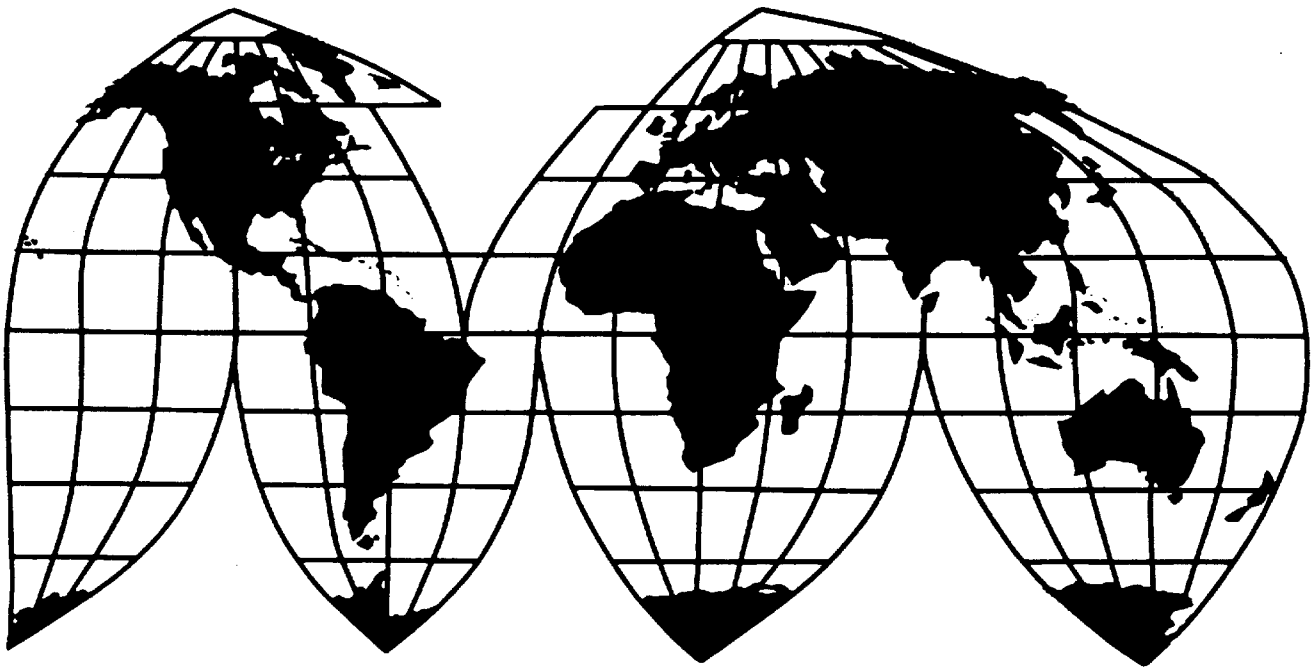
Shifts in U.S. Merchandise Trade in 1999

Investigation No. 332-345

Publication 3353 **September 2000**

U.S. 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 in order 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	Africa 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
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 Economic and Monetary Union
EU or EU-15	European Union
FACT	Food, Agriculture, Conservation, and Trade (Act)
FAIR	Federal Agriculture Improvement and Reform (Act)
FAS	Foreign Agriculture 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 Co-operation 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 U.S. Trade 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. Trade monitoring at the industry/commodity sector and subsector levels (the latter referred to as industry/commodity groups 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. Trade monitoring enables the USITC to better anticipate and address the issues of concern in its various roles under U.S. trade statutes.[1] This annual report analyzes significant merchandise trade shifts on an aggregate basis, on a bilateral basis, and at the industry/commodity-group level.[2] This series is part of the Commission's recurring reports that facilitate the development of core competencies and expertise, and which enable the Commission to provide objective and in-depth analysis to the Congress, other Federal agencies, and the general public related to emerging and complex international trade and economic issues.

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. These groups are aggregated into sectors. Appendix A shows the industry/commodity sectors, the industry/commodity groups in the sector, and HTS coverage by chapter, for each sector. Certain industry/commodity groups appearing in this year's report have been extensively revised into new groups, combined groups, or split-off groups, or by shifting HTS subheadings among groups to provide more pertinent product coverage.[3] Hence, production, consumption, and other basic information about the affected industry/commodity groups in Appendix B have been re-estimated for the full 5-year period (1995-99); likewise, trade data in that appendix have been adjusted over the full period to reflect these revised industry/commodity groups.[4] Moreover, titles of many industry/commodity groups have been modified to be more succinct and more descriptive of the product coverage.

U.S. trade shifts in services are the subject of a separate USITC annual report.[5] 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 1999, it is important to note that the United States

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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] This report analyzes changes in U.S. merchandise trade on a value basis. A principal reason is that aggregate trade data by quantity are generally not available. 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.

[3] For more details about specific changes in coverage of the industry/commodity groups, consult the respective industry/commodity sector coordinators listed at the beginning of chapters 5-14.

[4] Basic information and trade flow data for industry/commodity groups in app. B are described in further detail in the final paragraph of this chapter.

[5] See USITC, *Recent Trends in U.S. Services Trade,* investigation No. 332-345, USITC publication 3306, May 2000.

recorded a trade surplus in services of $96.2 billion,[6] which, when added to the $375.2-billion merchandise trade deficit, reduced the combined trade deficit (merchandise plus services) to $279.0 billion.

Chapter 1 of the report is the general introduction. Chapter 2 summarizes U.S. merchandise trade for 1999, in comparison with such trade for 1998. Coverage of the individual merchandise sectors include data showing U.S. export, import, and trade balance shifts by industry/commodity groups and sectors,[7] 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.

TRADE DATA NOTE

Although all import and export figures presented in this report are official statistics of the U.S. Department of Commerce (Commerce), these figures may be substantially different from the figures 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:

- Figures in this report include merchandise trade only; other reported figures may include services.
- Figures are not seasonally adjusted; the values of other reported figures may be so adjusted.
- Figures are not adjusted on a balance of payments (BOP) basis; the values of other reported figures 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 figures may be on a total export/f.a.s. basis, which include re-exports of foreign merchandise.
- Imports are on an imports-for-consumption/customs value basis; other reported import figures may be on a general imports/customs value basis.
- Exports and imports may not include all errata because certain errors may not be corrected by Commerce in time to be included in this report.
- Figures 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 figures are reassigned to the month of exportation/entry), and trade is reported as originally released by Commerce. Other reported figures 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 of other sources.

[6] Official statistics of the U.S. Department of Commerce (USDOC), revised estimate for Jan.-Dec. 1999, reported in USDOC, Bureau of Economic Analysis, *Survey of Current Business*, Table 1.1, Gross Domestic Product, Apr. 2000, p. 41.

[7] See ch. 3 of the 1993 annual report for long-range assessments of common factors affecting trends in selected industry/commodity sectors. USITC, *U.S. Trade Shifts in Selected Industries: 1993 Annual Report*, investigation No. 332-345, USITC publication 2805, Sept. 1994.

Chapter 3 analyzes noteworthy economic and trade developments in 1999 involving specific countries or country groups. This year's report considers the progress in overcoming the financial crises affecting East/Southeast Asia, Russia, and Brazil, and the implications for U.S. trade. Analysis of shifts in U.S. bilateral trade chiefly considers 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.

Chapter 4 analyzes factors affecting trends in selected industries/commodities that have been subject to specific monitoring requirements or recent bilateral agreements. In addition to describing the ongoing 5-year (sunset) review process for outstanding antidumping (AD) and countervailing duty (CVD) orders, this chapter also describes the World Trade Organization's (WTO's) dispute settlement process for adjudicating trade disputes among its members.

Chapters 5 through 14 address specific industry/commodity sectors, with each chapter providing a general sector overview and identifying significant shifts in merchandise trade within the sector.[8] In most cases, these chapters identify significant shifts in specific industry/commodity groups, and in this year's report, the review has focused on trade flows (exports, imports, or trade balance) exhibiting shifts exceeding $1.0 billion. Finally, a statistical summary table of industry/commodity groups, showing absolute and percent changes in a year-to-year comparison for 1998 and 1999, concludes each sector analysis chapter.

The report has seven appendixes. Appendix A lists the revised, specific industry/commodity sectors and groups that the Commission monitors. Appendix B provides official and estimated data (1995-99) for domestic consumption, production, employment, trade, and import penetration for the revised set of over 250 industry/commodity groups covered in this report. USITC international trade analysts have estimated certain components of these data, based on primary and secondary government and industry sources. The estimated data are subject to change either from future secondary sources, or from the detailed surveys the USITC often conducts in the course of statutory investigations or other work. Given the significant changes reflected in certain industry/commodity groups, basic information on establishments, employees, capacity utilization, and shipments or production have been re-estimated for the full 5-year period for the affected industry/commodity groups. Likewise, export and import flows were also adjusted over the full period to reflect trade in the revised industry/commodity groups. Appendix C ranks the industry/commodity groups exhibiting the most significant annual growth and decline in U.S. exports, imports, and trade balances in 1999. Appendix D lists the political entities included in the country groups shown in this report. Appendix E lists the current status of existing AD and CVD orders in the sunset review process. Appendix F lists the current status of existing WTO dispute settlement cases involving the United States. Finally, appendix G discusses the effect of exchange rate shifts on trade flows, summarizes the major shifts in exchange rates that occurred during 1999, highlighting the appreciation of the Japanese yen and depreciation of the European Monetary Union's euro, and examines the trend in certain countries that adopt the U.S. dollar as their official currency ("dollarization").

[8] Textiles and apparel are presented separately from footwear in ch. 9.

CHAPTER 2
U.S. Merchandise Trade Performance

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Highlights of U.S. merchandise trade performance in 1999 are presented first in this chapter, along with a survey of wider U.S. macroeconomic conditions. Next are analyses of key trade shifts in industry/commodity groups and sectors, and among bilateral and multilateral trade partners. Material in this chapter is compiled from more detailed analyses presented in subsequent chapters, including important bilateral trade and multilateral economic developments (chapter 3), and product-specific developments in the industry/commodity sectors (chapters 4-14) affecting U.S. merchandise trade.

During 1999, U.S. total merchandise trade (exports plus imports) grew by $117.3 billion (8 percent) to nearly $1.7 trillion, representing 77 percent of total U.S. combined trade (exports plus imports of merchandise plus services)[1] and 18 percent of U.S. gross domestic product. However, the U.S. merchandise trade deficit widened by $102.3 billion (38 percent) to $375.2 billion in 1999, up from the $272.9-billion deficit recorded the previous year (table 2-1). This rise in the merchandise trade deficit resulted from an increase in exports of $7.5 billion (1 percent) to $642.2 billion, that failed to keep pace with an increase in imports of $109.8 billion (12 percent) to just over $1.0 trillion.

At the macroeconomic level, continued strong U.S. and generally improving worldwide economic activity both exerted a noteworthy influence on U.S. merchandise trade performance in 1999.[2] Expansion of the U.S. economy for the ninth consecutive year in 1999 continued to buoy confidence of and spending by both consumers and businesses (albeit incremental increases in interest rates), which in turn spurred growing U.S. demand for both domestic and imported goods. Given low levels of unemployment, enhanced investment returns from the stock market, and rising real (inflation-adjusted) personal incomes, consumers were more willing to spend a higher portion of disposable incomes with a resulting decline in rates of personal savings. Likewise, business investment and expenditures were

[1] Total U.S. combined trade grew by $149.1 billion (7 percent) during 1999 to nearly $2.2 trillion. Official statistics of the U.S. Department of Commerce (USDOC).

[2] Information on the macroeconomic background for U.S. merchandise trade performance in 1999 was principally derived from Christopher L. Bach, "The Year 1999," *Survey of Current Business*, USDOC, Apr. 2000, pp. 154-192; Council of Economic Advisors, *Economic Report of the President*, together with the *Annual Report of the Council of Economic Advisers*, "The Macroeconomic Policy and Performance," Feb. 2000, pp. 49-95; Federal Reserve Board of Governors, *Monetary Policy Report Submitted to Congress*, Feb. 17, 2000; and Organization for Economic Cooperation and Development (OECD), "United States," *OECD Economic Outlook*, vol. 66 (Paris: OECD, Dec. 1999), pp. 39-43.

Table 2-1
U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major industry/commodity sectors, 1998 and 1999[1]

Item	1998	1999	Change, 1999 from 1998: Absolute	Change, 1999 from 1998: *Percent*
		Million dollars		
U.S. exports of domestic merchandise:				
Agricultural products	59,494	55,569	-3,924	-6.6
Forest products	23,901	24,070	169	0.7
Chemicals and related products	77,994	81,240	3,246	4.2
Energy-related products	12,346	11,957	-389	-3.2
Textiles and apparel	19,137	18,723	-415	-2.2
Footwear	720	693	-27	-3.7
Minerals and metals	40,559	39,890	-669	-1.6
Machinery	68,010	66,886	-1,124	-1.7
Transportation equipment	147,639	145,937	-1,702	-1.2
Electronic products	150,534	162,240	11,706	7.8
Miscellaneous manufactures	15,350	15,270	-81	-0.5
Special provisions	19,021	19,714	693	3.6
Total	634,705	642,189	7,484	1.2
U.S. imports for consumption:				
Agricultural products	47,328	49,469	2,141	4.5
Forest products	31,998	35,798	3,799	11.9
Chemicals and related products	70,715	80,172	9,457	13.4
Energy-related products	56,254	69,473	13,219	23.5
Textiles and apparel	67,809	71,269	3,461	5.1
Footwear	13,879	14,074	194	1.4
Minerals and metals	80,739	81,717	978	1.2
Machinery	74,929	79,143	4,214	5.6
Transportation equipment	173,941	203,661	29,720	17.1
Electronic products	200,924	228,469	27,545	13.7
Miscellaneous manufactures	54,219	60,312	6,093	11.2
Special provisions	34,913	43,879	8,966	25.7
Total	907,647	1,017,435	109,788	12.1
U.S. merchandise trade balance:				
Agricultural products	12,166	6,100	-6,065	-49.9
Forest products	-8,097	-11,727	-3,630	-44.8
Chemicals and related products	7,279	1,068	-6,211	-85.3
Energy-related products	-43,908	-57,516	-13,609	-31.0
Textiles and apparel	-48,671	-52,547	-3,875	-8.0
Footwear	-13,159	-13,380	-221	-1.7
Minerals and metals	-40,181	-41,827	-1,646	-4.1
Machinery	-6,919	-12,257	-5,338	-77.2
Transportation equipment	-26,302	-57,724	-31,422	-119.5
Electronic products	-50,390	-66,230	-15,840	-31.4
Miscellaneous manufactures	-38,869	-45,042	-6,173	-15.9
Special provisions	-15,892	-24,165	-8,273	-52.1
Total	-272,942	-375,246	-102,305	-37.5

[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.

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

further encouraged by robust corporate-sector performance, technological advances, and productivity gains. However, continued strength of the U.S. dollar against the currencies of its major trade partners (the Japanese yen being a notable exception) tended to lessen the competitiveness of U.S. merchandise in both domestic and foreign markets.[3] External economic factors such as differing growth rates among global economies, structural impediments to trade in key foreign markets, price shifts for certain widely traded products (e.g., crude petroleum), and technological change (e.g., increased demand for more advanced

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

computers and peripherals) likely had a greater direct influence on trade shifts in certain industry/commodity sectors as well as on U.S. bilateral trade flows with specific partners. Trade impacts were also evident in 1999 from recoveries in key regions of the world affected by financial crises in the recent past as domestic consumption began to rebound and as firms in these nations continued to seek outside markets for their output.[4]

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

U.S. Trade Balance

Widening of the U.S. merchandise trade deficit during 1999 primarily reflects significant shifts in key industry/commodity groups shown in tables C-1 through C-6 in appendix C. Trade shifts contributing to a wider deficit were decreased exports (table C-2) of aircraft, spacecraft, and related equipment (hereafter aircraft) and construction and mining equipment. Also contributing to a wider deficit were substantial growth in imports (table C-3) of motor vehicles; computers, peripherals, and parts (hereafter computer hardware); crude petroleum; medicinal chemicals (hereafter pharmaceuticals); and telephone and telegraph apparatus. In contrast, notable counter-shifts somewhat tempered the deficit growth during this period, particularly increased exports (table C-1) of semiconductors and integrated circuits (hereafter semiconductors) and decreased imports (table C-4) of steel mill products.

Overall, the predominant industry/commodity groups contributing to the 1999 deficit were motor vehicles, apparel, computer hardware, and crude petroleum (table C-6). Trade deficits in these four groups together accounted for $219.5 billion, or about 58 percent of the U.S. merchandise trade deficit in 1999, a decrease from the previous year when they accounted for a roughly 66-percent share. In contrast, the largest surplus was again recorded for aircraft at $33.2 billion (table C-6). These five groups were not only a large component of the 1999 U.S. trade position, but also exhibited significant shifts in exports, imports, or both during 1999.

All major industry/commodity sectors, with the exceptions of agricultural products and chemicals and related products, continued to register trade deficits in 1999 (table 2-1).[5] However, trade surpluses in these two sectors shrank, by almost $6.1 billion (50 percent) to $6.1 billion for agricultural products, and by $6.2 billion (85 percent) to $1.1 billion for chemicals and related products. Further, all sectors experienced erosion of their trade balances in 1999; the largest occurred in transportation equipment in which the deficit widened by $31.4 billion (120 percent) to $57.7 billion, accelerating the trend in the previous year. Other sectors exhibiting significant widening of their deficits were electronic products, which grew by $15.8 billion (31 percent) to $66.2 billion, and energy-related products, which grew by $13.6 billion (31 percent) to $57.5 billion in 1999.

U.S. Exports

U.S. merchandise exports declined in 1999 for most all industry/commodity sectors, except electronic products, chemicals and related products, and forest products (table 2-1). However, the overall beneficial impact of export increases by these sectors on the merchandise deficit was somewhat mitigated

[4] See ch. 3 for a discussion about the progress towards recovery in 1999 from financial conditions of the affected East/Southeast Asian countries, Russia, and Brazil.

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

by decreased exports of agricultural products, transportation equipment, and machinery. The most significant export shifts (exceeding $1.0 billion) in 1999 (in descending order of shifts) were:

Export sector	Change, 1999 from 1998 (*billion dollars*)	(*percent*)	1999 export level (*billion dollars*)
Increases:			
Electronic products	11.7	8	162.2
Chemicals and related products	3.2	4	81.2
Decreases:			
Agricultural products	-3.9	-7	55.6
Transportation equipment	-1.7	-1	145.9
Machinery	-1.1	-1	66.9

Together, these five sectors recorded a net export gain totaling $8.2 billion, which slightly exceeded the net increase of all U.S. merchandise exports of $7.5 billion in 1999. 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 4-14.

U.S. Imports

U.S. merchandise imports rose in 1999 for every industry/commodity sector (table 2-1). A substantial portion of the $109.8-billion increase in merchandise imports was accounted for by import shifts exceeding $5.0 billion in five sectors (in descending order of shifts):

Import sector	Change, 1999 from 1998 (*billion dollars*)	(*percent*)	1999 import level (*billion dollars*)
Transportation equipment	29.7	17	203.7
Electronic products	27.5	14	228.5
Energy-related products	13.2	24	69.5
Chemicals and related products	9.5	13	80.2
Miscellaneous manufactures	6.1	11	60.3

Together, these five sectors accounted for $86.0 billion (78 percent) of the net increase in merchandise imports in 1999. 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 4-14.

U.S. BILATERAL/MULTILATERAL TRADE

Significant Bilateral/Multilateral Shifts

Growth of the U.S. merchandise trade deficit during 1999 also reflected significant shifts with certain key trade partners. Table 2-2 shows U.S. bilateral merchandise trade with its 10 largest partners

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, 1998 and 1999[1]

Item	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
		Million dollars		
U.S. exports of domestic merchandise:				
Canada	137,768	145,731	7,964	5.8
Mexico	75,369	81,381	6,011	8.0
Japan	54,846	54,310	-535	-1.0
China	13,908	12,585	-1,324	-9.5
Germany	25,026	25,151	126	0.5
United Kingdom	36,714	35,815	-899	-2.4
Korea	15,979	22,038	6,059	37.9
Taiwan	16,923	17,640	716	4.2
France	16,676	17,654	978	5.9
Singapore	14,218	14,842	624	4.4
All Other	227,277	215,041	-12,236	-5.4
Total	634,705	642,189	7,484	1.2
EU-15	140,217	142,029	1,812	1.3
OPEC	24,212	19,397	-4,814	-19.9
Latin America	135,852	133,944	-1,909	-1.4
CBERA	19,200	19,030	-171	-0.9
Asia	154,902	159,371	4,469	2.9
Sub-Saharan Africa	6,521	5,332	-1,190	-18.2
Central and Eastern Europe	2,787	2,650	-138	-4.9
U.S. imports for consumption:				
Canada	174,685	198,242	23,557	13.5
Mexico	93,017	109,018	16,001	17.2
Japan	121,313	130,951	9,638	7.9
China	70,815	81,522	10,707	15.1
Germany	49,796	55,386	5,591	11.2
United Kingdom	34,617	38,773	4,156	12.0
Korea	23,701	31,152	7,451	31.4
Taiwan	32,985	35,057	2,072	6.3
France	23,371	25,400	2,029	8.7
Singapore	18,216	18,120	-96	-0.5
All Other	265,130	293,813	28,682	10.8
Total	907,647	1,017,435	109,788	12.1
EU-15	174,881	194,409	19,528	11.2
OPEC	34,336	38,892	4,557	13.3
Latin America	142,351	165,686	23,335	16.4
CBERA	17,124	19,365	2,240	13.1
Asia	346,893	382,342	35,449	10.2
Sub-Saharan Africa	13,359	13,750	391	2.9
Central and Eastern Europe	4,368	4,803	436	10.0
U.S. merchandise trade balance:				
Canada	-36,918	-52,511	-15,593	-42.2
Mexico	-17,648	-27,637	-9,989	-56.6
Japan	-66,467	-76,641	-10,173	-15.3
China	-56,907	-68,937	-12,031	-21.1
Germany	-24,770	-30,235	-5,465	-22.1
United Kingdom	2,097	-2,958	-5,055	(2)
Korea	-7,722	-9,115	-1,393	-18.0
Taiwan	-16,061	-17,417	-1,356	-8.4
France	-6,695	-7,747	-1,052	-15.7
Singapore	-3,997	-3,277	720	18.0
All Other	-37,853	-78,771	-40,918	-108.1
Total	-272,942	-375,246	-102,305	-37.5
EU-15	-34,664	-52,380	-17,716	-51.1
OPEC	-10,124	-19,495	-9,371	-92.6
Latin America	-6,499	-31,742	-25,243	-388.4
CBERA	2,076	-335	-2,411	(2)
Asia	-191,991	-222,971	-30,980	-16.1
Sub-Saharan Africa	-6,838	-8,418	-1,580	-23.1
Central and Eastern Europe	-1,580	-2,154	-574	-36.3

[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 1999.

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

(ranked by total trade) and U.S. multilateral merchandise trade with selected country groups[6] during 1999. The U.S. trade deficit widened by $10.0 billion or more with each of its five major partners--Canada, China, the European Union (EU), Japan, and Mexico[7]. Further 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.

Significance of International Trade in the Gross Domestic Product

To provide perspective about the significance of international trade in the U.S. economy, merchandise trade values are compared with various macroeconomic 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. The U.S. merchandise trade deficit with all worldwide trade partners combined was significantly higher in 1999--4.1 percent of the nominal U.S. GDP in that year--compared to ratios of 3.2 percent in 1998 and 2.7 percent in 1997. In 1999, U.S. merchandise trade deficits with its five major trade partners accounted for 3.0 percent of nominal U.S. GDP. Over the 5-year period 1995-99, imports of merchandise (goods) became a larger component of the U.S. economy, whereas exports of U.S. goods represented a smaller share of GDP in the past couple of years (table 2-4). Merchandise exports increased by $95.7 billion (18 percent) to $642.2 billion and imports grew by $277.7 billion (38 percent) during 1995-99 to $1.0 trillion, whereas nominal U.S. GDP rose $1.9 trillion (25 percent) over the same period to $9.3 trillion in 1999.

Table 2-3
U.S. bilateral merchandise trade balances with major partners, in dollars and as a ratio to nominal U.S. gross domestic product (GDP), 1999

Partner	Nominal GDP	U.S. exports	U.S. imports	U.S. merchandise trade balance	Ratio of the merchandise trade balance to U.S. GDP
	Billion dollars		*Million dollars*		*Percent*
European Union (EU)	8,182.5	142,029	194,409	-52,380	0.6
Japan	4,205.0	54,310	130,951	-76,641	0.8
China	1,016.8	12,585	81,522	-68,937	0.7
Canada	617.6	145,731	198,242	-52,511	0.6
Mexico	448.0	81,381	109,018	-27,637	0.3
United States	9,256.1	642,189	1,017,435	-375,246	4.1

Note.--Calculations based on unrounded data.

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. 2000, p. 41. Estimated GDP data for Canada, Japan, Mexico, EU, and China are from U.S. Department of State, *Country Reports on Economic Policy and Trade Practices*, 1999, found at Internet address http://www.state.gov/www/issues/economic/trade_reports/, retrieved June 6, 2000.

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

[7] In recent years, these countries consistently appeared as the top five U.S. partners in terms of total trade. The 15 member countries of the EU are considered together as a single U.S. trade partner, for no individual EU country was consistently ranked among the top five U.S. trade partners from year to year.

Table 2-4
Components of U.S. gross domestic product (GDP) and trade as a share of GDP, 1995-99

Component	1995	1996	1997	1998	1999
	Billion current dollars				
Personal consumption expenditures:					
Goods	2,087.0	2,190.6	2,284.6	2,407.1	2,601.7
Services	2,882.0	3,047.0	3,239.8	3,441.5	3,655.6
Gross private domestic investment	1,143.8	1,242.7	1,383.7	1,531.2	1,622.7
Exports:					
Goods	546.5	582.1	643.2	634.7	642.2
Services	234.7	255.8	279.0	285.1	299.3
Imports:					
Goods	739.7	790.5	862.4	907.6	1,017.4
Services	145.2	154.8	171.2	185.5	203.1
Government consumption expenditures and gross investment	1,372.0	1,421.9	1,481.0	1,529.7	1,630.1
Gross Domestic Product	**7,400.5**	**7,813.2**	**8,300.8**	**8,759.9**	**9,256.1**
	Percent				
Exports as a share of GDP:					
Goods	7.4	7.5	7.7	7.2	6.9
Services	3.2	3.3	3.4	3.3	3.2
Imports as a share of GDP:					
Goods	10.0	10.1	10.4	10.4	11.0
Services	2.0	2.0	2.1	2.1	2.2

Note.--Calculations based on unrounded data. Components of U.S. GDP may not sum to total, as merchandise (goods) 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. 2000, p. 41.

However, comparing U.S. global merchandise imports and exports as shares of GDP with similar ratios for its major trade partners (table 2-5, with Germany in place of the EU, due to data availability) indicates that, during 1995-99, global merchandise trade accounted for a smaller portion of GDP for the United States and Japan (the world's two largest economies), than for other major partners. In terms of exports as a share of GDP in 1999, the United States (7 percent) lagged significantly behind China (20 percent), Mexico and Germany (29 percent each), and Canada (37 percent). These U.S. trade partners continued to benefit from sustained growth in the U.S. economy that provided a strong market for their exports in recent years. Whereas the ratio of merchandise imports to GDP was slightly higher for the United States than for Japan in 1999 (11 percent compared with 6 percent), it was roughly one-third of the comparable ratio for Canada (34 percent) and Mexico (30 percent) and two-fifths the ratio for Germany (28 percent). Cumulative percentage-point growth in the share of each country's global merchandise export and import trade to its nominal GDP during 1995-99 (table 2-5) indicates that the economies of most leading trade partners are becoming increasingly more reliant on international merchandise trade than is that of the United States.[8]

[8] The noticeable percentage-point decline in China's merchandise trade as a share of its GDP during 1995-99 reflects the relatively high growth of its developing economy which outpaced the growth of its merchandise trade

(continued...)

Table 2-5
Merchandise trade as a share of gross domestic product (GDP) for the United States and major trade partners, 1995-99

(Percent)

Country	1995	1996	1997	1998	1999	Increase 1995-99
Exports as a share of GDP:						
United States	7.4	7.5	7.7	7.2	6.9	-0.5
Japan	8.6	8.9	9.8	9.9	9.4	0.8
China	21.2	18.5	20.2	19.1	19.5	-1.7
Canada	34.1	34.1	34.5	36.0	37.4	3.3
Mexico	27.8	28.7	27.5	28.3	29.2	1.5
Germany	21.7	22.4	24.5	25.8	28.9	7.3
Imports as a share of GDP:						
United States	10.0	10.1	10.4	10.4	11.0	1.0
Japan	6.5	7.6	7.3	6.7	6.3	-0.2
China	18.8	17.0	15.8	14.6	15.3	-3.5
Canada	29.8	29.0	31.8	33.9	34.4	4.7
Mexico	25.3	26.7	27.3	30.2	30.4	5.0
Germany	19.2	19.6	21.3	22.0	27.8	8.6

Note.--Calculations based on unrounded data.

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. 2000, p. 41. Estimated trade and GDP data for Japan, China, Canada, Mexico, and Germany are from U.S. Department of State, *Country Reports on Economic Policy and Trade Practices,* 1999, found at Internet address http://www.state.gov/www/issues/economic/trade_reports/, retrieved June 6, 2000.

[8] (...continued)
the yen.

CHAPTER 3
Significant Global Trade Developments and Shifts with Leading Partners

This chapter examines noteworthy economic and trade developments among selected U.S. trade partners during 1999. First, trade patterns with countries affected by recent financial crises have shifted noticeably with these partners' recoveries; the focus of the following section is on an assessment of progress towards recovery in the seven affected countries. Second, significant shifts in U.S. trade are noted with the top five U.S. trade partners; highlights of trade-related developments, analyses of trade trends, and tabulation of significant shifts in trade for each of the top five U.S. trade partners are presented in the latter section of this chapter.

REGIONAL FINANCIAL AND ECONOMIC CRISES[1]

Selected Economic and Financial Indicators

In 1999, Brazil, Indonesia, Korea, Malaysia, the Philippines, Russia, and Thailand[2] exhibited varying degrees of recovery from the economic and financial crises that engulfed their economies during 1997-98. Favorable indicators include positive economic growth, mostly stabilized or decreased rates of unemployment, generally stabilized or increased nominal exchange rates against the U.S. dollar, mostly increased world trade, and certain countries have had restored investor confidence (tables 3-1 and 3-2). The annual rate of change in real gross domestic product (GDP) for these countries in 1999 ranged from 0.2 percent in Indonesia to 10.7 percent in Korea, which contrasted significantly with the declines that each country registered in 1998 (table 3-1).

The Asian countries, with the exception of Indonesia, that experienced the financial "contagion" that swept through the region starting in Thailand in July 1997 had reportedly stabilized their economies and financial systems sufficiently by late 1999 for one observer to declare that the crisis appeared to be

[1] A review of the economic literature and government publications on this topic provided extensive references to document recent developments in each of the countries recovering from financial and economic crises. Selected references are cited herein to provide more detailed explanation.

[2] For more details about prior developments regarding the global financial crisis and trade developments for these countries, see Carl F. Seastrum, "East/Southeast Asia," *Shifts in U.S. Merchandise Trade in 1998*, investigation No. 332-245, USITC publication 3220, Aug. 1999, pp. 3-1 through 3-11, Linda White, "Russia," *Shifts in U.S. Merchandise Trade in 1998*, pp. 3-12 through 3-18, and Tracy Quilter, "Brazil," *Shifts in U.S. Merchandise Trade in 1998*, pp. 3-19 through 3-25. For additional detailed treatment of background to the financial crises by the USITC, see William L. Greene, "Korea's Foreign Exchange Crisis and Its Implications for U.S.-Korean Trade," *Industry Trade and Technology Review (ITTR)*, USITC publication 3182, Mar. 1999, pp. 1-15; Diane Manifold, "Japan's Financial Assistance to Asia," *International Economic Review* (*IER*), USITC publication 3254, Sept./Oct./Nov. 1999, p. 5; Karl Tsuji, "Thailand's Financial Crisis and Progress Towards Recovery--Implications for U.S. Trade," *ITTR*, USITC publication 3253, Oct. 1999, pp. 15-38; Michael P. Barry, *The Russian Financial Crises (sic): A Look Back*, Office of Economics working paper No. 2000-02-A, Feb. 2000; and Michael P. Barry, *Event Study of Russian Foreign Exchange Market*, Office of Economics working paper No. 2000-02-B, Feb. 2000.

Table 3-1
Regional financial crises countries: Real GDP, consumer prices, unemployment, goods trade balance, goods exports, goods imports, average nominal exchange rates, interest rates, and international reserves (excluding gold), 1998 and 1999

Country	1998	1999	1998	1999	1998	1999
	Real GDP		Consumer prices		Unemployment	
	Percentage change				*Percentage of labor force*	
Brazil	-0.1	[1]0.8	3.2	4.9	[1]7.6	[1]7.6
Indonesia	-13.2	0.2	58.4	20.5	[2]10.0	[2]10.0
Korea	-6.7	10.7	7.5	0.8	6.8	6.3
Malaysia	-7.5	5.4	5.3	2.7	[3]3.4	[3]3.4
Philippines	-0.5	3.2	9.7	6.7	[2]10.0	[2]9.5
Russia	-4.5	3.2	27.7	85.9	11.9	[4]13.2
Thailand	-10.4	4.2	8.1	0.3	[5]4.4	[5]4.2
	Goods trade balance		Goods exports		Goods imports	
	Billion dollars					
Brazil	-6.6	-1.2	51.1	48.0	57.7	49.2
Indonesia	21.5	[2]24.7	48.8	[2]48.7	27.3	[2]23.9
Korea	39.0	25.0	132.3	144.7	93.3	119.8
Malaysia	14.9	19.5	73.1	84.5	58.2	65.0
Philippines	-0.2	5.9	29.5	36.7	29.7	30.7
Russia	15.1	33.2	74.2	74.1	59.1	40.9
Thailand	11.4	16.9	54.3	58.5	42.9	41.6
	Average nominal exchange rates[6]		Interest rates[7]		International reserves (excluding gold)	
	–Local currency per U.S. dollar–		*Percent*		*Billion dollars*	
Brazil	1.161	1.815	29.50	26.26	42.6	34.8
Indonesia	10,013.6	7,855.2	62.79	23.58	22.7	26.4
Korea	1,401.4	1,188.8	15.0	5.0	52.0	74.0
Malaysia	3.9244	3.8000	8.46	3.38	25.6	30.6
Philippines	40.893	39.089	15.004	9.996	9.2	13.2
Russia	9.7051	24.6199	50.6	14.8	7.8	8.5
Thailand	41.359	37.844	13.02	1.77	28.8	34.1

[1] Bank of Brazil, "Statistical Tables," *Boletim do Banco Central do Brasil*, Mar. 2000, found at Internet address http://www.bcb.gov.br/ingles/hiie3040.htm, retrieved May 12, 2000.

[2] Economic Intelligence Unit (EIU), "Foreign Trade & Payments: Trade Surplus Increases Again," *Country Reports Indonesia*, Mar. 10, 2000, EIU CD-ROM Asia-Pacific Business Intelligence, Vol. II, 1993-May 2000.

[3] Department of Statistics Malaysia, *Key Statistics - Malaysia*, May 17, 2000, found at Internet address http://www.statistics.gov.my/English/keystats.html, retrieved May 22, 2000. Data for 1999 estimated based on the average of the percentages reported for Mar., June, Sept., and Dec.

[4] Jan.-June.

[5] Bank of Thailand, *Population, Labour Force and Wage*, found at Internet address http://www.bot.or.th/bothomepage/databank/EconData/KeyEcon/tab17_e.htm, retrieved May 18, 2000.

[6] Brazilian real (principal rate), Indonesian rupiah (market rate), Korean won (market rate), Malaysian ringgit (official rate), Philippines peso (market rate), Russian ruble (official rate), and Thai baht (official rate) for Brazil, Indonesia, Korea, Malaysia, Philippines, Russia, and Thailand, respectively. 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.

[7] Money market rate (the rate at which short-term borrowing is effected between financial institutions), except for the Philippines, which is a treasury bill rate. Each country's interest rate 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 interest rates.

Note.--Because of rounding, figures may not add to totals shown.

Source: International Monetary Fund (IMF), *World Economic Outlook* (Washington, DC: IMF, Apr. 2000, pp. 10, and 21, and "Statistical Appendix," pp. 114, 117, 121-3, 129-131, and 138; and IMF, *International Financial Statistics*, vol. 53, No. 4 (Washington, DC: IMF, Apr. 2000), various pages; except as noted above.

Table 3-2
Regional financial crises countries: Current account balance as a share of gross domestic product (GDP) and in billions of dollars, and foreign direct investment (FDI), inflows 1998 and 1999

	Current account balance				Foreign direct investment inflows	
Country	1998	1999	1998	1999	1998	1999
	—Percentage of GDP—		*—Billion dollars —*			
Brazil	-4.3	-4.1	[1]-33.6	[1]-24.4	[4]28.5	[4]31.0
Indonesia	4.2	3.6	4.1	[2]3.9	[5]-0.36	[5]1.4
Korea	12.7	6.1	40.2	25.0	[6]5.5	[6]8.5
Malaysia	12.9	18.4	[3]9.4	[3]9.2	[6]3.7	[6]3.8
Philippines	2.0	9.1	1.3	[2]4.6	[6]1.7	[6]0.9
Russia	0.9	10.8	2.1	[2]14.6	[7]2.2	[8]1.5
Thailand	12.7	9.1	14.0	11.1	[6]6.9	[6]5.8

[1] Bank of Brazil, “Statistical Tables,” *Boletim do Banco Central do Brasil*, Mar. 2000, found at Internet address http://www.bcb.gov.br/ingles/hiie3040.htm, retrieved May 12, 2000.

[2] Jan.-Sept.

[3] Department of Statistics Malaysia, *Malaysia’s Quarterly Balance of Payments Performance, July-Sept., 1999*, found at Internet address http://www.statistics.gov.my/English/BOP3QT-99e.htm, retrieved May 22, 2000. Data for 1999 are for Jan.-Sept.

[4] United Nations Conference on Trade and Development (UNCTAD), “Latin America and the Caribbean Attract Largest Share of FDI in the Developing World in 1999,” UNCTAD press release TAD/INF/2835, Feb. 1, 2000, found at Internet address http://www.unctad.org/en/press/pr2835en.htm, retrieved May 24, 2000. Data for 1999 are estimated.

[5] Economist Intelligence Unit (EIU), “Data Summary,” *Country Forecasts, Nov. 22, 1999*, EIU CD-ROM Asia-Pacific Business Intelligence, Vol. II, 1993-May 2000. Data for 1999 are estimated.

[6] UNCTAD, “Foreign Direct Investment Holds Steady in Developing Asia as a Whole in 1999--But With Significant Variation Among Countries,” UNCTAD press release TAD/INF/2834, Jan. 25, 2000, found at Internet address http://www.unctad.org/en/press/pr2834en.htm, retrieved May 24, 2000. Data for 1999 are estimated.

[7] EIU, “Foreign Direct Investment in Eastern Europe,” *Crossborder Monitor*, Oct. 20, 1999, EIU CD-ROM Western European Business Intelligence 1993-May 2000.

[8] Institute for International Finance, Inc., *Capital Flows to Emerging Market Economies*, Apr. 13, 2000, p. 8, found at Internet address http://www.iif.com, retrieved May 24, 2000.

