada, Japan, Sweden, Switzerland, and the United Kingdom.

[3] Trade-weighted average of the foreign-exchange value of the U.S. dollar against a subset of broad index currencies that do not circulate widely outside the issuing partner's economy. The weight for each currency is its broad index weight scaled so that the weights of the subset of currencies in the index sum to one. The other important trading partners index consists of 19 currencies (Argentina, Brazil, Chile, China, Colombia, Hong Kong, India, Indonesia, Israel, Korea, Malaysia, Mexico, the Philippines, Singapore, Taiwan, Thailand, Russia, Saudi Arabia, and Venezuela).

Source: Calculated from official statistics of the Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, (various months) 2001-02.

During the first quarter of 2002, the yen depreciated by 0.5 percent against the dollar,[41] following a sell-off of the yen in January-February due to reduced expectations for the use of public funds to recapitalize banks, the upcoming removal of the government guarantee for bank time deposits, and Standard & Poor's downgrade of several major Japanese banks.[42] As the Japanese government expressed a commitment to stabilize markets, investor confidence grew and the yen began to appreciate in the second half of the quarter.[43]

The yen continued its rising trend in the second quarter, appreciating 10.1 percent. Although there was a mild increase in Japanese economic activity during April-June, most of this increase can be attributed to the broad depreciation of the dollar.[44]

In the third quarter of 2002, the yen depreciated 1.4 percent, as concerns grew that slowing global growth would delay an economic recovery in Japan.[45] Investors focused on the heightened policy debate in Japan regarding measures to address deflation and financial sector problems, as the Government of Japan announced a cabinet reshuffle, a study of measures that may help stabilize financial markets, and a new anti-deflation package.[46]

The yen appreciated by 3.2 percent against the dollar in the fourth quarter. However, the yen depreciated against many other currencies, hitting an all-time low against the euro in late December 2002. The dollar's depreciation can be explained by fears of a possible war with Iraq, renewed concerns over the pace of the U.S. economic recovery, and rising oil prices.[47]

Euro appreciation

The euro appreciated by 5.3 percent in 2002 on an average annual basis, after continually depreciating from its inception at the beginning of 1999 through 2001 (see table F-2).[48] The EU's currency appreciated 16.1 percent against the dollar from the beginning to the end of 2002, as shown by the following tabulation:[49]

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[41] Percent change in the value of the currency is measured from the start of the quarter until the final day of the quarter, and is not based on average quarterly values.

[42] Ibid., p. 5.

[43] Federal Reserve Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations*, Jan.-Mar. 2002, p. 6.

[44] Federal Reserve Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations*, Apr.-June 2002, p. 6.

[45] Ibid., July-Sept. 2002, p. 5.

[46] Ibid., Oct.-Dec. 2002, p. 7.

[47] Ibid, pp. 3-4.

[48] For information about the performance of the euro in 1999, see Robert Hughes, "Background on Exchange Rate Shifts," *Shifts in Merchandise Trade in 1999*, Investigation No. 332-345, USITC publication 3353, Sept. 2000, pp. G-1 through G-13.

[49] Federal Reserve Board, *Federal Reserve Bulletin*, (various months) 2000-2001; and compiled from official statistics of the Federal Reserve found at *http://www.federalreserve.gov/releases/H10/hist/dat96_eu.txt*.

Time frame	Exchange rate (*euros per dollar*)
Beginning of 2002	1.1073
First quarter (average)	1.1402
Second quarter (average)	1.0887
Third quarter (average)	1.0161
Fourth quarter (average)	0.9997
End of year	0.9537
Low (January 31)	1.1636
High (December 31)	0.9537

The value of the euro at its creation was just under $1.1668 or 0.8570 euros per dollar.[50] However, it soon began to weaken against the dollar amidst indications of slower economic growth in the euro-area.[51] Weakening of the euro in 2000 was broad based as investors diversified away from the euro area.[52] This trend continued into 2001. In 2002, however, the euro appreciated greatly against the dollar, as investors looked to diversify their assets away from the United States.