Source: International Monetary Fund (IMF), *World Economic Outlook* (Washington, DC: IMF, Apr. 2000), p. 5, and “Statistical Appendix,” p. 150; and IMF, *International Financial Statistics*, vol. 53, No. 4 (Washington, DC: IMF, Apr. 2000, various pages; except as noted above.

over.[3] However, it was also noted that much structural reform, particularly to repair the underlying financial fragility exposed by the Asian crisis, remained to be completed.[4] Another analyst identified three flaws that could indicate countries that would be vulnerable to a future crisis: "...little in the way of cash reserves to defend their currency, weak banks, and a recent history of sharp currency appreciation."[5] The financial crises forced the affected countries, except Malaysia, to abandon managed, fixed exchange rate policies and allow varying degrees of flexible exchange rates, as the cost to these economies of high interest rates and of expending hard currency reserves to defend their currencies proved to be too great.

Continued strong economic growth (i.e., in the United States) or significant turn-around in the major economies (i.e., Western Europe and Japan) could prove very important to sustaining the recovery of these countries, at least in the short term. Recovery of the Japanese economy would be especially important for the affected Asian countries because of the complex interconnection of foreign direct investment (FDI) and international trade, in which Japan is a leading supplier and trade partner.[6] However, Japan's economy has been stagnant or decreasing throughout the 1990s.[7]

The pace of economic recovery of the seven countries is related to the degree of success that each achieved in solving structural problems in the financial and corporate sectors, in providing the appropriate mix of restraint or stimulation in monetary and fiscal policy while maintaining relatively stable exchange rates and restoring confidence in the value of the country's currency, and in renewing general investor confidence. Data for certain indicators often used by analysts to assess the economic and financial health of countries are shown in tables 3-2 and 3-3. However, some observers have expressed concerns that the rapid turnaround in economic growth experienced by these countries may lead them to be complaisant in continuing to reform their economies, particularly in the financial and corporate sectors.[8] The degree to which each country has recovered from its crisis and how well it has addressed such issues as structural problems are explored below.

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[3] Timothy Lane, "The Asian Financial Crisis: What Have We Learned?" *Finance & Development*, Sept. 1999, p. 44.

[4] The Manila Framework Group when it referred to "better-than-expected improvement in the economic outlook of most Asian economies" accompanied by a need to continue to restructure financial and corporate sectors, building on "progress on bank and corporate sector restructuring, strengthening of regulatory infrastructure, and improve (sic) merits in insolvency procedures and corporate governance." Manila Framework Group, "Sixth Meeting of the Manila Framework Group, 10-21 March 2000," press release, found at Internet address http://www.treasury.gov.my/org/ekonomi/Manila_Framework.htm, retrieved May 18, 2000. The group has 14 members, including the 5 countries affected by the Asian financial crisis, and the United States.

[5] Aaron Tornell, *Common Fundamentals in the Tequila and Asian Crises*, National Bureau of Economic Research working paper No. W7139, May 1999, found at Internet address http://papers.nber.org, retrieved May 12, 2000.

[6] For further details see *East Asia: Regional Economic Integration and Implications for the United States*, USITC publication 2621, May 1993, various pages; Diane Manifold, *Japanese Corporate Activities in Asia: Implications for U.S.-Japan Relations*, Office of Economics working paper No. 96-04-A, revised Feb. 1997, pp. 3 and 21-23; and Manifold, "Japan's Financial Assistance to Asia," p. 5.

[7] Akiko Kashiwagi and Kathryn Tolbert, "Japan Says Economy Grew 0.5% in 1999: Positive Annual Report is First Since '96," *Washington Post*, June 9, 2000, p. E3; and Stephanie Strom, "Japanese Economy Rose 2.4% in Quarter: But No One is Proclaiming That Its 'Severe Situation' Has Ended," *New York Times*, June 10, 2000, p. B2.

[8] International Monetary Fund (IMF), *World Economic Outlook 2000* (Washington, DC: IMF, Apr. 2000), pp. 51-52, found at Internet address http://www.imf.org, retrieved Apr. 13, 2000, stated that "priorities include initiatives to assist further financial sector and corporate restructuring, as well as broader institutional, legal, and regulatory reforms aimed at strengthening the environment for market-based activities;" and "Let the Good Times Roll: Emerging Economies Are Enjoying a New Boom. Might it lead to Another Future Bust?" *Economist*, Apr. 15, 2000, pp. 76-78.

Table 3-3
Regional financial crises countries: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, 1998 and 1999[1]

Type of trade/country	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
	Million dollars			
U.S. exports of domestic merchandise:				
Brazil	14,293	12,331	-1,962	-13.7
Indonesia	2,225	1,890	-335	-15.1
Korea	15,979	22,038	6,059	37.9
Malaysia	8,526	8,558	32	0.4
Philippines	6,537	7,019	482	7.4
Russia	3,543	1,823	-1,719	-48.5
Thailand	5,029	4,745	-284	-5.6
Total	56,132	58,403	2,272	4.0
U.S. imports for consumption:				
Brazil	9,953	11,273	1,320	13.3
Indonesia	9,262	9,389	127	1.4
Korea	23,701	31,152	7,451	31.4
Malaysia	18,817	21,391	2,575	13.7
Philippines	11,875	12,379	504	4.2
Russia	5,675	5,706	31	0.5
Thailand	13,366	14,296	930	7.0
Total	92,649	105,586	12,937	14.0
U.S. merchandise trade balance:				
Brazil	4,340	1,058	-3,282	-75.6
Indonesia	-7,037	-7,499	-462	-6.6
Korea	-7,722	-9,115	-1,393	-18.0
Malaysia	-10,290	-12,833	-2,543	-24.7
Philippines	-5,337	-5,360	-22	-0.4
Russia	-2,133	-3,882	-1,750	-82.1
Thailand	-8,337	-9,551	-1,214	-14.6
Total	-36,517	-47,182	-10,665	-29.2

[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.

U.S. Trade Flows

During 1999, after most economies had been stabilized and began to grow again, these countries, with the exceptions of Indonesia and Russia, experienced a rebound in trade with the United States (table 3-3). The U.S. trade deficit with these countries expanded in 1999 by $10.7 billion (29 percent) to $47.2 billion. This deficit accounted for 13 percent of the U.S. global merchandise trade deficit in 1999. U.S. exports to the seven countries rose during 1999 by $2.3 billion (4 percent) to $58.4 billion. Such exports of semiconductors and integrated circuits (hereafter semiconductors) grew sharply, by $4.2 billion (37 percent) to $15.7 billion.[9] In contrast, U.S. exports of aircraft, spacecraft, and related equipment (hereafter aircraft) decreased significantly, by $1.9 billion (33 percent) to $3.8 billion. Whereas U.S. exports to Korea rebounded during 1999, by $6.1 billion (38 percent) to $22.0 billion, those to Brazil continued to fall, dropping by $2.0 billion (14 percent) to $12.3 billion and those to Russia reversed course and decreased by $1.7 billion (49 percent) to $1.8 billion.

U.S. imports from the seven countries also increased during 1999 by $12.9 billion (14 percent) to $105.6 billion. Computers, peripherals, and parts (hereafter computer hardware); semiconductors; motor vehicles; and telephone and telegraph apparatus (hereafter telecommunications equipment) all registered increases ranging from $3.7 billion to $1.1 billion. U.S. imports of steel mill products from the seven countries decreased by $1.2 billion. Although each country contributed to increased U.S. imports during 1999, such imports from Russia remained virtually unchanged at $5.7 billion whereas those from Korea climbed sharply, by $7.5 billion (31 percent) to $31.2 billion.

Recent Trends: Brazil

- The United States experienced the greatest absolute decline in its trade position with Brazil, among the seven countries in 1999. The U.S. trade surplus with Brazil continued to decrease, falling by $3.3 billion (76 percent) to $1.1 billion, as U.S. exports dropped by $2.0 billion and imports rose by $1.3 billion, consistent with the significant decrease in the value of the Brazilian real compared to the U.S. dollar.[10] U.S. exports to Brazil fell across a broad range of products led by computer hardware and by certain motor-vehicle parts (vehicle parts). However, exports of electronic products such as semiconductors, radio and television broadcasting equipment, and telecommunications equipment all posted notable increases.[11] Increased U.S. imports from Brazil were led by aircraft and by coffee. Brazil reportedly instituted certain measures to discourage imports and encourage exports during 1999.[12]

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[9] Unless indicated otherwise, trade data are compiled from official statistics of the U.S. Department of Commerce (USDOC).

[10] See table G-1 for the exchange rate shift of the Brazilian real compared to the U.S. dollar during 1999.

[11] On the one hand, high interest rates in Brazil and public anxiety about layoffs discouraged consumer purchases of big ticket items such as computers and automobiles. On the other hand, privatization in the telecommunications sector and pent-up consumer demand for telephone service drove related growth in U.S. exports.

[12] U.S. Department of State (State Dept.), *1999 Country Reports on Economic Policy and Trade Practices: Brazil*, Mar. 2000, found at Internet address http://www.state.gov/www, retrieved Mar. 24, 2000.

- Both outside observers[13] and Brazilian authorities[14] agree that Brazil has made a better than expected recovery from its financial and economic crisis. Brazilian real GDP growth was up by 0.8 percent in 1999, after having decreased slightly in 1998 and by much less than the declines experienced in the Asia countries and in Russia.

- In late 1998 the Brazilian real, which was tied to the dollar by a managed peg and was perceived to be overvalued, came under severe pressure, in the aftermath of international investors' loss of confidence in emerging markets after Russia's bond default, and was sharply devalued and subsequently allowed to float freely against the dollar in January 1999. The average annual nominal exchange rate in 1999 increased by 0.654 reals per U.S. dollar (56 percent) to 1.815 reals per U.S. dollar.

- Brazilian interest rates were raised significantly to preserve foreign exchange reserves needed to finance the overall merchandise trade deficit and to stabilize the currency, with rates on loans to commercial banks reportedly reaching as high as 45 percent before falling to 18.5 percent during the last week of March 2000.[15]

- Brazilian policy measures credited for improved economic indicators included tight monetary policy by the Central Bank, with inflation targeting;[16] restrained fiscal spending by the central government; and legislative progress in trimming social security spending and bringing regional and local government spending under control.[17] The International Monetary Fund (IMF) identifying Brazil's fiscal deficit as the key measure to correct, characterized these steps as being sufficient to satisfy conditions attached to a $41.5 billion aid package.[18] However, some observers have expressed concern that success so far and renewed growth will lead to complaisance in continuing to address further necessary reforms.[19]

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[13] Ibid.; IMF, *Letter of Intent of the Government of Brazil*, Apr. 20, 2000, and attachments, found at Internet address http://www.inf.org, retrieved June 6, 2000 contain a comprehensive discussion of economic conditions in 1999 and benchmark projections for the future, and progress made on financial and economic structural reforms and goals for further reforms; Economist Intelligence Unit (EIU), "Summary--Brazil 1st Quarter 2000," *Country Reports Brazil*, Feb. 25, 2000, EIU CD-ROM Western Hemisphere Business Intelligence, 1993-May 2000; and IMF, *World Economic Outlook, 2000*, pp. 18-21 and 67-77.

[14] Airman Raga, Governor of the Central Bank of Brazil, "Monetary Policy During the Transition to a Floating Exchange Rate: Brazil's Recent Experience," *Finance & Development*, vol. 37, No. 1, Mar. 2000, pp. 16-18.

[15] IMF, *Memorandum of Economic Policies*, Nov. 12, 1999, found at Internet address http://www.imf.org, retrieved May 11, 2000; and Stephen Buckley, "Brazilian Economy Back From the Brink: Tough New Policies Helped Rescue the Nation," *Washington Post*, Apr. 1, 2000, p. A13.

[16] IMF, *World Economic Outlook, 2000*, p. 20. The Governor of the Central Bank of Brazil saw this inflation targeting commitment as being very important to restoring confidence in Brazil's resoluteness in meeting its policy goals. The idea of targets was introduced in Mar. 1999, when a goal of reducing inflation to a single-digit annualized rate was established. In June 1999, the Central Bank was given the responsibility to carry out a formal annual inflation targeting framework using monetary policy aimed at the broad-based consumer price index known as the IPCA. It met the goal for 1999. Fraga, "Monetary Policy," pp. 17-18.

[17] IMF, *Memorandum of Economic Policies*; Buckley, "Brazilian Economy Back From the Brink," p. A13; and Fraga, "Monetary Policy," pp. 17-18.

[18] IMF, *World Economic Outlook, 2000*, p. 18; IMF, *Memorandum of Economic Policies*; and Michael Mussa, IMF Economic Counselor and Director, IMF Research Department, "Press Conference on Exchange Rate Regimes in an Increasingly Integrated World Economy," Apr. 14, 2000, found at Internet address http://www.imf.org, retrieved May 11, 2000.

[19] "Progress and Pitfalls in Brazil's Public Finances," *Economist*, May 6, 2000, p. 37.

- Overall policy measures restored investor confidence in Brazil's improving economic and financial health that an estimated record FDI inflow of $31.0 billion in 1999 (up from the actual $28.5 billion in 1998) totally financed the current account deficit.[20] Because the corporate and financial sectors had largely hedged against the risk of devaluation, Brazil avoided the widespread financial stresses in the banking and corporate sectors experienced by the Asian countries and Russia.[21]

Recent Trends: Indonesia

- The U.S. trade deficit with Indonesia increased in 1999 by $462 million (7 percent) to $7.5 billion as U.S. exports decreased by $335 million and U.S. imports increased by $127 million. A decrease in shipments of aircraft to Indonesia accounted for most of the export decline. Computer hardware accounted for all the growth in U.S. imports, which was partially offset by a decrease in imports of natural rubber.

- Many observers have noted that economic recovery was better than expected in Indonesia, the hardest hit country in Asia, but albeit still weak.[22] Further, many reforms remain to be undertaken especially, but not limited to, banking and corporate financial restructuring.[23]

- A series of banking crises exacerbated the Indonesian financial and economic crisis that began when Indonesia unpegged the rupiah from the dollar, subsequent to Thailand unpegging its

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[20] Fraga, "Monetary Policy," p. 18; and United Nations Conference on Trade and Development (UNCTAD) "Latin America and the Caribbean Attract Largest Share of FDI in the Developing World in 1999," UNCTAD Press Release TAD/INF/2835, Feb. 1, 2000, found at Internet address http://www.unctad.org, retrieved May 24, 2000. The latter source reported that the share of privatization-related FDI in Brazil rose from 22 percent in 1998 to 28 percent in 1999.

[21] IMF, *World Economic Outlook, 2000*, pp. 70 and 72.

[22] U.S. State Dept., *1999 Country Reports: Indonesia*, Mar. 2000. This report commented that "Indonesia still faces daunting economic problems;" EIU, "Outlook for 2000-01: Economic Stability Looks Well Established" *Country Reports Indonesia*, Mar. 10, 2000, EIU CD-ROM Asia-Pacific Business Intelligence, vol. II, 1993-May 2000; and IMF, *World Economic Outlook, 2000*, pp. 22-24 and 81-83, which stated on page 24, "Indonesia faces the most severe challenges regarding economic restructuring, and full implementation of the new government's ambitious and wide-ranging program of reforms is needed. Policy priorities are to complete the bank recapitalization program and to step up the recovery and restructuring of corporate debt, including strengthening the state institutions involved in the reform process."

[23] IMF, *World Economic Outlook, 2000*, pp. 24 and 85; EIU, "Foreign Trade & Payments: Trade Finance Remains a Serious Bottleneck," *Country Reports Indonesia*, Dec. 8, 1999, EIU CD-ROM Asia-Pacific Business Intelligence, vol. II, 1993-May 2000, reported that the supply bottlenecks continue to exist because of problems in the banking and corporate sector. Letters of credit are not being honored because of lack of confidence in Indonesian banks, and local banks had little credit available to provide working capital to exporters. International trade finance schemes worked out in 1998 had expired and the Ministry of Finance was not yet guaranteeing loans, as it was required to do by a new law. The full range of problems was outlined in IMF, *Indonesia Letter of Intent, January 20, 2000*, and the attached *Memorandum of Economic and Financial Policies (MEFP)*, found at Internet address http://www.imf.ogr, retrieved May 11, 2000. An IMF official characterized the commitments made in this letter as "a bold and comprehensive program." The IMF approved a 3-year, Extended Fund Facility of about $5 billion, with about $349 billion available immediately. Future disbursements were to depend upon Indonesia meeting performance targets and program reviews, although additional financing reportedly was coming from the World Bank, the Asian Development Bank, the Consultative Group for Indonesia, and bilateral official contributions (especially Japan). "IMF Approves US$5 Billion Extended Arrangement for Indonesia," Press Release No. 00/4, Feb. 4, 2000, found at Internet address http://www.imf.org, retrieved May 11, 2000.

currency, leading to an almost 40-percent depreciation by October 1998.[24] According to the IMF, implementation by Indonesian authorities of the March 1999 bank closures was comprehensive in nature and based on transparent, uniform, simple, and defensible criteria, with no exceptions to the specified rule, and was "well-received by the markets" and even by observers who had been critical of earlier efforts. IMF reports indicate that because bank restructuring was perceived to be at the heart of economic revival, market interest rates began to fall rapidly and expectations for the economy and the banking system "dramatically improved."

- Although the IMF suspended further distributions of funds in February 2000 because Indonesia did not meet reform conditions,[25] by May 2000, Indonesia and the IMF reportedly had reached a new agreement that would allow resumption of lending in exchange for renewed efforts to implement needed policies and reforms.[26]

Recent Trends: Korea

- Total U.S. trade (exports plus imports) with Korea increased sharply in 1999 as the Korean economy rebounded the strongest, among the seven countries. Although U.S. exports rose by $6.1 billion (38 percent) to $22.0 billion, the trade deficit with Korea grew by $1.4 billion (18 percent) to $9.1 billion. A major explanation of this trend is the extensive two-way trade in electronic goods, in which significant growth in U.S. imports of computer hardware, semiconductors, motor vehicles, telecommunications equipment, and consumer electronics (except televisions) comprised the largest share of the $7.5 billion (31 percent) growth in U.S. imports to $31.2 billion. The overall rise in imports was tempered by a decrease in steel mill products which was influenced by U.S. antidumping measures. Demand in Korea, particularly among export-oriented manufacturers, fueled U.S. exports of semiconductors; computer hardware; semiconductor manufacturing equipment and robotics; telecommunications equipment; and scales and weighing machinery. U.S. exports of cotton, not carded or combed, registered a large decline as the Korean textile and apparel industries continued to contract out production in the face of losing competitive position to Asian sources with lower labor costs.

- Although certain financial and corporate reforms remain to be addressed, Korea's movement toward economic recovery is reflected by 10.7 percent real GDP growth (about twice that of Malaysia with the next-fastest growth), only an 0.8-percent increase in consumer prices, decreased unemployment, a surge in both exports and imports (the latter reflecting increased domestic demand and demand for inputs used in export-oriented products), an appreciation in the nominal

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[24] Charles Enoch, *Interventions in Banks During Banking Crises: The Experience of Indonesia*, IMF policy discussion paper PDP/00/2 (Washington, DC: IMF, Mar. 2000), pp. 1, 3, 5, 7, 24-25, and 27; and IMF, "Banking Crises: Indonesia's Experience, In Some Crises, Bank Closures May Be More Effective Than Resolution Efforts," *IMF Survey*, vol. 29, No. 10, May 22, 2000, pp. 166-167. The author notes that four major sets of bank closures occurred between Nov. 1997 and Mar. 1999, and that failure to properly implement the Nov. 1997 closures and the promised macroeconomic programs resulted in both a flight from the banking system and from the currency.

[25] "Indonesia Financial Problems," world business briefs, *New York Times*, Mar. 29, 2000, found at Internet address http://www.nytimes.com, retrieved Mar. 29, 2000.

[26] IMF, "IMF Completes First Review of Indonesia Under Its Extended Agreement," news brief No. 00/38, June 2, 2000, found at Internet address http://www.imf.org, retrieved June 5, 2000; and IMF, *Indonesia Letter of Intent*, and attached *MEFP*, May 17, 2000, found at Internet address http://www.imf.org, retrieved June 5, 2000. The *MEFP* states that the government remains committed to the promises made in the Jan. 20, 2000, *MEFP* and "at this first Review, the focus has been on elaborating aspects of the approved FY2000 budget, and carrying forward banking and corporate sector reforms."

value of the won, a sharp fall in interest rates, a significant increase in international reserves (excluding gold), and a notable increase in FDI inflows.[27]

- Korea (and Malaysia) reportedly experienced more progress in corporate and financial sector reform than other Asian crisis countries.[28] However, the transitional problems of shifting from a state-directed economic system based on the Japanese model to a more market-oriented economy, of certain remaining weaknesses in the financial system, and of uncertain stability of the *chaebol* system[29] have not been fully resolved.

- Although the IMF is scheduled to discontinue its oversight of the Korean economy at the end of 2000, some observers are concerned that the initial robust recovery of Korea's economy will reduce pressure to sustain necessary reforms of corporate and financial sectors.[30]

Recent Trends: Malaysia

- The U.S. trade deficit with Malaysia registered the second-largest increase among the seven countries, up by $2.5 billion (25 percent) to $12.8 billion. U.S. imports accounted for all of this growth, increasing by $2.6 billion (14 percent) to $21.4 billion, whereas exports remained flat at $8.6 billion. Two-way trade increased in certain electronic products. U.S. exports of semiconductors, and printed circuits increased in 1999, whereas imports of computer hardware, semiconductors, telecommunication equipment, and television receivers and video monitors accounted for the bulk of the import growth. Aircraft exported to Malaysia dropped sharply, down by $857 million (67 percent) to $420 million in 1999.

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[27] Ministry of Finance and Economy, *G-20 Report: Korea's Crisis Resolution and Its Policy Implications*, The Republic of Korea, final draft, Dec. 12, 1999, pp. 43-52, found at Internet address http://www.mofe.go.kr, retrieved Mar. 31, 2000; EIU, "Output & Demand: Private Consumption Growth Continues to Quicken," "Output & Demand: Mfg (sic) Investment Grows Strongly But Is Patchy," and "Output & Demand: Export Volume Growth Remains Robust," *Country Reports South Korea*, Jan. 21, 2000, EIU CD-ROM Asia-Pacific Intelligence, vol. I, 1993-May 2000; Kalpana Kochhar and others, *Republic of Korea: Economic and Policy Developments* (Washington, DC: IMF, Feb. 2000), IMF staff country report No. 00/11, esp. pp. 9-11 and 16-19; U.S. State Dept., *1999 Country Reports: Korea*, Mar. 2000; IMF, *World Economic Outlook 2000*, pp. 22-24 and 77-86.

[28] Dhaneshwar Ghura, "Building Financial Stability: Korea's Crisis," Mar. 6, 2000, pp. 77-80; IMF, *World Economic Outlook, 2000*, pp. 24 and 84-85; and Stanley Fischer, "Press Conference of Stanley Fischer," Apr. 13, 2000.

[29] *Chaebol* are conglomerates of many companies clustered around one holding company and unlike many of Japan's *keiretsu* (which integrate vertically in the same industry), tend to spread across industries and have a centralized control structure. Four "superchaebol" (Samsung, Daewoo, Lucky Goldstar Electronics (LG Group), and Hyundai) reportedly have sales which account for about 40 percent to 45 percent of Korea's GDP. "South Korea: The Chaebol Economy," found at Internet address http://www.megastories.com/seasia/skorea/chaebol, retrieved June 16, 2000.

[30] Samuel Len, "Korean Conglomerates Remain Entrenched: Stock Exchange Says Efforts to Unravel Ownership Fall Short," *New York Times*, Sept. 21, 1999, p. C8; EIU, "Money & Finance: IMF Bows Out," "Outlook for 2000-01: Reforms May Pause," "Economic Policy: Opposition to Foreign Ownership of So (sic) Korean Cos (sic)," and "Economic Policy: Chaebol Still Dominate the Economy," *Country Reports Korea*, Jan. 21, 2000; Moon Ihlwan, "South Korea: Can Reform Survive the Next Election?" *Business Week*, Mar. 13, 2000, p. 60; Moon Ihlwan, "The Next Frontier in Remaking the *Chaebol*," *Business Week*, Apr. 24, 2000, p. 66E8; and IMF, *World Economic Outlook 2000*, pp. 84-85.

- According to Malaysian official statistics, the country recorded its twenty-ninth consecutive monthly merchandise trade surplus in March 2000.[31] The trade surplus for 1999 expanded by 24 percent compared to the 1998 level because of faster growth of exports (up by 12 percent) than of imports (up by 9 percent). Electrical and electronic products accounted for 58 percent of the value of all Malaysian exports in 1999, and growth of these products was 22 percent in that year. Electronic integrated circuits accounted for the largest share (27 percent) of these products in 1999, and recorded 24 percent growth. The United States, Japan, and Singapore were the three principal trade partners in 1999, accounting for 51 percent of Malaysia's total trade.[32]

- Malaysia followed a unique path among the seven countries toward solving its financial crisis (starting in 1998) by departing from guidance of the IMF, imposing selective capital controls on movements of capital, and temporarily freezing certain financial assets to maintain a fixed exchange rate against the U.S. dollar.[33] The purpose of these policies was to stabilize the currency while pursuing expansive monetary and fiscal policy to stimulate the economy. These measures allowed Malaysia to implement less restrictive monetary and fiscal policies than those implemented by other afflicted countries while pursuing structural reforms in the financial and corporate sectors.[34] The Malaysian Government reportedly exercised more extensive intervention in the financial reform process than did governments of other Asian countries.[35]

- The Malaysian economy rebounded strongly in 1999.[36] Although the real GDP rate of change recorded in 1998 was the third-largest decrease among the seven countries, it recovered to be the second-best increase, 5.4 percent, in 1999. Strong growth in Malaysian exports led GDP growth and contributed to a notable increase in international reserves (excluding gold), a stable current account balance, and steady levels of FDI inflows. Concurrently, Malaysia had the lowest interest rates among the seven countries, the lowest unemployment rate, and among the smallest increases in consumer prices.

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[31] "Malaysian External Trade Statistics (METS), Mar. & Jan.-Mar. 2000," Department of Statistics Malaysia (DSM), May 17, 2000, found at Internet address http://www.statistics.gov.my, retrieved May 22, 2000, and "METS, 1999," DSM, May 17, 2000, found at Internet address http://www.statistics/gov.my, retrieved May 22, 2000.

[32] Ibid.

[33] Malaysia instituted selective capital controls on Sept. 1, 1998, and pegged the ringgit at 3.8 per U.S. dollar the next day. U.S. State Dept., *1999 Country Reports: Malaysia*, Mar. 2000; and EIU, "Outlook for 2000-01: Slow Pace of Bank Lending Is a Potential Risk," *Country Reports Malaysia*, Feb. 8, 2000. See Seastrum, "East/Southeast Asia," p. 3-6, for detailed descriptions of measures taken to control capital movements and the exchange rate. The IMF indicated that properly designed macroeconomic policies are particularly important to effectively use capital controls; for an explanation of the difficulties, see IMF staff report, "While Short-Term Controls May Be Useful, Free Capital Flows Provide Long-term Benefits," *IMF Survey*, vol. 29, No. 2, Jan. 24, 2000, pp. 31-32.

[34] EIU, "Domestic Economy: Economic Trends," *Country Reports Malaysia*, Feb. 8, 2000, and EIU CD-ROM Asia-Pacific Intelligence, vol. I, 1993-May 2000.

[35] Organization for Economic Cooperation and Development (OECD), "Developments in Selected Non-Member Economies," *OECD Economic Outlook 66* (Paris: OECD, Dec. 1999), p. 129.

[36] Ibid., pp. 127-129; EIU, "Summary--Malaysia 1st Quarter 2000," "Economic Structure: Annual Indicators," "Domestic Economy: Economic Trends," "Industry: Manufacturing Output and Sales Rise Ever Higher," and "Industry: More Surplus Capacity Comes on Stream," *Country Reports Malaysia,* Feb. 8, 2000; U.S. State Dept., *1999 Country Reports: Malaysia*, Mar. 2000; and IMF, *World Economic Outlook 2000,* Apr. 2000, pp. 22-24 and 77-86.

- Malaysia has taken significant steps to structurally reform its financial sector, but reportedly needs to continue these efforts and to speed up structural reforms in the corporate sector to improve the competitiveness of its firms in the global economy.[37]

Recent Trends: Philippines

- The U.S. trade deficit with the Philippines remained virtually unchanged at $5.4 billion in 1999 because both U.S. exports and imports increased by a similar absolute amount, about $500 million. Major changes in this trade were also dominated by two-way trade in electronic products. Both U.S. exports and imports of semiconductors increased significantly in 1999. In addition, U.S. imports of computer hardware increased notably.

- The Philippines reportedly weathered the Asian financial crisis relatively unscathed compared with other affected countries in the region because it had undertaken certain reforms to its economy prior to the beginning of the crisis in mid-1997.[38] However, government efforts to continue and expand financial and corporate reforms purportedly faced "obstacles" from "nationalist and vested interests."[39]

- Despite its economic resilience during the Asian financial crisis, the Philippines did experience "contagion-like" pressure on its exchange rates, banking, and other financial sectors through market and trade linkages that eroded investor confidence in emerging markets worldwide, including the Philippines, from which it has not fully recovered.[40]

- After only a small decrease in real GDP in 1998, the Philippines achieved a modest 3.2-percent increase in 1999, led by exports that were stimulated by increased world demand for electronic

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[37] Fischer, "Press Conference of Stanley Fischer," characterized Malaysia and Korea as having "made more progress on banking sector reform than other crisis countries." IMF, *World Economic Outlook 2000*, pp. 84-85 states that "Korea and Malaysia have achieved the most progress in restructuring and strengthening the financial sector," and "This corporate reform process has advanced the most in Korea and Malaysia." However, the OECD warned that the government of Malaysia had assumed a higher risk for itself by the most direct intervention in the financial and corporate sector of these Asian countries. Even with government-established lending goals, banks reportedly had not met their goals. OECD, "Developments in Selected Non-Member Economies," p. 129. See also, EIU, "Financial Services: Slow Pick-up (sic) in Lending," and "Outlook for 2000-01: Slow Pace of Bank Lending Is a Potential Risk," and "Domestic Economy: Economic Trends," *Country Reports Malaysia*, Feb. 8, 2000. The latter article also warns of large debt levels of corporations and excess production capacity.

[38] U.S. State Dept., *1999 Country Reports: Philippines*, Mar. 2000, reported that "significant progress" had been made during the Aquino and Ramos administrations in "economic liberalization and deregulation." See also IMF, *World Economic Outlook 2000*, Apr. 2000, p. 84; and Asian Development Bank (ADB), "Bank and Corporate Restructuring," *Asia Recovery Report 2000*, Mar. 2000, p. 62. For a detailed analysis of reforms made and of those still needed, see especially Piyabha Kongsamut, "Philippines: Growth and Reform Agenda," *IMF Survey*, vol. 29, No. 9, May 8, 2000, pp. 158-160; and M. Rodlauer and others, *Philippines: Toward Sustainable and Rapid Growth, Recent Developments and the Agenda Ahead*, IMF occasional paper No. 187 (Washington, DC: IMF, Mar. 2000), found at Internet address http://www.imf.org, retrieved May 10, 2000.

[39] U.S. State Dept., *1999 Country Reports: Philippines*, Mar. 2000, discusses the "long-standing problem" of public finances as being particularly important, especially the inability of the government to collect sufficient revenues because of "weak tax administration and collection," which has caused higher domestic interest rates and led "the government to rely more heavily on foreign borrowings."

[40] Jun Nagayasu, "Currency Crisis and Contagion: Evidence from Exchange Rates and Sectoral Stock Indices of the Philippines and Thailand," IMF working paper No. WP/00/39 (Washington, DC: IMF, Mar. 2000), pp. 1 and 4, found at Internet address http://www.imf.org, retrieved May 10, 2000.

products.[41] This increase in real GDP was accompanied by decreases in consumer prices, interest rates, unemployment, and the average nominal exchange rate. Although international investment reserves (excluding gold), the merchandise trade balance, and the current account all increased in 1999, already small FDI inflows decreased further, by $800 million (47 percent) to an estimated $900 million. Barriers to such investment include limitations on foreign-ownership shares of firms in certain economic sectors, restrictions on foreign ownership of land, and export performance requirements.[42]

Recent Trends: Russia

- The increase in the U.S. trade deficit with Russia, by $1.8 billion (82 percent) to $3.9 billion, occurred in 1999 almost entirely because U.S. exports decreased sharply, by $1.7 billion (49 percent) to $1.8 billion, led by large decreases in aircraft, poultry, and cigarettes. These reductions were partially offset by a large increase in exports of cereals. In contrast, 1999 U.S. imports from Russia were relatively flat, growing by $30 million (less than 1 percent) to $5.7 billion. Otherwise significant growth in imports of precious metals and non-numismatic coins, crude petroleum, petroleum products, nuclear materials, and unwrought aluminum was more than offset by very large decreases in imports of steel mill products, which were influenced by antidumping measures,[43] and notable declines in imports of certain base metals and chemical elements.

- Although Russia experienced much greater than expected 1999 growth in real GDP (3.2 percent, compared with a decrease of 4.5 percent in 1998 during the financial crisis), real GDP declined in 9 out of the previous 10 years.[44] However, despite the sharp upturn of consumer prices, rising unemployment, and deterioration in the nominal value of the ruble in 1999, the economy appears to have stabilized and begun to grow. Illustrative of this situation were declining interest rates in 1999; a sharply improving Russian merchandise trade balance, mostly because of decreased imports; a rising current account balance; and a slightly improving level of international reserves (excluding gold).

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[41] OECD, "Developments in Selected Non-Member Economies," p. 127; EIU, "Summary--Philippines," "Outlook for 2000-01: Stability Is Assured," and "Domestic Economy: Economic Trends," *Country Reports Philippines*, Jan. 17, 2000, EIU CD-ROM Asia-Pacific Intelligence, vol. II, 1993-May 2000; U.S. State Dept., *1999 Country Reports: Philippines*, Mar. 2000; ADB, *Asia Recovery Report 2000*, Mar. 2000, pp. 44-52; and IMF, *World Economic Outlook, 2000*, pp. 22-24 and 77-86.

[42] U.S. State Dept., *1999 Country Reports: Philippines*, Mar. 2000; and Office of the U.S. Trade Representative (USTR), *2000 National Trade Estimate Report*, Apr. 2000, pp. 339-340.

[43] For details of these restraints, see White, "Russia."

[44] See Ibid., for details of events and policies during 1997-98; and Gerard Belanger and others, *Russian Federation: Recent Economic Developments*, IMF staff country report No. 99/100 (Washington, DC: IMF, Sept. 2000) found at Internet address http://www.imf.org, retrieved June 6, 2000. The latter article covers the 1990s, but focuses on recent years. Stanley Fischer and Ratna Sahay, *The Transition Economies After Ten Years*, IMF working paper No. WP/00/30 (Washington, DC: IMF, Feb. 2000), p. 34, reported that the level of real GDP in 1998 was about 60 percent of that in 1989; U.S. State Dept., *1999 Country Reports: Russia*, Mar. 2000; IMF, *World Economic Outlook, 2000*, pp. 26-28 and 52; EIU, "Russia: Solid Growth," *Crossborder Monitor*, May 10, 2000, DIALOG File 629:EIU:BUS. Newsletters. Patrick E. Tyler, "Clinton and Putin Meet at Kremlin With Wide Agenda," *New York Times*, June 4, 2000, sec. 1, p. 6, illustrated the apparent depth of the descent of the Russian economy during the 1990s, reporting President Vladimir V. Putin's statement when he became acting president on Dec. 31, 1999: "'To reach the production level of Portugal and Spain, two countries that are not known as leaders of the world economy,'...'it will take Russia approximately 15 years,' even under optimistic growth assumptions of 8 percent a year."

- Real GDP growth was led by sustained exports for the year, that increased rapidly by late 1999 and in early 2000; higher prices for petroleum; and import-substitution policies that favored Russian producers, partly driven by the lower value of the ruble against the U.S. dollar and partly by restrictive measures imposed to dissuade imports.[45]

- The extent of the challenges confronting Russia in its efforts to recover from its 1998 economic and financial crisis can be seen in the reportedly sustained lack of domestic investment in the Russian economy, namely, "1999 was the first year in a decade with positive investment growth."[46] In addition, the already low value of FDI inflows decreased by $700 million (32 percent) to $1.5 billion in 1999. These conditions indicate limited progress in upgrading Russia's industrial base and other parts of its economy to be competitive in international markets, and that Russia has only halted its economic downturn by trying to insulate its economy from world markets.

- The IMF has tried to emphasize progress made by Russia in trying to structurally reform its governance, and its economic, financial, and business sectors, as well as the need to continue engagement when progress is slow.[47] Thus, despite criticism, the IMF approved Russia's plans for reforms in its July 13, 1999, economic policy statement.[48] IMF officials understood the large scope

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[45] U.S. State Dept., *1999 Country Reports: Country*, Mar. 2000; USTR, *2000 National Trade Estimate Report*, pp. 352-360; EIU, "Russia's Economy: Is Growth Sustainable?" *Crossborder Monitor*, May 24, 2000, DIALOG File 629:EIU:BUS. Newsletters; and EIU, "Russia: Wish List," *Business Eastern Europe*, May 29, 2000, DIALOG File 629:EIU:BUS. Newsletters.

[46] EIU, "Russia's Economy: Is Growth Sustainable?" predicts that the Russian economy will experience capacity restraints by the end of 2000 because of lack of investment, asserts only investment and restructuring can prevent this, and rates the chances of President Vladimir V. Putin being able to implement his "impressive reform programme" (sic) as "slim."

[47] IMF, John Odling-Smee, Director of the IMF's European II Department, "Why Resume Lending?: Russia's Current Economic Policies Are Deserving of IMF Support," *IMF Survey*, vol. 28, No. 17, Aug. 30, 1999, p. 273, found at Internet address http://www.imf.org, retrieved June 6, 2000, stated Russia faces "a reform effort whose scale and ambition have few parallels," adding that "even when the (July 13, 1999) program is implemented, there will...remain the need for radical reforms, including additional steps to overcome nonpayment and corruption, impose the rule of law, create a favorable climate for private business, and reform key sectors such as agriculture, energy, and social services." He noted the special complexity of the transition problems in Russia because of "the economic and political dimensions are intertwined," and pointed out that transition economies like Russia's must develop "institutions and changes in governance that are needed to support institutions." Stanley Fischer, "Russian Economic Policy at the Start of the New Administration," remarks prepared for conference on the "Investment Climate and Russia's Economic Strategy," State University: Higher School of Economics, Moscow, Apr. 6, 2000, found at Internet address http://www.imf.org, retrieved May 25, 2000, said the new Russian administration had an opportunity to apply the clear lessons learned from 10 years of experience with over 25 transition economies moving from non-market to market economies.

[48] IMF, "IMF Approves Stand-By Credit for Russia," press release No. 99/35, July 28, 1999, found at Internet address http://www.imf.org, retrieved June 7, 2000; and IMF, "Statement of the Government of the Russian Federation and Central Bank of Russia on Economic Policies," July 13, 1999, found at Internet address http://www.imf.org, retrieved June 6, 2000. The 17-month stand-by credit amounted to about US$4.5 billion, with about US$640 million released immediately. Future installments were to depend on successful implementation of the goals and completion of quarterly reviews. IMF, "IMF's Camdessus Reviews Status of Russian Program," news brief No. 99/81, Dec. 7, 1999, found at Internet address http://www.imf.org, retrieved June 6, 2000, noted that

(continued...)

of problems confronting Russia in its transition from a non-market to a market economy, but urged the need for Russia to take gradual attainable reform steps and to admit that the process could take many years. As a precaution against misuse of the funds disbursed from this package, the funds were held in an account at the IMF to be used only for debt service payments owed to the Fund.[49]

- According to the EIU, market reform of the Russian economy has been hampered by numerous problems, such as political instability,[50] inability of the government to collect tax revenues, an industrial sector mired in the centrally planned system from the communist era, poorly executed privatization of certain state companies, organized crime, and widespread corruption.[51] In contrast, Russia's foreign debt service problems reportedly were eased in 1999 when then-Finance Minister, Mikhail Kasyvanov, reportedly a market reformer, negotiated the write-off of billions of dollars of Soviet era debt with the London Club of private-sector international creditors.[52] Kasyvanov was elevated to Prime Minister in May 2000 and pledged to continue measured market reforms that would show concern for those whose standard of living had declined during the last decade.

- The loose structure of the Russian federation that consists of 89 separate republics and regions spread across 11 time zones further complicates efforts to reform the economy.[53] Reportedly, these regions often ignore laws and directives of the central government, have erected trade barriers (including border posts) that prevent imports and treat other regions like foreign countries, and have employed trade practices not in agreement with the policies of the central government.[54] The new President of Russia took steps to try to consolidated more power in the central government in May 2000.

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[48] (...continued)
Russia still had not met 5 out of the 10 structural benchmarks it was to have met on Sept. 30, 1999. IMF, "Press Briefing by Thomas Dawson, Director, IMF External Relations Department, May 4, 2000, Washington, DC, found at Internet address http://www.imf.org, retrieved June 6, 2000, suggested that loans would not be resumed until economic policies had been formulated by the new government and the IMF had reviewed these policies with Russian authorities.

[49] IMF, "Facts About IMF Lending to Russia," Sept. 13, 1999, found at Internet address http://www.imf.org, retrieved June 6, 2000.

[50] EIU, "Russia: Revolving Door," *Crossborder Monitor*, Aug. 11, 1999, DIALOG File 629:EIU:BUS. Newsletters, reported that Russia's fifth prime minister in 18 months made difficult the formulation and implementation of economic policy and structural reforms. IMF, "Press Briefing by Thomas Dawson," May 4, 2000.

[51] Michael Camdessus, then Managing Director of the IMF, "Russia: Long Climb Out of a Black Hole," a commentary, *Washington Post*, Sept. 13, 1999, found at Internet address http://www.imf.org, retrieved June 6, 2000; EIU, "Shadow Boxing," *Business Russia*, Apr. 10, 2000, DIALOG File 629:EIU:BUS: Newsletters; and Vladimir Isachenkov, "Kasyvanov Confirmed as Russian Premier," *Washington Post*, May 17, 2000, found at Internet address http://www.washingtonpost.com, retrieved May 17, 2000.

[52] "Russian Debt: Orient Express," *Economist*, May 13, 2000, p. 77, reported that the London Club wrote "down more than a third of Russia's Soviet-era debt to them, swapping the rest for long-dated, low-interest bonds." The article reported that Russia sought to achieve a similar write down of $42 billion in state-to-state debt held by the Paris Club of official creditors to enable Russia to reenter the world capital markets. The government's goal is to have one-half of this debt written off by western governments. Isachenkov, "Kasyvanov Confirmed."

[53] David Hoffman, "Putin Moves To Bolster Central Rule," *Washington Post*, May 18, 2000, p. A1; "Russia's Regions: Beyond the Kremlin's Walls," *Economist*, May 20, 2000, p. 65; and Michael Wines, "Putin's Move on Governors Would Bolster His Role," *New York Times*, May 22, 2000, found at Internet address, http://www.nytimes.com, retrieved May 22, 2000, reported that President Putin alleged "a fifth of provincial laws run counter to federal legislation."

[54] Ibid.

Recent Trends: Thailand

- The U.S. trade deficit with Thailand increased by $1.2 billion (15 percent) to $9.6 billion in 1999, reflecting a $930-million growth in imports and a $284-million rise in exports. Although expanded two-way trade in semiconductors nearly offset each other, additional U.S. import articles that increased in 1999 by notable amounts were cement, stone, and related products; precious jewelry and related articles; and shellfish. Aircraft accounted for most of the overall U.S. export decline.

- By most measures, Thailand's economy performed better than expected in 1999.[55] Real GDP growth swung sharply upward from a decrease of 10.4 percent in 1998[56] to an increase of 4.2 percent in 1999 (third-best behind Korea and Malaysia). This strong turnaround, according to official statistics of the IMF, was accompanied by almost no inflation in consumer prices, a sharp fall in average interest rates (from 13 percent to 2 percent), stable unemployment, a modest improvement in the trade balance (exports up slightly and imports nearly at the same level), a small appreciation in the average nominal exchange rate, and a slight increase in international reserves (excluding gold). Perhaps reflecting the pickup in Thailand's economy, its current account position worsened slightly.[57] However, more troubling for future growth was a decrease in FDI inflows, down by $1.1 billion (16 percent) to $5.8 billion in 1999, reportedly reflecting unease among foreign investors about the progress in financial and corporate reform, a legal structure that favors debtors over creditors, and existing manufacturing overcapacity.[58]

- In completing the ninth and final review of the Thai economy under the $17.2-billion Stand-By Credit Arrangement, the IMF viewed Thailand as making "impressive" progress in addressing problems exposed by its financial crisis, but warned that it must persevere in properly managing its macroeconomic problems and pursuing policies for restructuring corporate debt and the financial sector.[59] The IMF also approved Thailand's proposed policy shift to inflation targeting to give a "clearer sense of direction" to monetary policy, and urged allowing the central bank greater independence and accountability. However, the IMF reported that the "heavily indebted corporate sector and continued weaknesses in Thailand's financial system" presented a challenge, and recommended the improvement in the financial system whereby nearly all banks would be able to

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[55] EIU, "Output & Demand: Business Conf. (sic) Returns as Consumption Picks Up," "Output & Demand: Manufacturers Lead the Way," and "Industry: Rising Export Demand Fuels Higher Output," *Country Reports Thailand*, Feb. 11, 2000, EIU CD-ROM Asia-Pacific Intelligence, vol. II, 1993-May 2000; U.S. State Dept., *1999 Country Reports: Thailand*, Mar. 2000; IMF, *World Economic Outlook 2000*, Apr. 2000, pp. 22-24 and 77-86; Tsuji, "Thailand's Financial Crisis and Recovery;" Toshihide Endo and others, *Thailand: Selected Issues*, IMF staff country report No. 00/21 (Washington, DC: IMF, Feb. 2000); and Stephen Schwartz and others, *Thailand: Statistical Appendix*, IMF staff country report No. 00/20 (Washington, DC: IMF, Feb. 2000), both found at Internet address http://www.imf.org, retrieved Mar. 9, 2000.

[56] Second only to Indonesia for the largest decrease among the seven countries.

[57] IMF, *World Economic Outlook, 2000*, pp. 78.

[58] Thailand has relied mainly on a private-sector, market-based approach to financial and corporate restructuring that analysts agree has resulted in slow-paced processes. OECD, "Developments in Selected Non-Member Economies," pp. 128-129; EIU, "Output & Demand: Manufacturers Lead the Way," and "Factory Utilisation (sic) Continues to Rise," *Country Reports Thailand*, Feb. 11, 2000; and Frederik Balfour, "Restructuring: Thailand's Recovery Is Only Skin-deep, Pump-priming and Cosmetic Reform Won't Work for Long," *Business Week*, May 8, 2000, p. 74E6.

[59] IMF, "IMF Completes Final Review of Thai Program," news brief No. 00/27, May 8, 2000, found at Internet address http://www.imf.org, retrieved May 12, 2000. See also, IMF, "IMF Concludes Article IV Consultation With Thailand," public information notice No. 00/5, Feb. 10, 2000, found at Internet address http://www.imf.org, retrieved May 12, 2000.

"comply with the stronger prudential norms,[60] well ahead of the yearend-2000 deadline. Finally, the IMF characterized the "commitment to complete reforms in the financial sector, and to speed up the process of corporate debt restructuring" as "an ambitious reform agenda" that "the authorities have begun to put in place," which are "necessary to underpin continued strong economic performance."[61]

- Financial and corporate sector restructuring are closely connected because of the high level of nonperforming loans, of which the ratio to total loans reportedly stood at a "relatively high" 39 percent at yearend 1999, which concerned many analysts, including the IMF.[62] Reportedly, lack of credit availability is already affecting a large share of Thai businesses.[63]

- The total level of Thailand's external debt at yearend 1999 decreased significantly from its 1997 peak, down by $18.8 billion (20 percent) to $74.6 billion.[64] Moreover the composition had changed too, with the share of short-term debt (virtually all private rather than public),[65] decreasing from 50 percent at yearend 1995 to 20 percent at the end of September 1999 (the most current figure available). Private-sector external debt also decreased as a share of total external debt, from 81 percent at yearend 1996 to 42 percent at end of June 1999 (the latest available). In contrast, virtually all public-sector external debt is medium- to long-term.

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[60] Such as "international best practice" capital adequacy standards, and loan classification and provisioning rules.

[61] IMF, "IMF Completes Final Review of Thai Program."

[62] IMF, "IMF Concludes Article IV Consultation With Thailand;" EIU, "Output & Demand: Manufacturers Lead the Way," "Financial Indicators: Lending Activity Is Still Static," and "Financial Indicators: More Bad Loans May Have to be Written Off," *Country Reports Thailand*, Feb. 11, 2000; and IMF, *World Economic Outlook, 2000*, p. 84.

[63] EIU, "Financial Indicators: Lending Activity Is Still Static," and "Financial Indicators: More Bad Loans May Have to be Written Off," *Country Reports Thailand*, Feb. 11, 2000.

[64] U.S. State Dept., *1999 Country Reports: Thailand*, Mar. 2000, stated that "Thailand's financial crisis resulted in part from significant increases in private sector external debt." Debt data in text compiled from IMF; Schwartz and others, *Thailand: Statistical Appendix*, Feb. 2000, p. 81; and ADB, *Asia Recovery Report 2000*, Mar. 2000, p. 61.

[65] Short-term, private-sector debt is highly vulnerable to capital flight during a financial crisis.

SIGNIFICANT SHIFTS WITH LEADING PARTNERS

The following summarizes key shifts in U.S. merchandise trade with each of its top five trade partners in terms of U.S. total trade (exports plus imports)--Canada, China, the European Union, Japan, and Mexico. For each partner, U.S. trade flows are discussed for the relevant industry/commodity groups. A tabulation of significant shifts in trade is included at the end of the discussions for each partner.

Canada

- The U.S. trade deficit with Canada expanded by $15.6 billion (42 percent) during 1999 to $52.5 billion (table 3-4).[66] Concurrently, total U.S. merchandise trade with Canada increased by $31.5 billion (10 percent) to $344.0 billion. The increased trade deficit with Canada was greater than that with any other single-country partner, but slightly less than the growth in the deficit with the EU. Bilateral trade with Canada is strongly influenced by the highly integrated nature of North American manufacturing, as evidenced by high levels of U.S. FDI between these two countries. Canada was the second-leading destination for U.S. in FDI 1998 at $103.9 billion (latest data available).[67] Canadian direct investment in the United States, including investment from Canadian holding companies in the Netherlands, was $74.8 billion in 1998.[68]

- Over one-half of private sector activity in Canada is export-oriented, with 85 percent of such exports destined for U.S. markets.[69] The Canadian economy grew by 3.5 percent in 1999, and is expected to grow another 3 percent in 2000, supported by buoyant domestic demand and sustained growth in the United States.[70]

- Transportation equipment accounted for a major share of the overall shift in U.S. bilateral trade with Canada. General Motors, Ford, and the Chrysler Division of DaimlerChrysler consider the United States and Canada as a single unit for production planning purposes and these "Big Three" dominate Canadian motor vehicle production.[71] Expansion of U.S.-Canada trade in the transportation sector reflects the cross-border integration of the sector's manufacturing activities and growth in markets for motor vehicles in both countries.

- Decreased U.S.-Canada trade in farm and garden machinery and equipment (hereafter farm equipment) reflects lower demand for farm equipment in response to the decline in agricultural commodity prices.[72] U.S. exports of farm equipment to Canada declined by $415 million (23-percent) to $1.4 billion in 1999, whereas U.S. imports of farm equipment from Canada

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[66] See ch. 2 for a general discussion about U.S. and international macroeconomic conditions that influenced U.S. merchandise trade performance in 1999.

[67] USDOC, Bureau of Economic Analysis (BEA), "U.S. Direct Investment Abroad, International Data, Country Detail for Position, Capital Flow, and Income," found at internet address http://www.bea.doc.gov/bea/di/dia-ctry.htm retrieved May 17, 2000.

[68] USDOC, BEA, "Foreign Direct Investment in the United States, International Data, Country Detail for Position, Capital Flow, and Income," found at internet address http://www.bea.doc.gov/bea/di/fdi-ctry.htm retrieved May 18, 2000.

[69] The Scotia Bank, *Global Economic Outlook*, (Halifax, NS: The Scotia Bank, Jan. 2000), p. 3.

[70] OECD, *OECD Economic Outlook*, Dec. 1999, p. 67.

[71] See "Motor Vehicles" and "Certain Motor Vehicle Parts" in ch. 12.

[72] The U.S. agricultural price index decreased 13.6 percent in 1999, the most substantial decline among major commodity groups. See "Farm and Garden Machinery and Equipment" in ch. 11.

declined by $331 million (36 percent) to $594 million. Highlights of the leading increases and decreases in the U.S. exports and imports are identified in table 3-4.

U.S. exports

- Growth in U.S. exports to Canada of vehicle parts; motor vehicles; internal combustion piston engines, other than for aircraft (hereafter internal combustion piston engines); and seats for motor vehicles and aircraft, by $4.2 billion (12 percent) in 1999 to $39.4 billion, accounted for over one-half of the overall growth in U.S. exports to Canada that year. Meanwhile, U.S. exports of aircraft, and aircraft engines and gas turbines, rose by $432 million (14 percent) to $3.5 billion. Bombardier of Canada is a world leader in the production of regional/commuter jets and an important customer for U.S.-made aircraft engines and other parts. Regional jets are increasingly being used for new service on "long-thin" routes,[73] or to increase a carrier's departure frequency between airports.[74]

- Exports of scales and weighing machinery (hereafter measuring instruments) from the United States to Canada climbed by $321 million (12 percent) to $3.0 billion, reflecting the relative competitiveness of U.S. producers in the global market. A significant portion of measuring instruments exported to Canada consisted of instruments and apparatus specially designed for telecommunications equipment. The international telecommunications market is expected to grow by 50 percent per annum through 2001.[75]

- U.S. medicinal chemicals (hereafter pharmaceuticals) exports rose by $313 million (20 percent) to $1.9 billion. The combination of increased drug prices, rising demand by an aging population, and an industry environment conducive to trade (e.g., similar economies, regional integration of industries and markets, and the establishment of mutually favorable tariff rates under the NAFTA) led to the continued rise in U.S. exports.

U.S. imports

- U.S. imports of motor vehicles from Canada rose by $8.9 billion (24 percent) in 1999 to $46.6 billion. Some Canadian motor vehicle assembly plants have a productivity and cost advantage over U.S. facilities. Canadian plants account for 19 percent of North American production, up from 15 percent a decade ago.[76] Imports of internal combustion piston engines and vehicle parts from Canada grew by $2.1 billion (20 percent) to $13.0 billion. Together, motor vehicles and vehicle parts accounted for nearly one-half of the expansion of all U.S. imports from Canada in 1999.

- Forest products and furniture imports from Canada rose by $2.4 billion (20 percent) to $14.3 billion. Relatively low interest rates and high consumer confidence levels encouraged strong home construction markets and purchases of lumber and home furnishings from Canada, a traditional supplier.

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[73] "Long-thin" routes have a small but consistent customer base separated by a great distance. Such a market can be profitable with smaller, rather than larger, long-range aircraft. As these markets are not the predominant ones served by major airlines, airframe manufacturers have not given them equal attention with the more established airline markets.

[74] The United States did not produce regional jet aircraft in 1999; all such aircraft were of foreign manufacture.

[75] The Scotia Bank, *Global Economic Outlook*, p. 10.

[76] Ibid.

- Imports from Canada of telecommunications equipment consist of a wide variety of these products of which parts for telecommunications equipment comprised the largest share. Imports of such equipment grew by $1.5 billion (51 percent) in 1999 to $4.6 billion. Canada has emerged as a global leader in designing optical Internet networks and fiber-optic equipment--an international market expected to grow by 50 percent per annum through 2001.[77]

- Much of the $1.9 billion (17 percent) increase in value of U.S. imports of crude petroleum and of natural gas and components from Canada to $13.5 billion was the result of increased oil and gas prices.

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[77] Ibid.

Table 3-4
Leading changes in U.S. exports to and U.S. imports from Canada, 1998 and 1999

Sector/commodity	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
	Million dollars			
U.S. EXPORTS:				
Increases:				
Transportation equipment:				
Certain motor vehicle parts (ET010)	14,308	16,218	1,910	13
Motor vehicles (ET009)	13,369	14,425	1,056	8
Internal combustion piston engines, other than for aircraft (ET002)	6,703	7,723	1,020	15
Seats for motor vehicles and aircraft (MM067)	776	1,020	244	32
Aircraft, spacecraft, and related equipment (ET013)	1,667	1,883	216	13
Aircraft engines and gas turbines (ET001)	1,412	1,628	216	15
Other:				
Measuring, testing and controlling instruments (ET043)	2,629	2,950	321	12
Medicinal chemicals (CH025)	1,598	1,912	313	20
Decreases:				
Farm and garden machinery and equipment (MM078)	1,839	1,425	-415	-23
Rail locomotive and rolling stock (ET008)	1,010	718	-292	-29
Semiconductor manufacturing equipment and robotics (MM087)	710	451	-259	-36
All other	91,747	95,378	3,631	3
TOTAL	137,768	145,731	7,964	6
U.S. IMPORTS:				
Increases:				
Transportation equipment:				
Motor vehicles (ET009)	37,670	46,563	8,893	24
Certain motor vehicle parts (ET010)	7,576	9,009	1,433	19
Internal combustion piston engines, other than for aircraft (ET002)	3,303	4,001	697	21
Aircraft, spacecraft, and related equipment (ET013)	3,473	3,801	327	9
Energy related products:				
Crude petroleum (CH004)	5,560	6,552	991	18
Natural gas and components (CH006)	6,004	6,933	929	16
Forest products:				
Lumber (AG052)	6,134	7,041	907	15
Wood veneer and wood panels (AG054)	1,794	2,437	643	36
Moldings, millwork, and joinery (AG053)	880	1,200	320	36
Other:				
Telephone and telegraph apparatus (ET017)	3,015	4,564	1,549	51
Furniture (MM054)	3,101	3,607	506	16
Decreases:				
Computers, peripherals, and parts (ET035)	3,625	3,213	-412	-11
Farm and garden machinery and equipment (MM078)	926	594	-331	-36
Semiconductors and integrated circuits (ET033)	2,253	1,945	-307	-14
All other	89,371	96,782	7,411	8
TOTAL	174,685	198,242	23,557	14

Note.--Calculations based on unrounded data.

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

China

- The U.S. trade deficit with China grew by $12.0 billion (21 percent) during 1999 to $68.9 billion, as growth of imports from China outpaced that of exports to China. Total U.S. trade with China increased by $9.3 billion (11 percent) to $94.1 billion and accounted for 6 percent of total U.S. merchandise trade with all trade partners. In 1999, the United States was China's second-largest trade partner, accounting for 19 percent of China's total trade.[78] The United States also replaced Japan as China's largest export market. China's State Statistics Bureau reported that exports to the United States during 1999 consisted primarily of textile products, home appliances, and inexpensive commodities, whereas imports from the United States consisted of high-tech products such as telecommunications equipment, electronic products, and other equipment.[79]

- After nearly 20 years of continuous expansion, the pace of China's economic growth began to slow during the end of the 1990s. Despite the government's efforts to boost the economy through fixed-asset investments in infrastructure development, housing construction, and technology up-grades, China's GDP growth rate declined somewhat in 1999.[80] China's National Bureau of Statistics estimated that the economy grew 7.1 percent in real terms during 1999, compared with 7.8 percent in 1998.[81] This was due to the Asian slowdown, weak domestic consumer demand due to fears of job losses, surplus consumer goods, poorly performing state-owned enterprises, and declining exports.[82]

- In 1999, China continued its efforts to join the World Trade Organization (WTO). On November 15, 1999, the United States and China announced the completion of a bilateral talks on China's accession to the WTO.[83] The agreement provides significant access for U.S. agriculture, industrial products, and services. China will reduce both tariffs and non-tariff barriers to industrial goods and farm products. The agreement contains provisions to address import surges and unfair trade practices. The agreement calls for China (generally by 2004[84]) to cut import duties on agricultural goods from an average rate of 22.1 percent to 17 percent; establish large and increasing tariff-rate quotas for wheat, corn, rice, and cotton; phase-out state trading in soy oil; eliminate export subsidies; and improve market access for foreign banks, insurance companies, telecommunications companies, computer services, business consulting, accounting, advertising, and financial information services.

U.S. exports

- U.S. exports to China decreased by $1.3 billion (10 percent) to $12.6 billion in 1999. The decline was led primarily by aircraft and parts, which declined by $1.1 billion (32 percent) to $2.3 billion.

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[78] State Statistics Bureau, People's Republic of China (SSB), "China's Top Ten Trade Partners in 1999," Feb. 21, 2000, found at Internet address http://www.ce.cei.gov.cn/enew/e41dob89.htm, retrieved May 8, 2000.

[79] SSB, "U.S. Becomes China's Largest Export Destination," Feb. 19, 2000, found at Internet address http://www.ce.cei.gov.cn/enew/e41dob78.htm, retrieved May 8, 2000.

[80] EIU, "Market Watch, Financing Foreign Operations," June 30, 1999.

[81] U.S. State Dept., telegram No. 6859, "China Country Commercial Guide Executive Summary," prepared by U.S. Embassy, Beijing, July 20, 1999.

[82] "China's Economy," *The United States-China Business Council: China Operations '99*, Mar. 4, 1999, found at Internet address http://www.uschina.org/press/econmay99chops.html, retrieved May 8, 2000.

[83] USTR, "U.S.-China Sign Historic Trade Agreement," press release No. 99-95, Nov. 15, 1999.

[84] Representative of the China, Hong Kong, Mongolia, and Taiwan Office of the USTR, telephone interview with USITC staff, Sept. 12, 2000.

In addition, competing aircraft from the EU's Airbus Industrie G.I.E., (Airbus) have reduced Boeing's share of the Chinese market. Highlights of the leading increases and decreases in U.S. exports are identified in table 3-5.

- Other products experiencing declines include animal or vegetable fats and oils ($245 million); telecommunications equipment ($240 million); and animal feeds ($170 million). Chinese demand for U.S. exports was also adversely affected by the fear of unemployment caused by the impact of structural reforms to state-owned enterprises, banks, social security safety net programs, and housing on the economy.[85]

U.S. imports

- U.S. imports from China increased by $10.7 billion (15 percent) in 1999 to $81.5 billion. Highlights of the leading increases and decreases in U.S. imports are identified in table 3-5.

- Electronic products (principally computer hardware, radio and television transmission and reception apparatus, and telecommunications equipment); furniture; and lamps and lighting fittings (lighting fixtures) accounted for 19 percent of all U.S. imports. The strong U.S. economy and lower demand for Chinese products in other Asian countries contributed to the growth in U.S. imports from China. China's shipments to the United States increased despite a dramatic increase in shipments to recovering South Asian markets.[86]

- The increase in imports of computer hardware ($2.1 billion) accounted for one-fifth of the overall rise in U.S. imports from China. Imports from China have been fueled by intense price competition in the U.S. market.

- Chinese producers of knocked-down furniture, lamps and small appliances have benefitted from relatively low interest rates in the United States that have encouraged home purchases, as well as sales of products associated with these purchases. Collectively, U.S. imports of furniture, lighting fixtures, and household appliances, including commercial applications (household appliances) from China grew by $1.9 billion (36 percent) to $7.2 billion.

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[85] "Business: The Economy China' Economy Slowing Down," *BBC News*, July 16, 1999, found at Internet address http://www.news.bbc.co.uk/hi/english/b...e_economy/newsid_395000/395986.htm, retrieved Apr. 5, 2000.

[86] U.S. State Dept., telegram No. 167, "China's Economy Spins (Slowly) Into the Millennium," prepared by U.S. Embassy, Beijing, Jan. 7, 2000.

Table 3-5
Leading changes in U.S. exports to and U.S. imports from China, 1998 and 1999

Sector/commodity	1998	1999	Change, 1999 from 1998: Absolute	Change, 1999 from 1998: *Percent*
	Million dollars			
U.S. EXPORTS:				
Increases:				
Semiconductors and integrated circuits (ET033)	441	642	201	46
Oilseeds (AG032)	279	354	75	27
Medical goods (ET040)	113	180	67	60
Photographic cameras and equipment (ET039)	24	81	57	241
Aircraft engines and gas turbines (E001)	142	196	54	39
Certain organic chemicals (CH012)	83	130	47	56
Cathode-ray tubes (ET031)	20	60	42	212
Decreases:				
Aircraft, spacecraft, and related equipment (ET013)	3,392	2,294	-1,099	-32
Animal or vegetable fats and oils (AG033)	319	74	-246	-77
Telephone and telegraph apparatus (ET017)	683	443	-240	-35
Animal feeds (AG013)	205	35	-170	-83
Computers, peripherals, and parts (ET035)	826	691	-135	-16
Fertilizers (CH016)	1,065	933	-132	-12
All other	6,316	6,472	156	2
TOTAL	13,908	12,585	-1,324	-10
U.S. IMPORTS:				
Increases:				
Computers, peripherals, and parts (ET035)	5,652	7,761	2,110	37
Furniture (MM054)	2,009	3,001	992	49
Lamps and lighting fittings (MM056)	1,761	2,280	520	30
Telephone and telegraph apparatus (ET017)	1,717	2,172	456	27
Footwear (CH051)	8,016	8,438	422	5
Household appliances, including commercial applications (MM073)	1,489	1,899	410	28
Decreases:				
Photographic cameras and equipment (ET039)	1,158	1,077	-81	-7
Miscellaneous inorganic chemicals (CH013)	361	287	-74	-21
Dolls (MM058)	1,253	1,199	-54	-4
Coal, coke, and related chemical products (CH003)	121	70	-51	-42
Crude petroleum (CH004.)	60	11	-50	-82
Inorganic acids (CH014)	51	10	-41	-81
All other	47,167	53,317	6,150	13
TOTAL	70,815	81,522	10,707	15

Note.--Calculations based on unrounded data.

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

European Union

- A rise in U.S. imports in 1999, stimulated by sustained rapid U.S. economic growth, was the principal factor responsible for the $17.7-billion (51 percent) expansion in the U.S. trade deficit to $52.4 billion with the 15 nations of the European Union (EU). The 1999 deficit followed a $10.6-billion (44-percent) rise in the 1998 trade deficit that reached $34.7 billion, and was larger than the increase in the trade deficit with any other country or region in 1999.

- The EU economy grew a modest 2.9 percent in 1998 and 2.3 percent in 1999, although GDP expanded by more than 3 percent in Finland, Greece, Luxembourg, Netherlands, Portugal, Spain, and Sweden in 1999.[87] Expansion of EU exports represented a major factor in the growth of EU economies in 1999, contributing to a fall in the EU unemployment rate, from 9.9 percent at the end of 1998 to 9.6 percent in 1999. Investment and private consumption in the EU increased by an estimated 4.1 percent and 2.6 percent, respectively, in 1999.[88]

- EU export growth was driven by strong foreign demand for EU goods as a result of strong economic growth in major EU markets (e.g., the United States), economic recovery in Asia, and a depreciation of the euro versus the U.S. dollar of 14 percent in 1999.[89] Growth in U.S. import demand was principally focused in pharmaceuticals, motor vehicles, and aircraft. Highlights of the leading increases and decreases in the U.S. exports and imports are identified in table 3-6.

U.S. exports

- U.S. exports to the EU grew by $1.8 billion (1 percent) to $142.0 billion in 1999. Highlights of the leading increases and decreases in these U.S. exports are identified in table 3-6. The leading EU market for U.S. manufacturers was the United Kingdom, accounting for 25 percent of all U.S. exports to the EU, followed by Germany, with 18 percent.

- Leading U.S. export sectors included aircraft, and aircraft engines and gas turbines, which together increased by $4.3 billion (20 percent) in 1999 to $26.0 billion. U.S. exports of these items continued the pattern of significant growth since 1996 as airlines added to their aircraft fleets, following increased demand for air-transport services by the general public and continued need to replace aging aircraft.

- U.S. exports of pharmaceuticals to EU nations rose by 12 percent, reflecting the combination of increased drug prices, benefits derived from the release of newly approved products, and increasing pharmaceutical demand by aging populations**.** In addition, U.S. multinational pharmaceutical companies have increasingly taken advantage of tax differentials between nations by shipping intermediate products to production facilities abroad, such as Ireland, where tax policy favors value-added manufacturing.[90]

- Lower U.S. exports to EU nations were registered among precious metals and non-numismatic coins (down by 34 percent) due to lower gold and silver prices, and a significant decline due to

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[87] Eurostat, European Commission, found at Internet address http//europa.eu.int, retrieved Apr. 11, 2000.

[88] Ibid.

[89] At the beginning of 1999, the euro began trading at slightly less than 1.170 per U.S. dollar but fell to 1.007 per U.S. dollar by the end of the year. Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, (various months), 1999-2000. See app. G for more details about depreciation of the euro during 1999.

[90] Patricia L. Layman, "Irish Firms Find Their Niche," *Chemical Market Reporter*, Feb. 22, 1999, pp. 18-20.

dramatic changes in investment-related shipments of precious metals to the EU. Also, U.S. exports of cigarettes declined 60 percent due to increasing EU cigarette production and reduced demand for tobacco products in the EU.

U.S. imports

- U.S. imports from the EU in 1999 rose by $19.5 billion (11 percent) to $194.4 billion. Highlights of the leading increases and decreases in these U.S. imports are identified in table 3-6. Germany was the leading EU supplier of U.S. imports in 1999, accounting for 28 percent of imports from the EU, followed by the United Kingdom, with 20 percent of the total.

- The transportation sector accounted for 30 percent of the increased U.S. imports from the EU, comprised of motor vehicles which rose by $3.9 billion (21 percent) to $22.1 billion; aircraft, which climbed by $1.1 billion (19 percent) to $7.3 billion; and internal combustion piston engines and vehicle parts, which together grew by $633 million (15 percent) to $4.9 billion.

- The significant rise in U.S. imports of motor vehicles and vehicle parts reflected strong U.S. sales of motor vehicles which rose 9 percent in 1999 due to the sustained strength of the U.S. economy, low interest rates, strong buying incentives, and stable vehicle prices. U.S. domestic sales of imported German luxury automobiles have been particularly robust despite rapid growth in North American production of Mercedes, BMW, and Volkswagen vehicles.

- U.S. imports of aircraft from the EU increased due to the strong market for civil passenger transport aircraft and parts, largely attributable to rising passenger air miles and the growing presence of European manufacturers in the U.S. market**.** Airbus has increased its global market share relative to Boeing, its sole competitor in the large commercial aircraft segment of the industry, from one-third of the global market in the early 1990s to nearly 57 percent in 1999, with several deliveries of aircraft to U.S. airlines.[91]

- U.S. imports of pharmaceuticals rose $4.6 billion (35 percent) to $17.8 billion due to the increasing tendency of U.S. pharmaceutical firms to source chemical raw materials and finished products from Ireland, Germany, and the United Kingdom. This trend is due to significant global outsourcing capacity,[92] the prominence of multinational pharmaceutical companies, and the highly-trained workforce in these nations.[93] Ireland, in particular, has attracted foreign investment to the country through the use of tax incentives for U.S. and other foreign pharmaceutical firms.[94]

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[91] Pierre Sparaco, "A340-500/600 To Exacerbate Airbus-Boeing Rivalry," *Aviation Week & Space Technology*, Apr. 10, 2000, p. 55.

[92] For a more detailed discussion, see Elizabeth Howlett, "Outsourcing by the Pharmaceutical Industry Provides Opportunities for Fine Chemical Producers Worldwide," *ITTR*, USITC publication 3253, Oct. 1999, pp. 7-13.

[93] Clay Boswell and Feliza Mirasol, "Sourcing Pharmaceutical Manufacturing from Offshore Facilities," *Chemical Market Reporter*, Oct. 25, 1999, p. A28.

[94] Howlett, "Outsourcing by the Pharmaceutical Industry," p. 13; and Boswell and Mirasol, "Sourcing Pharmaceutical Manufacturing," p. A28.

Table 3-6
Leading changes in U.S. exports to and U.S. imports from the European Union, 1998 and 1999

Sector/commodity	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
	Million dollars			
U.S. EXPORTS:				
Increases:				
Transportation equipment:				
Aircraft, spacecraft, and related equipment (ET013)	15,388	19,107	3,719	24
Aircraft engines and gas turbines (ET001)	6,343	6,886	543	9
Internal combustion piston engines, other than for aircraft (ET002)	1,283	1,504	221	17
Electronic products:				
Telephone and telegraph apparatus (ET017)	3,489	3,868	379	11
Computers, peripherals, and parts (ET035)	14,253	14,467	214	2
Measuring, testing, and controlling instruments (ET043)	3,954	4,165	211	5
Navigational instruments (ET021)	843	1,024	181	22
Machinery:				
Construction and mining equipment (ET004)	1,686	1,867	181	11
Miscellaneous machinery (MM098)	1,152	1,492	340	30
Other:				
Medicinal chemicals (CH025)	6,312	7,072	761	12
Decreases:				
Precious metals and non-numismatic coins (MM020)	3,261	2,145	-1,116	-34
Cigarettes (AG045)	1,028	408	-620	-60
Oilseeds (AG032)	1,706	1,146	-560	-33
All other	79,519	76,878	2,641	3
TOTAL	140,217	142,029	1,812	1
U.S. IMPORTS:				
Increases:				
Transportation equipment:				
Motor vehicles (ET009)	18,201	22,056	3,855	21
Aircraft, spacecraft, and related equipment (ET013)	6,141	7,288	1,147	19
Certain motor-vehicle parts (ET010)	2,391	2,853	462	19
Internal combustion piston engines, other than for aircraft (ET002)	1,872	2,043	171	9
Other:				
Medicinal chemicals (CH025)	13,157	17,803	4,645	35
Works of art and miscellaneous manufactured goods (MM064)	3,519	4,374	855	24
Telephone and telegraph apparatus (ET017)	1,191	1,862	672	56
Medical goods (ET040)	2,754	3,328	575	21
Petroleum products (CH005)	2,343	2,871	527	23
Electric motors, generators, and related equipment (MM091)	990	1,471	481	49
Decreases:				
Steel mill products (MM025)	4,054	3,417	-637	-16
Farm and garden machinery and equipment (MM078)	1,988	1,464	-525	-26
Textile machinery (MM082)	1,337	999	-338	-25
All other	114,943	122,580	7,637	7
TOTAL	174,881	194,409	19,528	11

Note.--Calculations based on unrounded data.

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

Japan

- The U.S. trade deficit with Japan rose by $10.2 billion (15 percent) during 1999 to $76.6 billion, as U.S. imports increased by $9.6 billion (8 percent) and U.S. exports declined slightly. Appreciation of the Japanese yen against the U.S. dollar in 1999 (13 percent) moderated the growth in the U.S. trade deficit with Japan.[95]

- Japan's economy returned to recession in the second half of 1999, contracting during the last 2 quarters of the year.[96] Declines in personal consumption and private housing investment contributed to the contraction in domestic demand and GDP during the second half.[97] The decline in consumption reflected small winter bonuses and concerns about Year-2000 (Y2K) which reduced durable goods expenditures and postponed winter travel.[98] In the public sector, government spending and consumption fell in real terms in the fourth quarter.

U.S. exports

- U.S. exports to Japan declined by $536 million (less than 1 percent) in 1999 to $54.3 billion. Highlights of the leading increases and decreases in these U.S. exports are identified in table 3-7.

- Monolithic digital integrated circuits led U.S. export growth in semiconductors and integrated circuits. Integrated circuits are key components of electronic products, and U.S. demand for Japanese electronic products expanded in 1999.

- The growth of U.S. exports of pharmaceuticals was centered on antibiotics and was likely aided by the continued aging of the Japanese population. Japan has about 18 million individuals of 65 years and older[99] out of a population of 126 million.[100]

- The increase in U.S. exports of internal combustion piston engines was concentrated in engines above 2000 cubic centimeters displacement, engine sizes typical of U.S. production.

- Data of the Japanese Ministry of Agriculture, Forestry, and Fisheries indicate that declining domestic fish production has increased Japanese dependence on imported products.[101] The United States contributed to the growing import presence in the Japanese market through increased shipments of frozen pacific salmon and frozen fish livers and roes.

- New large civilian transport aircraft over 15,000 kilograms (kg) led the decrease in U.S. exports to Japan, as the number of aircraft over 15,000 kg imported into Japan from all countries declined by 25 percent.

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[95] See app. G for more details about appreciation of the yen during 1999.

[96] U.S. State Dept., telegram No. 001847, "Japan's Real GDP Down 1.4% in Fourth Quarter," prepared by U.S. Embassy, Tokyo, Mar. 13, 2000.

[97] Ibid.

[98] Ibid.

[99] Ann Saphir, "Seniors in Japan Access New Services," *Modern Healthcare*, Apr. 24, 2000, found at Internet address http://proquest.umi.com, retrieved Apr. 27, 2000.

[100] USDOC, *Country Commercial Guide: Japan*, July 15, 1999, p. 97.

[101] See supply and demand of fishery products. Minister's Secretariat, Ministry of Agriculture, Forestry and Fisheries, *Abstract of Statistics on Agriculture Forestry and Fisheries*, found at Internet address http://www.maff.go.jp/abst/from1/11ab/52a.html, retrieved Apr. 28, 2000.

- U.S. exports of motor vehicles and vehicle parts declined as the automotive market in Japan remained weak. Overall vehicle sales in Japan fell for the 35th month in December 1999.[102]

- The decline in exports of television receivers and video monitors is attributable to reduced exports of related parts, specifically printed circuit boards and ceramic substrates that returned to more historic levels in 1999 after strong growth in 1998.

U.S. imports

- U.S. imports from Japan increased by $9.6 billion (8 percent) in 1999 to $131.0 billion. Highlights of leading increases and decreases in these U.S. imports are identified in table 3-7.

- Motor vehicles, engines, and certain other parts accounted for 59 percent of the growth of all imports from Japan, as Japanese suppliers responded to expanding demand in the United States.[103]

- Large import increases were registered for a broad spectrum of electronic products, including printed circuit assemblies for telephonic apparatus; video recording apparatus and still image video cameras; computer displays, laser printers, and parts; and light-emitting diodes and integrated circuits. Telephone equipment led the expansion in U.S. imports of electronic products from Japan in 1999.

- Steel mill products led the decline in U.S. imports from Japan. The 50-percent reduction was concentrated in hot-rolled, flat-rolled carbon steel products that were the subject of an antidumping order issued by the U.S. Department of Commerce on June 29, 1999.[104]

- The downturn in imports of photographic cameras and equipment is largely attributable to a 50-percent decline in imports of electrostatic photocopying apparatus.

- Imports of metal cutting machine tools and machine tool accessories from Japan declined as imports of machine centers and horizontal lathes returned to more historic levels in 1999 after strong growth in 1998.