In the first quarter of 2002, the euro depreciated by 3.6 percent against the dollar, despite initial support because of the introduction of euro notes and coins. Investor expectations that economic recovery in the euro area would be slower than that in the United States, as well as concerns over how fiscal imbalances would be managed in the euro area after the European Commission's warning to Germany and Portugal over their widening budget deficits, worked toward the depreciation of the euro in the quarter.[53]

The exchange rate grew 10.7 percent in the second quarter, based on a steep fall of the dollar due to a sluggish economic recovery, a large and growing current account deficit, sharp declines in U.S. stock prices, and low short-term U.S. interest rates. Increasing interest rates differentials between the euro area and the United States supported the euro during the period.[54]

In the third quarter, the euro depreciated slightly, by 0.1 percent against the dollar. The euro rose above the 1.0 euros per dollar early in the quarter, before falling due to damage from summer floods, rising oil prices, and concern over the financial health of the insurance and banking sectors in the euro-area.[55] Concerns associated with the anniversary of the September 11,2001 terrorist attacks and the possibility of military conflict with Iraq sparked investor nervousness across markets, as did sharp equity market declines, and an increasingly negative outlook for U.S. and global growth.[56]

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[50] European Commission, "Official ECU Exchange Rates Calculated and Published by the European Commission," found at *http://www.europa.eu.int/comm/economy_finance/xecud.htm*, retrieved Aug. 4, 2000.

[51] Institute for International Economics, Hot Topics in International Economics, *The Weak Euro*, found at *http://www.iie.com/topics/euro/hoteuro.htm*

[52] Federal Reserve Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations*, Jan.-Mar. 2000, p. 3.

[53] Federal Reserve Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations*, Jan.-Mar. 2002, p. 4.

[54] Ibid., Apr.-June 2002, pp. 1-4.

[55] Ibid, July-Sept. 2002, p. 6.

[56] Ibid., p. 1.

The euro appreciated by almost 6.0 percent against the dollar during the fourth quarter, with most of this rise occurring in December. The euro again benefitted from the higher interest rates in the euro area compared with those of the United States, whereas the dollar lost value due in part to security concerns.

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APPENDIX G
Status of WTO Cases Involving the United States

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Table G-1
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS2	Standards for Reformulated and Conventional Gasoline	January 1995	Venezuela	United States	Completed-Compliance Notified
WT/DS3	Measures Affecting the Testing and Inspection of Agricultural Products	April 1995	United States	Korea	Inactive
WT/DS4	Standards for Reformulated and Conventional Gasoline	January 1995	Brazil	United States	Completed-Compliance Notified
WT/DS5	Measures Concerning the Shelf-Life of Products	May 1995	United States	Korea	Settled
WT/DS6	Imposition of Import Duties on Automobiles from Japan under Sections 301 and 304 of the Trade Act of 1974	July 1995	Japan	United States	Settled
WT/DS11	Taxes on Alcoholic Beverages	September 1995	United States	Japan	Completed-Compliance Notified
WT/DS13	Duties on Imports of Grains	July 1995	United States	European Union	Settled
WT/DS16	Regime for the Importation, Sale, and Distribution of Bananas	September 1995	Guatemala, Honduras, Mexico, United States	European Union	Inactive
WT/DS21	Measures Affecting the Importation of Salmonids	November 1995	United States	Australia	Settled
WT/DS24	Restrictions on Imports of Cotton and Man-Made Fibre Underwear	November 1996	Costa Rica	United States	Completed-Compliance Notified
WT/DS26	Measures Affecting Meat and Meat Products (Hormones)	April 1996	United States	European Union	Completed-Retaliation Authorized
WT/DS27	Regime for the Importation, Sale, and Distribution of Bananas	February 1996	Ecuador, Guatemala, Honduras, Mexico, United States	European Union	Completed-Compliance Pending
WT/DS28	Measures Concerning Sound Recordings	February 1996	United States	Japan	Settled