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[102] USTR, *The President's 1999 Annual Report on the Trade Agreements Program*, p. 227, found at Internet address http://www.ustr.gov/reports/tpa/2000/index.html, retrieved Mar. 3, 2000.

[103] Laura A. Polly, "Key Performance Indicators, Automobiles," *ITTR*, USITC publication 3293, Mar. 2000, p. A-4.

[104] Several U.S. steel producers and two unions filed an antidumping trade complaint against imports of certain hot-rolled, flat-rolled carbon steel products from Japan in late Sept. 1998. On June 11, 1999, the USITC found that the U.S. industry producing such products was materially injured by these imports. For more information, see "Steel Mill Products" in ch. 10.

Table 3-7
Leading changes in U.S. exports to and U.S. imports from Japan, 1998 and 1999

Sector/commodity	1998	1999	Change, 1999 from 1998: Absolute	Change, 1999 from 1998: *Percent*
	Million dollars			
U.S. EXPORTS:				
Increases:				
Semiconductors and integrated circuits (ET033)	2,283	2,801	518	23
Medicinal chemicals (CH025)	1,064	1,320	256	24
Internal combustion piston engines, other than for aircraft (ET002)	295	510	215	73
Fresh or frozen fish (AG006)	684	899	215	31
Decreases:				
Transportation equipment:				
Aircraft, spacecraft, and related equipment (ET013)	5,138	4,557	-581	-11
Motor vehicles (ET009)	1,118	807	-311	-28
Certain motor-vehicle parts (ET010)	1,253	997	-256	-20
Other:				
Television receivers and video monitors (ET022)	399	22	-376	-94
All other	42,612	42,397	-215	-1
TOTAL	54,846	54,310	-535	-1
U.S. IMPORTS:				
Increases:				
Transportation equipment:				
Motor vehicles (ET009)	28,864	32,115	3,252	11
Internal combustion piston engines, other than for aircraft (ET002)	3,275	4,682	1,407	43
Certain motor-vehicle parts (ET010)	3,491	4,562	1,070	31
Electronic products:				
Telephone and telegraph apparatus (ET017)	2,361	3,210	850	36
Consumer electronics (except televisions) (ET018)	4,612	5,322	711	15
Computers, peripherals, and parts (ET035)	13,130	13,645	514	4
Semiconductors and integrated circuits (ET033)	5,891	6,401	509	9
Decreases:				
Steel mill products (MM025)	2,914	1,461	-1,453	-50
Photographic cameras and equipment (ET039)	3,122	2,646	-477	-15
Metal cutting machine tools and machine tool accessories (MM084)	2,206	1,891	-314	-14
All other	51,447	55,016	3,569	7
TOTAL	121,313	130,951	9,638	8

Note.--Calculations based on unrounded data.

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

Mexico

- The U.S. trade deficit with Mexico expanded by $10.0 billion (57 percent) in 1999, to $27.6 billion. Total U.S. merchandise trade with Mexico increased by $22 billion (13 percent) during this same period to $190.4 billion.

- The bulk of U.S.-Mexico trade is accounted for by the export of U.S. components and materials and the import of goods assembled in Mexico. The value added by Mexican labor in the assembly process makes up much of the U.S. trade deficit with Mexico. The industries making the most use of assembly in Mexico, electronic products, automotive, and apparel, were also responsible for most of the growth in the U.S. trade deficit with Mexico.

- Use of the assembly industry in Mexico is spurred by the relatively low cost of Mexican labor, reduced trade barriers between the two countries under the North American Free Trade Agreement (NAFTA),[105] growing demand in the United States, and proximity to the U.S. market that lowers transportation costs and shortens delivery times relative to competing goods imported from Asia.

U.S. exports

- U.S. exports to Mexico reached record levels in 1999, rising $6.0 billion (8 percent) to $81.3 billion. Highlights of the leading increases and decreases in these U.S. exports are identified in table 3-8.

- U.S. exports of electronic products, machinery, plastics, and fabric, mainly destined for use in Mexico's maquiladora industry or for Mexican domestic manufacturing and commercial sectors, drove overall U.S. exports to Mexico to their highest level in 1999. The strong performance of the Mexican economy, which boosted overall Mexican imports by 13 percent in 1999 also contributed to the rise of U.S. exports to Mexico and of even faster-growing exports from Europe and Asia to Mexico.[106]

- The growth of electronic assembly operations in Mexico has resulted in a steady upward trend in U.S. exports of many electrical components, such as semiconductors, circuit apparatus, electrical capacitors,[107] and parts of radio and television equipment. In particular, 1999 was a very good year for both the U.S. and the global semiconductor industries as worldwide prices, notably for memory products, stabilized at the same time that demand for products that incorporate semiconductors, such as telecommunications equipment and personal computers, substantially increased.

- Despite recent foreign investment in integrated textile mills in Mexico, U.S. exports of fabric rose sharply in 1999 to supply the rapidly growing apparel assembly industry. Most of the apparel was

[105] Mexico's average import duty on U.S. goods has been reduced from 10 percent prior to the NAFTA to below 2 percent. Furthermore, approximately 80 percent of U.S. manufactured goods now enter Mexico free of duty. USTR, "Mexico," *2000 National Trade Estimate Report*, p. 284.

[106] U.S. State Dept., telegram No. 01964, "Mexico's Trade by Country in 1999," prepared by U.S. Embassy, Mexico City, Mar. 22, 2000.

[107] Fluctuations in electric capacitor trade tend to be linked with semiconductors, as the two components are often used on the same circuit-boards.

re-exported back to the United States.[108] The steepest increase in U.S. fabric exports to Mexico was in woven fabrics of cotton and of artificial filaments.

U.S. imports

- U.S. imports from Mexico recorded a $16.0-billion (17-percent) increase during 1999 to $109.0 billion. Highlights of the leading increases in these imports are identified in table 3-8.[109]

- Once again, record U.S. imports from Mexico in 1999 were driven by a significant expansion in U.S. GDP--7.3 percent in the last quarter of the year.[110] Higher world prices for crude petroleum, one of Mexico's major exports, combined with rising U.S. domestic demand for motor vehicles, computer hardware, and apparel helped to spur this increase.

- The growth in U.S. imports, particularly in electronic products, demonstrates the continued shift of labor-intensive electronic assembly operations to facilities operating under Mexico's Maquiladora Decree.[111] Mexico is a leading supplier to the United States of several types of electric products, such as electric motors, internal combustion engines, and meters, as well as semiconductors and other electronic assemblies that are key components in numerous finished electronic goods, such as computers, telecommunications equipment, consumer electronics, and appliances.[112] Previously, a higher proportion of these electronic inputs and finished goods was imported for the North American market from Asia.[113] Collectively, U.S. imports of computer hardware, telecommunications, radio and television broadcasting equipment, and television receivers and video monitors from Mexico rose by $3.8 billion (30 percent) to $16.5 billion and accounted for 24 percent of the overall increase in U.S. imports from Mexico.

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[108] Two-thirds of apparel imported from Mexico into the United States incorporates U.S.-produced fabric and yarn. "North American Textiles and Apparel Industry Gains Competitive Advantage Under NAFTA," *NAFTA Works,* Aug. 1999, p. 3.

[109] A trade shift of at least $200 million was required for the inclusion of industry/commodity groups in table 3-8. The largest decrease in U.S. imports from Mexico in 1999 was for vegetables which fell by $142 million (9 percent) to $1.5 billion.

[110] USDOC, BEA, *Overview of the Economy*, found at Internet address http://www.bea.doc.gov/bea/glance.htm, retrieved Apr. 25, 2000.

[111] Exports from companies operating under the Maquiladora Decree accounted for 86 percent of Mexico's overall exports to the United States in 1998. See USITC, *Production Sharing: Use of U.S. Components and Materials in Foreign Assembly Operations, 1995-1998*, USITC publication No. 3265, Dec. 1999, table C-2, p. C-5.

[112] "A Booming North American Electronics Industry Ensues Five Years of NAFTA," *NAFTA Works*, Oct. 1999, p. 3.

[113] For example, growth in imports of television equipment and computer monitors continues to be led by Korean-, Taiwan-, and Japanese-owned firms with investments in Baja California Norte and Sonora; and many U.S.-based computer hardware companies have also shifted assembly of products for the North American market from Asia to subsidiaries or contract assemblers in Guadalajara, while maintaining assembly in Southeast Asia to supply markets in that region. Elizabeth Malkin and Geeri Smith, "Mexican Makeover: NAFTA Creates the World's Newest Industrial Power," *Business Week*, Dec. 21, 1998.

- Mexico also has become a top destination for contract equipment providers (also known as contract electronic manufacturers--or CEMs), including manufacturers of generic personal computers, further enhancing the increase in U.S. imports of computers from Mexico in 1999.[114]

- As in 1998, U.S. imports of motor vehicles increased markedly, reflecting (1) the high degree to which General Motors, Ford, and the Chrysler Division of DaimlerChrysler have integrated their manufacturing operations in North America; (2) increased motor vehicle production in Mexico, which was up by 5 percent in 1999 to 1.5 million units; and (3) continued strong demand in the United States. Mexico's motor vehicle exports to the United States largely consist of small and medium-sized cars, light trucks, and auto parts. Motor vehicles and certain parts, including seats, accounted for 22 percent of the overall increase in U.S. imports from Mexico in 1999 with imports of these products rising by $3.5 billion (20 percent) to $21.3 billion.

- The increase in world prices for crude petroleum, particularly in the second half of 1999, caused U.S. imports to expand sharply and accounted for 9 percent of the rise in overall U.S. imports from Mexico in 1999.

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[114] These manufacturers of generic personal computers typically started as sub-contractors to major manufacturers, but have begun to operate independently in recent years. Derek Reveron, "White Box Rising," *Latin Trade*, Feb. 1, 2000, p. 50.

Table 3-8
Leading changes in U.S. exports to and U.S. imports from Mexico, 1998 and 1999

Sector/commodity	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
	Million dollars			
U.S. EXPORTS:				
Increases:				
Electronic products:				
Semiconductors and integrated circuits (ET033)	2,386	3,178	791	33
Computers, peripherals, and parts (ET035)	2,459	2,804	345	14
Circuit apparatus not exceeding 1000V (ET028)	1,298	1,642	344	27
Electrical capacitors and resistors (ET025)	1,097	1,372	275	25
Radio and television broadcasting equipment (ET023)	106	308	202	191
Parts of circuit apparatus (ET030)	866	1,066	200	23
Chemicals:				
Miscellaneous plastic products (CH041)	2,967	3,635	667	23
Petroleum products (CH005)	1,447	1,847	399	28
Other:				
Fabrics (CH046)	1,264	1,972	708	56
Miscellaneous products of base metal (MM031)	1,401	1,643	242	17
Miscellaneous machinery (MM098)	645	874	228	35
Decreases:				
Transportation equipment:				
Wiring harnesses for motor vehicles (MM068)	691	258	-433	-63
Seats for motor vehicles and aircraft (MM067)	705	493	-211	-30
Other:				
Cotton, not carded or combed (AG049)	616	285	-330	-54
All other	57,421	60,004	2,584	5
TOTAL	75,369	81,381	6,011	8
U.S. IMPORTS:				
Increases:				
Transportation equipment:				
Motor vehicles (ET009)	13,225	15,813	2,589	20
Certain motor-vehicle parts (ET010)	3,184	3,687	503	16
Seats for motor vehicles and aircraft (MM067)	1,426	1,817	391	27
Electronic products:				
Computers, peripherals, and parts (ET035)	5,448	7,239	1,791	33
Telephone and telegraph apparatus (ET017)	1,677	2,668	991	59
Radio and television broadcasting equipment (ET023)	1,313	1,974	661	50
Television receivers and video monitors (ET022)	4,218	4,609	391	9
Other:				
Crude petroleum (CH004)	3,819	5,265	1,447	38
Apparel (CH049)	6,812	7,846	1,034	15
All other	51,895	58,100	6,202	12
TOTAL	93,017	109,018	16,000	17

Note.--Calculations based on unrounded data.

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

CHAPTER 4
Factors Affecting Trends in Selected Industries/Commodities

This chapter focuses on products that have been the subject either of recent trade negotiations or agreements. The analyses highlight trade shifts or other developments in these product areas. They give updates for certain products discussed in last year's report--flat glass, and automobiles and automobile parts, that are subject to special bilateral market access agreements for imports negotiated by the United States with Japan; and the textile and apparel sector, parts of which have been affected by the phase-out of import quotas as a result of U.S. obligations under the Uruguay Round of Agreements. Other topics addressed in this chapter include summaries of the 5-year (sunset) review process for outstanding antidumping or countervailing orders in the U.S. market, and the World Trade Organization's dispute settlement process for adjudicating trade disputes among member countries.

FLAT GLASS

Under the U.S.-Japanese agreement on market access for imports of flat glass, Japan agreed to provide increased access to its home market for foreign flat glass. As part of the agreement, Japan agreed to remove discriminatory standards and to promote the sale of safety and insulating glass. The agreement covered the 1995-99 period and expired on December 31, 1999.[1]

The quantity of Japanese imports of flat glass from all countries more than doubled during 1994-97, the first 3 years of the agreement, but declined by 16 percent in 1998 (figure 4-1) as a likely result of reduced Asian demand during the region's financial crisis,[2] the weak Japanese economy, and an increase in the Japanese consumption tax from 3 percent to 5 percent.[3] The trend in Japanese imports from the United States was similar, but more pronounced, inasmuch as such imports more than tripled during the 1994-97 period and then declined by 41 percent in 1998 to just over 5 million square meters valued at $72 million.

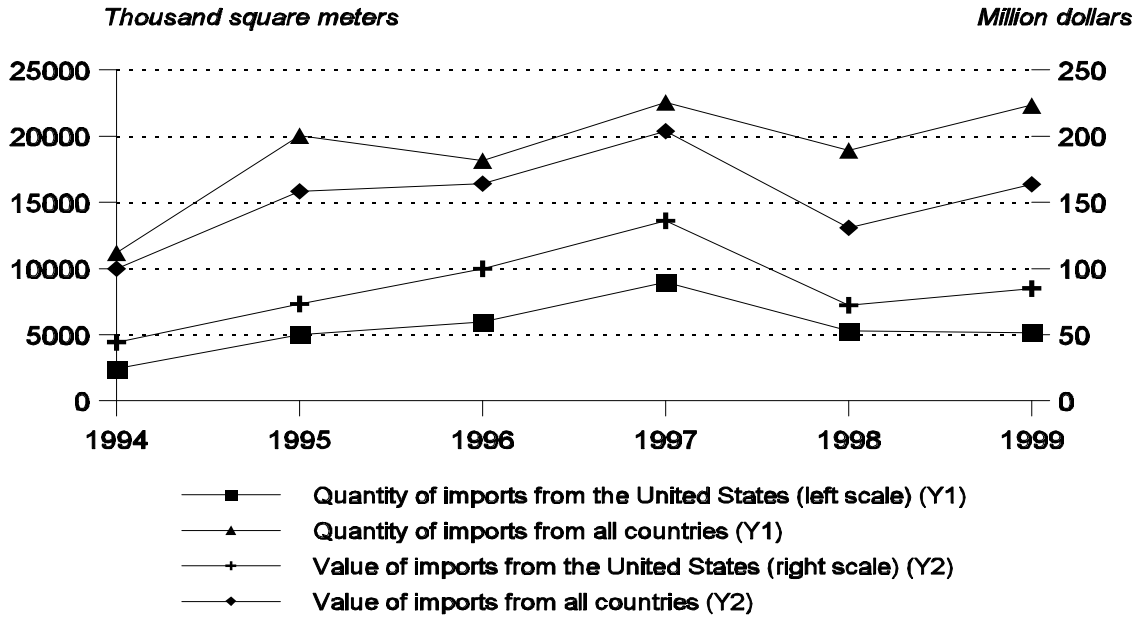
Japanese demand for imported flat glass improved in 1999 as such imports increased by 25 percent to $164 million, although the quantity of imports from all countries (up by 18 percent to 22 million square meters) remained slightly below the amount for 1997, and the U.S. share of the market declined. Imports from the United States in 1999 decreased by 2 percent to 5 million square meters but increased in value

[1] Office of the U.S. Trade Representative (USTR), "The President's 1999 Annual Report on the Trade Agreements Program," p. 227, found at Internet address http://www.ustr.gov/reports/tpa/2000/index.html, retrieved on Mar. 3, 2000.

[2] James J. Lukes, "Flat Glass," *Shifts in U.S. Merchandise Trade in 1998*, investigation No. 332-345, USITC publication 3220, Aug. 1999, p. 4-2.

[3] U.S. Department of State (State Dept.,) telegram, "Embassy Update of National Trade Estimate," prepared by U.S. Embassy Tokyo, Feb. 4, 1998, retrieved from NewsEdge/Web June 4, 1998, and "Glass: Update on Developments in Hokkaido," prepared by U.S. Consul in Sapporo, May 21, 1998, retrieved from NewsEdge/Web June 4, 1998.

Figure 4-1
Japanese imports of flat glass, by quantity and value, from the United States and all countries, 1994-99



Source: Compiled from official statistics of the Ministry of Trade and Industry, Japan.

by 18 percent to $85 million. Imports from the United States lost market share to less expensive imports from Korea, Indonesia, and Thailand.

The Government of Japan declined to negotiate a new bilateral agreement with the United States on flat glass, maintaining that a new agreement was not needed because Japan's flat glass market was already fully open to foreign glass products.[4] Although the agreement achieved some important successes in boosting demand for insulating glass and featuring American glass in public works projects, important U.S. goals remain unfulfilled.[5] U.S. and other foreign suppliers have limited access to the distribution system controlled by the three major Japanese glass producers and the foreign share of the Japanese market remains small.[6] The U.S. and Japanese Governments held government-to-government discussions in March 2000 to address the remaining market access barriers and are contemplating a joint government/industry meeting later in the year.

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[4] U.S. State Dept., telegram No. 09447, "Tokyo Press Reaction to Flat Glass Talks," prepared by U.S. Embassy, Tokyo, Nov. 16, 1999.
[5] USTR, "The President's 1999 Annual Report on the Trade Agreements Program," p. 227.
[6] Ibid.

U.S.-JAPAN AGREEMENT ON AUTOS AND AUTO PARTS[7]

The auto and auto parts industry was designated a priority sector in the 1993 U.S.-Japan Framework Agreement, leading to extensive discussions between the two countries focusing on efforts to liberalize access to the Japanese auto market for U.S. auto and auto parts manufacturers. The United States and Japan concluded their negotiations on June 28, 1995 with the signing of the U.S.-Japan Agreement on Autos and Auto Parts (Agreement). As part of the Agreement, the Government of Japan made commitments in three important areas: improving market access for foreign motor vehicles; eliminating regulations that limit U.S. auto parts sales in Japan; and enhancing sales opportunities for U.S. original equipment parts producers with Japanese automakers in the United States and Japan.[8] The ten-member Compliance Group,[9] which evaluates Agreement achievements, presents its findings every 6 months in a report to the President.[10]

The June 1999 status report to the President highlighted continuing U.S. concerns about Japan's economic recession and reluctance to deregulate its economy, with resulting adverse effects on the automotive sector, including foreign automakers. The report noted a 29-percent decline in sales of North American-produced "Big Three" (General Motors, Ford, and DaimlerChrysler) motor vehicles in Japan during January-March 1999 compared to the same period the previous year[11] and a 7-percent decline in U.S. exports of auto parts to Japan in 1998. Since that reporting period, new import vehicle registrations of U.S. passenger cars and trucks in Japan recorded an overall decline of 4 percent from the 1998 level of 62,644 units to 59,876 units in 1999.[12] Registrations for U.S. trucks fell by 32 percent during the period, whereas registrations of U.S. passenger cars remained relatively unchanged.[13] The value of U.S. auto parts exported to Japan continued to decline in 1999, falling by 12 percent to nearly $1.9 billion from the 1998 level.[14]

The Governments of Japan and the United States held bilateral consultations on the Agreement in October 1999. Although Japan has agreed to streamline new car registration procedures and create a new class of certified mechanics,[15] the United States continues to push for further Japanese industry deregulation by supporting transparent standards for aftermarket parts, removal of parts from the "critical

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[7] For more information, see U.S. Department of Commerce (USDOC) and USTR, *Report to President William Jefferson Clinton of the Interagency Enforcement Team Regarding the U.S.-Japan Agreement on Autos and Auto Parts*, Apr. 12, 1996 and Oct. 21, 1996.

[8] The Agreement includes 15 quantitative and qualitative criteria specific to motor vehicles, original equipment (OE) parts, and aftermarket parts, as well as two general qualitative criteria, all of which are designed to measure progress in reaching joint goals in these sectors.

[9] The Compliance Group was established on Sept. 6, 1995 by the USTR and the USDOC.

[10] The most recent report was submitted on June 3, 1999.

[11] Measured by the number of import vehicle registrations in Japan, by make and model, as compiled by the Japan Automobile Manufacturers Association from data sources of the Japan Automobile Dealers Association and the Japan Automobile Importers' Association.

[12] "New Import Vehicle Registrations 1999 YTD & December," *Japan Automotive News*, Feb. 1, 2000, p. 7.

[13] Exports of passenger cars from the United States to Japan were sustained by a 78-percent increase in shipments from Honda to 15,596 units and a 3-fold increase in shipments from Mercedes-Benz to 2,239 units.

[14] Although not a measurement criteria specified in the Agreement, U.S. imports of auto parts from Japan rose by 28 percent from the 1998 level to $10.5 billion in 1999.

[15] USDOC and USTR, *Report to President William Jefferson Clinton of the Interagency Enforcement Team, Regarding the U.S.-Japan Agreement on Autos and Auto Parts,* June 3, 1999.

parts" list,[16] relaxation of the *shaken* or vehicle inspection system, and financial incentives for U.S. automakers in Japan.[17]

In April 2000, the U.S. and Japanese Governments discussed the future of the Agreement, which expires at the end of 2000. Neither government has formally declared a position on the renewal of the Agreement. The Japanese Government, however, reportedly highlighted the globalization of the automotive industry and issues other than market access that will determine the success of the automotive industry in Japan. With respect to the United States, the automotive parts industry reportedly supports a follow-on agreement, whereas vehicle manufacturers are interested in a government-to-government consultative framework.[18]

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TEXTILES AND APPAREL

In recent decades, multilateral and bilateral agreements have had a significant influence on U.S. trade in textiles and apparel. These agreements have limited U.S. textiles and apparel imports while guaranteeing a certain level of access to the U.S. market. The North American Free Trade Agreement (NAFTA) phased out barriers to most textile and apparel trade between the United States and Mexico by January 1, 1999. The Uruguay Round Agreement on Textiles and Clothing (ATC) requires the United States and other textiles and apparel-importing countries to integrate textiles and apparel into the General Agreement on Tariffs and Trade (GATT) regime by 2005. In November 1999, the United States and China signed a market access agreement that would phase out U.S. import quotas on Chinese textiles and apparel by January 1, 2005, and commit China to open its markets to U.S. goods. In May 2000, the President signed into law legislation that will grant expanded trade benefits to eligible sub-Saharan African and Caribbean Basin countries. These and other developments affecting U.S. trade in this sector are highlighted in the following discussion.

Agreement On Textiles and Clothing

On January 1, 1995, the ATC replaced the 1974 Multifiber Arrangement (MFA), a multilateral agreement negotiated under GATT auspices that permitted the use of quotas without compensation, and created special interim rules for world trade in textiles and apparel.[19] Under the ATC, World Trade Organization (WTO) member countries with MFA quotas in place--the United States, the European Union

[16] Those automotive parts subject to disassembly repair that must be completed by a certified mechanic at a certified or designated garage, or be inspected at a Ministry of Transportation Land Office.

[17] Corbett B. Daly, "Japan: With Imports Falling, U.S. Urges Japan to Deregulate Auto, Auto Parts Industries," BNA, and "U.S., Japan Auto Agreement Talks Focus on Improving, Not Renewing Deal," Oct. 15, 1999, found at Internet address http://www.insidetrade.com, retrieved Oct. 15, 1999.

[18] "U.S., Japan Informally Explore Future After Expiry of Auto Deal," Apr. 28, 2000, found at Internet address http://www.insidetrade.com, retrieved Apr. 28, 2000.

[19] The MFA governed most world trade in textiles and apparel during 1974-94 and provided a general framework and guiding principles for negotiation of bilateral agreements between textile importing and exporting countries for the purpose of setting quotas, or for unilateral action by an importing country if an agreement could not be reached. The MFA was established to deal with problems of market disruption in sector trade in developed countries, while permitting developing countries to share in expanded export opportunities.

(EU), Canada, and Norway--are to eliminate the quotas on these goods from other WTO countries and integrate the products into the GATT regime over a 10-year transition period ending on January 1, 2005. As trade in this sector is integrated into the GATT regime, it becomes subject to the same GATT rules as trade in other sectors.

Quota elimination under the ATC involves the integration of articles into the GATT regime (including the removal of quotas on those goods) and the acceleration of growth rates for quotas on articles not yet integrated into the GATT regime during the transition period (the "growth-on-growth" provision). WTO countries were to integrate at least 16 percent of their sector trade into the GATT regime in 1995 and an additional 17 percent in 1998 (based on their respective 1990 import volumes); they are to integrate at least another 18 percent in 2002 and the remainder on January 1, 2005.[20] Under the growth-on-growth provision, importing countries were to increase existing quota growth rates for major WTO suppliers by 16 percent in 1995 and by another 25 percent in 1998; they are to increase the growth rates by another 27 percent in 2002.[21] For the 22 small WTO suppliers (countries accounting for 1.2 percent or less of an importing country's total quotas in 1991), quota growth rates were advanced by one stage--that is, they were increased by 25 percent in 1995 and by 27 percent in 1998.

The ATC also allows WTO countries during the 10-year transition period to set new quotas on imports of textiles and apparel not yet integrated into the GATT regime by applying a "transitional safeguard" when imports cause or threaten serious damage to a domestic industry. These quotas may remain in place for up to 3 years or until the article is integrated into the GATT regime.

U.S. Quota Actions in 1999

There are currently U.S. quotas on textiles and apparel from 48 countries, which together accounted for 84 percent of the total value of U.S. sector imports in 1999. U.S. quotas are being phased out for Mexico under NAFTA and the other 37 WTO countries under the ATC. The 10 non-WTO suppliers subject to quotas, led by China and Taiwan, are ineligible for ATC benefits.[22]

U.S. quota actions under the ATC in 1999 involved Pakistan and Turkey. The Committee for the Implementation of Textile Agreements (CITA), which administers the U.S. textile trade agreements program, established a quota on combed cotton yarn from Pakistan of 5,262,665 kilograms (kg) for the 12-

[20] The WTO reported that almost none of the articles integrated by the developed countries in 1995 were subject to quota and that the articles integrated in 1995 and 1998 were mostly relatively less value-added items such as yarn and fabric, rather than finished goods such as apparel. WTO, *Comprehensive Report of the Textiles Monitoring Body to the Council for Trade in Goods on the Implementation of the Agreement on Textiles and Clothing During the First Stage of the Integration Process*, document G/L/179 (97-3288), July 31, 1997, paras. 15 and 70, found at Internet address http://www.wto.org/wto/ddf, retrieved Jan. 28, 1998.

[21] The acceleration of quota growth rates is based on rates specified in the bilateral MFA agreements in place on Dec. 31, 1994. The "base" growth rates vary by country and article, but ranged from less than 1 percent to 6 and 7 percent. Assuming a 6-percent base rate for a major supplier, the annual quota growth rate would be 6.96 percent during 1995-97, 8.7 percent during 1998-2001, and 11.05 percent during 2002-04.

[22] Sector imports from non-WTO suppliers are subject to quotas imposed by the President under section 204 of the Agricultural Act of 1956 (7 U.S.C. 1854), which provides the President with the basic statutory authority to enter into agreements with foreign governments to limit their exports of these products to the United States.

month period beginning on March 17, 1999.[23] The quota was subsequently extended for another year and increased by 6 percent to 5,578,425 kg. In April 1999, the WTO Textiles Monitoring Body (TMB), which supervises the implementation of the ATC provisions, recommended that the United States rescind its quota on Pakistani yarn. However, in May 1999, the United States notified the TMB that it was unable to comply with the recommendation.[24] In April 2000, Pakistan asked the WTO Dispute Settlement Body to set up a panel to rule on the U.S. quota.[25]

The United States reached agreement with Turkey in April 1998 to set a new quota on cotton and manmade-fiber underwear from Turkey for the period from June 1, 1998, through December 31, 2002, and to increase its existing quotas on certain knit shirts and wool fabrics.[26] In March 2000, the TMB announced that the new underwear quota for Turkey "had not been demonstrated to be in conformity with the provisions of the ATC."[27]

U.S. quota actions with non-WTO suppliers in 1999 included the completion of negotiations on the first bilateral textile agreement with Cambodia, a fairly new but rapidly growing supplier of apparel, and the establishment of a new quota on glass fiber fabrics from Belarus. The agreement with Cambodia, which will be in effect for 3 years beginning on January 1, 1999, establishes 12 quotas on its shipments of apparel. Cambodia agreed to improve cooperation and information sharing to prevent illegal textile transshipments and to increase market access in Cambodia for U.S. exporters. For the first time in a U.S. bilateral textile agreement, the United States obtained a commitment from Cambodia to improve labor conditions in its textile and apparel sector. If the United States determines that Cambodia's labor conditions comply with international labor standards by December 1 of each agreement year, U.S. quotas could be increased by 14 percent for the following agreement year, in addition to the annual quota growth rate of 6 percent. In May 2000, the United States granted Cambodia a 5-percent increase in quotas for the year 2000, following agreement by Cambodia and the International Labor Organization to establish a new program that provides for independent monitoring of labor conditions in the Cambodian apparel industry.[28]

The United States requested consultations with Belarus in September 1999 for the purpose of negotiating a quota on its shipments of glass fiber fabrics, which rose from 456,093 square meters in the 12-month period ending May 1998 to 6,480,552 square meters in the succeeding 12-month period.[29]

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[23] Quota information on Pakistan is from *Federal Register* notices of CITA, "Establishment of an Import Limit for Certain Cotton Textile Products Produced or Manufactured in Pakistan" (64 F.R. 12290), Mar. 12, 1999; and "Establishment of an Import Limit for Certain Cotton Textile Products Produced or Manufactured in Pakistan" (65 F.R. 14544), Mar. 14, 2000.

[24] WTO, TMB, "Fifty-Sixth Meeting of the TMB, Note by the Chairman," document G/TMB/19 (99-2684), June 29, 1999, found at Internet address http://www.wto.org, retrieved Mar. 22, 2000.

[25] WTO, TMB, "Overview of the State of Play of WTO Disputes," found at Internet address http://www.wto.org/wto/dispute/bulletin.htm# Toc472401424, retrieved May 9, 2000.

[26] CITA, "Establishing and Increasing Import Limits for Certain Cotton, Wool, and Man-Made Fiber Textile Products Produced or Manufactured in Turkey," *Federal Register* (63 F.R. 27923), May 21, 1998, p. 27923.

[27] WTO, TMB, "Report of the Sixty-First Meeting," document G/TMB/R/60 (00-0349), Jan. 28, 2000, found at Internet address http://www.wto.org, retrieved Mar. 23, 2000.

[28] According to USTR, "[i]n December 1999, the U.S. Government found that Cambodia was not in substantial compliance with its labor laws and internationally recognized core labor standards... However, the U.S. Government sought to acknowledge that progress had been made... and offered a 5 percent increase..." USTR, "USTR Announces Apparel Quota Increase for Cambodia," press release No. 00-39, May 18, 2000.

[29] Information on Belarus is from *Federal Register* notices of CITA, "Request for Public Comments on Bilateral Textile Consultations with the Government of Belarus" (64 F.R. 51962), Sept. 21, 1999; "Establishment of an Import Limit for Certain Man-Made Fiber Textile Products Produced or Manufactured in Belarus" (64 F.R.

(continued...)

Because the two countries were unable to agree on a limit, the United States established a quota on such fabrics from Belarus of 6,480,552 square meters for the 12-month period beginning on September 17, 1999. In February 2000, the two countries agreed on a new limit of 11,500,000 square meters for the calendar year 2000.

Market Access Agreement with China

In November 1999, the United States and China signed a market access agreement that incorporates textile provisions from a 1997 Memorandum of Understanding between the two countries. Should China accede to the WTO, the agreement requires the United States to phase out quotas on imports of Chinese textiles and apparel as of January 1, 2005, the same date as that for other WTO members. However, the agreement allows the United States to apply selective safeguards (quotas) on imports of these goods from China for 4 additional years beyond the termination of textile quotas for WTO members (i.e., through December 31, 2008). The agreement states that no safeguards established during the 4-year period will remain in effect beyond a year, without re-application, unless both countries agree.[30] In addition to the textile-specific safeguard, the agreement provides for a "product-specific" safeguard that would allow the United States to apply a safeguard measure on imports of Chinese goods for 12 years following China's accession to the WTO. The agreement also commits China to open its domestic market to U.S.-made textiles and apparel.[31]

Outward Processing Program for Macedonia and Romania

The United States signed textile agreements with Macedonia and Romania under an Outward Processing Program for Textiles and Apparel in September 1999, marking the first time that the program has been extended to countries outside the Western Hemisphere. Under the agreements, which took effect on January 1, 2000, U.S. imports of wool apparel from Macedonia and Romania will be eligible to enter free of quota, provided that the garments are assembled from fabrics made in the United States. The agreements with these countries were intended to promote "economic development in two countries whose economies were adversely affected by the conflict in Kosovo, while enhancing export growth of (U.S.) domestic wool fabric producers."[32] In 1999, U.S. imports of wool apparel totaled $29 million for Macedonia and $17 million for Romania.

Trade and Development Act of 2000

On May 18, 2000, the President signed into law the Trade and Development Act of 2000, which grants expanded trade benefits to 48 eligible countries in sub-Saharan Africa (SSA) under Title I, the African Growth and Opportunity Act, and 24 Caribbean Basin Economic Recovery Act (CBERA) beneficiary countries under Title II, the United States-Caribbean Basin Trade Partnership Act. Chief

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[29] (...continued)
71982), Dec. 22, 1999; and "Settlement of a Call and Establishment of an Import Limit for Certain Man-Made Fiber Textile Products Produced or Manufactured in Belarus" (65 F.R. 15315), Mar. 22, 2000.

[30] *Memorandum of Understanding, The Government of the People's Republic of China and the Government of the United States of America*, Feb. 1, 1997, p. 10.

[31] *Agreement on Market Access Between the People's Republic of China and the United States of America*, Nov. 15, 1999.

[32] USTR, "United States Signs Textile Agreements with Macedonia and Romania," press release No. 99-75, Sept. 17, 1999. For detailed information on the agreements, see CITA, "Implementation and Enforcement of the Outward Processing Program for Textiles and Apparel," *Federal Register* (64 F.R. 69746), Dec. 14, 1999, p. 69746.

among the trade benefits in this legislation is preferential treatment for certain textiles and apparel from SSA and CBERA countries. The legislation also suspends or reduces U.S. tariffs on imports of worsted wool fabrics and their inputs in an effort to improve the competitiveness of the U.S. tailored clothing industry and, as part of an accord with the EU, changes the rules of origin for certain textile articles. The key textile and apparel provisions of the Trade and Development Act of 2000 are discussed below.

African Growth and Opportunity Act

The Africa Growth and Opportunity Act (AGOA) grants duty-free benefits under the Generalized System of Preferences program to imports of qualifying apparel from eligible SSA countries for 8 years beginning on October 1, 2000. It also eliminates existing U.S. quotas on imports of textiles and apparel from SSA countries, and allows imports of such goods from all SSA countries to enter free of quota during the 8-year period.[33] The only SSA countries currently subject to such quotas are Kenya and Mauritius. However, the AGOA grants preferential treatment (duty- and quota-free benefits) to SSA countries contingent upon their adoption of enforcement measures to prevent unlawful transshipments of textiles and apparel from third countries.

Unlimited preferential treatment is granted under the AGOA to apparel from SSA countries made of fabrics produced in the United States of U.S. yarns. If the U.S. fabrics used in the production of such apparel are cut into garment parts in SSA countries rather than the United States, the garments must also be sewn together with U.S. thread. Unlimited preferential treatment is also granted to (1) knit-to-shape sweaters in chief weight of cashmere or containing 50 percent or more by weight of wool measuring 18.5 microns in diameter or finer (merino wool); (2) apparel wholly assembled from fabric or yarn not available in commercial quantities in the United States;[34] and (3) handloomed, handmade, and folklore articles.

Preferential treatment is also granted to a specified amount of imports of SSA apparel made from fabrics that are produced in SSA countries of U.S. or SSA yarns (regional fabrics). Imports of SSA apparel made of regional fabrics will be subject to an annual cap beginning on October 1, 2000, equal to 1.5 percent of the overall quantity of U.S. apparel imports in the preceding 12-month period, and rising in each of the seven succeeding 1-year periods in equal increments, to 3.5 percent in the final 1-year period beginning on October 1, 2007.[35] A special rule allows apparel entered under the cap from "lesser-developed" SSA countries to be made of third-country fabrics (other than U.S. or SSA fabrics) for the first 4 years, through September 30, 2004.[36] Apparel of regional or third-country fabrics covered by the cap are subject to a "surge mechanism," under which the U.S. Secretary of Commerce may suspend duty-free treatment on any such article whenever the Secretary determines that the article is being imported in such increased quantities as to threaten or cause serious damage to the U.S. industry.

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[33] As noted earlier, the United States will eliminate quotas on textiles and apparel from all WTO countries as of Jan. 1, 2005. Imports of textiles and apparel from non-WTO countries will continue to be subject to control under section 204 of the Agricultural Act of 1956.

[34] Apparel articles assembled from fabric or yarn not available in commercial quantities in the United States are identified in Annex 401 of NAFTA (e.g., apparel of silk or linen fabric, velveteen or fine-wale corduroy cotton fabric, and hand-woven Harris Tweed wool fabric).

[35] Assuming that all U.S. imports of SSA apparel would have entered under the cap in calendar year 1999, the SSA countries would have filled 60 percent of the cap of 212 million square meter equivalents (SMEs), based on overall apparel imports of 14.1 billion SMEs and those from SSA countries of 128.2 million SMEs.

[36] The AGOA defines a lesser-developed SSA country as one that had a per-capita gross national product of less than $1,500 in 1998, as measured by the World Bank. All but six SSA countries (Botswana, Gabon, Mauritius, Namibia, Seychelles, and South Africa) meet the definition of a lesser-developed country.

The AGOA eliminates existing U.S. quotas on textiles and apparel from Kenya and Mauritius within 30 days after these countries adopt an effective visa system to prevent the transshipment of textiles and apparel from third countries and to prevent the use of counterfeit documents relating to importation of the articles into the United States.[37] This requirement for an effective visa system also applies to other SSA countries if they are to receive the preferential treatment. Sub-Saharan African countries are also required to enact legislation or promulgate regulations that would permit the U.S. Customs Service verification teams the access necessary to investigate alleged transshipments. There are also criteria for production and export record-keeping requirements, country-of-origin documentation, and penalties for exporters who transship.

U. S.-Caribbean Basin Trade Partnership Act

The U.S.-Caribbean Basin Trade Partnership Act (the Act) allows imports of qualifying apparel from CBERA beneficiary countries to enter free of duty and quota during a transition period beginning on October 1, 2000, and ending on the earlier of September 30, 2008, or the date on which the Free Trade Area of the Americas or a similar free-trade agreement between the United States and CBERA beneficiary countries enters into force. The preferential treatment (duty- and quota-free benefits) is essentially equivalent to that provided under NAFTA for similar goods from Mexico, which competes with CBERA countries for apparel assembly work from U.S. firms.