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS31	Certain Measures Concerning Periodicals	March 1996	United States	Canada	Completed-Compliance Notified
WT/DS32	Measures Affecting Imports of Women's and Girls' Wool Coats	March 1996	India	United States	Settled
WT/DS33	Measure Affecting Imports of Woven Wool Shirts and Blouses	March 1996	India	United States	Completed-No Compliance Needed
WT/DS35	Export Subsidies in Respect of Agricultural Products	March 1996	Argentina, Australia, Canada, New Zealand, Thailand, United States	Hungary	Settled
WT/DS36	Patent Protection for Pharmaceutical and Agricultural and Chemical Products	April 1996	United States	Pakistan	Settled
WT/DS37	Patent Protection Under the Industrial Property Act	April 1996	United States	Portugal	Settled
WT/DS38	The Cuban Liberty and Democratic Solidarity Act	May 1996	European Union	United States	Inactive
WT/DS39	Tariff Increases on Products from the European Communities	April 1996	European Union	United States	Inactive
WT/DS41	Measures Affecting the Testing and Inspection of Agricultural Products	May 1996	United States	Korea	Inactive
WT/DS43	Taxation of Foreign Film Revenues	June 1996	United States	Turkey	Settled
WT/DS44	Measures Affecting Consumer Photographic Film and Paper	June 1996	United States	Japan	Completed-No Compliance Needed
WT/DS45	Measures Affecting Distribution Services	June 1996	United States	Japan	Inactive
WT/DS49	Anti-Dumping Investigation Regarding Imports of Fresh or Chilled Tomatoes from Mexico	July 1996	Mexico	United States	Settled

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS50	Patent Protection for Pharmaceutical and Agricultural Chemical Products	July 1996	United States	India	Completed-Compliance Notified
WT/DS52	Certain Measures Affecting Trade and Investment in the Automotive Sector	August 1996	United States	Brazil	Settled
WT/DS56	Certain Measures Affecting Imports of Footwear, Textiles, Apparel, and Other Items	October 1996	United States	Argentina	Completed-Compliance Notified
WT/DS57	Textiles, Clothing, and Footwear Import Credit Scheme	October 1996	United States	Australia	Settled
WT/DS58	Import Prohibition of Certain Shrimp and Shrimp Products	October 1996	India, Malaysia, Pakistan, Thailand	United States	Completed-Compliance Notified
WT/DS59	Certain Measures Affecting the Automobile Industry	October 1996	United States	Indonesia	Completed-Compliance Notified
WT/DS61	Import Prohibition of Certain Shrimp and Shrimp Products	October 1996	Philippines	United States	Inactive
WT/DS62	Customs Classification of Certain Computer Equipment	November 1996	United States	European Union	Completed-No Compliance Needed
WT/DS63	Antidumping Measures on Imports of Solid Urea from the Former German Democratic Republic	December 1996	European Union	United States	Inactive
WT/DS65	Certain Measures Affecting Trade and Investment in the Automotive Sector	January 1997	United States	Brazil	Settled
WT/DS67	Customs Classification of Certain Computer Equipment	February 1997	United States	United Kingdom	Completed-No Compliance Needed
WT/DS68	Customs Classification of Certain Computer Equipment	February 1997	United States	Ireland	Completed-No Compliance Needed
WT/DS74	Measures Affecting Pork and Poultry	April 1997	United States	Philippines	Settled
WT/DS76	Measures Affecting Agricultural Products	April 1997	United States	Japan	Completed-Compliance Notified

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS78	Safeguard Measures Against Imports of Broom Corn Brooms	April 1997	Colombia	United States	Inactive
WT/DS80	Measures Affecting Commercial Telephone Directory Services	May 1997	United States	Belgium	Inactive
WT/DS82	Measures Affecting the Grant of Copyright and Neighboring Rights	May 1997	United States	Ireland	Settled
WT/DS83	Measures Affecting the Enforcement of Intellectual Property Rights	May 1997	United States	Denmark	Settled
WT/DS84	Taxes on Alcoholic Beverages	May 1997	United States	Korea	Completed-Compliance Notified
WT/DS85	Measures Affecting Textiles and Apparel Products	May 1997	European Union	United States	Settled
WT/DS86	Measures Affecting the Enforcement of Intellectual Property Rights	May 1997	United States	Sweden	Settled
WT/DS88	Measures Affecting Government Procurement	June 1997	European Union	United States	Inactive
WT/DS89	Antidumping Duties on Imports of Color Television Receivers from Korea	July 1997	Korea	United States	Inactive
WT/DS90	Quantitative Restrictions on Imports of Agricultural, Textile, and Industrial Products	July 1997	United States	India	Completed-Compliance Notified
WT/DS95	Measures Affecting Government Procurement	July 1997	Japan	United States	Inactive
WT/DS97	Countervailing Duty Investigation of Imports of Salmon from Chile	August 1997	Chile	United States	Inactive
WT/DS99	Anti-Dumping Duty on Dynamic Random Access Memory Semiconductors (DRAMS) of One Megabit or Above from Korea	August 1997	Korea	United States	Completed-Compliance Notified
WT/DS100	Measures Affecting Imports of Poultry Products	August 1997	European Union	United States	Inactive

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS101	Antidumping Investigation of High Fructose Corn Syrup (HFCS) from the United States	September 1997	United States	Mexico	Inactive
WT/DS102	Measures Affecting Pork and Poultry	October 1997	United States	Philippines	Settled
WT/DS103	Measures Affecting the Importation of Milk and the Exportation of Dairy Products	October 1997	United States	Canada	Completed-Compliance Pending
WT/DS104	Measures Affecting the Exportation of Processed Cheese	October 1997	United States	European Union	Inactive
WT/DS106	Subsidies Provided to Producers and Exporters of Automotive Leather	November 1997	United States	Australia	Inactive
WT/DS108	Tax Treatment for "Foreign Sales Corporations"	November 1997	European Union	United States	Completed-Retaliation Authorized
WT/DS109	Taxes on Alcoholic Beverages	December 1997	United States	Chile	Inactive
WT/DS111	Tariff Rate Quota for Imports of Groundnuts	December 1997	Argentina	United States	Inactive
WT/DS115	Measures Affecting the Grant of Copyright and Neighboring Rights	January 1998	United States	European Union	Settled
WT/DS118	Harbour Maintenance Tax	February 1998	European Union	United States	Inactive
WT/DS124	Enforcement of Intellectual Property Rights for Motion Pictures and Television Programs	April 1998	United States	European Union	Settled
WT/DS125	Enforcement of Intellectual Property Rights for Motion Pictures and Television Programs	April 1998	United States	Greece	Settled
WT/DS126	Subsidies Provided to Producers and Exporters of Automotive Leather	May 1998	United States	Australia	Completed-Compliance Notified
WT/DS127	Certain Income Tax Measures Constituting Subsidies	May 1998	United States	Belgium	Inactive
WT/DS128	Certain Income Tax Measures Constituting Subsidies	May 1998	United States	Netherlands	Inactive

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS129	Certain Income Tax Measures Constituting Subsidies	May 1998	United States	Greece	Inactive
WT/DS130	Certain Income Tax Measures Constituting Subsidies	May 1998	United States	Ireland	Inactive
WT/DS131	Certain Income Tax Measures Constituting Subsidies	May 1998	United States	France	Inactive
WT/DS132	Antidumping Investigation of High Fructose Corn Syrup (HFCS) from the United States	May 1998	United States	Mexico	Completed-Compliance Notified
WT/DS136	Anti-Dumping Act of 1916	June 1998	European Union	United States	Completed-Compliance Pending
WT/DS138	Imposition of Countervailing Duties on Certain Hot-Rolled Lead and Bismuth Carbon Steel Products Originating in the United Kingdom	June 1998	European Union	United States	Completed-No Compliance Needed
WT/DS144	Certain Measures Affecting the Import of Cattle, Swine, and Grain from Canada	September 1998	Canada	United States	Settled
WT/DS151	Measures Affecting Textiles and Apparel Products	November 1998	European Union	United States	Settled
WT/DS152	Sections 301-310 of the Trade Act of 1974	November 1998	European Union	United States	Completed-No Compliance Needed
WT/DS158	Regime for the Importation, Sale, and Distribution of Bananas II	January 1999	Guatemala, Honduras, Mexico, Panama, United States	European Union	Completed-Compliance Pending
WT/DS160	Section 110(5) of the U.S. Copyright Act	January 1999	European Union	United States	Completed-Retaliation Pending
WT/DS161	Measures Affecting Imports of Fresh, Chilled, and Frozen Beef	February 1999	United States	Korea	Completed-Compliance Notified
WT/DS162	Anti-Dumping Act of 1916	February 1999	Japan	United States	Completed-Compliance Pending