Unlimited preferential treatment under the Act is granted to apparel assembled from fabrics made in the United States of U.S. yarns. If the U.S. fabric used in the production of such apparel is cut into garment parts in CBERA countries rather than in the United States, the apparel must also be sewn together with U.S. thread. Unlimited preferential treatment is also granted to textile luggage assembled from U.S. fabrics made of U.S. yarns; apparel assembled from fabrics deemed to be in "short supply" in the United States under NAFTA (e.g., silk or linen fabric, velveteen or fine-wale corduroy cotton fabric, and hand-woven Harris tweed wool fabric); and handloomed, handmade, and folklore articles.

The Act grants preferential treatment for limited amounts of knit apparel, except socks, made of fabrics knitted in CBERA countries (regional knit fabrics), provided that the fabrics are produced of U.S. yarns.[38] This preferential treatment is limited to 4.2 million dozen outerwear T-shirts and 250 million square meter equivalents (SMEs) of other knit apparel, for the 1-year period beginning on October 1, 2000. Both caps are to be increased by 16 percent in each succeeding 1-year period through September 30, 2004, and remain at those levels through September 30, 2008.

Preferential treatment is also granted to brassieres from CBERA countries cut and sewn or otherwise assembled in the United States, CBERA countries, or both. For the 1-year period beginning on October 1, 2001, and in each of the six succeeding 1-year periods, preferential treatment is only granted to producers whose total costs of the U.S. fabric components during the previous 1-year period is at least 75 percent of the aggregate declared customs value of the fabric contained in all of their brassieres entered during that period. In general, preferential treatment is only granted to producers who use mostly U.S. fabric components.

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[37] The United States requires visas for textiles and apparel from a number of countries. Issued by the quota regulatory authority of the country in which the goods originate, a visa is an endorsement that certifies the origin of the goods, specifies the product types and quantity, and authorizes the shipment.

[38] Knit apparel made of regional knit fabrics includes garments cut and assembled from knit fabrics or those knit-to-shape directly from yarns (sweaters).

Rules of origin

Section 405 of the Trade and Development Act of 2000 changes the rules of origin for certain dyed and printed fabrics and "flat goods" (e.g., bed sheets and scarves). Under the current rules of origin, which were implemented on July 1, 1996, as required by section 334 of the Uruguay Round Agreements Act, the country of origin for fabrics and flat goods is the country in which the base fabric was made, regardless of any further finishing operations performed in other countries. For nonwool fabrics and flat goods made with nonwool and noncotton fabrics (containing less than 16 percent by weight of cotton), the legislation restores the rules of origin in effect before July 1996, which permitted the processes of dyeing and printing to confer origin, when accompanied by two or more finishing operations.

The Clinton Administration requested this change to implement the terms of an August 1999 agreement with the EU. In May 1997, the EU filed a request with the WTO for consultations with the United States, claiming that the rules adversely affected its exports of dyed and printed fabrics and flat goods to the U.S. market. The EU stated that as a result of the U.S. rules change in 1996, EU exports of these articles had lost their quota-free access to the U.S. market and EU exporters had to comply with any U.S. quota or visa requirements applicable to the country of origin of the base fabric. In addition, EU silk accessories, such as scarves, had to be marked as a product of the country in which the base fabric was formed (mainly in China), rather than as a product of the EU country in which the fabric was printed, dyed, and otherwise finished (e.g., Italy or France), as was the usual case under the previous rules. On June 25, 1999, the President signed the Miscellaneous Trade and Technical Corrections Act of 1999 (PL-106-36), which exempts woven silk fabrics and scarves from country-of-origin marking requirements under section 304 of the Tariff Act of 1930.[39]

Fine wool fabrics

Title V of the Trade and Development Act of 2000 reduces U.S. tariffs on worsted wool fabrics for tailored clothing and suspends the tariffs on fine wool yarns and fine raw wool for 3 years beginning on January 1, 2001. These tariff changes are intended to improve the competitiveness of the U.S. tailored clothing industry relative to its counterpart in Canada, whose lower fabric duties have enabled the Canadian industry to greatly expand its exports of men's suits to the U.S. market under NAFTA.[40] Since implementation of the United States-Canada Free Trade Agreement in 1989, which was suspended in 1994 and its duty phaseout schedules incorporated into NAFTA, U.S. imports of men's and boys' wool suits from Canada grew sixfold, to 1.3 million suits valued at $157 million in 1999.

Title V creates two tariff-rate quotas (TRQs) for the purpose of granting duty reductions on worsted wool fabrics[41] certified by the importer as suitable for use in making men's or boys' suits, suit-type jackets, and trousers.[42] One TRQ will permit 2.5 million SMEs of wool fabrics having average fiber diameters greater than 18.5 microns to enter each year at 19.3 percent, the same rate as that for men's and

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[39] Also in response to EU concerns about section 334 rules, statistical provisions were created in the Harmonized Tariff Schedule of the United States in 1999 for "discharge printed fabrics" in order to exempt the fabrics from visa and quota requirements applicable to selected countries in which the base fabric was made.

[40] NAFTA contains a tariff preference level that permits specified amounts of wool apparel from Canada to enter the United States free of duty even though the garments do not meet the NAFTA rules of origin (e.g., the suits are made of European fabric).

[41] The fabrics are classifiable under U.S. Harmonized Tariff Schedule (HTS) subheadings 5111.11.70, 5111.19.60, 5112.11.20, and 5112.19.90.

[42] The duty reductions temporarily and partially eliminate the "tariff inversion" that exists for the fabrics, where the tariff is higher on the fabric than on the finished garment made of such fabric.

boys' suit-type jackets of worsted wool fabrics.[43] The other TRQ will allow 1.5 million SMEs of wool fabrics (having average fiber diameters of 18.5 microns or less) to enter each year at 6 percent, the same as Canada's rate on the finer wool fabrics.[44] Imports in excess of the TRQ limits will be subject to the normal trade relations rate (28.3 percent in 2001). Title V also suspends the tariffs on wool yarns, fibers, and tops having average fiber diameters of 18.5 microns or less.[45]

Title V authorizes the President to take action to ensure that the TRQs are allocated fairly to firms that make men's and boys' worsted wool tailored clothing in the United States and that apply for an allocation based on the amount of worsted wool suits made during the prior calendar year. The President has the authority to modify the TRQ limits in response to requests from U.S. producers of men's and boys' worsted wool tailored clothing, subject to a review of U.S. market conditions, but by not more than 1.0 million SMEs in any of the 3 years. Title V also provides for the establishment of a trust fund for wool research, development, and promotion and for a partial refund of duties paid by specified U.S. manufacturers on imports of the wool fabrics, yarns, fibers, and tops (without regard to micron level) in each of the years 2000, 2001, and 2002.

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FIVE-YEAR (SUNSET) REVIEWS OF ANTIDUMPING AND COUNTERVAILING DUTY ORDERS

The Uruguay Round Agreements Act, approved in late 1994, amended the U.S. antidumping (AD) and countervailing duty (CVD) laws in several respects. One of the most significant changes is the provision requiring U.S. Department of Commerce (Commerce) and the U.S. International Trade Commission (Commission) to conduct reviews (sunset reviews), no later than 5 years after an AD or CVD order is issued, to determine whether revoking the order would be likely to lead to continuation or recurrence of dumping or subsidies (determined by Commerce) and of material injury (determined by the Commission) within a reasonably foreseeable time.[46] This requirement resulted in the institution of reviews of all outstanding AD and CVD orders in existence as of January 1, 1995, over a 3-year "transition period" that began in July 1998 and ends in June 2001.[47] Five-year reviews of all AD and CVD orders that have been issued since January 1, 1995, must be initiated by Commerce by no later than 30 days prior to their 5-year anniversary. The Commission institutes its reviews on the same day as Commerce. A summary of

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[43] The 19.3 percent rate will be subject to the same staged duty reductions as those agreed to by the United States in the Uruguay Round of multilateral trade negotiations for men's and boys' wool suit-type jackets (HTS subheading 6203.31.00). The tariff on these items will be reduced to 18.8 percent in 2001, 18.4 percent in 2002, and 18 percent in 2003 (the last year of the temporary duty reductions for the fabrics).

[44] The President is authorized to reduce the 6 percent rate, as necessary, to equalize the rate with that of Canada.

[45] The duty suspension applies to wool yarns under HTS subheading 5107.10.00 (normal trade relations rate of 6.9 percent in 2001) and to wool fibers and tops under headings 5101.11 - 5101.30, 5103.10, 5103.20, 5104.00, 5105.21, and 5105.29. Wool tops are used in the manufacture of worsted yarn and are a loose, untwisted rope of fibers that have been combed to straighten the fibers and remove the short fibers.

[46] Section 751(c)(1) of the Act (19 U.S.C. § 1675 (c)(1)).

[47] A complete schedule for these "transition" reviews (321 in total) was published in the *Federal Register* on May 29, 1998, and can be found at Internet address http://205.197.120.60/oinv/sunset.nsf, as well as, at Commerce's Internet address http://www.ita.doc.gov/import_admin/records/sunset.

the outcomes of the review cases to date is provided in table 4-1. Major deadlines in the sunset review process are highlighted in table 4-2. Appendix E displays the status of sunset reviews that have been instituted through August 2000.[48]

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Table 4-1
Five-year (sunset) review status[1]

Review/Institution period	Number instituted	No responses: Revoked by Commerce[2]	Commission decision[3]	
			Expedited	Full
Transition/July 1998-Dec. 1999	309 (105)	75 (36)	[4]51 (28)	[5]183 (41)
Normal/Jan. 2000-Aug. 2000	24 (10)	2 (1)	[6]3 (3)	[7]6 (2)

[1] As of Aug. 22, 2000. Numbers shown in parentheses are on a grouped basis, meaning that reviews on the same or similar products from different countries that were instituted simultaneously and/or reviews of antidumping and countervailing duty orders on the same or similar products that were instituted simultaneously are counted as one. Grouped numbers for revocations mean that all orders in a group were revoked; if at least one order in a group was not revoked, the group is treated as "not revoked." See the Commission's Web site at http://www.usitc.gov for details on each review.

[2] Revoked because of no domestic response to the notice of institution.

[3] For Jan.-Aug. 2000, this decision is pending for 13 (4) reviews.

[4] The current status of these reviews is as follows:
- Commission determination to revoke orders 3
- Commission determination to not revoke orders 48
- Pending Commission determination 0

[5] The current status of these reviews is as follows:
- Commission determination to revoke orders 51
- Commission determination to not revoke orders 73
- Negative Commerce determination 3
- Pending Commission determination 56

[6] The current status of these reviews is as follows:
- Commission determination to revoke orders 0
- Commission determination to not revoke orders 3
- Pending Commission determination 0

[7] The current status of these reviews is as follows:
- Commission determination to revoke orders 0
- Commission determination to not revoke orders 0
- Pending Commission determination 6

Source: Compiled by USITC staff from "5. Five-Year Review Status," at Internet address http://205.197.120.60/oinv/sunset.nsf/, retrieved Aug. 28, 2000.

[48] For additional information on sunset review cases, see USITC, "5-Year Sunset Review" at Internet address http://www.ita.doc.gov/import_admin/records/sunset/ss-home.htm.

Table 4-2
Simplified process of 5-year (sunset) review cases

U.S. Department of Commerce (Commerce)	Day	U.S. International Trade Commission (Commission)
Initiates investigation	**0**	Institutes investigation
Deadline for domestic industry response to notice of initiation	**15**	
Notify Commission regarding domestic response	**20**	
	50	Submission of requested information for inclusion in review
No domestic response--final determination - revoking order or termination of suspended investigation	**90**	
	95	Determination on adequacy of response from interested parties
Expedited review--final determination on margins/subsidy	**120**	
	150	Expedited review--final determination on injury (can be extended 90 days for extraordinarily complicated case)
Full review--final determination on margins/subsidy	**240**	
Extraordinary complicated case--full review--final determination on margins/subsidy	**330**	
	360	Full review--final determination on injury
	450	Extraordinary complicated case--full review--final determination on injury

Source: Compiled by USITC staff.

THE WTO DISPUTE SETTLEMENT UNDERSTANDING

The 1994 Uruguay Round Agreements (URA) provided a more structured and clearly defined[49] (and more effective[50]) mechanism than had existed under the predecessor General Agreement on Trade and Tariffs (GATT) for resolving trade-policy disputes among members of the World Trade Organization (WTO). Some specific aims of the WTO's Understanding on Rules and Procedures Governing the Settlement of Disputes (Dispute Settlement Understanding or DSU), found under Article 3 (General Provisions), are to:[51]

- provide security and predictability to the rules-based multilateral trading system;
- achieve prompt settlement of disputes;
- secure positive solutions to disputes;
- secure the withdrawal of so-determined offending measures;
- resort to compensation only if the withdrawal of a measure is impracticable; and,
- allow for suspension by the aggrieved party of trade benefits granted to the responding party, but only as a last resort.

Unlike the previous GATT dispute-settlement mechanism, the WTO DSU is an integral part of the operation of the URA ("integrative") providing for a single, unified dispute-settlement procedure reaching across essentially all categories under the URA.[52] Recourse to the DSU process is compulsory for all WTO members. Specific but flexible timetables are prescribed for each step of the DSU process, to correct the tendency for cases to drag on inconclusively for an extended period of time as happened under the previous GATT regime.[53] Rulings of Dispute Settlement Body (DSB) panels are binding, being automatically adopted unless opposed by all WTO members.[54] Moreover, panel decisions are enforceable, as the prevailing party can seek permission from the DSB to "retaliate" by suspending trade concessions to the other party, should the other party fail to abide by the decision and compensation negotiations fail. The WTO's dispute settlement procedures prescribe a series of formal consultations among the parties, examinations of the evidence by an impartial dispute-settlement panel, possibility for appeals of panel rulings, and compliance negotiations. These various steps and their approximate timing are summarized in table 4-3. However, at all times, parties in a dispute are encouraged to consult with each other to reach a mutually agreeable settlement outside the formal dispute settlement process.

According to the WTO Secretariat, involvement of selected members in WTO proceedings, as well as WTO agreements cited in the disputes, during January 1995 through May 2000, are as follows:[55]

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[49] WTO, "Settling Disputes, the WTO's Most Individual Contribution," Feb. 6, 1998, found at Internet address http://www.wto.org/wto/about/dispute1.htm, retrieved June 8, 2000.

[50] USTR, "What is the World Trade Organization (WTO)?," Apr. 12, 2000, found at Internet address http://www.ustr.gov/new/wtofact3.pdf, retrieved June 8, 2000.

[51] Article 3 (General Provisions), Annex 2 (Understanding on Rules and Procedures Governing the Settlement of Disputes), *Final Act of the Uruguay Round, Agreement Establishing the World Trade Organization*.

[52] In addition to merchandise trade, among the agreements covered under the DSU include those on services, intellectual property, government procurement, and non-tariff barriers that include health, safety, labor, environmental standards, and product safety issues. Appendix 1 (Agreements Covered by the Understanding) and Appendix 2 (Special or Additional Rules and procedures Contained in the Covered Agreements), Annex 2.

[53] The GATT provided no fixed timetables for dispute settlement. WTO, "Settling Disputes."

[54] Under the GATT, parties could unilaterally veto unfavorable findings. Ibid.

[55] WTO Secretariat, "WTO's Unique System of Settling Disputes Nears 200 Cases in 2000," June 2000, found at Internet address http://www.wto.org/wto/new/Press180.htm, retrieved June 14, 2000.

Selected members	as Complainant	as Respondent
United States	60	42
European Community countries	50	28
Japan	8	12

Agreement cited	Number of cases
Sanitary-Phytosanitary (SPS)/Technical Barriers to Trade (TBT)	26
Agriculture	25
Textiles	13
Trade Related Investment Measures (TRIMS)	15
Trade-Related Aspects of Intellectual Property Rights (TRIPS)	21
General Agreement on Trade in Services (GATS)	9

In a recent assessment of DSU cases involving the United States, the U.S. General Accounting Office (GAO) concluded that "...the United States has gained more than it has lost in the WTO dispute settlement system to date."[56] Reasons cited for this conclusion include (1) the U.S. ability to effect changes to several foreign laws, regulations, and practices that it considered to restrict trade, (2) several cases in which the United States prevailed that provided commercial benefits to U.S. exporters or investors, and (3) several WTO rulings that have upheld trade principles that are important to the United States.[57] Moreover, other conclusions reached by the GAO in this assessment were that:[58]

- the impact on the United States should not be judged merely by wins and losses, or commercial value, alone;
- there are not enough cases to fully evaluate the system; and
- some high-profile cases involving the United States are in progress.

Appendix F displays the status of cases involving the United States. Preliminary observations, based on issues entering the formal dispute settlement process in the first 5 years, are that the WTO's DSU has become a frequently used tool of the major traders in the world economy and increasingly used by developing countries as well. The United States reportedly has allayed the concerns of some nations that its dominant economic position would hamper observance of panel decisions and, instead, has developed a record of complying with DSU rulings; when called for, the United States has brought its regulations into conformity. In contrast, so far the European Union has resisted implementing compliance following adverse decisions. In two prominent cases, the EU has resisted compliance and, for the first time under the DSU, the DSB authorized WTO members (Canada and the United States) to retaliate against the EU by suspending concessions in compensation for the EU failure to implement panel and Appellate Body recommendations.

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[56] U.S. General Accounting Office (GAO), *World Trade Organization, U.S. Experience to Date in Dispute Settlement System*, Briefing Report to the Chairman Committee on Ways and Means, House of Representatives, National Security and International Affairs Division, GAO/NSIAD/OGC-00-196BR, June 2000, p. 29.

[57] Ibid.

[58] Ibid., p. 28.

Table 4-3
Simplified overview of the World Trade Organization (WTO) Dispute Settlement Understanding (DSU) procedure

Approximate time period[1]	Event[2]
-----	**Problem identification** WTO-member country identifies alleged violations of WTO rules by another member/other members and brings a case forward before the Dispute Settlement Body (DSB).
60 days	**Consultations** The parties are required to discuss and attempt to settle a dispute by themselves. This stage may include mediation.
45 days	**Panel establishment** Panelists are appointed by the DSB and the panel is formed.
6 months	**Panel examination** There are normally two meetings with parties, with any third parties participating at the first meeting. The panel may consult outside experts or appoint an expert review group to prepare an advisory report. The panel issues an interim report, which is circulated to the parties for review. Following this, the panel issues its final report, which is circulated to all WTO members.
3 weeks	**Final panel report** to DSB.
60 days	Adoption of panel report recommendations by DSB (unless rejected by consensus).
Total of 1 year (if no appeal)[3]	
60-90 days	**Appeal to Appellate Body** and the appeals report is sent to the DSB.
30 days	**Adoption of the appeals report** recommendations by the DSB (unless rejected by consensus).
Total of 1 year and 3 months (including appeal)[3]	
30 days or "reasonable period of time" to comply	**Compliance** The losing party reports to DSB its intent to comply with recommendations or enter into compensation negotiations.
20 days	Compensation negotiations between parties takes place. Suspension of concessions (retaliation) may be implemented under DSB authorization if compliance does not take place or if compensation negotiations fail.
Total of 1 year, 1 month, and 20 days (if no appeal, including time for compliance and compensation negotiations); or 1 year, 4 months, and 20 days (including appeal)[3]	

[1] Approximate time periods for each stage are target figures, for the agreement is flexible.
[2] Eight basic steps (underlined) may be identified among the numerous procedures in the DSU process.
[3] Totals are also approximate.

Source: Annex (Understanding on Rules and Procedures Governing the Settlement of Disputes), *Final Act of the Uruguay Round, Agreement Establishing the World Trade Organization*. See also John Jackson, "The Role and Effectiveness of the WTO Dispute Settlement Mechanism," *Brookings Trade Forum on Policy Challenges for the New Millennium*, Brookings Institute, Washington, DC, Apr. 27-28, 2000, p. 6; World Trade Organization (WTO), "Settling Disputes, the WTO's Most Individual Contribution," Feb. 6, 1998, found at Internet address http://www.wto.org/wto/about/dispute1.htm, retrieved June 8, 2000;" and Jean Heilman Grier, "Dispute Settlement and the World Trade Organization," U.S. Department of Commerce, International Trade Administration, Feb. 1995, found at Internet address http://www.ita.doc.gov/legal/dsuwto.html, retrieved June 8, 2000.

CHAPTER 5
Agricultural Products

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The U.S. trade surplus in agricultural products fell by $6.1 billion (50 percent) to $6.1 billion in 1999 (table 5-1). This decline follows a 38-percent decline from the previous year, which was already the smallest surplus in more than a decade. The agricultural products sector typically maintains the largest U.S. trade surplus among industry/commodity sectors. However, a 7-percent reduction in the value of U.S. agricultural products exports, combined with 5-percent growth in the value of U.S. imports led to the erosion of the 1999 trade surplus. Many important U.S. agricultural markets are in Asia, but exports overall to the region declined slightly (by less than 1 percent), despite notable increased exports to Korea and Japan.

U.S. exports of agricultural products declined by $3.9 billion (7 percent) to $55.6 billion in 1999 (table 5-2), following a $5.9 billion drop in 1998. About 41 percent of the decline in 1999 exports was accounted for by cotton, not carded or combed, after funding for the Step 2 export program[1] was exhausted for most of 1999. The second-largest decline was for exports of cigarettes, which fell primarily because of declining cigarette consumption in some of the major export markets such as the European Union (EU) and Russia, and as increased competition in those markets with domestic cigarette producers, prompted U.S. cigarette manufacturers to shift some production from facilities in the United States to the EU countries. Exports of fats and oils shrank as world prices declined by 22 percent and as increased exports of palm oil from Malaysia displaced U.S. oil exports in third-country markets. Another important agricultural export, animal feeds, fell as a result of lower prices for soybean meal, an important ingredient in many animal feeds, and the expiration of the waiver of a 13-percent value-added tax on soybean meal exported after January 1, 1999 to China, a primary destination for U.S. soybean meal.[2]

U.S. imports of agricultural products rose by $2.1 billion (5 percent) to $49.5 billion in 1999 (table 5-3). Many of the imports exhibiting the largest increases included income-sensitive products, such as shellfish and wine and certain other fermented beverages, and occurred during a period of rising income levels in the United States.[3] In contrast, there were significant import declines for coffee and tea, and sugar. Low world prices for coffee resulted in a decline in the value of U.S. imports even though the volume of U.S. green coffee imports actually increased by 8 percent. Trade statistics for all product groups in the agricultural products sector are presented in table 5-4 at the end of this chapter.

[1] See "Commodity Analysis of Cotton, Not Carded or Combed," in this chapter.

[2] China imposes 13-percent value-added tax on most agricultural products, but soybean meal had previously been granted a special exemption.

[3] See ch. 2 for a general discussion about U.S. and international macroeconomic conditions that influenced U.S. merchandise trade performance in 1999.

Table 5-1
Agricultural products: **U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1998 and 1999**[1]

Item	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
		Million dollars		
U.S. exports of domestic merchandise:				
Canada	7,458	7,608	151	2.0
Japan	11,747	11,984	237	2.0
Mexico	6,362	5,850	-512	-8.1
Netherlands	1,701	1,618	-83	-4.9
Korea	2,398	2,763	365	15.2
France	570	437	-133	-23.3
Thailand	447	445	-2	-0.3
Taiwan	1,961	2,093	132	6.8
United Kingdom	1,294	1,182	-112	-8.6
Italy	777	586	-190	-24.5
All other	24,779	21,002	-3,777	-15.2
Total	59,494	55,569	-3,924	-6.6
EU-15	9,530	7,508	-2,022	-21.2
OPEC	2,521	2,449	-72	-2.9
Latin America	11,779	10,436	-1,344	-11.4
CBERA	2,693	2,605	-88	-3.3
Asia	22,175	22,135	-39	-0.2
Sub-Saharan Africa	781	728	-53	-6.8
Central and Eastern Europe	378	272	-106	-28.1
U.S. imports for consumption:				
Canada	9,785	10,349	564	5.8
Japan	445	482	37	8.4
Mexico	5,396	5,631	235	4.4
Netherlands	1,365	1,443	78	5.7
Korea	160	184	24	15.1
France	1,845	2,176	332	18.0
Thailand	1,922	2,117	195	10.1
Taiwan	390	412	22	5.6
United Kingdom	1,134	1,264	131	11.5
Italy	1,683	1,756	73	4.3
All other	23,204	23,656	451	1.9
Total	47,328	49,469	2,141	4.5
EU-15	9,206	9,930	724	7.9
OPEC	1,291	1,282	-9	-0.7
Latin America	15,481	15,727	246	1.6
CBERA	3,503	3,189	-315	-9.0
Asia	7,608	8,010	402	5.3
Sub-Saharan Africa	919	833	-87	-9.4
Central and Eastern Europe	260	254	-5	-2.1
U.S. merchandise trade balance:				
Canada	-2,327	-2,740	-413	-17.8
Japan	11,302	11,502	199	1.8
Mexico	967	219	-748	-77.4
Netherlands	336	176	-161	-47.8
Korea	2,238	2,579	341	15.2
France	-1,274	-1,739	-465	-36.5
Thailand	-1,475	-1,671	-196	-13.3
Taiwan	1,571	1,682	111	7.1
United Kingdom	160	-82	-242	(2)
Italy	-906	-1,169	-263	-29.0
All other	1,575	-2,654	-4,229	(2)
Total	12,166	6,100	-6,065	-49.9
EU-15	324	-2,422	-2,746	(2)
OPEC	1,231	1,168	-63	-5.1
Latin America	-3,702	-5,292	-1,590	-42.9
CBERA	-810	-584	226	27.9
Asia	14,566	14,125	-441	-3.0
Sub-Saharan Africa	-138	-105	33	24.0
Central and Eastern Europe	118	17	-101	-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] 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 1999.

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

Table 5-2
Leading decreases in U.S. exports of agricultural products, 1998 and 1999

Sector/commodity	1998	1999	Change, 1999 from 1998 Absolute	*Percent*
	Million dollars			
Cotton, not carded or combed (AG049)	2,545	968	-1,577	-62
Cigarettes (AG045)	4,166	3,232	-934	-22
Animal or vegetable fats and oils (AG033)	2,763	1,947	-816	-29
Animal feeds (AG013)	4,307	3,621	-686	-16
Oilseeds (AG032)	5,166	4,776	-390	-7
Poultry (AG005)	2,255	1,878	-377	-17
All other	38,292	39,147	855	2
Total	59,494	55,569	-3,924	-7

Note.--Calculations based on unrounded data.

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

Table 5-3
Leading changes in U.S. imports of agricultural products, 1998 and 1999

Sector/commodity	1998	1999	Change, 1999 from 1998 Absolute	*Percent*
	Million dollars			
Increases:				
Shellfish (AG009).	4,654	5,072	418	9
Wine and certain other fermented beverages (AG041)	1,881	2,210	329	17
Fresh or frozen fish (AG006)	2,641	2,945	303	11
Distilled spirits (AG042)	2,086	2,383	297	14
Decreases:				
Coffee and tea (AG028)	3,656	3,114	-542	-15
Sugar and other sweeteners (AG012)	1,068	879	-188	-18
Miscellaneous vegetable substances (AG017)	993	839	-154	-15
Animal or vegetable fats and oils (AG033).	1,475	1,348	-126	-9
All other	28,874	30,679	1,805	6
Total	47,328	49,469	2,141	5

Note.--Calculations based on unrounded data.

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

U.S. BILATERAL TRADE

The principal U.S. trade partners for agricultural products in 1999 were Canada, Japan, Mexico, Netherlands, Korea, and France. Compared with 1998, the only shift in the ranking of U.S. agricultural products trade partners was that France replaced China as the sixth-leading partner and Netherlands moved ahead of Korea as the fourth-leading partner.

In 1999, the largest absolute decline in the U.S. trade position for agricultural products among the top 10 single-country suppliers occurred with Mexico, as the U.S. surplus fell by $748 million (77 percent) to $219 million in 1999 (table 5-1). Exports to Mexico dropped by $512 million (8 percent) to $5.9 billion, led by cotton and soybeans, whereas imports from Mexico increased by $235 million (4 percent) to $5.6

billion, led by beer and other alcoholic beverages, and fresh melons. Increased U.S. consumption of Mexican beer was promoted by increased advertising in the United States.

U.S. trade in agricultural products with the EU changed significantly from 1998 to 1999, from a surplus of $324 million to a deficit of $2.4 billion. This is a major turnabout from the U.S. trade surplus with the EU of $2.8 billion as recently as 1996. U.S. agricultural exports to the EU fell by $2.0 billion (21 percent), whereas imports increased by $724 million (8 percent). Over one-half of the decline in U.S. exports to the EU was attributable to reduced exports of cigarettes and soybeans. EU cigarette production capacity increased in 1999 as Philip Morris and other cigarette manufacturers added capacity to their European production facilities and reduced exports to Europe from their U.S. plants. The value of U.S. soybean exports to Europe declined in 1999 as world prices fell more than 20 percent as compared with 1998 levels, and as the EU purchased more soybeans from Argentina and Brazil following bumper harvests in those countries. The strong U.S. dollar relative to the currencies of the EU for most of 1999 further discouraged exports and encouraged imports.[4] U.S. agricultural exports to Korea increased by $365 million (15 percent) to $2.8 billion, led by corn, frozen beef, and soybean oil. U.S. exports to Korea were depressed in 1998 owing to the Asian financial crisis, but bounced back in 1999 to nearly the same levels as in 1997. In contrast, U.S. agricultural imports from Canada rose by $564 million (6 percent) to $10.3 billion in 1999, led by chilled beef and seafood, particularly crab and lobster. U.S. agricultural imports from France increased by $332 million (18 percent) to $2.2 billion in 1999, mainly in the form of higher-priced wine, brandy, and liqueur to meet increased demand for luxury items in the United States.

COMMODITY ANALYSIS OF COTTON, NOT CARDED OR COMBED

The U.S. trade surplus in uncarded cotton, not carded or combed (hereafter cotton) declined by $1.7 billion (67 percent) in 1999 to $832 million, as exports fell by $1.6 billion (62 percent) to $968 million but imports climbed to $136 million. Moreover on a volume basis, exports declined 56 percent, from 1.62 million metric tons in 1998 to 708,000 metric tons in 1999, whereas imports increased from 7,413 metric tons to 103,892 metric tons. U.S. cotton imports, although small compared with exports, increased substantially from all the major suppliers. Both of these effects can be attributed to a 27-percent decline in U.S. cotton production in 1998/99 compared to 1997/98,[5] the expiration of funding under the Step 2 Federal agricultural support program,[6] the financial crisis in Asia where some of the most important buyers of U.S. cotton are located, and to low world prices for cotton in 1999.

The Step 2 program offers certificates to encourage domestic textile mills and raw cotton exporters to purchase U.S.-grown cotton. According to the National Cotton Council, "Step 2 encourages domestic mills to purchase and use the last feasible bale of U.S. cotton before turning to imports."[7] Step 2 is part of the 3-Step competitiveness program which was written into law under the 1990 Food, Agriculture, Conservation, and Trade (FACT) Act (PL 101-624) and continued under the 1996 Federal Agriculture Improvement and Reform (FAIR) Act (PL 104-127). Funding for Step 2 was capped at $701 million for the life of the FAIR Act.

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[4] See app. G for a more detailed discussion about how exchange rate shifts and other macroeconomic factors affect trade flows, particularly "Euro depreciation."

[5] U.S. Department of Agriculture (USDA), Foreign Agricultural Service (FAS), "World Agricultural Production," USDA/FAS Circular Series WAP 02-99, Feb. 1999, p. 10.

[6] National Cotton Council of America, "The Economic Impacts of Step 2," Feb. 2000, found at Internet address http:// www.cotton.org/step2%20Impact.htm, retrieved Apr. 20, 2000.

[7] Ibid.

U.S. exports

U.S. cotton exports in 1999 fell to all leading markets when compared with the previous year. Exports to Mexico fell by $330 million (54 percent), to Korea by $201 million (76 percent), to Japan by $156 million (62 percent), to Turkey by $125 million (73 percent), to China by $101 million (86 percent), and to Indonesia by $71 million (47 percent).

The United States is second only to China as a world producer of cotton. However, part of the reason for the trade shift is that U.S. cotton production fell by 27 percent in 1998/99, when compared to 1997/98, to only 16 percent of world production.[8] Perhaps a more important reason for the decline in U.S. cotton exports, was the termination of funding for the Step 2 program. This funding was exhausted by December 14, 1998, but on October 22, 1999, an emergency assistance package was signed by the President which made Step 2 certificates available retroactive to October 1, 1999. Another reason for the decline in the value of U.S. cotton exports was low world prices for cotton,[9] partly reflecting domestic price deregulation by China.[10] The price of upland cotton fell from over 65 cents per pound in late 1998 to less than 45 cents a pound in late 1999.[11] As a result, the value of U.S. cotton exports exceeded the decline in volume. However, higher U.S. production, improved world prices,[12] and the resumption of the Step 2 program are expected to result in a recovery of U.S. cotton exports in 2000.

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[8] USDA, FAS, "World Agricultural Production."

[9] USDA, FAS, "Cotton: World Markets and Trade," Apr. 2000, found at Internet address http://www.fas.usda.gov/cotton/circular/2000/2004/toc.htm, retrieved Apr, 20, 2000.

[10] See "U.S. Bilateral Trade, and Commodity Analysis of Textiles and Apparel" in ch. 9.

[11] World Agricultural Production, USDA/FAS, Circular series WAP 12-99, Dec. 1999, p. 1.

[12] As of June 8, 2000, the A-Index (a principal measure of international cotton prices) had risen 60 cents per pound. USDA, FAS, "World Cotton Outlook," found at Internet address http://www.da.gov/cotton/circular/2000/2006/master2.htm#cotton.prices, retrieved July 7, 2000.

Table 5-4
Agricultural products sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
AG001	Certain miscellaneous animals and meats:				
	Exports	1,859	1,754	-105	-5.6
	Imports	1,373	1,513	140	10.2
	Trade balance	485	241	-244	-50.4
AG002	Cattle and beef:				
	Exports	2,382	2,753	371	15.6
	Imports	2,752	2,905	152	5.5
	Trade balance	-370	-152	218	58.9
AG003	Swine and pork:				
	Exports	934	932	-2	-0.2
	Imports	714	717	3	0.4
	Trade balance	220	215	-5	-2.3
AG004	Sheep and meat of sheep:				
	Exports	35	25	-10	-29.3
	Imports	166	179	14	8.1
	Trade balance	-131	-155	-24	-18.2
AG005	Poultry:				
	Exports	2,255	1,878	-377	-16.7
	Imports	46	57	12	25.9
	Trade balance	2,210	1,821	-389	-17.6
AG006	Fresh or frozen fish:				
	Exports	1,289	1,634	346	26.8
	Imports	2,641	2,945	303	11.5
	Trade balance	-1,353	-1,310	42	3.1
AG007	Canned fish:				
	Exports	170	222	52	30.4
	Imports	530	611	81	15.2
	Trade balance	-360	-389	-29	-8.1
AG008	Cured and other fish:				
	Exports	146	166	20	13.4
	Imports	252	277	25	9.9
	Trade balance	-106	-111	-5	-4.9
AG009	Shellfish:				
	Exports	589	752	163	27.7
	Imports	4,654	5,072	418	9.0
	Trade balance	-4,065	-4,319	-254	-6.3
AG010	Dairy produce:				
	Exports	592	591	-1	-0.2
	Imports	1,325	1,387	62	4.7
	Trade balance	-733	-796	-64	-8.7
AG011	Eggs:				
	Exports	207	155	-52	-25.3
	Imports	14	20	7	49.4
	Trade balance	193	134	-59	-30.5
AG012	Sugar and other sweeteners:				
	Exports	381	357	-24	-6.3
	Imports	1,068	879	-188	-17.7
	Trade balance	-687	-522	164	23.9
AG013	Animal feeds:				
	Exports	4,307	3,621	-686	-15.9
	Imports	661	604	-57	-8.6
	Trade balance	3,646	3,017	-629	-17.3
AG014	Live plants:				
	Exports	142	144	1	1.0

See footnote(s) at end of table.

Table 5-4--*Continued*
Agricultural products sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
			Million Dollars		
	Imports	387	428	41	10.6
	Trade balance	-245	-285	-40	-16.2
AG015	Seeds:				
	Exports	706	697	-9	-1.3
	Imports	400	428	28	7.1
	Trade balance	306	269	-38	-12.2
AG016	Cut flowers:				
	Exports	45	41	-3	-7.2
	Imports	614	592	-23	-3.7
	Trade balance	-570	-550	20	3.4
AG017	Miscellaneous vegetable substances:				
	Exports	462	453	-9	-1.9
	Imports	993	839	-154	-15.5
	Trade balance	-531	-386	145	27.3
AG018	Fresh, chilled, or frozen vegetables:				
	Exports	1,199	1,201	2	0.2
	Imports	2,313	2,236	-76	-3.3
	Trade balance	-1,114	-1,035	78	7.0
AG019	Prepared or preserved vegetables, mushrooms, and olives:				
	Exports	1,617	1,565	-52	-3.2
	Imports	1,218	1,384	167	13.7
	Trade balance	399	180	-219	-54.9
AG020	Edible nuts:				
	Exports	1,392	1,212	-179	-12.9
	Imports	660	794	134	20.4
	Trade balance	732	418	-313	-42.8
AG021	Tropical fruit:				
	Exports	60	64	4	6.0
	Imports	1,495	1,574	80	5.3
	Trade balance	-1,434	-1,510	-76	-5.3
AG022	Citrus fruit:				
	Exports	672	498	-174	-25.9
	Imports	211	331	119	56.5
	Trade balance	461	167	-293	-63.7
AG023	Deciduous fruit:				
	Exports	665	743	78	11.7
	Imports	177	268	91	51.4
	Trade balance	488	475	-13	-2.7
AG024	Other fresh fruit:				
	Exports	484	562	77	15.9
	Imports	890	1,031	140	15.8
	Trade balance	-406	-469	-63	-15.5
AG025	Dried fruit other than tropical:				
	Exports	385	379	-6	-1.6
	Imports	60	78	17	28.9
	Trade balance	325	301	-24	-7.3

See footnote(s) at end of table.

Table 5-4--*Continued*
Agricultural products sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
AG026	Frozen fruit:				
	Exports	92	89	-3	-3.4
	Imports	89	125	37	41.4
	Trade balance	3	-37	-40	(3)
AG027	Prepared or preserved fruit:				
	Exports	185	180	-5	-2.7
	Imports	484	576	92	19.1
	Trade balance	-299	-396	-97	-32.6
AG028	Coffee and tea:				
	Exports	263	284	21	7.9
	Imports	3,656	3,114	-542	-14.8
	Trade balance	-3,393	-2,830	563	16.6
AG029	Spices:				
	Exports	66	72	6	8.7
	Imports	455	530	74	16.3
	Trade balance	-389	-458	-69	-17.6
AG030	Cereals:				
	Exports	9,991	10,129	138	1.4
	Imports	773	732	-41	-5.3
	Trade balance	9,218	9,398	179	1.9
AG031	Milled grains, malts, and starches:				
	Exports	417	439	22	5.4
	Imports	258	261	3	1.3
	Trade balance	159	178	19	12.1
AG032	Oilseeds:				
	Exports	5,166	4,776	-390	-7.5
	Imports	315	263	-51	-16.3
	Trade balance	4,851	4,513	-339	-7.0
AG033	Animal or vegetable fats and oils:				
	Exports	2,763	1,947	-816	-29.5
	Imports	1,475	1,348	-126	-8.6
	Trade balance	1,289	599	-690	-53.5
AG034	Pasta, cereals, and other bakery goods:				
	Exports	1,051	1,044	-7	-0.7
	Imports	1,461	1,637	175	12.0
	Trade balance	-410	-593	-183	-44.5
AG035	Sauces, condiments, and soups:				
	Exports	529	587	57	10.9
	Imports	396	457	60	15.2
	Trade balance	133	130	-3	-2.0
AG036	Infant formulas, malt extracts, and other edible preparations:				
	Exports	2,097	2,458	361	17.2
	Imports	560	670	111	19.8
	Trade balance	1,537	1,788	251	16.3
AG037	Cocoa, chocolate, and confectionery:				
	Exports	602	651	49	8.1
	Imports	2,183	2,123	-60	-2.8
	Trade balance	-1,581	-1,472	109	6.9

See footnote(s) at end of table.