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS163	Measures Affecting Government Procurement	February 1999	United States	Korea	Completed-No Compliance Needed
WT/DS164	Measures Affecting Imports of Footwear	March 1999	United States	Argentina	Inactive
WT/DS165	Import Measures on Certain Products from the European Communities	March 1999	European Union	United States	Completed-No Compliance Needed
WT/DS166	Definitive Safeguard Measures on Imports of Wheat Gluten from the European Communities	March 1999	European Union	United States	Completed-Compliance Notified
WT/DS167	Countervailing Duty Investigation with Respect to Live Cattle from Canada	March 1999	Canada	United States	Inactive
WT/DS170	Patent Protection Term	May 1999	United States	Canada	Completed-Compliance Notified
WT/DS171	Patent Protection for Pharmaceuticals and Test Data Protection for Agricultural Chemicals	May 1999	United States	Argentina	Settled
WT/DS172	Measures Relating to the Development of a Flight Management System	May 1999	United States	European Union	Inactive
WT/DS173	Measures Relating to the Development of a Flight Management System	May 1999	United States	France	Inactive
WT/DS174	Protection of Trademarks and Geographical Indications for Agricultural Products and Foodstuffs	June 1999	United States	European Union	Inactive
WT/DS175	Measures Relating to Trade and Investment in the Motor Vehicle Sector	May 1999	United States	India	Completed-Compliance Notified
WT/DS176	Section 211 of the Omnibus Appropriations Act	July 1999	European Union	United States	Completed-Compliance Pending
WT/DS177	Safeguard Measure on Imports of Fresh, Chilled, or Frozen Lamb from New Zealand	July 1999	New Zealand	United States	Completed-Compliance Notified

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS178	Safeguard Measure on Imports of Fresh, Chilled, or Frozen Lamb from Australia	July 1999	Australia	United States	Completed-Compliance Notified
WT/DS179	Anti-Dumping Measure on Stainless Steel in Coils and Stainless Steel Sheet and Strip from Korea	July 1999	Korea	United States	Completed-Compliance Notified
WT/DS180	Reclassification of Certain Sugar Syrup	September 1999	Canada	United States	Inactive
WT/DS184	Anti-Dumping Measures on Certain Hot-Rolled Steel Products from Japan	November 1999	Japan	United States	Completed-Compliance Pending
WT/DS186	Section 337 of the Tariff Act of 1930 and Amendments Thereto	January 2000	European Union	United States	Inactive
WT/DS192	Transitional Safeguard Measure on Combed Cotton Yarn from Pakistan	April 2000	Pakistan	United States	Completed-Compliance Notified
WT/DS194	Measures Treating Export Restraints as Subsidies	May 2000	Canada	United States	Completed-No Compliance Needed
WT/DS195	Measures Affecting Trade and Investment in the Motor Vehicle Sector	May 2000	United States	Philippines	Settled
WT/DS196	Certain Measures on the Protection of Patents and Test Data	May 2000	United States	Argentina	Settled
WT/DS197	Measures on Minimum Import Prices	May 2000	United States	Brazil	Inactive
WT/DS198	Measures on Minimum Import Prices	May 2000	United States	Romania	Settled
WT/DS199	Measures Affecting Patent Protection	May 2000	United States	Brazil	Settled
WT/DS200	Section 306 of the Trade Act of 1974 and Amendments Thereto	June 2000	European Union	United States	Inactive
WT/DS202	Definitive Safeguard Measures on Imports of Circular Welded Carbon Quality Line Pipe from Korea	June 2000	Korea	United States	Completed-Compliance Notified