Table 5-4--*Continued*
Agricultural products sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
AG038	Fruit and vegetable juices:				
	Exports	668	748	80	12.0
	Imports	677	796	119	17.6
	Trade balance	-9	-48	-39	-461.3
AG039	Nonalcoholic beverages, excluding fruit and vegetable juices:				
	Exports	302	328	26	8.6
	Imports	568	625	57	10.1
	Trade balance	-266	-298	-31	-11.8
AG040	Malt beverages:				
	Exports	254	201	-53	-20.8
	Imports	1,699	1,881	182	10.7
	Trade balance	-1,445	-1,680	-235	-16.2
AG041	Wine and certain other fermented beverages:				
	Exports	532	541	9	1.7
	Imports	1,881	2,210	329	17.5
	Trade balance	-1,349	-1,669	-320	-23.7
AG042	Distilled spirits:				
	Exports	506	480	-26	-5.1
	Imports	2,086	2,383	297	14.2
	Trade balance	-1,580	-1,902	-323	-20.4
AG043	Unmanufactured tobacco:				
	Exports	1,459	1,294	-164	-11.3
	Imports	771	711	-60	-7.7
	Trade balance	688	583	-105	-15.2
AG044	Cigars and certain other manufactured tobacco:				
	Exports	661	651	-10	-1.6
	Imports	377	301	-76	-20.2
	Trade balance	284	350	66	23.2
AG045	Cigarettes:				
	Exports	4,166	3,232	-934	-22.4
	Imports	59	112	52	87.8
	Trade balance	4,106	3,120	-987	-24.0
AG046	Hides, skins, and leather:				
	Exports	1,934	1,850	-84	-4.3
	Imports	1,124	1,052	-72	-6.4
	Trade balance	809	798	-12	-1.4
AG047	Furskins:				
	Exports	196	141	-55	-28.2
	Imports	86	73	-13	-15.2
	Trade balance	109	67	-42	-38.4
AG048	Wool and other animal hair:				
	Exports	13	22	10	77.4
	Imports	141	70	-71	-50.2
	Trade balance	-128	-48	80	62.7
AG049	Cotton, not carded or combed:				
	Exports	2,545	968	-1,577	-62.0
	Imports	14	136	123	905.6
	Trade balance	2,532	832	-1,700	-67.1

See footnote(s) at end of table.

Table 5-4--*Continued*
Agricultural products sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998	
				Absolute	*Percent*
		Million Dollars			
AG050	Ethyl alcohol for nonbeverage purposes:				
	Exports	58	58	([4])	-0.4
	Imports	124	130	6	4.9
	Trade balance	-66	-73	-6	-9.6

[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 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 6
Forest Products

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The U.S. trade deficit in forest products increased by $3.6 billion (45 percent) in 1999 to $11.7 billion (table 6-1). A small increase in exports of forest products of $169 million (1 percent) to $24.1 billion was overshadowed by the $3.8-billion (12-percent) rise in imports to $35.8 billion. Product groups registering the largest increases in exports between 1998 and 1999 included lumber, up by $182 million (9 percent), and printing and writing papers, up by $140 million (10 percent) (table 6-2). Most of the growth in U.S. imports of forest products in 1999 occurred in the wood products area as a vibrant construction sector increased demand for building materials (table 6-3). Imports of lumber rose by $1.1 billion (16 percent), imports of wood veneer and wood panels were up by $807 million (29 percent), and imports of moldings, millwork, and joinery climbed by $597 million (31 percent). Trade statistics for all product groups in the forest products sector are presented in table 6-4 at the end of this chapter.

U.S. BILATERAL TRADE

In 1999, the United States had a trade surplus in forest products with 5 of its top 10 trade partners and a trade deficit with the remainder (table 6-1). Canada is by far the largest trade partner of the United States, accounting for 52 percent of total U.S. trade (exports plus imports) in forest products in 1999. Other principal sectoral trade partners include Mexico, Japan, China, the United Kingdom, Germany, and Brazil. The percentage of total U.S. trade in forest products accounted for by each of these countries, however, is well below 10 percent.

The United States posted a $16.6 billion trade deficit with Canada in 1999, an increase of $2.2 billion (15 percent) from 1998 (table 6-1). Although U.S. exports of forest products to Canada grew by $397 million (6 percent) in 1999, U.S. imports rose by $2.6 billion (12 percent). Almost three-quarters of this growth in imports was accounted for by lumber; wood veneer and wood panels; and moldings, millwork, and joinery. Robust construction activity in the United States during 1999 increased demand for these wood products from Canada, a traditional supplier.

The United States enjoyed a $2.0 billion trade surplus in forest products with Mexico in 1999, an increase of $221 million (12 percent) from the surplus recorded in 1998 (table 6-1). U.S. exports rose by $262 million (9 percent) in 1999, while U.S. imports from Mexico grew by only $41 million (4 percent). Mexico is the second-largest trade partner of the United States in forest products. A strengthening Mexican economy and a thriving maquiladora sector in 1999 led to increased demand for a variety of

Table 6-1
Forest products: **U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1998 and 1999**[1]

Item	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
		Million dollars		
U.S. exports of domestic merchandise:				
Canada	6,833	7,231	397	5.8
Mexico	2,828	3,091	262	9.3
Japan	2,946	2,847	-99	-3.3
China	611	637	25	4.2
United Kingdom	1,169	1,090	-79	-6.8
Germany	867	740	-128	-14.7
Brazil	359	274	-85	-23.8
Italy	678	614	-64	-9.4
Korea	489	724	235	48.0
Indonesia	137	184	47	34.6
All other	6,984	6,640	-344	-4.9
Total	23,901	24,070	169	0.7
EU-15	4,724	4,272	-452	-9.6
OPEC	499	510	11	2.2
Latin America	5,052	5,178	126	2.5
CBERA	1,025	1,070	45	4.4
Asia	5,752	5,998	245	4.3
Sub-Saharan Africa	194	155	-39	-20.1
Central and Eastern Europe	60	66	6	10.5
U.S. imports for consumption:				
Canada	21,234	23,829	2,596	12.2
Mexico	1,003	1,044	41	4.1
Japan	515	610	95	18.5
China	1,244	1,526	283	22.7
United Kingdom	789	807	18	2.3
Germany	696	760	64	9.2
Brazil	797	972	175	22.0
Italy	364	409	45	12.2
Korea	280	295	15	5.4
Indonesia	582	721	140	24.0
All other	4,496	4,824	328	7.3
Total	31,998	35,798	3,799	11.9
EU-15	3,846	3,955	110	2.8
OPEC	610	755	145	23.7
Latin America	2,399	2,774	375	15.6
CBERA	97	107	11	10.9
Asia	3,864	4,488	623	16.1
Sub-Saharan Africa	106	110	4	3.6
Central and Eastern Europe	21	23	2	9.1
U.S. merchandise trade balance:				
Canada	-14,400	-16,599	-2,198	-15.3
Mexico	1,825	2,046	221	12.1
Japan	2,431	2,237	-194	-8.0
China	-633	-890	-257	-40.6
United Kingdom	380	283	-97	-25.5
Germany	171	-20	-192	(2)
Brazil	-438	-698	-261	-59.5
Italy	313	205	-108	-34.6
Korea	209	429	220	105.0
Indonesia	-445	-537	-92	-20.8
All other	2,488	1,816	-671	-27.0
Total	-8,097	-11,727	-3,630	-44.8
EU-15	878	316	-562	-64.0
OPEC	-111	-245	-134	-120.7
Latin America	2,653	2,404	-249	-9.4
CBERA	928	963	35	3.7
Asia	1,888	1,510	-378	-20.0
Sub-Saharan Africa	88	45	-43	-48.5
Central and Eastern Europe	39	43	4	11.2

[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 1999.

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

Table 6-2
Leading increases in U.S. exports of forest products, 1998 and 1999

Sector/commodity	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
	Million dollars			
Increases:				
Lumber (AG052)	2,002	2,184	182	9
Printing and writing papers (AG063)	1,350	1,490	140	10
Wood pulp and wastepaper (AG059)	3,452	3,540	88	3
Paper boxes and bags (AG060)	1,345	1,416	72	5
All other	15,753	15,439	-314	-2
Total	23,901	24,070	169	1

Note.--Calculations based on unrounded data.

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

Table 6-3
Leading increases in U.S. imports of forest products, 1998 and 1999

Sector/commodity	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
	Million dollars			
Increases:				
Lumber (AG052)	6,743	7,820	1,077	16
Wood veneer and wood panels (AG054)	2,767	3,574	807	29
Moldings, millwork, and joinery (AG053)	1,924	2,521	597	31
Industrial papers and paperboards (AG061)	2,267	2,596	329	15
All other	18,296	19,286	990	5
Total	31,998	35,798	3,799	12

Note.--Calculations based on unrounded data.

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

forest products from the United States, including paper boxes and bags, industrial papers and paperboard, wood pulp and wastepaper, books and magazines, and printing and writing papers.[1]

The U.S. trade surplus in forest products with Japan declined by $194 million (8 percent) in 1999 to $2.2 billion as U.S. exports fell by $99 million (3 percent) and U.S. imports rose by $95 million (19 percent) (table 6-1). Japan is the third-largest trade partner of the United States in forest products; in the past few years, the United States' largest bilateral trade surplus in forest products has been with Japan. Sector exports to Japan in 1999 declined because the continued sluggishness of the Japanese economy constrained demand for forest products.[2] The rise in U.S. imports of forest products from Japan during 1999 occurred primarily in the paper products area as a result of growing U.S. demand.[3]

[1] U.S. Department of Agriculture (USDA), Foreign Agricultural Service (FAS), *Mexico Solid Wood Products Revised: Forest Products Annual Report 2000 (Part II, Market Report) 2000*, Mexico City, AGR No. MX0027, Feb. 18, 2000.

[2] USDA, FAS, *Japan Solid Wood Products New Pent-Up Housing Demand on Hold as New House Mortgage Loan Applications Diminish*, Tokyo, AGR No. JA0045, Apr. 18, 2000.

[3] American Forest & Paper Association, *Paper, Paperboard & Wood Pulp*, Mar. 2000.

The U.S. trade deficit in forest products with China widened by $257 million (41 percent) in 1999. Although exports rose by $25 million (4 percent) to $637 million, imports grew by $283 million (23 percent) to $1.5 billion (table 6-1). Increases in imports occurred among a variety of forest products, including miscellaneous paper products; miscellaneous articles of wood; printed materials; and moldings, millwork, and joinery. A strong U.S. economy in 1999 and concurrent high levels of consumer spending fueled demand for imports of these items.[4]

COMMODITY ANALYSIS OF LUMBER[5]

The U.S. trade deficit in lumber increased by $895 million (19 percent) in 1999 as robust housing and industrial construction in the United States stimulated domestic and import demand for building materials. U.S. housing starts totaled an estimated 1.7 million in 1999, up from 1.6 million in 1998[6] and amounted to the highest number of starts in the 1990s. Prices for softwood lumber generally increased in 1999.[7] Imports of lumber grew by $1.1 billion (16 percent) in 1999 to $7.8 billion. Exports increased by $182 million (9 percent) to $2.2 billion. Canada was the principal export market for U.S. lumber, accounting for 23 percent of the export value.

U.S. imports

U.S. imports of lumber from most major suppliers increased in 1999. Much of the import value increase was due to higher prices. The average unit value for imported lumber from all sources was $169 per cubic meter (about $398 per thousand board-feet) in 1999, compared to $147 per cubic meter (about $353 per thousand board-feet) in 1998. On a quantity basis, imports rose by 3 percent, from 45 million cubic meters in 1998 to 46 million cubic meters in 1999. Softwood lumber accounted for 97 percent and 94 percent of the quantity and value, respectively, of lumber imports. Canada accounted for 90 percent of the value of U.S. lumber imports, and imports from Canada grew by 15 percent in value during 1999, but only by 1 percent in quantity.[8] Imports from other countries increased by higher percentages but still accounted for small shares of overall U.S. lumber imports. Imports from Brazil, the second-leading supplier, were up by 27 percent but accounted for only 3 percent of U.S. lumber imports.

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[4] See ch. 2 for a general discussion about U.S. and international macroeconomic conditions that influenced U.S. merchandise trade performance in 1999.

[5] Lumber is classified into two principal types, softwood (coniferous) and hardwood (broad-leaved). Softwood is primarily used as structural components in residential and industrial construction, and hardwood is primarily used in flooring, decorative trim, and for the manufacture of furniture.

[6] "U.S. Housing Market Profile," *Weekly Market Report of Lumber & Panel Products*, (Portland, OR: C.C. Crow's Publications, Inc., Jan. 21, 2000).

[7] The average composite framing lumber price was $402 per thousand board-feet in 1999, compared with $349 per thousand board-feet in 1998. *Random Lengths Yearbook, 1999*, (Eugene, OR: Random Lengths, 2000), p. 208.

[8] Imports from Canada are constrained by a duty-free quota on lumber originating in the Provinces of Alberta, British Columbia, Ontario, and Quebec.

Table 6-4
Forest products sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
			Million Dollars		
AG051	Logs and rough wood products:				
	Exports	1,927	1,885	-41	-2.1
	Imports	423	495	72	17.0
	Trade balance	1,503	1,390	-113	-7.5
AG052	Lumber:				
	Exports	2,002	2,184	182	9.1
	Imports	6,743	7,820	1,077	16.0
	Trade balance	-4,741	-5,636	-895	-18.9
AG053	Moldings, millwork, and joinery:				
	Exports	548	545	-3	-0.5
	Imports	1,924	2,521	597	31.0
	Trade balance	-1,376	-1,976	-600	-43.6
AG054	Wood veneer and wood panels:				
	Exports	929	958	29	3.1
	Imports	2,767	3,574	807	29.2
	Trade balance	-1,838	-2,615	-778	-42.3
AG055	Wooden containers:				
	Exports	138	172	34	24.5
	Imports	419	471	52	12.4
	Trade balance	-281	-299	-18	-6.4
AG056	Tools and tool handles of wood:				
	Exports	36	44	8	21.1
	Imports	117	120	2	1.9
	Trade balance	-81	-75	5	6.7
AG057	Miscellaneous articles of wood:				
	Exports	202	187	-15	-7.5
	Imports	846	1,007	161	19.1
	Trade balance	-644	-821	-177	-27.4
AG058	Cork and rattan:				
	Exports	85	90	6	6.6
	Imports	447	450	3	0.7
	Trade balance	-362	-359	3	0.7
AG059	Wood pulp and wastepaper:				
	Exports	3,452	3,540	88	2.5
	Imports	2,447	2,604	157	6.4
	Trade balance	1,005	936	-70	-6.9
AG060	Paper boxes and bags:				
	Exports	1,345	1,416	72	5.3
	Imports	745	802	57	7.7
	Trade balance	600	615	15	2.4
AG061	Industrial papers and paperboards:				
	Exports	5,185	5,018	-167	-3.2
	Imports	2,267	2,596	329	14.5
	Trade balance	2,918	2,421	-496	-17.0
AG062	Newsprint:				
	Exports	460	423	-37	-8.0
	Imports	3,766	3,517	-248	-6.6
	Trade balance	-3,305	-3,094	211	6.4
AG063	Printing and writing papers:				
	Exports	1,350	1,490	140	10.4
	Imports	4,289	4,538	249	5.8
	Trade balance	-2,939	-3,048	-108	-3.7

See footnote(s) at end of table.

Table 6-4--Continued
Forest products sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
AG064	Certain specialty papers:				
	Exports	701	641	-60	-8.5
	Imports	845	971	126	14.9
	Trade balance	-144	-330	-186	-128.7
AG065	Miscellaneous paper products:				
	Exports	1,234	1,281	47	3.8
	Imports	1,029	1,150	120	11.7
	Trade balance	204	131	-73	-35.7
AG066	Printed matter:				
	Exports	4,308	4,195	-112	-2.6
	Imports	2,923	3,161	238	8.1
	Trade balance	1,385	1,034	-351	-25.3

[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 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 7
Chemicals and Related Products

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During 1999, the U.S. trade surplus for chemicals and related products decreased by $6.2 billion (85 percent) to $1.1 billion (table 7-1) as the growth of exports was overshadowed by the growth of imports. U.S. exports of these products increased by $3.2 billion (4 percent) to $81.2 billion, whereas U.S. imports rose by $9.5 billion (13 percent) to $80.2 billion. Since this sector comprises many products (e.g. coatings, adhesives, plastics, and pigments), used in the production of manufactured goods, the performance of the sector is strongly influenced by the level of economic activity. Hence, shifts in U.S. sector exports and imports reflect, in part, the relative strength of the U.S. economy compared with other trade partners' economies in 1999.[1]

The U.S. trade position fluctuated significantly across the spectrum from commodity to specialty chemical products (table 7-2). The largest trade deficit was in the pharmaceutical industry, where the trade deficit increased by $4.1 billion (69 percent) to $10.1 billion in 1999, owing to increased sourcing of pharmaceuticals, bulk active ingredients, and chemical intermediates abroad where manufacturing costs are lower. The largest trade surplus was in plastics, rubber, and products thereof, which decreased by $1.0 billion (19 percent) to $4.4 billion. The U.S. plastics industry was adversely affected by the conditions in Asia, which resulted in diminished demand abroad for U.S. resins and finished products, and lower prices for plastics resins worldwide.

Among major types of chemicals and related products, U.S. export and import performance varied widely during 1999 (table 7-2). Exports of medicinal chemicals (hereafter pharmaceuticals) exhibited the largest increase, rising by $1.7 billion (14 percent) to $13.7 billion. This increase continues the trend exhibited the previous year, and continues to reflect the introduction of several innovative products, which command high market prices. In addition, exports of plastics, rubber, and products thereof also exhibited significant gains, increasing by $1.0 billion (4 percent) to $29.1 billion.

Pharmaceuticals also exhibited the largest increase in U.S. imports of chemicals and related products, rising by $5.8 billion (33 percent) to $23.8 billion, followed by plastics, rubber, and products thereof (especially new pneumatic tires and tubes), which grew by $2.0 billion (9 percent) to $24.7 billion. Both the strong U.S. economy and increased automobile and truck traffic led to greater demand for new tires and tubing for vehicles, requiring foreign products to supplement domestic supply. These import flows continued the trend exhibited in 1998. Trade statistics for all commodity/industry groups in the chemicals and related products sector are presented in table 7-3 at the end of this chapter.

[1] See ch. 2 for a general discussion about U.S. and international macroeconomic conditions that influenced U.S. merchandise trade performance in 1999.

Table 7-1
Chemicals and related products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1998 and 1999[1]

Item	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
		Million dollars		
U.S. exports of domestic merchandise:				
Canada	17,302	18,783	1,481	8.6
Japan	5,328	5,575	247	4.6
Mexico	9,882	10,731	849	8.6
Germany	2,836	2,947	110	3.9
United Kingdom	3,288	3,566	278	8.5
Ireland	918	755	-163	-17.7
China	2,017	2,149	132	6.5
France	2,308	2,509	201	8.7
Belgium	3,898	3,732	-167	-4.3
Netherlands	4,005	3,717	-288	-7.2
All other	26,211	26,776	565	2.2
Total	77,994	81,240	3,246	4.2
EU-15	20,123	20,336	213	1.1
OPEC	1,714	1,711	-4	-0.2
Latin America	18,685	18,634	-51	-0.3
CBERA	1,818	1,821	3	0.2
Asia	15,969	17,704	1,734	10.9
Sub-Saharan Africa	678	610	-68	-10.0
Central and Eastern Europe	239	243	4	1.7
U.S. imports for consumption:				
Canada	12,768	13,708	940	7.4
Japan	8,288	8,869	581	7.0
Mexico	2,767	3,124	358	12.9
Germany	7,814	8,267	454	5.8
United Kingdom	5,433	6,834	1,401	25.8
Ireland	4,125	6,326	2,201	53.4
China	3,706	4,242	537	14.5
France	3,289	3,576	287	8.7
Belgium	1,405	1,889	483	34.4
Netherlands	1,217	1,306	89	7.3
All other	19,903	22,030	2,127	10.7
Total	70,715	80,172	9,457	13.4
EU-15	27,753	33,537	5,784	20.8
OPEC	3,044	3,245	201	6.6
Latin America	5,625	6,613	988	17.6
CBERA	757	892	135	17.9
Asia	17,678	18,815	1,136	6.4
Sub-Saharan Africa	762	849	87	11.5
Central and Eastern Europe	338	340	2	0.4
U.S. merchandise trade balance:				
Canada	4,534	5,075	541	11.9
Japan	-2,960	-3,294	-334	-11.3
Mexico	7,115	7,607	492	6.9
Germany	-4,977	-5,321	-343	-6.9
United Kingdom	-2,145	-3,268	-1,123	-52.3
Ireland	-3,207	-5,571	-2,364	-73.7
China	-1,688	-2,093	-405	-24.0
France	-981	-1,067	-86	-8.7
Belgium	2,493	1,843	-650	-26.1
Netherlands	2,788	2,411	-377	-13.5
All other	6,308	4,746	-1,562	-24.8
Total	7,279	1,068	-6,211	-85.3
EU-15	-7,631	-13,201	-5,571	-73.0
OPEC	-1,330	-1,535	-205	-15.4
Latin America	13,060	12,021	-1,039	-8.0
CBERA	1,061	929	-132	-12.4
Asia	-1,709	-1,111	598	35.0
Sub-Saharan Africa	-84	-239	-155	-184.8
Central and Eastern Europe	-99	-97	3	2.6

[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. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 1999.

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

Table 7-2
Chemicals and related products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by major types, 1998 and 1999[1]

Item	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
		Million dollars		
U.S. exports of domestic merchandise:				
Plastics, rubber, and products thereof	28,073	29,084	1,011	3.6
General organic chemicals	15,073	15,817	743	4.9
General inorganic chemicals	5,831	5,730	-102	-1.7
Pharmaceuticals	11,956	13,681	1,725	14.4
Consumer and industrial products	7,372	7,560	188	2.6
Fertilizers and pesticides	5,735	5,244	-491	-8.6
Dyes, pigments, paints, and inks	3,953	4,125	172	4.3
Total	77,994	81,240	3,246	4.2
U.S. imports for consumption:				
Plastics, rubber, and products thereof	22,620	24,653	2,033	9.0
General organic chemicals	13,200	14,697	1,497	11.3
General inorganic chemicals	5,475	5,273	-203	-3.7
Pharmaceuticals	17,952	23,781	5,829	32.5
Consumer and industrial products	4,920	5,132	213	4.3
Fertilizers and pesticides	3,764	3,669	-95	-2.5
Dyes, pigments, paints, and inks	2,784	2,967	184	6.6
Total	70,715	80,172	9,457	13.4
U.S. merchandise trade balance:				
Plastics, rubber, and products thereof	5,452	4,431	-1,021	-18.7
General organic chemicals	1,873	1,120	-754	-40.2
General inorganic chemicals	356	457	101	28.4
Pharmaceuticals	-5,996	-10,100	-4,105	-68.5
Consumer and industrial products	2,453	2,428	-24	-1.0
Fertilizers and pesticides	1,971	1,575	-396	-20.1
Dyes, pigments, paints, and inks	1,170	1,158	-12	-1.0
Total	7,279	1,068	-6,211	-85.3

[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.

U.S. BILATERAL TRADE

The primary U.S. trade partner in chemicals and related products is Canada (table 7-1), largely due to physical proximity, similar economies, regional integration of the industries and markets, and establishment of mutually favorable tariff rates under the U.S.-Canada Free Trade Agreement (CFTA) and North American Free Trade Agreement (NAFTA). In 1999, Canada was both the leading source of sector products imported by the United States as well as the leading market for U.S. exports in this sector. The U.S. bilateral trade surplus with Canada, which also exhibited the largest improvement in the bilateral trade balance with top 10 trade partners, increased by $541 million (12 percent) to $5.1 billion. Exports to Canada increased by $1.5 billion (9 percent) to $18.8 billion, and imports rose by $940 million (7 percent) to $13.7 billion. The president of the Canadian Chemical Producers Association noted that the increase in U.S. chemical exports to Canada, primarily specialty and industrial chemicals, was partly the result of the surging Canadian economy.[2]

The second-largest U.S. trade balance improvement was with Mexico, the third-largest U.S. trade partner, in this sector as the U.S. trade surplus increased by $492 million (7 percent) to $7.6 billion.

[2] Pablo Figueroa, "Canada Looks For a Lift," *Chemical Week*, Jan. 5, 1999, p. 35.

Exports to Mexico increased by $849 million (9 percent) to $10.7 billion, whereas imports grew by $358 million (13 percent) to $3.1 billion. Growth in U.S.-Mexican sector trade can be attributed to the development of Mexico's downstream manufacturing industries that utilize chemicals and related products as well as the strengthening of Mexican markets for the finished products. U.S. chemical exports also benefit from the Mexican industry's limited capacity to process crude oil and gas into basic chemicals. This relationship was noted by the president of Mexico's chemical industry association who stated, "...We cannot continue exporting jobs to other countries where they process our crude petroleum and natural gas only for us to import it back as petrochemicals." This official further noted that chemicals accounted for 55 percent of Mexico's overall trade deficit.[3] The Mexican economy grew about 5 percent in 1999, and although increased Mexican demand for finished chemicals could be met in-part by local production, the country's inability to manufacture basic chemicals caused U.S. exports to increase more than imports.[4]

Total trade (exports plus imports) in chemicals and related products between the European Union (EU) and the United States grew in 1999, reflecting a small increase in both U.S. exports by $213 million (1 percent) to $20.3 billion, but a significantly larger increase in U.S. imports by $5.8 billion (21 percent) to $33.5 billion; the U.S. trade deficit with the EU in these products increased by $5.6 billion (73 percent) to $13.2 billion. For most chemical industry sub-sectors, the strong U. S. economy absorbed many of the EU products that might normally have been exported to Asian markets. The two leading U.S. trade partners in the EU were the United Kingdom and Germany. For both countries, the primary types of product traded were pharmaceuticals. This industry benefitted from a rise in new medicines, which command higher market prices, and increased reliance on British and German custom manufacturing facilities for pharmaceutical products. Overall, U.S. bilateral trade declined among individual EU countries included among the top10 trade partners for chemicals and related products, but the size of the decline varied greatly among these countries. For example, the U.S. trade position declined significantly with Ireland (74 percent) and the United Kingdom (52 percent), whereas it declined to a lesser extent with France (9 percent) and Germany (7 percent).

The U.S. trade deficit with Japan, the second-leading sector trade partner, grew by $334 million (11 percent) to $3.3 billion in 1999. U.S. exports increased by $247 million (5 percent) to $5.6 billion, whereas imports from Japan increased by $581 million (7 percent) to $8.9 billion. Increased U.S. imports were largely due to the strong U.S. economy and the sluggish Japanese economy, as Japanese companies, confronted with limited domestic demand, cut production or sought foreign markets for their products. Japanese demand for U.S. sector exports was stagnant, except in specialized categories such as pharmaceuticals.

The U.S. bilateral trade deficit with Ireland increased dramatically for this sector, growing by $2.4 billion (74 percent) to $5.6 billion. U.S. imports were led by pharmaceuticals and intermediate chemicals, which amounted to $5.3 billion (84 percent) of the $6.3 billion overall sector imports. The largest categories for U.S. chemical exports to Ireland in 1999 were also pharmaceuticals and intermediate chemicals, totaling $362 million, which amounted to 48 percent of all U.S. chemicals exports of $755 million to that country. Since 1995, U.S. imports of pharmaceuticals from Ireland have grown eightfold, increasing from $634 million in 1995 to $5.2 billion in 1999. The Irish Government, through its Industrial Development Agency, has sought to attract foreign investment in high-technology, high value-added speciality industries. An able work force and a 10-percent corporate tax rate (working in conjunction with

[3] Kara Sissell, "Industry Renews Pleas for Action," *Chemical Week*, Nov. 10, 1999, p. 46.
[4] Kara Sissell, "Mexico's Year of Transition," *Chemical Week*, Jan. 3, 2000, p. 35.

transfer pricing) made Ireland an ideal location for foreign companies desiring to locate in Europe and sell throughout the world.[5]

COMMODITY ANALYSIS OF MEDICINAL CHEMICALS

The U.S. trade deficit in medicinal chemicals (hereafter pharmaceuticals) increased by $4.1 billion (69 percent) to $10.1 billion in 1999. Although U.S. exports continued to increase (by $1.7 billion), the growing deficit reflected a larger rise in imports (of $5.8 billion), particularly from Western Europe. Global trade in the pharmaceutical industry has generally increased since January 1, 1995, following the elimination of duties on most pharmaceutical products under the Uruguay Round Agreements. The United States, United Kingdom, Germany, Ireland, Japan, and several other large pharmaceutical producing countries participated in this agreement. Because the global pharmaceutical industry is dominated by multinational corporations, there is substantial intracompany trade throughout the world.

In addition, there is a continuing trend in the pharmaceutical industry toward outsourcing the production of bulk active ingredients and chemical intermediates used in the production of dosage-form drugs.[6] Such chemicals are often produced in highly specialized processes that only a limited number of facilities are equipped to perform. Outsourcing benefits pharmaceutical companies that need a timely and flexible source of these chemicals, which is often the situation for firms looking to push their products through clinical trials and, after regulatory approval, to benefit as long as possible from patent protection. Because of the importance of bringing new pharmaceutical products to 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 taxes, work force, infrastructure, environmental regulation, and wage rates.[7]

As in the previous year, a number of large multinational firms introduced several new and innovative medicines into the U.S. market in 1999.[8] Such products command high sales prices, which may also account for the increase in total U.S. trade in the pharmaceutical industry.

U.S. exports

U.S. exports increased by $1.7 billion (14 percent) to $13.7 billion in 1999. Overall, the combination of higher drug prices, increasing demand by aging populations, and the trend of shipping abroad the active ingredients to be processed for U.S. and foreign markets led to the continued rise in U.S. exports. The top three markets for U.S. pharmaceuticals were Canada, Japan, and Germany, which together accounted for approximately 33 percent of all such U.S. exports. However, U.S. exports to the United Kingdom and France rose more in absolute value in 1999 than did those to Canada, Japan, or Germany, increasing by $343 million (30 percent) to $1.2 billion in France and by $341 million (41 percent) to $1.2 billion in the United Kingdom. U.S. exports to Germany increased by $256 million (9 percent) to $1.2 billion, in part reflecting increased investment in the German contract manufacturing

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[5] Clay Boswel and Feliza Mirasol, "Sourcing Pharmaceuticals from Offshore Facilities," *Chemical Marketing Reporter*, Oct. 25, 1999, p. FR 28.

[6] Elizabeth Howlett, "Outsourcing by the Pharmaceutical Industry Provides Opportunities for Fine Chemical Producers Worldwide," *Industry Trade and Technology Review*, USITC publication 3253, Oct. 1999, pp. 1-14.

[7] Charles W. Thurston, "Branded Offshore Manufacturing Finds a Home in Ireland and Singapore," *Chemical Marketing Reporter*, June 8, 1998, p. FR 12.

[8] European Federation of Pharmaceutical Industries and Associations (EFPIA), *The Pharmaceutical Industry in Figures, 2000 Edition*, (Brussels: EFPIA, 2000), p. 23.

facilities that support the U.S. pharmaceutical industry and require U.S. shipments of bulk medicinal and medicinal intermediate products.[9]

U.S. imports

U.S. imports of pharmaceuticals increased by $5.8 billion (32 percent) to $23.8 billion in 1999. Imports from the top three suppliers to the United States in 1999, increased by $2.0 billion (61 percent) to $5.2 billion from Ireland, $1.0 billion (35 percent) to $4.0 billion from the United Kingdom, and $315 million (9 percent) to $3.8 billion from Germany, and together accounted for 55 percent of all U.S. imports of these products. 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 of active ingredients and dosage-form drugs. Because of the large number of prominent multinational pharmaceutical companies that are active in these three countries (e.g., Glaxo Wellcome, SmithKline Beecham, and Hoechst Marion Roussell), and their reputations for well-trained organic chemists, both the United Kingdom and Germany are attractive sites for contract manufacturing.[10] Reportedly, 13 of the 15 leading multinational drug companies worldwide have established manufacturing facilities in Ireland.[11] Because its production costs are relatively low and because foreign multinational companies can take advantage of transfer pricing, Ireland's medicinal chemicals are highly price competitive in the U.S. market,[12] which has led to a rise in imports that continued from 1995 through 1999.

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[9] Sean Milmo, "Europe in Contract Mode," *Chemical Market Reporter*, Jan. 18, 1999, p. FR 11.
[10] Ibid.
[11] Thurston, "Branded Offshore Manufacturing."
[12] Dyan Machan, "Irish Tiger," *Forbes*, Mar. 9, 1998, p. 86.

Table 7-3
Chemicals and related products sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
CH007	Major primary olefins:				
	Exports	169	181	12	7.4
	Imports	1,360	1,798	438	32.2
	Trade balance	-1,191	-1,617	-426	-35.7
CH008	Other olefins:				
	Exports	211	208	-2	-1.1
	Imports	82	91	9	11.1
	Trade balance	129	117	-11	-8.8
CH009	Primary aromatics:				
	Exports	56	91	34	60.8
	Imports	704	815	111	15.8
	Trade balance	-647	-724	-77	-11.9
CH010	Organic commodity chemicals:				
	Exports	1,266	1,474	207	16.4
	Imports	741	778	37	5.0
	Trade balance	526	696	170	32.4
CH011	Organic specialty chemicals:				
	Exports	6,616	6,940	324	4.9
	Imports	5,965	6,546	581	9.7
	Trade balance	651	394	-257	-39.5
CH012	Certain organic chemicals:				
	Exports	5,184	5,401	217	4.2
	Imports	3,348	3,595	247	7.4
	Trade balance	1,836	1,806	-30	-1.6
CH013	Miscellaneous inorganic chemicals:				
	Exports	4,419	4,365	-54	-1.2
	Imports	4,752	4,641	-111	-2.3
	Trade balance	-334	-276	58	17.2
CH014	Inorganic acids:				
	Exports	186	204	17	9.3
	Imports	282	238	-44	-15.6
	Trade balance	-95	-34	61	64.4
CH015	Chlor-alkali chemicals:				
	Exports	834	781	-53	-6.3
	Imports	191	126	-66	-34.3
	Trade balance	642	655	13	2.0
CH016	Fertilizers:				
	Exports	3,339	3,032	-307	-9.2
	Imports	2,472	2,486	14	0.6
	Trade balance	867	546	-321	-37.0
CH017	Paints, inks, and related items, and certain components thereof:				
	Exports	3,112	3,327	215	6.9
	Imports	1,755	1,959	204	11.6
	Trade balance	1,357	1,368	11	0.8
CH018	Synthetic organic pigments:				
	Exports	349	360	11	3.1
	Imports	402	404	2	0.4
	Trade balance	-53	-43	9	17.7

See footnote(s) at end of table.

Table 7-3--*Continued*
Chemicals and related products sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
CH019	Synthetic dyes and azoic couplers:				
	Exports	453	404	-49	-10.9
	Imports	555	527	-28	-5.1
	Trade balance	-102	-123	-21	-20.7
CH020	Synthetic tanning agents:				
	Exports	19	13	-5	-28.6
	Imports	6	7	1	18.0
	Trade balance	13	6	-6	-51.3
CH021	Natural tanning and dyeing materials:				
	Exports	21	21	([3])	0.1
	Imports	66	71	5	7.3
	Trade balance	-45	-50	-5	-10.7
CH022	Photographic chemicals and preparations:				
	Exports	449	433	-16	-3.5
	Imports	633	564	-69	-10.9
	Trade balance	-184	-131	53	29.0
CH023	Pesticide products and formulations:				
	Exports	2,396	2,211	-184	-7.7
	Imports	1,292	1,183	-109	-8.5
	Trade balance	1,104	1,029	-75	-6.8
CH024	Adhesives and glues:				
	Exports	477	502	25	5.3
	Imports	159	181	22	13.7
	Trade balance	318	321	4	1.1
CH025	Medicinal chemicals:				
	Exports	11,956	13,681	1,725	14.4
	Imports	17,952	23,781	5,829	32.5
	Trade balance	-5,996	-10,100	-4,105	-68.5
CH026	Essential oils and other flavoring materials:				
	Exports	916	948	32	3.5
	Imports	836	754	-82	-9.8
	Trade balance	80	194	113	141.1
CH027	Perfumes, cosmetics, and toiletries:				
	Exports	2,572	2,578	6	0.2
	Imports	1,629	1,864	235	14.4
	Trade balance	943	714	-229	-24.3
CH028	Soaps, detergents, and surface-active agents:				
	Exports	1,961	2,138	177	9.0
	Imports	875	948	73	8.3
	Trade balance	1,086	1,190	104	9.6
CH029	Miscellaneous chemicals and specialties:				
	Exports	2,619	2,536	-83	-3.2
	Imports	1,667	1,790	122	7.3
	Trade balance	951	746	-205	-21.6
CH030	Explosives, propellant powders, and related items:				
	Exports	292	264	-28	-9.7
	Imports	248	267	18	7.4
	Trade balance	44	-3	-47	([4])

See footnote(s) at end of table.

Table 7-3--*Continued*
Chemicals and related products sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
CH031	Polyethylene resins in primary forms:				
	Exports	2,134	2,249	115	5.4
	Imports	1,150	1,329	179	15.5
	Trade balance	984	920	-64	-6.5
CH032	Polypropylene resins in primary forms:				
	Exports	760	863	102	13.5
	Imports	220	232	12	5.4
	Trade balance	540	630	90	16.8
CH033	Polyvinyl chloride resins in primary forms:				
	Exports	767	626	-141	-18.3
	Imports	248	235	-13	-5.4
	Trade balance	518	391	-127	-24.6
CH034	Styrene polymers in primary forms:				
	Exports	779	753	-26	-3.4
	Imports	418	427	8	2.0
	Trade balance	361	326	-35	-9.6
CH035	Saturated polyester resins:				
	Exports	626	566	-59	-9.4
	Imports	451	448	-2	-0.5
	Trade balance	175	118	-57	-32.5
CH036	Other plastics in primary forms:				
	Exports	6,124	6,323	199	3.3
	Imports	2,295	2,455	161	7.0
	Trade balance	3,829	3,868	39	1.0
CH037	Styrene-butadiene rubber in primary forms:				
	Exports	322	309	-13	-3.9
	Imports	175	173	-3	-1.6
	Trade balance	146	137	-10	-6.6
CH038	Other synthetic rubber:				
	Exports	1,064	1,079	16	1.5
	Imports	669	697	28	4.2
	Trade balance	395	382	-12	-3.1
CH039	Pneumatic tires and tubes (new):				
	Exports	2,532	2,366	-166	-6.6
	Imports	4,011	4,559	547	13.6
	Trade balance	-1,479	-2,193	-713	-48.2
CH040	Other tires:				
	Exports	93	111	18	19.3
	Imports	143	129	-14	-9.5
	Trade balance	-50	-18	32	63.7
CH041	Miscellaneous plastic products:				
	Exports	10,882	11,816	933	8.6
	Imports	9,709	10,988	1,279	13.2
	Trade balance	1,174	828	-346	-29.5
CH042	Miscellaneous rubber products:				
	Exports	1,954	1,982	28	1.4
	Imports	2,154	2,277	123	5.7
	Trade balance	-200	-295	-95	-47.8

See footnote(s) at end of table.

Table 7-3--*Continued*
Chemicals and related products sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
CH043	Gelatin:				
	Exports	51	63	13	25.0
	Imports	122	107	-15	-12.2
	Trade balance	-71	-44	28	38.7
CH044	Natural rubber:				
	Exports	36	41	5	13.1
	Imports	977	704	-272	-27.9
	Trade balance	-941	-664	277	29.5

[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 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 8
Energy-Related Products

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The overall U.S. trade deficit in energy-related products increased by $13.6 billion (31 percent) to $57.5 billion in 1999, primarily because of an increase in the world price of crude petroleum coupled with a slight increase in imports of petroleum products (table 8-1). The price of crude petroleum increased by about $6 per barrel (an average of nearly 60 percent) during 1999 with the average for the year at $17.23 per barrel. In December 1999, prices reached a high for the year of $22.70 per barrel. Such price levels had not been reached since the mid-1980s, and resulted from a combination of tight global supply of crude petroleum and increased demand. Historically, the United States has maintained a trade deficit in the energy-related products sector primarily because of an increased reliance on imported crude petroleum.

U.S. imports of energy-related products increased by $13.2 billion (24 percent) to $69.5 billion in 1999. Among the principal suppliers and the countries showing the largest changes in sector trade with the United States in 1999 were Canada, Venezuela, Saudi Arabia, Mexico, Nigeria, Iraq, and Colombia. U.S. exports of energy-related products decreased by $389 million (3 percent) to $12.0 billion in 1999. The primary markets for U.S. exports of energy-related products were Canada and Mexico, which experienced the largest bilateral trade changes in 1999.

Overall shifts in trade volume for the products in this sector in 1999 included decreased imports of crude petroleum coupled with increased imports of both distillate fuel oils and natural gas due to relatively cold winter conditions in the Northeast. This trend has been reinforced as power plants, particularly in the Northeastern United States, move toward cleaner-burning natural gas rather than fuel oil to generate electricity. Many of these power plants are fueled by gas originating in Canada.[1] Trade statistics for all commodity/industry groups in the energy-related products sector are presented in table 8-2 at the end of this chapter.

U.S. BILATERAL TRADE

Canada remained the leading U.S. trade partner for energy-related products in 1999. The United States and Canadian energy sectors are integrated by 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 increased by $2.8 billion (22 percent) to $15.4 billion in 1999, primarily

[1] Joseph M. Duckert, "Natural Gas: The New Leading Actor," in Duckert, *The Evolution of the North American Energy Market*, Center for Strategic and International Studies, Policy Papers on the Americas, vol. X, study 6, Oct. 19, 1999, pp. 6-19.

Table 8-1
Energy-related products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1998 and 1999[1]

Item	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
		Million dollars		
U.S. exports of domestic merchandise:				
Canada	2,565	2,370	-195	-7.6
Mexico	1,845	2,311	465	25.2
Venezuela	131	79	-51	-39.1
Saudi Arabia	30	33	2	8.1
Nigeria	36	26	-9	-26.3
Colombia	48	38	-10	-20.5
Iraq	0	0	0	0.0
United Kingdom	355	257	-98	-27.6
Angola	1	1	(2)	4.2
Norway	20	41	21	107.2
All other	7,315	6,801	-514	-7.0
Total	12,346	11,957	-389	-3.2
EU-15	2,286	1,912	-374	-16.4
OPEC	287	245	-42	-14.6
Latin America	3,690	3,746	55	1.5
CBERA	806	704	-102	-12.7
Asia	2,791	3,096	305	10.9
Sub-Saharan Africa	203	150	-53	-26.0
Central and Eastern Europe	99	42	-57	-57.6
U.S. imports for consumption:				
Canada	15,207	17,766	2,558	16.8
Mexico	4,903	6,280	1,377	28.1
Venezuela	7,167	8,480	1,313	18.3
Saudi Arabia	5,919	6,679	759	12.8
Nigeria	4,213	3,720	-492	-11.7
Colombia	1,745	2,807	1,062	60.9
Iraq	727	2,721	1,994	274.3
United Kingdom	1,516	2,278	762	50.3
Angola	2,166	2,320	154	7.1
Norway	1,173	2,085	912	77.7
All other	11,518	14,338	2,820	24.5
Total	56,254	69,473	13,219	23.5
EU-15	3,456	4,444	989	28.6
OPEC	21,064	24,856	3,792	18.0
Latin America	16,230	20,816	4,585	28.3
CBERA	985	1,479	493	50.0
Asia	1,485	2,055	570	38.4
Sub-Saharan Africa	7,964	8,001	37	0.5
Central and Eastern Europe	20	44	24	124.8
U.S. merchandise trade balance:				
Canada	-12,642	-15,396	-2,753	-21.8
Mexico	-3,057	-3,970	-912	-29.8
Venezuela	-7,036	-8,401	-1,364	-19.4
Saudi Arabia	-5,889	-6,646	-757	-12.9
Nigeria	-4,177	-3,694	483	11.6
Colombia	-1,697	-2,769	-1,072	-63.2
Iraq	-727	-2,721	-1,994	-274.3
United Kingdom	-1,161	-2,021	-860	-74.1
Angola	-2,165	-2,318	-154	-7.1
Norway	-1,154	-2,044	-891	-77.2
All other	-4,203	-7,538	-3,334	-79.3
Total	-43,908	-57,516	-13,609	-31.0
EU-15	-1,170	-2,532	-1,362	-116.4
OPEC	-20,777	-24,611	-3,834	-18.5
Latin America	-12,540	-17,070	-4,530	-36.1
CBERA	-180	-775	-595	-330.8
Asia	1,306	1,041	-265	-20.3
Sub-Saharan Africa	-7,761	-7,850	-90	-1.2
Central and Eastern Europe	79	-2	-81	(3)

[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] 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 1999.

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

as a result of the increases in the per-barrel price of crude petroleum and the wellhead price of natural gas.

The increased U.S. trade deficits on a regional basis also reflect these rising energy prices. The trade deficit with OPEC (accounting for more than 37 percent of all U.S. imports of crude petroleum) increased by $3.8 billion (19 percent) to $24.6 billion in 1999. Venezuela, historically a major supplier of petroleum products to U.S. markets, accounted for $8.4 billion (34 percent) of this deficit, whereas Saudi Arabia's share increased by $757 million (13 percent) to $6.6 billion. The U.S. energy-related products trade deficit with Latin America increased by $4.5 billion (36 percent) to $17.1 billion in 1999; Mexico's share of the deficit increased by $912 million (30 percent) to $4.0 billion. The U.S. trade deficit with the European Union (EU) in energy-related products increased by $1.4 billion in 1999 (116 percent) to $2.5 billion.

COMMODITY ANALYSIS

Crude Petroleum and Petroleum Products

The U.S. trade deficit in crude petroleum increased by $6.1 billion (25 percent) to $30.9 billion in 1999. Strong world demand, tight global supplies, and the recovery of the Asian economies have contributed to the rising world price of crude petroleum which resulted in the value of imports increasing by $6.2 billion (24 percent) to $31.6 billion in 1999. U.S. exports of crude petroleum have been largely prohibited since 1973, except as approved by the Secretary of Energy as part of a commercial exchange agreement between U.S. and Canadian refiners, and following a Presidential determination in May 1996 that it was in the national interest to allow exports of Alaskan North Slope crude. U.S. export volume of crude petroleum increased by only 3 million barrels (7 percent) to 42.4 million barrels in 1999 although rising prices caused the value of crude petroleum exports to increase by $102 million (15 percent) to $772 million.

U.S. imports

Although imports of crude petroleum decreased slightly by 119 million barrels (5.6 percent) to 2.1 billion barrels in 1999, these imports still accounted for over 60 percent of domestic consumption. A drawdown of crude petroleum stocks at refineries (declining nearly 7 percent in average levels during 1999), together with a small decline in domestic consumption (less than 2 percent) for petroleum products, such as gasoline and certain heating fuels, reduced the level of 1999 imports in the face of rising prices and despite historic low U.S. production of 2.1 billion barrels in 1999. U.S. production declines began in 1985 when declining world crude petroleum prices resulted in reduced profitability and increased import competition for higher cost U.S. stripper wells which have continued to shut down.

Consistent with the higher price of crude petroleum faced by refineries, the value of U.S. imports of petroleum products also increased by $4.5 billion (26 percent) to $22.1 billion in 1999. In addition, U.S. imports of distillate fuel oils (used as heating fuels) increased slightly as a result of a relatively cold winter in the Northeast. These factors combined to increase the U.S. trade deficit in petroleum products by $4.1 billion (36 percent) to $15.5 billion in 1999.

Natural Gas and Components

The U.S. trade deficit in natural gas and components increased by $1.7 billion (19 percent) to $10.3 billion in 1999, representing an increase of 388 billion cubic feet (13 percent). The average wellhead price of natural gas increased by 7 percent during 1999, reaching $2.07 per thousand cubic feet in 1999. The United States is a major world producer of natural gas. The value of U.S. exports of natural gas and components increased by $178 million (31 percent) to $759 million, principally accounted for by increased demand in Mexico.

U.S. imports

U.S. imports of natural gas and components increased by $1.8 billion (20 percent) to $11.0 billion in 1999. Most of the 396-billion cubic feet (13-percent) increase in natural gas imports was due to a relatively harsh winter in the Northeast, resulting in increased imports from Canada which accounted for 95 percent of the overall quantity of imports.

Coal, Coke, and Related Chemical Products

The U.S. trade surplus in coal, coke, and related chemical products decreased by $1.1 billion (55 percent) to $930 million in 1999. The United States is a major world producer and consumer of these products, as well as a net exporter based on abundant reserves of high-quality coals. Most of the $964 million (27 percent) decline in exports to $2.7 billion was due to decreased demand in Japan for U.S. coal and coke, as Japan increased its imports from China. The $171 million (11 percent) increase in U.S. imports of this product group is largely attributable to higher imports of coke, coupled with increased prices for coal that generally follow the price trend of crude petroleum. Canada, Colombia, and Saudi Arabia were the leading import sources.

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Table 8-2
Energy-related products sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
CH001	Electrical energy:				
	Exports	185	206	22	11.7
	Imports	1,039	1,334	295	28.4
	Trade balance	-854	-1,127	-273	-32.0
CH002	Nuclear materials:				
	Exports	1,041	950	-92	-8.8
	Imports	1,382	1,636	254	18.4
	Trade balance	-340	-686	-346	-101.7
CH003	Coal, coke, and related chemical products:				
	Exports	3,635	2,671	-964	-26.5
	Imports	1,570	1,741	171	10.9
	Trade balance	2,065	930	-1,135	-55.0
CH004	Crude petroleum:				
	Exports	670	772	102	15.2
	Imports	25,467	31,642	6,175	24.2
	Trade balance	-24,797	-30,870	-6,074	-24.5
CH005	Petroleum products:				
	Exports	6,233	6,599	366	5.9
	Imports	17,584	22,079	4,495	25.6
	Trade balance	-11,351	-15,480	-4,129	-36.4
CH006	Natural gas and components:				
	Exports	581	759	178	30.6
	Imports	9,212	11,042	1,830	19.9
	Trade balance	-8,630	-10,282	-1,652	-19.1

[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 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 9
Textiles, Apparel, and Footwear

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The U.S. trade deficit in textiles and apparel in 1999 widened by $3.9 billion (8 percent) over the 1998 level to $52.5 billion (table 9-1), after increasing by a much greater amount of $6.5 billion in 1998.[1] The smaller increase in 1999 reflected a slowdown in the growth of U.S. imports, which rose by $3.5 billion (5 percent) to $71.3 billion, down from the $6.5 billion gain in 1998, whereas U.S. exports fell for the second-straight year by $415 million (2 percent) to $18.7 billion.

The growth in U.S. imports of textiles and apparel in 1999 largely reflected strong consumer demand for apparel, which accounted for 79 percent of the value of U.S. sector imports in 1999. U.S. consumer spending on apparel and footwear that year rose by 8.8 percent over the 1998 level.[2] The import growth contributed significantly to the decline in U.S. production of apparel, which fell for the fifth-straight year, by 6.2 percent.[3] U.S. imports of textile and apparel likely will continue to grow as a result of the ongoing trade liberalization under the North American Free Trade Agreement (NAFTA) and the Uruguay Round Agreement on Textiles and Clothing, and the upcoming expansion of trade benefits for eligible countries in sub-Saharan Africa and beneficiary countries under the Caribbean Basin Economic Recovery Act (CBERA) following enactment of the Trade and Development Act of 2000 in May 2000.[4]

The decline in U.S. exports of textile and apparel in 1999 mainly resulted from smaller shipments to the European Union (EU), CBERA countries, and Asia. The export decline to the EU of $407 million (18 percent) was attributed to a strong U.S. dollar and competition from Asia.[5] The export decline to the CBERA countries of $216 million (5 percent) in 1999 followed an increase of about the same magnitude in 1998. Slightly more than one-half of U.S. exports of these products consisted of shipments of cut garment parts to Mexico and the CBERA countries for assembly and subsequent return to the United States as finished apparel. The decline in exports to Asia of $130 million (7 percent), to $1.8 billion, partly reflected the lingering effects of the Asian financial crisis of 1997-98.

The U.S. trade deficit in footwear widened by $221 million (2 percent) to $13.4 billion in 1999, as imports rose by $194 million (1 percent), to $14.1 billion, and exports fell by $27 million (4 percent),

[1] The apparel articles covered here include those of textile and nontextile (e.g., leather) materials.
[2] U.S. Department of Commerce, Bureau of Economic Analysis, facsimile to USITC staff, Apr. 19, 2000.
[3] Board of Governors of the Federal Reserve System, "Industrial Production and Capacity Utilization: Recent Developments and the 1999 Revision," *Federal Reserve Bulletin*, Feb. 2000, p. 201.
[4] See the textile and apparel section of ch. 4 for information on these developments.
[5] American Textile Manufacturers Institute (ATMI), *ATMI HiLights*, Mar. 2000, p. vi.

Table 9-1
Textiles and apparel: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1998 and 1999[1]

Item	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
		Million dollars		
U.S. exports of domestic merchandise:				
Mexico	4,727	5,550	823	17.4
China	155	166	11	7.2
Canada	3,642	3,545	-97	-2.7
Hong Kong	378	295	-82	-21.8
Dominican Rep	1,328	1,259	-69	-5.2
Honduras	1,213	1,233	20	1.7
Korea	166	180	14	8.6
Taiwan	124	108	-15	-12.3
India	28	36	9	31.6
Italy	168	163	-6	-3.4
All other	7,210	6,187	-1,023	-14.2
Total	19,137	18,723	-415	-2.2
EU-15	2,243	1,836	-407	-18.1
OPEC	413	312	-101	-24.4
Latin America	10,206	10,607	400	3.9
CBERA	4,605	4,389	-216	-4.7
Asia	1,975	1,845	-130	-6.6
Sub-Saharan Africa	178	146	-32	-17.7
Central and Eastern Europe	58	62	4	7.4
U.S. imports for consumption:				
Mexico	8,225	9,413	1,188	14.4
China	8,784	9,234	450	5.1
Canada	3,360	3,640	280	8.3
Hong Kong	4,688	4,559	-129	-2.7
Dominican Rep	2,398	2,388	-10	-0.4
Honduras	1,911	2,205	294	15.4
Korea	2,966	3,189	222	7.5
Taiwan	3,018	2,916	-102	-3.4
India	2,536	2,666	130	5.1
Italy	2,333	2,314	-19	-0.8
All other	27,589	28,745	1,155	4.2
Total	67,809	71,269	3,461	5.1
EU-15	5,078	5,019	-59	-1.2
OPEC	2,523	2,526	3	0.1
Latin America	17,624	19,439	1,815	10.3
CBERA	8,462	8,999	537	6.3
Asia	36,969	38,102	1,134	3.1
Sub-Saharan Africa	568	622	54	9.4
Central and Eastern Europe	532	438	-94	-17.6
U.S. merchandise trade balance:				
Mexico	-3,498	-3,863	-366	-10.5
China	-8,629	-9,068	-438	-5.1
Canada	281	-96	-377	(2)
Hong Kong	-4,310	-4,264	46	1.1
Dominican Rep	-1,070	-1,129	-59	-5.5
Honduras	-698	-971	-274	-39.2
Korea	-2,801	-3,009	-208	-7.4
Taiwan	-2,894	-2,807	87	3.0
India	-2,508	-2,630	-121	-4.8
Italy	-2,165	-2,152	13	0.6
All other	-20,379	-22,558	-2,179	-10.7
Total	-48,671	-52,547	-3,875	-8.0
EU-15	-2,835	-3,183	-348	-12.3
OPEC	-2,110	-2,214	-104	-4.9
Latin America	-7,418	-8,832	-1,414	-19.1
CBERA	-3,857	-4,610	-753	-19.5
Asia	-34,993	-36,257	-1,263	-3.6
Sub-Saharan Africa	-391	-476	-85	-21.8
Central and Eastern Europe	-474	-376	98	20.6

[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.

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 1999.

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

to $693 million (table 9-2).[6] U.S. output and shipments of footwear both fell in 1999, by 31 million pairs (19 percent) to 134 million pairs and by $74 million (2 percent) to $3.3 billion, respectively. As a result, the share of the U.S. footwear market supplied by imports in 1999 rose slightly to 94 percent by quantity and 83 percent by value. Footwear imports from China rose by $422 million (5 percent) to $8.4 billion. China's dominance in footwear, for which it accounted for 76 percent of the U.S. import quantity in 1999, is attributed to its price competitiveness due to low wages and established production infrastructure. Trade statistics for all industry/commodity groups in the textile, apparel, and footwear sector are presented in table 9-3 at the end of this chapter.

U.S. BILATERAL TRADE AND COMMODITY ANALYSIS OF TEXTILES AND APPAREL

About one-half of the increase in U.S. imports of textiles and apparel in 1999 was accounted for by countries benefitting from preferential market access, namely NAFTA partners Mexico and Canada, and the CBERA countries. The NAFTA and CBERA countries together accounted for 72 percent of U.S. exports and 31 percent of U.S. imports in 1999. The U.S. trade balance with these countries deteriorated significantly in 1999, as U.S. imports from Mexico rose faster than U.S. exports there in absolute terms, whereas U.S. exports to the CBERA countries and Canada fell for the first time in at least 10 years. The trade deficit with Mexico, which displaced China as the largest source of textiles and apparel imports in 1999, widened by $366 million (11 percent) to $3.9 billion, as imports grew by $1.2 billion (14 percent) to $9.4 billion and exports rose by $823 million (17 percent) to $5.6 billion. The trade deficit with the CBERA countries rose by $753 million (20 percent) to $4.6 billion, as imports grew by $537 million (6 percent) to $9.0 billion and exports fell by $216 million (5 percent) to $4.4 billion. Nevertheless, the percentage increase in imports of these products from Mexico and the CBERA countries in 1999 represented a slowdown from their respective growth rates of 1998, when their shipments rose by 23 and 9 percent, respectively. Trade sources attributed this slowdown in import growth to intense price competition from Asia.[7] The U.S. trade balance with Canada in 1999 was marked by a deficit for the first time since at least 1989, when the U.S.-Canada Free Trade Agreement (CFTA) entered into force.[8] U.S. exports to Canada fell by $97 million (3 percent), to $3.5 billion, while U.S. imports from Canada rose by $280 million (8 percent), to $3.6 billion. U.S. imports of apparel from Canada grew by $180 million (12 percent) to $1.7 billion and over the past 4 years have almost doubled.[9]

The CBERA countries and Mexico compete mainly with one another for assembly work from U.S. apparel firms. By assembling apparel in these countries, whose proximity to suppliers and markets in the United States enables U.S. firms to maintain greater management control over production, U.S. firms save on labor costs and obtain quicker turnaround than importing from Asia. In 1999, apparel accounted for 83 percent ($7.8 billion) of U.S. textiles and apparel imports from Mexico and almost all ($8.9 billion) of those from the CBERA countries, led by the Dominican Republic, Honduras, and El Salvador. Most of these imported garments were assembled from U.S.-cut fabric components and entered under the production-sharing provisions of chapter 98 of the Harmonized Tariff Schedule of the United

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[6] No further analysis is provided because the change in U.S. footwear trade in 1999 was relatively small (table 9-2).

[7] The average prices of U.S. imports of apparel from Asia fell again in 1999; however, trade sources report that Asian apparel prices have been increasing in recent months. See "Apparel Imports Decelerated in 1999; Prices Fell Sharply Before Turning Up," *Pacific Trade Winds* (Santa Barbara, CA), Mar. 2000, p. 1.

[8] In 1994, the CFTA was suspended and its duty phaseout schedules were incorporated into NAFTA.

[9] See the textile and apparel section of ch. 4 regarding recent developments in U.S. imports of men's and boys' wool suits from Canada.

Table 9-2
Footwear: **U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1998 and 1999**[1]

Item	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
		Million dollars		
U.S. exports of domestic merchandise:				
China	29	41	11	38.3
Italy	5	5	1	19.2
Brazil	4	2	-2	-53.0
Indonesia	12	14	2	17.0
Mexico	96	94	-2	-2.1
Thailand	4	5	2	47.2
Spain	5	4	-1	-27.0
Dominican Rep	78	57	-20	-26.1
United Kingdom	15	18	3	20.9
Vietnam	17	30	12	71.7
All other	457	424	-33	-7.1
Total	720	693	-27	-3.7
EU-15	82	82	(2)	(3)
OPEC	33	30	-3	-9.6
Latin America	255	216	-39	-15.4
CBERA	124	98	-26	-21.2
Asian Pacific Rim	256	267	11	4.3
ASEAN	41	59	17	41.7
Central and Eastern Europe	4	2	-1	-38.1
U.S. imports for consumption:				
China	8,016	8,438	422	5.3
Italy	1,170	1,185	15	1.3
Brazil	1,025	960	-65	-6.3
Indonesia	746	751	5	0.7
Mexico	349	354	5	1.4
Thailand	343	325	-18	-5.3
Spain	391	327	-64	-16.4
Dominican Rep	284	237	-47	-16.6
United Kingdom	234	239	5	2.3
Vietnam	115	146	31	26.8
All other	1,206	1,111	-95	-7.9
Total	13,879	14,074	194	1.4
EU-15	2,047	2,038	-9	-0.4
OPEC	747	752	5	0.6
Latin America	1,726	1,593	-133	-7.7
CBERA	325	259	-66	-20.3
Asian Pacific Rim	9,712	10,031	319	3.3
ASEAN	1,291	1,246	-45	-3.5
Central and Eastern Europe	122	148	26	21.4
U.S. merchandise trade balance:				
China	-7,986	-8,397	-411	-5.1
Italy	-1,166	-1,180	-14	-1.2
Brazil	-1,021	-958	63	6.1
Indonesia	-735	-738	-3	-0.4
Mexico	-254	-260	-7	-2.7
Thailand	-340	-320	20	5.8
Spain	-385	-323	63	16.2
Dominican Rep	-207	-180	27	13.0
United Kingdom	-219	-221	-2	-1.0
Vietnam	-98	-116	-18	-18.8
All other	-749	-687	62	8.3
Total	-13,159	-13,380	-221	-1.7
EU-15	-1,965	-1,956	9	0.4
OPEC	-714	-722	-8	-1.1
Latin America	-1,471	-1,377	94	6.4
CBERA	-201	-161	40	19.7
Asian Pacific Rim	-9,456	-9,764	-308	-3.3
ASEAN	-1,250	-1,187	62	5.0
Central and Eastern Europe	-118	-146	-27	-23.2

[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.
[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 1999.

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

States.[10] With the complete elimination of almost all U.S. tariffs on qualifying apparel articles from Mexico under NAFTA as of January 1, 1999, Mexico has a significant competitive advantage over the CBERA countries in the production of apparel for export to the United States. However, as discussed in chapter 4 of this report, newly signed legislation will provide the CBERA countries with similar NAFTA-equivalent tariff treatment for apparel articles.

NAFTA trade preferences have encouraged not only U.S. apparel producers to begin or expand operations in Mexico, but also U.S. producers of apparel fabrics to do likewise, in order to be closer to their apparel manufacturing customers.[11] Some of these facilities (not starting operation until late 1999 or still under construction) will be vertically integrated, producing thread and yarn, weaving and finishing fabric, and assembling apparel, whereas other facilities are being developed in coordination with partner firms that will specialize in fabric processing, apparel assembly, or both, thus forming an integrated manufacturing network.[12]

The U.S. trade deficit with Asia for textiles and apparel widened by $1.3 billion in 1999, to $36.3 billion, as U.S. imports rose by $1.1 billion (3 percent), to $38.1 billion, and U.S. exports fell by $130 million (7 percent), to $1.8 billion. Nevertheless, the share of U.S. imports of these goods accounted for by Asia, the largest regional source of such imports, continued to decline in 1999, by about 1 percentage point, to 53 percent.

China continued to be the trade partner with which the United States has its largest bilateral trade deficit in textiles and apparel, which reached $9.1 billion in 1999, or more than double the second-largest deficit of $4.3 billion with Hong Kong. The deficit with China rose by $438 million (5 percent) in 1999, as U.S. imports rebounded by $450 million (5 percent) to $9.2 billion and U.S. exports rose by $11 million (7 percent) to $166 million. The rise in imports from China reportedly is attributable to the massive restructuring of the Chinese textile industry and the resulting cost reductions. In addition, the Chinese textile industry benefitted from lower cotton costs following deregulation of cotton prices by the Chinese Government.[13]

U.S. imports of textiles and apparel from Korea, which along with Hong Kong and Taiwan were the "Big Three" suppliers of these goods during the 1980s, increased for the third-straight year in 1999, by $222 million (8 percent), to $3.2 billion. Korea's shipments had grown by a much larger $386 million (15 percent) in 1998. The recovery in imports from Korea reportedly reflected the sharp depreciation of its currency during the Asian financial crisis of 1997 and 1998, which effectively reduced dollar prices of its

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[10] The production-sharing provisions provide a duty exemption for U.S. apparel parts returned to the United States in the form of finished apparel. In general, the duty is assessed only on the value-added abroad. The fabric for making the apparel parts can be of either U.S. or foreign origin as long as the fabric is cut to shape in the United States and exported ready for assembly. Apparel from Mexico assembled from U.S.-made and -cut fabric has been eligible to enter free of duty since the implementation of NAFTA in 1994.

[11] The vast majority of textiles and apparel maquiladoras are apparel producers. The number of textile and apparel maquiladoras grew from 912 in 1998 to 1,035 in 1999 and the number of workers in these plants rose from 224,023 to 263,475 during the same period. See "Maquila Scoreboard," *Twin Plant News*, June 1999, p. 63, and May 2000, p. 55.

[12] For further information on these developments, see USITC, *Production Sharing: Use of U.S. Components and Materials in Foreign Assembly Operations, 1995-1998*, investigation No. 332-237, USITC publication 3265, Dec. 1999, pp. 3-23 to 3-27.

[13] The restructuring of the Chinese textile industry involved plant closings, managerial reorganizations, and the elimination of 1.2 million jobs and 9.6 million antiquated cotton spindles. See, for example, U.S. Department of State (State Dept.,) telegram, "SOE Reform: China Textile Industry Leads the Way," message reference No. 002711, prepared by U.S. Embassy, Beijing, Mar. 24, 2000.

goods in the United States, as well as a shift toward higher valued-added textile products.[14] The import growth from Korea offset a decline in imports from Hong Kong of $129 million (3 percent) and Taiwan of $102 million (3 percent). Taiwan's competitiveness reportedly declined as a result of the major currency devaluations of competing countries in East Asia.[15] Imports from Hong Kong likely fell for similar reasons, although Hong Kong suppliers have reportedly been losing sales to China, Mexico, Indonesia, and other countries with lower cost structures.[16]

U.S. imports of textiles and apparel from the Association of Southeast Asian Nations (ASEAN) rose by $383 million (5 percent) to $8.7 billion in 1999, compared with a $1.0 billion increase in 1998. The smaller increase in 1999 likely resulted from a strengthening of the currencies of several ASEAN countries as their economies began recovering from the Asian financial crisis. Thailand replaced Indonesia as the largest ASEAN source of these goods, with shipments rising by $82 million (4 percent) to $2.1 billion, whereas those from Indonesia fell by $56 million (3 percent) to $2.0 billion. The import increase from Thailand reportedly reflected the country's political stability and reputation as a reliable supplier, the infusion of substantial foreign direct investment in the apparel industry in 1998, and the Thai Government's offers of low interest-rate loans to the local textile and apparel industry to upgrade equipment and facilities.[17] A trade source reported that the decline in imports from Indonesia may be attributed to obsolete apparel and textile facilities and equipment and to the country's political instability that prompted concerns about transportation problems and delivery disruptions.[18] Substantial growth occurred again in imports from the newest ASEAN member, Cambodia, whose shipments rose by $226 million (63 percent) to $587 million in 1999. Industry sources attribute this growth to increased foreign investment in apparel production, which has enabled apparel to become one of the biggest growth industries in Cambodia.[19] As discussed in the textile and apparel section of chapter 4 of this report, the United States recently granted Cambodia a 5-percent quota increase for calendar year 2000.

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[14] *Market Profile - Republic of Korea*, Nov. 24, 1999, found at Internet address http://www.tdctrade.com/mktprof/asia/mpsko.htm, retrieved Apr. 26, 2000; "South Korea: Export Recovery," *Textile Asia*, Nov. 1999, p. 89; and "Going for Value Added - South Korea," *Textile Asia*, Jan. 2000, p. 57.

[15] U.S. State Dept., telegram No. 000093, "A Resilient Taiwan's 'Economic Miracle' Still in Place After a Tough Year," prepared by AIT, Taipei, Jan. 10, 2000; and "Taiwan--Sharp Rebound," *Textile Asia*, Jan. 2000, p. 55.

[16] "Hong Kong's Clothing Industry," *Profiles of Hong Kong Major Manufacturing Industries*, July 26, 1999, found at Internet address http://www.tdctrade.com/main/industries/ipclot.htm, retrieved Apr. 26, 2000, p. 4.

[17] "Focus on Thailand: A Stable Society Draws Foreign Investments, Financial Crisis Boosts Apparel Industry," *Pacific Trade Winds* (Santa Barbara, CA), July 1999, pp. 1-2.

[18] "Indonesia: Economic Recovery Progressing," *JTN Monthly*, Feb. 2000, p. 18. An Indonesian textile trade association reportedly has petitioned the Indonesian Government for $5 billion to fund the industry's modernization. See "Indonesia's Textile Industry Looking for Governmental Help," *Emerging Textiles*, found at Internet address http://www.emergingtextiles.com/cgi-bin/more.cgi/latest300300.html, retrieved Apr. 3, 2000.

[19] The number of apparel factories in Cambodia reportedly rose from 70 in 1997 to 178 in 1999. See "Racing Ahead--Cambodia," *Textile Asia*, Nov. 1999, p. 96.

Table 9-3
Textiles, apparel, and footwear sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
CH045	Fibers and yarns, except raw cotton and raw wool:				
	Exports	2,969	2,830	-139	-4.7
	Imports	2,498	2,547	50	2.0
	Trade balance	471	282	-189	-40.1
CH046	Fabrics:				
	Exports	4,886	5,170	283	5.8
	Imports	5,662	5,563	-99	-1.8
	Trade balance	-776	-393	383	49.4
CH047	Carpets and rugs:				
	Exports	826	772	-54	-6.6
	Imports	1,109	1,248	139	12.5
	Trade balance	-283	-475	-193	-68.2
CH048	Home furnishings:				
	Exports	442	398	-44	-10.0
	Imports	2,271	2,652	380	16.7
	Trade balance	-1,829	-2,254	-424	-23.2
CH049	Apparel:				
	Exports	8,514	7,964	-549	-6.5
	Imports	53,874	56,565	2,691	5.0
	Trade balance	-45,361	-48,601	-3,240	-7.1
CH050	Miscellaneous textile products:				
	Exports	1,500	1,589	89	5.9
	Imports	2,395	2,696	301	12.6
	Trade balance	-894	-1,106	-212	-23.7
CH051	Footwear:				
	Exports	720	693	-27	-3.7
	Imports	13,879	14,074	194	1.4
	Trade balance	-13,159	-13,380	-221	-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 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 10
Minerals and Metals

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The U.S. trade deficit in the minerals and metals sector widened slightly by $1.6 billion (4 percent) in 1999 to $41.8 billion, as U.S. exports of minerals and metals declined by $669 million (2 percent) to $39.9 billion (table 10-1) and imports rose by $978 million (1 percent) to $81.7 billion. The rise in U.S. imports reflected continued strong U.S. economic growth, whereas the decline in U.S. exports reflected more modest economic growth abroad[1] and a strengthening of the U.S. dollar relative to currencies of major trade partners.[2] The increasing trade deficit in minerals and metals in 1999 continues the trend of 1998, when the deficit for the sector expanded by $10.1 billion (34 percent) to $30.1 billion.

The decline in U.S. exports of minerals and metals in 1999 was caused by declines in a number of key industry/commodity groups (table 10-2). U.S. exports of steel mill products and of iron and steel waste and scrap, together, fell by $413 million (8 percent) to $5 billion, reflecting declines in the price of finished steel products and scrap in 1999, and stronger U.S. domestic demand relative to foreign demand for steel mill products. U.S. exports of precious metals and non-numismatic coins declined by $343 million (5 percent) to $6.5 billion due largely to declining prices of gold and silver and wide swings in shipments of silver bullion to the United Kingdom, a major global precious-metals trading center.

The increase in U.S. imports of minerals and metals in 1999 was lead by natural and synthetic gemstones (table 10-3), which rose by $1.6 billion (17 percent) to $11.0 billion, largely due to increases in diamond imports from Israel, India, and Belgium--major diamond cutting and trading centers--as lower-priced diamonds continued to spur consumer interest. U.S. imports of cement, stone, and related products increased by $676 million (20 percent) to $4.1 billion in 1999, due to continued strong residential and commercial construction markets in the United States and increased imports of cement and other construction-related materials from Canada and emerging non-traditional suppliers such as China, Thailand, and South Korea. At the same time, imports of miscellaneous products of base metal increased by $653 million (11 percent) to $6.6 billion in 1999, due largely to the significant trade in certain automotive-related parts between automotive plants in the United States and Canada.

The widening of the U.S. trade deficit for minerals and metals also was partially offset by increased U.S. exports of miscellaneous products of base metal and declining imports of steel mill products. Reflecting the significant integration of the automotive manufacturing sector in North America, U.S. exports of these miscellaneous products increased by $477 million (10 percent) in 1999 to $5.4 billion, largely due to extensive trade in certain automotive-related parts between plants in the United States and Canada. Imports of steel mill products declined by $3.7 billion (22 percent) in 1999 to

[1] See ch. 2 for a general discussion about U.S. and international macroeconomic conditions that influenced U.S. merchandise trade performance in 1999.

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

Table 10-1
Minerals and metals: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1998 and 1999[1]

Item	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
		Million dollars		
U.S. exports of domestic merchandise:				
Canada	13,129	13,578	449	3.4
Mexico	6,063	6,528	465	7.7
Japan	1,993	1,890	-103	-5.2
China	592	713	121	20.5
United Kingdom	4,272	3,079	-1,193	-27.9
Israel	196	225	29	14.9
Germany	1,169	1,194	25	2.2
Taiwan	669	590	-79	-11.9
Switzerland	1,565	2,787	1,223	78.1
Russia	64	31	-33	-52.1
All other	10,849	9,276	-1,573	-14.5
Total	40,559	39,890	-669	-1.6
EU-15	8,601	7,135	-1,466	-17.0
OPEC	994	728	-266	-26.7
Latin America	8,722	8,619	-103	-1.2
CBERA	821	708	-114	-13.8
Asia	6,149	5,783	-365	-5.9
Sub-Saharan Africa	258	222	-36	-14.1
Central and Eastern Europe	87	87	(2)	-0.5
U.S. imports for consumption:				
Canada	16,994	17,285	292	1.7
Mexico	5,720	5,997	276	4.8
Japan	6,630	5,159	-1,471	-22.2
China	4,615	5,520	906	19.6
United Kingdom	2,624	2,584	-40	-1.5
Israel	3,807	4,588	781	20.5
Germany	3,425	3,444	20	0.6
Taiwan	3,076	3,264	189	6.1
Switzerland	884	992	108	12.2
Russia	3,953	3,397	-556	-14.1
All other	29,011	29,486	475	1.6
Total	80,739	81,717	978	1.2
EU-15	16,333	16,248	-85	-0.5
OPEC	1,347	1,306	-41	-3.0
Latin America	10,948	11,629	680	6.2
CBERA	468	536	68	14.6
Asia	21,309	21,447	137	0.6
Sub-Saharan Africa	2,600	2,637	37	1.4
Central and Eastern Europe	652	693	41	6.3
U.S. merchandise trade balance:				
Canada	-3,865	-3,708	157	4.1
Mexico	342	531	189	55.2
Japan	-4,638	-3,270	1,368	29.5
China	-4,023	-4,807	-784	-19.5
United Kingdom	1,648	495	-1,153	-69.9
Israel	-3,612	-4,363	-752	-20.8
Germany	-2,256	-2,250	6	0.3
Taiwan	-2,407	-2,675	-268	-11.1
Switzerland	681	1,795	1,115	163.7
Russia	-3,889	-3,366	523	13.4
All other	-18,162	-20,210	-2,047	-11.3
Total	-40,181	-41,827	-1,646	-4.1
EU-15	-7,732	-9,113	-1,381	-17.9
OPEC	-353	-578	-225	-63.8
Latin America	-2,226	-3,010	-784	-35.2
CBERA	354	172	-182	-51.4
Asia	-15,160	-15,663	-503	-3.3
Sub-Saharan Africa	-2,342	-2,416	-73	-3.1
Central and Eastern Europe	-565	-606	-41	-7.3

[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 1999.

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

Table 10-2
Leading changes in U.S. exports of minerals and metals, 1998 and 1999

Sector/commodity	1998	1999	Change, 1999 from 1998 Absolute	Percent
		Million dollars		
Increases:				
Miscellaneous products of base metal (MM031)	4,892	5,369	477	10
Natural and synthetic gemstones (MM019)	217	447	230	106
Flat glass (MM014)	1,416	1,506	90	6
Certain cutlery, sewing implements, and related products (MM043)	511	583	72	14
Industrial fasteners of base metal (MM032)	1,470	1,535	65	4
Unwrought aluminum (MM037)	917	980	64	7
Decreases:				
Steel mill products (MM025)	4,636	4,291	-346	-8
Precious metals and non-numismatic coins (MM020)	6,853	6,510	-343	-5
Steel pipe and tube fittings, and certain cast products (MM026)	809	662	-147	-18
Copper and related articles (MM036)	1,813	1,668	-144	-8
Metallic containers (MM029)	819	690	-129	-16
Certain base metals and chemical elements (MM041)	1,398	1,272	-126	-9
Certain ores, concentrates, ash, and residues (MM007)	350	237	-114	-32
All other	14,458	14,140	-318	-2
Total	40,559	39,890	-669	2

Note.--Calculations based on unrounded data.