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS203	Measures Affecting Trade in Live Swine	July 2000	United States	Mexico	Inactive
WT/DS204	Measures Affecting Telecommunications Services	August 2000	United States	Mexico	Panel Proceeding
WT/DS206	Anti-Dumping and Countervailing Measures on Steel Plate from India	October 2000	India	United States	Completed-Compliance Pending
WT/DS210	Administration of Measures Establishing Customs Duties for Rice	October 2000	United States	Belgium	Settled
WT/DS212	Countervailing Measures Concerning Certain Products from the European Communities	November 2000	European Union	United States	Completed-Compliance Pending
WT/DS213	Countervailing Duties on Certain Corrosion-Resistant Carbon Steel Flat Products from Germany	November 2000	European Union	United States	Completed-Compliance Pending
WT/DS214	Definitive Safeguard Measures on Imports of Steel Wire Rod and Circular Welded Carbon Quality Line Pipe	November 2000	European Union	United States	Panel Proceeding / Inactive
WT/DS217	Continued Dumping and Subsidy Offset Act of 2000	December 2000	Australia, Brazil, Chile, European Union, India, Indonesia, Japan, Korea, Thailand	United States	Completed-Compliance Pending
WT/DS218	Countervailing Duties on Certain Carbon Steel Products from Brazil	December 2000	Brazil	United States	Inactive
WT/DS221	Section 129(c)(1) of the Uruguay Round Agreements Act	January 2001	Canada	United States	Completed-No Compliance Needed
WT/DS223	Tariff-Rate Quota on Corn Gluten Feed from the United States	January 2001	United States	European Union	Settled
WT/DS224	U.S. Patents Code	January 2001	Brazil	United States	Inactive
WT/DS225	Anti-Dumping Duties on Seamless Pipe from Italy	February 2001	European Union	United States	Inactive

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS234	Continued Dumping and Subsidy Offset Act of 2000	May 2001	Canada, Mexico	United States	Completed-Compliance Pending
WT/DS236	Preliminary Determinations With Respect to Softwood Lumber from Canada	August 2001	Canada	United States	Completed-Compliance Notified
WT/DS239	Certain Measures Regarding Anti-Dumping Methodology	September 2001	Brazil	United States	Pending Consultations
WT/DS243	Rules of Origin for Textiles and Apparel Products	January 2002	India	United States	Panel Report Issued
WT/DS244	Sunset Review of Anti-Dumping Duties on Corrosion-Resistant Carbon Steel-Flat Products from Japan	January 2002	Japan	United States	Panel Proceeding
WT/DS245	Measures Affecting the Importation of Apples	March 2002	United States	Japan	Panel Proceeding
WT/DS247	Provisional Anti-Dumping Measure on Imports of Certain Softwood Lumber from Canada	March 2002	Canada	United States	Pending Consultations
WT/DS248	Definitive Safeguard Measures on Imports of Certain Steel Products	March 2002	European Union	United States	Panel Proceeding
WT/DS249	Definitive Safeguard Measures on Imports of Certain Steel Products	March 2002	Japan	United States	Panel Proceeding
WT/DS250	Equalizing Excise Tax Imposed by Florida on Processed Orange and Grapefruit Products	March 2002	Brazil	United States	Panel Proceeding
WT/DS251	Definitive Safeguard Measures on Imports of Certain Steel Products	March 2002	Korea	United States	Panel Proceeding
WT/DS252	Definitive Safeguard Measures on Imports of Certain Steel Products	March 2002	China	United States	Panel Proceeding
WT/DS253	Definitive Safeguard Measures on Imports of Certain Steel Products	April 2002	Switzerland	United States	Panel Proceeding
WT/DS254	Definitive Safeguard Measures on Imports of Certain Steel Products	April 2002	Norway	United States	Panel Proceeding

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS257	Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada	May 2002	Canada	United States	Panel Proceeding
WT/DS258	Definitive Safeguard Measures on Imports of Certain Steel Products	May 2002	New Zealand	United States	Panel Proceeding
WT/DS259	Definitive Safeguard Measures on Imports of Certain Steel Products	May 2002	Brazil	United States	Panel Proceeding
WT/DS260	Provisional Safeguard Measures on Imports of Certain Steel Products	June 2002	United States	European Union	Panel Proceeding
WT/DS262	Sunset Reviews of Anti-Dumping and Countervailing Duties on Certain Steel Products from France and Germany	July 2002	European Union	United States	Pending Consultations
WT/DS264	Final Dumping Determination on Softwood Lumber from Canada	September 2002	Canada	United States	Panel Proceeding
WT/DS267	Subsidies on Upland Cotton	September 2002	Brazil	United States	Panel Proceeding
WT/DS268	Sunset Reviews of Anti-Dumping Measures on Oil Country Tubular Goods from Argentina	October 2002	Argentina	United States	Pending Consultations
WT/DS274	Definitive Safeguard Measures on Imports of Certain Steel Products	November 2002	Taiwan	United States	Pending Consultations
WT/DS275	Import Licensing Measures on Certain Agricultural Products	November 2002	United States	Venezuela	Pending Consultations
WT/DS276	Measures Relating to Exports of Wheat and Treatment of Imported Grain	December 2002	United States	Canada	Panel Proceeding
WT/DS277	Investigation of the International Trade Commission in Softwood Lumber from Canada	December 2002	Canada	United States	Pending Consultations
WT/DS280	Countervailing Duties on Imports of Steel Plate from Mexico	January 2003	Mexico	United States	Pending Consultations
WT/DS281	Anti-Dumping Measures on Imports of Cement from Mexico	February 2003	Mexico	United States	Pending Consultations

See footnote at end of table.

Table G-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States

Case No.	Case Title	Month & Year of Initiation	Complainant(s)	Respondent(s)	Status[1]
WT/DS282	Anti-Dumping Measures on Oil Country Tubular Goods (OCTG) from Mexico	February 2003	Mexico	United States	Pending Consultations
WT/DS285	Measures Affecting the Cross-Border Supply of Gambling and Betting Services	March 2003	Antigua and Barbuda	United States	Panel Proceeding
WT/DS291	Measures Affecting the Approval and Marketing of Biotech Products	May 2003	United States	European Union	Pending Consultations
WT/DS294	Law, Regulations and Methodology for Calculating Dumping Margins ("Zeroing")	June 2003	European Union	United States	Pending Consultations

[1] Status of WTO dispute settlement cases involving the United States:

Pending Consultations . . . . . The complainant country files its request for consultations with the WTO.
Panel Proceeding . . . . . The complainant country submits its first request for the formation of a panel.
Panel Report Issued . . . . . The panel publicly issues its final report.
Panel Report Adopted . . . . . The report is adopted by the Dispute Settlement Body.
Panel Report Appealed . . . . . The appealing party files its notice of appeal of the panel report.
AB Report Issued . . . . . The Appellate Body publicly issues its report.
Completed (No Compliance Needed) . . . . . The Dispute Settlement Body adopts the panel report and no announced appeal is forthcoming and the respondent has no obligation to take any compliance action; or adopts the Appellate Body report and the respondent has no obligation to take any compliance action.
Completed (Compliance Pending) . . . . . The Dispute Settlement Body adopts the panel report and no announced appeal is forthcoming and the respondent has an obligation to comply; or adopts the Appellate Body report and the respondent has an obligation to comply.
Completed (Compliance Notified) . . . . . The parties agree that the respondent has complied, the respondent states it has complied and the complainant does not dispute the compliance, or the complainant has no further recourse to appeal compliance.
Completed (Retaliation Pending) . . . . . The complainant requests authorization from the WTO for retaliation.
Completed (Retaliation Authorized) . . . . . Retaliation is authorized by the WTO.
Settled . . . . . At least one party publicly indicates that the dispute has been settled and any opposing party does not dispute that assertion, occurring before the completion of any formal panel reporting procedure.
Inactive . . . . . The Pending Consultations status has continued for more than 2 years without the convening of a panel.

Sources: World Trade Organization (WTO) Secretariat, *Overview of the State-of-Play of WTO Disputes* (Geneva: WTO Secretariat, February 2003), located at *www.wto.org*. Status of disputes compiled by Commission staff from *Overview of the State-of-Play of WTO Disputes*; individual dispute notices at the WTO Web site, located at *www.wto.org*; various reporting services; various notices posted on the Office of the United State Trade Representative (USTR) Web site, located at *www.ustr.gov*; and USTR's Dispute Settlement Update, located at *http://www.ustr.gov/enforcement/update.html* (various periodic updates).