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

Table 10-3
Leading changes in U.S. imports of minerals and metals, 1998 and 1999

Sector/commodity	1998	1999	Change, 1999 from 1998 Absolute	Percent
		Million dollars		
Increases:				
Natural and synthetic gemstones (MM019).	9,449	11,021	1,572	17
Cement, stone, and related products (MM009).	3,426	4,103	676	20
Miscellaneous products of base metal (MM031)	5,985	6,639	653	11
Copper and related articles (MM036)	3,359	3,726	367	11
Cooking and kitchen ware (MM033)	1,393	1,585	191	14
Unwrought aluminum (MM037)	4,558	4,744	186	4
Certain builders' hardware (MM045).	1,531	1,696	165	11
Ceramic floor and wall tiles (MM012)	860	1,019	159	19
Flat glass (MM014)	1,120	1,268	148	13
Decreases:				
Steel mill products (MM025)	16,434	12,749	-3,685	-22
Primary iron products (MM021)	856	643	-213	-25
Certain base metals and chemical elements (MM041)	2,424	2,226	-197	-8
Copper ores and concentrates (MM004)	228	82	-146	-64
Iron ores and concentrates (MM003)	527	399	-129	-24
All other	28,589	29,817	1,228	4
Total	80,739	81,717	978	1

Note.--Calculations based on unrounded data.

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

$12.7 billion, led by lower Japanese imports which declined by $1.5 billion (38 percent) to $2.4 billion. The decline in U.S. imports of steel mill products largely reflected economic recovery in Asia and the dampening effects of trade actions against foreign producers by U.S. steel producers. Trade statistics for all commodity/industry groups in the minerals and metals sector are presented in table 10-6 at the end of this chapter.

U.S. BILATERAL TRADE

The largest U.S. trade partners in the minerals and metals products sector in 1999 were Canada, Mexico, and Japan. Canada was the leading destination for U.S. exports in 1999, accounting for 34 percent ($13.6 billion) of all sector exports, and the leading source of imports, accounting for 21 percent ($17.3 billion) of all sector imports. The U.S. trade deficit in minerals and metals with Canada decreased by $157 million (4 percent) to $3.7 billion in 1999, as U.S. exports to Canada, which rose by $449 million (3 percent), outpaced U.S. imports from Canada, which rose by $292 million (2 percent). Principal product groups experiencing export increases were miscellaneous articles of base metal, up by $294 million (15 percent) to $2.3 billion; flat glass, up by $130 million (19 percent) to $829 million; and steel mill products which rose by $28 million (1 percent) to $2.3 billion. The principal product groups registering an increase in 1999 U.S. imports from Canada were aluminum mill products, which increased by $133 million (12 percent) to $1.2 billion; and miscellaneous products of base metal, which increased by $142 million (9 percent) to $1.8 billion. Both industry segments experienced import growth due largely to continued strong demand for certain automotive parts by U.S. automotive plants and for appliances due to consumer confidence and the growth in housing starts. Imports from Canada of steel mill products declined by $137 million (6 percent) to $2.4 billion, largely reflecting shifts in automotive-related demand for steel by end-users. Imports from Canada of copper and related articles declined by $78 million (7 percent) to $1.1 billion, largely resulting from the continuing decline in copper prices.

Various ferrous and nonferrous metal-consuming sectors, such as the steel, automotive, and appliances industries, are highly integrated between the United States and Canada, resulting in extensive trade flows of raw materials, intermediate products, and finished products between the two nations. The lowering of trade restrictions between North American Free Trade Agreement (NAFTA) countries has encouraged metals producers and consumers to integrate their North American production and distribution operations to more efficiently serve regional end-use markets in North America.

Mexico was the second-leading market for U.S. sector exports and the third-leading supplier of U.S. imports of minerals and metals in 1999. U.S. exports to Mexico of minerals and metals in 1999 registered a $465-million (8-percent) increase to $6.5 billion, which accounted for 16 percent of overall sector exports. The increase was accounted for largely by miscellaneous products of base metal, which rose by $242 million (17 percent) to $1.6 billion; and copper and related articles, which rose by $22 million (6 percent) to $383 million; reflecting growing demand for construction-related materials in Mexico. U.S. imports of minerals and metals from Mexico increased $276 million (5 percent) to $6 billion, accounting for 7 percent of all sector imports. Most of the increase was accounted for by miscellaneous products of base metal which increased by $167 million (16 percent) to $1.2 billion, due to automotive-related demand. Other increases included flat glass, which rose by $52 million (16 percent) to $389 million, reflecting strong automotive and construction demand; and cement, stone, and related products, which rose by $52 million (20 percent) to $306 million, reflecting strong construction markets in the United States.

U.S. exports of minerals and metals to Japan registered a $103-million (5-percent) decline in 1999 to $1.9 billion (representing 5 percent of all sector exports). The decline was principally concentrated in aluminum mill products, down by $44 million (31 percent) to $101 million; certain base metals and

chemical elements, down by $26 million (18 percent) to $120 million; and copper and related articles which declined by $29 million (23 percent) to $96 million--all largely attributable to lingering weakness in Japan's industrial sector. U.S. imports of minerals and metals from Japan decreased by $1.5 billion (22 percent) to $5.2 billion (representing 6 percent of sector imports), almost entirely as a result of resumed shipments of steel and related products by Japanese producers to traditional Asian markets and the effect of U.S. trade actions on Japanese producers.

U.S. exports of minerals and metals to Asian and Latin American nations totaled 14 percent and 22 percent, respectively, of sector exports to all destinations in 1999, with European Union (EU) nations representing 18 percent of U.S. sector exports. The trade deficit in this sector with Latin America increased by $784 million (35 percent) to $3 billion whereas the U.S. trade deficit with Asia increased by $503 million (3 percent) to $15.7 billion. The largest trade balance change in this sector occurred with the EU as the deficit grew by $1.4 billion (18 percent) to $9.1 billion in 1999, largely influenced by dramatic swings in diamond exports to major trading centers in Belgium, as U.S. sector exports to EU nations decreased by $1.5 billion (17 percent) to $7.1 billion.

COMMODITY ANALYSIS

Steel Mill Products[3]

U.S. total trade (exports plus imports) in steel mill products declined by $4.0 billion (19 percent) during 1999 to $17.0 billion. U.S. imports of $12.7 billion were at the lowest since 1995. U.S. exports of steel mill products made up 13 percent of the volume of total trade, but accounted for only 5 percent of U.S. mill shipments in 1999. Exports continued to decline in 1999 by $346 million (8 percent) to $4.3 billion, following a 4-percent decrease in 1998; Canada and Mexico are the leading U.S. export markets. Overall, the United States was a net importer of steel mill products, with exports playing a relatively minor role in the market.

U.S. shipments of steel mill products rose by 2 million metric tons (mmt) (3 percent) in 1999 to 95 mmt, however, apparent supply of finished steel products fell by 4 percent. Service centers and distributors continued to be the leading market for steel mill products, despite a 1-percent decrease in service center shipments during 1999, followed by the automotive industry and construction products market. The United States was the second-largest steel producer in the world, after China, despite domestic raw steel production falling slightly to 97 mmt. Capacity utilization declined from an average of 86.8 percent in 1998 to an average of 83.7 percent in 1999. Some steelmakers increased steelmaking capabilities,[4] but others reported planned and unplanned outages.[5]

Other factors affecting the condition of the U.S. steel industry included lower average selling prices. The U.S. Bureau of Labor Statistics' producer price index for steel mill products registered lower

[3] Includes semifinished, flat-rolled (plate and sheet), bars, rods, angles and sections, wire, rails, pipes, and tubes.

[4] These mill included Bayou Steel, SMI Steel, North Star, and Chaparral. Norman L. Samways, "Developments in the North American Iron and Steel Industry-1999," *American Iron and Steel Engineer*, Feb. 2000, pp. 27-46.

[5] Weirton Steel chose not to operate its No. 4 blast furnace during 1999 due to reduced demand. Bethlehem Steel relined the blast furnace at the Sparrow's Point mill. LTV experienced equipment outages at both the Cleveland and Indiana Harbor plants. An explosion and fire at Rouge Steel idled steelmaking operations from Feb. to May 1999.

prices for 1999 compared with 1998 and 1997, and the average unit value for U.S. steel imports and exports declined 10 percent and 6 percent, respectively.

U.S. imports

U.S. imports of steel mill products fell by $3.7 billion (22 percent) during 1999 to $12.7 billion, while the quantity of imports decreased by 5 mmt (14 percent) to 33 mmt. However, 1998 was a record year for steel imports of $16.4 billion, compared to import levels in 1997 of $13.6 billion or 28.6 mmt. Canada, Japan, and Mexico were the leading sources of imports in 1999, with $2.3 billion (19 percent of imports), $1.5 billion (11 percent), and $1.1 billion (9 percent), respectively. In terms of import tonnage, Canada accounted for 5 mmt, Mexico accounted for 3 mmt, and Japan accounted for 3 mmt.

Reflecting shifts in market prices, the magnitude of the shift in the value of imports from many countries was not proportional to the shift in quantity, as the average unit value of the products from these countries fell, along with prices of steel mill products in 1999. The following tabulation highlights some of these differences:

Country	Percentage change in imports:	
	Value	Quantity
Russia	-76	-72
Japan	-50	-54
United Kingdom	-28	-34
Korea	-22	-14
Germany	-16	-1
France	-9	6
Canada	-6	1
Mexico	-4	15
Brazil	2	39
Taiwan	43	88

Imports of finished steel products decreased by $3.7 billion (25 percent) to $11.0 billion or by 7 mmt (21 percent) to 25 mmt. The product groups that contributed the most to the decline included hot-rolled sheet, cold-rolled sheet, cut-to-length plate, and heavy structural shapes (table 10-4), despite relatively strong demand in the U.S. market. Hot-rolled flat products alone accounted for the majority of the import decline, falling by 5 mmt (48 percent) to 6 mmt.[6] Several steel mill products were subject to antidumping investigations throughout 1999.[7] Steel industry officials attributed the reduced quantity of

[6] The U.S. Department of Commerce (USDOC) negotiated suspension agreements with Russia and Brazil to limit exports of hot-rolled steel products to the United States. Russia also concluded a comprehensive steel agreement in July 1999 to limit steel exports to the United States for several product categories. See USDOC International Trade Administration (ITA), "Fact Sheet-Comprehensive Agreement on Steel Imports from the Russian Federation," July 12, 1999, found at Internet address http://www.ita.doc.gov/media/0713steelfs.htm, retrieved Apr. 21, 2000. U.S. imports of steel mill products from Russia declined by 4 mmt (72 percent) in 1999 to 1 mmt.

[7] Cases initiated or completed during the year under Title VII of the Tariff Act of 1930, in addition to 5-year review cases (see app. E), covered cut-to-length steel plate; stainless steel plate, other than cold-rolled; stainless steel round wire; hot-rolled steel products; stainless steel sheet and strip; cold-rolled steel products; seamless carbon and alloy steel standard, line, and pressure pipe; structural steel beams; circular seamless stainless steel hollow products; and tin- and chromium-coated steel sheet. In addition, two cases completed under Section 202(b)

(continued...)

imports in 1999 to these trade cases.[8] In general, products subject to antidumping investigations did experience a reduction in both the value and quantity of imports, contributing to the overall decline in U.S. imports of steel mill products.

Table 10-4
Changes in U.S. imports of steel mill products, 1998 and 1999

Commodity	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
	Million dollars			
Carbon steel finished products:				
Hot-rolled flat products	3,312	1,562	-1,750	-53
Angles, shapes, and sections	967	477	-490	-51
Cold-rolled flat products	1,243	866	-377	-30
Coated flat products	1,071	1,273	202	19
Alloy steel finished products	2,006	1,632	-374	-19
Stainless steel finished products	1,370	1,105	-266	-19
Seamless pipe and tube, all grades	921	595	-326	-35
Large diameter welded pipe and tube, all grades	406	234	-171	-42
Semifinished products, all grades	1,663	1,709	47	3
All other	3,475	3,296	-179	-5
Total	16,434	12,749	-3,685	-22

Note.--Calculations based on unrounded data.

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

U.S. imports of pipe and tube products declined by 569,282 metric tons during 1999 after rising by 590,230 metric tons during 1998. Total domestic shipments of pipe and tube products were down 11 percent from 1998 levels, along with a reduction in most pipe and tube imports.[9] Overall, domestic demand for pipe and tube products fell by almost 8.5 percent, after 6 years of continuous growth, as drilling activity in the energy sector slowed.[10] U.S. rig counts, a key indicator of oil and gas drilling activity, averaged 608 in 1999, compared with 829 in 1998, and 944 in 1997.[11] Oil country tubular goods and line pipe together accounted for 80 percent of the drop in the quantity of pipe and tube imports during 1999.[12]

[7] (...continued)
of the Trade Act of 1974 covered steel wire rod and welded line pipe.

[8] American Iron and Steel Institute, press release "Full Year 1999: Steel Imports Exceed 35 Million Tons Total and Finished Steel Imports Second Highest Ever and Prices Not Yet Restored," Jan. 31, 2000, found at Internet address http://www.steel.org/news/pr/2000/pr0001_import.htm, retrieved Apr. 10, 2000.

[9] Douglas Preston Yadon, *Preston Pipe and Tube Report-TubeNet Issue 2/2000*, vol. 18, No. 1, Jan. 2000, found at Internet address http://www.tubenet.org, retrieved Apr. 21, 2000.

[10] Tom Stundza, "How Long Will Tight Supply Last?" *Purchasing*, Mar. 9, 2000 found at Internet address http://www.manufacturing.net/magazine/purchasing, retrieved Apr. 14, 2000.

[11] Baher Hughes, Inc., "Baher Hughes Investor Relations: Rig Counts," found at Internet address http://www.baherhughes.com/investor/rig/index.htm, retrieved Apr. 26, 2000.

[12] U.S. imports of oil country tubular goods and line pipe together decreased by 456,345 metric tons (31 percent) to 996,928 metric tons in 1999.

Within major product categories, some steel products experienced import growth, including concrete reinforcing bars, wire rod,[13] galvanized sheet and strip, and tin plate.[14] In addition, the U.S. steel industry imported semifinished products to complement domestic steelmaking capabilities. Such imports rose by 2 mmt (27 percent) during 1999 to 8 mmt, accounting for 24 percent of all steel imports by tonnage. In contrast, semifinished products comprised 16 percent of the quantity of all steel imports in 1998. The average unit value for imports of semifinished steel products fell by 18 percent during 1999. However, this situation arose despite a capacity utilization level of only 83.7 percent for 1999, as steelmakers attempted to take advantage of lower import prices.[15]

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Natural and Synthetic Gemstones

The U.S. trade deficit for natural and synthetic gemstones (hereafter gemstones) expanded by approximately $1.3 billion (15 percent) during 1999 to $10.6 billion, primarily as a result of a large increase in imported gemstones, particularly diamonds. The United States is the world's largest consumer market of gemstones, but with no significant natural-gemstone resources, generally relies on imports to supply nearly all of its requirements. U.S. exports also increased, by $230 million (106 percent) to $447 million, because of higher foreign demand for processed diamonds, although not nearly enough to counter the rise in imports.

U.S. imports

The sustained strength of the U.S. economy and greater consumer interest in lower priced diamonds caused a $1.6 billion (17 percent) growth in imports of gemstones to $11.0 billion. Although the value of all gemstone commodities increased, the value of diamonds alone rose by $1.4 billion (17 percent) to $9.9 billion (table 10-5).[16] The combined value of U.S. diamond imports from Israel, India, and Belgium--major diamond cutting and trading centers--increased by $1.3 billion (17 percent) to $8.7 billion. These countries continued to represent the bulk of U.S. diamond imports, and 79 percent of imported gemstones in 1999.

Pearl imports increased by $105 million (38 percent) to $385 million, of which Japan--the global trade center for pearls--supplied nearly one-half. China is also a growing import source for pearls, trading its product directly with the United States as well as through Japan, reflecting Japanese

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[13] On Feb. 16, 2000, the President issued Proclamation 7273, which imposed a safeguard action in the form of a tariff-rate quota on imports of certain steel wire for a period of 3 years and 1 day. The action followed receipt of a report from the USITC under section 202 of the Trade Act of 1974 containing what the President considered to be an affirmative determination.

[14] On Aug. 28, 2000, the USDOC published a notice in the *Federal Register* (65 F.R. 52067) that it will direct the U.S. Customs Service to impose antidumping duties on imports of tin- and chromium-coated steel sheet from Japan. The action followed a finding by the USDOC that such coated steel sheet from Japan was being sold in the United States at less than fair value (dumped) and a determination by the USITC that an industry in the United States was materially injured or threatened with material injury by reason of such imports.

[15] Tom Bagsarian, "Mills Bring in the Slabs," *New Steel*, June 1999, pp. 42-44.

[16] As the import value of diamonds increased, the quantity increased by 5.6 million carats (31 percent) to 23.5 million carats, thereby decreasing the trade weighted average unit import price by $53 to $422 per carat.

Table 10-5
Changes in U.S. imports of natural and synthetic gemstones, 1998 and 1999

Commodity	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
		Million dollars		
Diamonds	8,489	9,901	1,413	17
Natural colored gemstones	615	667	52	8
Pearls	280	385	105	38
Synthetic and reconstructed gemstones	66	68	3	4
Total	9,449	11,021	1,572	17

Note.--Calculations based on unrounded data.

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

investments in China's pearl industry. U.S. imports of pearls directly from China increased by $9.8 million (40 percent) to nearly $35 million. Industry sources report that since last year, China's freshwater pearl production has improved in terms of size, roundness, and luster to more closely compete with Japan's *akoya* production (the benchmark in pearl quality). With more favorable growing conditions in China (Japan continues to experience pollution problems in its growing water-beds) and longer growing periods of 4-7 years, some in the industry predict China may dominate the freshwater pearl production market in the distant future.[17]

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[17] Gary Roskin, "Chinese Pearls a Hit in Tucson," *Jewelers' Circular Keystone*, Apr. 1999, pp. 28-32.

Table 10-6
Minerals and metals sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
MM001	Clays and related mineral products:				
	Exports	993	952	-41	-4.1
	Imports	190	168	-21	-11.3
	Trade balance	803	783	-20	-2.4
MM002	Fluorspar and miscellaneous mineral substances:				
	Exports	53	74	21	39.5
	Imports	132	146	14	10.3
	Trade balance	-80	-72	7	9.2
MM003	Iron ores and concentrates:				
	Exports	244	243	-2	-0.6
	Imports	527	399	-129	-24.4
	Trade balance	-283	-156	127	44.9
MM004	Copper ores and concentrates:				
	Exports	63	81	18	28.0
	Imports	228	82	-146	-64.0
	Trade balance	-165	-2	163	99.1
MM005	Lead ores, concentrates, and residues:				
	Exports	65	43	-22	-33.7
	Imports	8	3	-4	-55.8
	Trade balance	57	40	-18	-30.7
MM006	Zinc ores, concentrates, and residues:				
	Exports	304	352	48	16.0
	Imports	37	53	16	42.9
	Trade balance	267	299	33	12.3
MM007	Certain ores, concentrates, ash, and residues:				
	Exports	350	237	-114	-32.4
	Imports	710	732	22	3.1
	Trade balance	-360	-495	-135	-37.6
MM008	Precious metal ores and concentrates:				
	Exports	11	40	30	278.3
	Imports	45	4	-42	-92.0
	Trade balance	-35	37	71	([3])
MM009	Cement, stone, and related products:				
	Exports	1,201	1,184	-17	-1.4
	Imports	3,426	4,103	676	19.7
	Trade balance	-2,226	-2,919	-693	-31.2
MM010	Industrial ceramics:				
	Exports	668	663	-5	-0.8
	Imports	545	648	104	19.0
	Trade balance	123	14	-109	-88.5
MM011	Ceramic bricks and similar articles:				
	Exports	26	20	-7	-24.8
	Imports	20	24	5	24.7
	Trade balance	7	-5	-11	([3])
MM012	Ceramic floor and wall tiles:				
	Exports	27	24	-3	-10.4
	Imports	860	1,019	159	18.5
	Trade balance	-834	-995	-162	-19.4
MM013	Ceramic household articles:				
	Exports	103	109	6	5.5
	Imports	1,716	1,671	-44	-2.6
	Trade balance	-1,613	-1,563	50	3.1
MM014	Flat glass:				

See footnote(s) at end of table.

Table 10-6--*Continued*
Minerals and metals sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
			Million Dollars		
	Exports	1,416	1,506	90	6.3
	Imports	1,120	1,268	148	13.2
	Trade balance	296	238	-58	-19.7
MM015	Glass containers:				
	Exports	173	173	([4])	([5])
	Imports	452	526	74	16.5
	Trade balance	-279	-353	-74	-26.7
MM016	Household glassware:				
	Exports	179	183	4	2.2
	Imports	864	937	73	8.5
	Trade balance	-685	-754	-69	-10.1
MM017	Miscellaneous glass products:				
	Exports	662	674	12	1.8
	Imports	702	805	103	14.6
	Trade balance	-41	-131	-91	-222.2
MM018	Fiberglass insulation products:				
	Exports	74	71	-3	-4.4
	Imports	71	139	68	95.2
	Trade balance	3	-69	-71	([3])
MM019	Natural and synthetic gemstones:				
	Exports	217	447	230	106.3
	Imports	9,449	11,021	1,572	16.6
	Trade balance	-9,233	-10,575	-1,342	-14.5
MM020	Precious metals and non-numismatic coins:				
	Exports	6,853	6,510	-343	-5.0
	Imports	7,735	7,708	-27	-0.4
	Trade balance	-883	-1,198	-316	-35.8
MM021	Primary iron products:				
	Exports	17	14	-3	-17.8
	Imports	856	643	-213	-24.8
	Trade balance	-838	-629	209	25.0
MM022	Ferroalloys:				
	Exports	103	80	-23	-22.3
	Imports	1,018	960	-57	-5.6
	Trade balance	-914	-880	34	3.8
MM023	Iron and steel waste and scrap:				
	Exports	817	750	-67	-8.2
	Imports	418	390	-27	-6.6
	Trade balance	399	360	-39	-9.8
MM024	Abrasive and ferrous products:				
	Exports	531	518	-13	-2.5
	Imports	735	765	30	4.1
	Trade balance	-204	-247	-43	-21.0
MM025	Steel mill products:				
	Exports	4,636	4,291	-346	-7.5
	Imports	16,434	12,749	-3,685	-22.4
	Trade balance	-11,798	-8,458	3,339	28.3
MM026	Steel pipe and tube fittings and certain cast products:				
	Exports	809	662	-147	-18.2
	Imports	591	584	-6	-1.1
	Trade balance	219	78	-141	-64.5
MM027	Fabricated structurals:				

See footnote(s) at end of table.

Table 10-6--*Continued*
Minerals and metals sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
	Exports	151	186	35	23.4
	Imports	328	432	103	31.5
	Trade balance	-177	-245	-68	-38.4
MM028	Metal construction components:				
	Exports	611	579	-32	-5.3
	Imports	562	693	132	23.4
	Trade balance	49	-115	-164	([3])
MM029	Metallic containers:				
	Exports	819	690	-129	-15.8
	Imports	463	527	64	13.8
	Trade balance	356	162	-193	-54.4
MM030	Wire products of base metal:				
	Exports	756	674	-83	-10.9
	Imports	1,231	1,354	123	10.0
	Trade balance	-475	-681	-206	-43.3
MM031	Miscellaneous products of base metal:				
	Exports	4,892	5,369	477	9.8
	Imports	5,985	6,639	653	10.9
	Trade balance	-1,094	-1,270	-176	-16.1
MM032	Industrial fasteners of base metal:				
	Exports	1,470	1,535	65	4.4
	Imports	2,020	2,019	-1	-0.1
	Trade balance	-550	-484	66	12.1
MM033	Cooking and kitchen ware:				
	Exports	244	214	-30	-12.5
	Imports	1,393	1,585	191	13.7
	Trade balance	-1,149	-1,371	-222	-19.3
MM034	Metal and ceramic sanitary ware:				
	Exports	147	132	-15	-10.2
	Imports	403	473	70	17.3
	Trade balance	-257	-341	-85	-33.1
MM035	Construction castings and other cast-iron articles:				
	Exports	37	27	-9	-25.1
	Imports	110	120	10	8.6
	Trade balance	-73	-92	-19	-25.5
MM036	Copper and related articles:				
	Exports	1,813	1,668	-144	-8.0
	Imports	3,359	3,726	367	10.9
	Trade balance	-1,546	-2,058	-512	-33.1
MM037	Unwrought aluminum:				
	Exports	917	980	64	6.9
	Imports	4,558	4,744	186	4.1
	Trade balance	-3,641	-3,764	-123	-3.4
MM038	Aluminum mill products:				
	Exports	3,046	2,943	-103	-3.4
	Imports	2,181	2,283	103	4.7
	Trade balance	866	660	-206	-23.8
MM039	Lead and related articles:				
	Exports	160	154	-5	-3.3
	Imports	190	201	11	5.8
	Trade balance	-30	-46	-16	-53.4
MM040	Zinc and related articles:				

See footnote(s) at end of table.

Table 10-6--*Continued*
Minerals and metals sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
			Million Dollars		
	Exports	102	107	5	4.7
	Imports	1,119	1,252	133	11.9
	Trade balance	-1,017	-1,145	-128	-12.6
MM041	Certain base metals and chemical elements:				
	Exports	1,398	1,272	-126	-9.0
	Imports	2,424	2,226	-197	-8.1
	Trade balance	-1,025	-955	71	6.9
MM042	Nonpowered handtools:				
	Exports	2,060	2,031	-30	-1.4
	Imports	2,885	2,917	32	1.1
	Trade balance	-825	-887	-62	-7.5
MM043	Certain cutlery, sewing implements, and related products:				
	Exports	511	583	72	14.2
	Imports	781	856	74	9.5
	Trade balance	-271	-273	-2	-0.8
MM044	Table flatware and related products:				
	Exports	24	26	2	7.1
	Imports	327	425	98	29.9
	Trade balance	-303	-399	-96	-31.7
MM045	Certain builders' hardware:				
	Exports	807	823	16	1.9
	Imports	1,531	1,696	165	10.8
	Trade balance	-723	-873	-149	-20.7

[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 of HTS import and export items for trade monitoring purposes.
[3] Not meaningful for purposes of comparison.
[4] Less than $500,000.
[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 11
Machinery

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In 1999, the U.S. trade deficit in the machinery sector widened by $5.3 billion (77 percent) to $12.3 billion (table 11-1). The most significant deficit increases occurred in electric motors, generators, and related equipment (hereafter electric motors and generators), which rose by $1.6 billion (198 percent) to $2.4 billion; household appliances, including commercial applications (hereafter household appliances), by $1.1 billion (149 percent) to $1.8 billion; and wiring harnesses for motor vehicles (hereafter wiring harnesses), by $782 million (25 percent) to $3.9 billion.

The trade deficit in these products was due to a substantial downturn in the demand for U.S. machinery in most regions of the world (table 11-1). During the first half of 1999, the European Union (EU) and Latin America were still recovering from the effects of the 1998 global slow down. A decline in the value of Western Europe's major currencies and the Brazilian real, relative to the value of the U.S. dollar, also placed U.S. exports at a competitive price disadvantage.[1] Although the United States experienced a trade deficit of $11.2 billion with the countries of Asia, U.S. exports increased by $958 million and reached $5.7 billion following a rebound in the "Tiger" economies of Korea, Singapore, Taiwan, and Hong Kong. Overall, U.S. exports of machinery products decreased by $1.1 billion (2 percent) to $66.9 billion in 1999 compared with 1998 (table 11-2). Farm and garden machinery and equipment, household appliances, wiring harnesses, and electric motors and generators together accounted for approximately $2.0 billion of the decreased U.S. exports in the machinery sector in 1999. However, a significant offsetting increase in machinery exports was registered in miscellaneous machinery,[2] which grew by $1.1 billion (19 percent) in 1999 to $6.8 billion.

In 1999, U.S. imports of machinery increased by $4.2 billion (6 percent) to $79.1 billion. The top five industry/commodity groups (table 11-3) that accounted for $3.6 billion or 68 percent of the overall increase in the value of U.S. sector imports during 1999 were affected by continued expansion of the U.S. economy,[3] which created additional demand for capital equipment, housing, commercial activity, and motor vehicles. In addition, concern over the possibility of power failures during the Year-2000 (Y2K) conversion led to a surge in U.S. imports of power generators in late 1999. Among the industry/commodity groups

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

[2] This extensive product grouping covers a wide and heterogeneous range of products such as: producer gas or water gas generators; calendering and similar rolling machines; pulley tackle and hoists; winches; jacks; elevators, moving stairways, and conveyors; ski lifts and draglines; lifting, handling, and unloading equipment; casting machines; hand-held blow torches; evaporative air coolers; trash compactors; and additional categories of industrial and commercial equipment not specifically provided for elsewhere in the tariff schedule.

[3] See ch. 2 for a general discussion about U.S. and international macroeconomic conditions that influenced U.S. merchandise trade performance in 1999.

Table 11-1
Machinery: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1998 and 1999[1]

Item	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
		Million dollars		
U.S. exports of domestic merchandise:				
Canada	16,140	16,274	135	0.8
Mexico	10,052	10,558	505	5.0
Japan	3,517	3,591	74	2.1
Germany	2,716	2,675	-41	-1.5
China	1,687	1,623	-64	-3.8
Taiwan	2,654	3,503	849	32.0
United Kingdom	3,244	3,039	-205	-6.3
Italy	939	1,006	67	7.2
Korea	1,440	2,225	785	54.5
France	1,812	1,893	81	4.5
All other	23,809	20,499	-3,310	-13.9
Total	68,010	66,886	-1,124	-1.7
EU-15	13,198	12,907	-291	-2.2
OPEC	3,063	2,346	-717	-23.4
Latin America	17,110	16,016	-1,095	-6.4
CBERA	1,893	1,730	-163	-8.6
Asia	14,718	15,676	958	6.5
Sub-Saharan Africa	801	522	-279	-34.8
Central and Eastern Europe	368	363	-4	-1.2
U.S. imports for consumption:				
Canada	9,118	9,633	515	5.7
Mexico	12,521	13,875	1,354	10.8
Japan	13,235	13,219	-16	-0.1
Germany	9,514	9,670	156	1.6
China	5,013	6,283	1,271	25.4
Taiwan	2,837	3,028	190	6.7
United Kingdom	3,601	3,443	-158	-4.4
Italy	3,534	3,551	17	0.5
Korea	1,520	1,967	447	29.4
France	2,319	2,100	-219	-9.5
All other	11,717	12,374	657	5.6
Total	74,929	79,143	4,214	5.6
EU-15	24,069	24,376	307	1.3
OPEC	209	211	2	0.8
Latin America	13,379	14,805	1,426	10.7
CBERA	154	190	37	23.9
Asia	25,036	26,925	1,889	7.5
Sub-Saharan Africa	79	128	48	61.1
Central and Eastern Europe	575	543	-32	-5.6
U.S. merchandise trade balance:				
Canada	7,022	6,642	-381	-5.4
Mexico	-2,469	-3,318	-849	-34.4
Japan	-9,718	-9,628	89	0.9
Germany	-6,798	-6,995	-197	-2.9
China	-3,326	-4,660	-1,335	-40.1
Taiwan	-183	476	659	(2)
United Kingdom	-358	-404	-47	-13.1
Italy	-2,595	-2,545	50	1.9
Korea	-80	258	338	(2)
France	-507	-207	301	59.3
All other	12,092	8,125	-3,967	-32.8
Total	-6,919	-12,257	-5,338	-77.2
EU-15	-10,871	-11,470	-598	-5.5
OPEC	2,854	2,135	-719	-25.2
Latin America	3,731	1,210	-2,521	-67.6
CBERA	1,740	1,540	-200	-11.5
Asia	-10,317	-11,249	-931	-9.0
Sub-Saharan Africa	722	394	-327	-45.4
Central and Eastern Europe	-208	-180	28	13.5

[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 1999.

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

Table 11-2
Leading changes in U.S. exports of machinery, 1998 and 1999

Sector/commodity	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
	Million dollars			
Increases:				
Miscellaneous machinery (MM098)	5,750	6,843	1,093	19
Welding and soldering equipment (MM096)	810	989	180	22
Non-metalworking machine tools (MM086)	617	792	175	28
Air-conditioning equipments and parts (MM071)	5,471	5,641	170	3
Decreases:				
Farm and garden machinery and equipment (MM078)	5,581	4,536	-1,045	-19
Household appliances, including commercial applications (MM073)	5,895	5,524	-371	-6
Wiring harnesses for motor vehicles (MM068)	1,315	993	-322	-25
Electric motors, generators, and related equipment (MM091)	3,955	3,728	-227	-6
All other	38,616	37,841	-775	-2
Total	68,010	66,886	-1,124	2

Note.--Calculations based on unrounded data.

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

Table 11-3
Leading changes in U.S. imports of machinery, 1998 and 1999

Sector/commodity	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
	Million dollars			
Increases:				
Electric motors, generators, and related equipment (MM091)	4,748	6,089	1,341	28
Household appliances, including commercial applications (MM073)	6,608	7,302	694	11
Air-conditioning equipment and parts (MM071)	4,945	5,604	659	13
Electric transformers, static converters, and inductors (MM092)	4,485	4,950	465	10
Wire harnesses for motor vehicles (MM068)	4,408	4,868	460	10
Decreases:				
Farm and garden machinery and equipment (MM078)	4,171	3,294	-877	-21
Metal cutting machine tools and machine tool accessories (MM084)	4,590	3,921	-669	-15
Textile machinery (MM082)	1,958	1,490	-468	-24
Metal rolling mills (MM083)	514	321	-193	-38
All other	38,502	41,304	-2,802	-7
Total	74,929	79,143	4,214	6

Note.--Calculations based on unrounded data.

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

accounting for the principal decreases in imports (table 11-3), which together generated 18 percent of the machinery trade deficit in 1999, metal rolling mills completed several new greenfield steel plants in 1999.

Two key factors contributed to the $794 million (27 percent) expansion of the U.S. trade deficit with Mexico in wiring harnesses. With the elimination of the Customs Merchandise Processing fee on July 1, 1999, U.S. companies with plants in Mexico assembling wire harnesses no longer had the incentive to export "wiring set" components from the United States in more-expensive kit form. As a result, U.S. exports of wiring harnesses dropped by $433 million (63 percent) in 1999 to $258 million when firms began exporting separately uncut rolls of insulated wire, connectors, and components in other product classifications. In contrast, imports from Mexico of wiring harnesses rose by $309 million (8 percent) in 1999 to $4.0 billion reflecting a sizable portion of re-exports to vehicle assembly plants in Mexico to minimize the Mexican corporate income tax obligations of the auto parts companies that assemble wiring harnesses in Mexico.[4] Were it not for the possibility of being taxed as a "permanent establishment," a company reportedly would ship wiring harnesses and other motor vehicle parts directly to vehicle assembly plants in Mexico from its parts assembly facilities in Mexico.[5] The current practice inflates the value of U.S. imports from Mexico, adds to the value of the U.S. sector trade deficit with Mexico, and raises manufacturing costs for companies that assemble vehicles in Mexico. Trade statistics for all commodity/industry groups in the machinery sector are presented in table 11-5 at the end of this chapter.

U.S. BILATERAL TRADE

In 1999, Canada and Mexico were the leading U.S. export markets for machinery exports accounting for 40 percent ($26.8 billion) of all U.S. machinery exports (table 11-1). Likewise, Mexico, Japan, Germany, and Canada accounted for 59 percent ($46.4 billion) of all U.S. machinery imports in that year. The largest sector trade deficit shift was with China, which widened by $1.3 billion (40 percent) to $4.7 billion.

During 1999, the U.S. trade deficit with Canada in machinery products grew by $381 million (5 percent) to $6.6 billion, reflecting the ongoing strength of the U.S. economy and Canada's weak dollar. Continued strong U.S. motor vehicle and consumer electronic products markets in 1999 along with the extensive interrelationships of U.S. companies and their Canadian subsidiaries, particularly those involving motor-vehicle assembly operations, are a major factor in U.S. trade with Canada.[6] The extent of manufacturing integration between the countries is reflected by the similarity of two-way trade. The most significant increases in U.S. machinery imports from Canada occurred in centrifuges and filtering and purifying equipment, up by $130 million (36 percent) to $494 million; household appliances, up by $99 million (13 percent) to $847 million; and miscellaneous machinery, up by $106 million (9 percent) to $1.3 billion. U.S. exports of machinery to Canada (the largest U.S. market) in 1999 recorded a modest increase, rising by $135 million (1 percent) to $16.3 billion. Canadian companies exhibited a high level of demand for U.S. machinery products to upgrade their plant and equipment, and to construct new facilities[7] led by

[4] "Permanent establishments" that ship products directly to customers in Mexico are taxed at a higher rate than "maquiladora" operations that export assembled products to the United States for distribution.

[5] Lawrence W. Amrich, Government Relations Director for Mexico, Delphi Automotive Systems, interview with USTIC staff, May 8, 2000.

[6] U.S. State Department (State Dept.,) telegram No. 00384, "Canadian Economy Prospects Good, Though Productivity remains a Concern," prepared by U.S. Embassy, Ottawa, Jan. 28, 2000.

[7] U.S. State Dept., *FY2000 Country Commercial Guide: Canada*, found at Internet address: http://www.state.gov/www/about_state/business/com_guides/2000/wha/index.html, retrieved May 8, 2000.

exports of air-conditioning equipment and parts (hereafter AC equipment), up by $123 million (7 percent) to $1.9 billion; household appliances, up by $34 million (2 percent) to $1.5 billion; and miscellaneous machinery, up by $332 million (32 percent) to $1.3 billion.

U.S. exports of machinery to Mexico increased by $505 million (5 percent) to $10.6 billion whereas machinery imports from Mexico grew by $1.4 billion (11 percent) to $13.9 billion in 1999. A significant portion of U.S. sector trade with Mexico consists of exported parts and subassemblies, and imports of assembled or substantially advanced finished goods and components. Expanding U.S. automotive, construction, and consumer electrical and electronic products markets are major driving forces in U.S.-Mexico trade in machinery. The increase in U.S. exports of sector products to Mexico was led by miscellaneous machinery, up by $228 million (35 percent) to $873 million; electric motors and generators, up by $175 million (20 percent) to $1.1 billion; and AC equipment, up $161 million (20 percent) to $965 million. Among products experiencing the largest growth in U.S. imports from Mexico were wiring harnesses, up by $309 million (8 percent) to $4 billion; electric motors and generators, up by $274 million (18 percent) to $1.8 billion; and AC equipment, up by $234 million (27 percent) to $1.1 billion.

COMMODITY ANALYSIS

Electric Motors, Generators, and Related Equipment[8]

The U.S. trade deficit in electric motors, generators, and related equipment (hereafter electric motors and generators) nearly tripled for a second consecutive year, growing by $1.6 billion (198 percent) to $2.4 billion. Rising trade deficits with the EU (up by $562 million, or 142 percent) and Japan (up by $434 million, or 70 percent) accounted for nearly two-thirds of the overall expansion in the U.S. trade deficit for these products in 1999. Growth in the bilateral deficits with Germany, the United Kingdom, and Denmark accounted for nearly two-thirds of the increase in the U.S. deficit with the EU. Although imports from each of these partners were up sharply in 1999, reflecting the strong growth in the U.S. economy, U.S. exports to these markets were either flat or down slightly, as growth in these economies lagged behind that in the United States.

U.S. imports

U.S. imports of electric motors and generators increased by $1.3 billion (28 percent) in 1999 to $6.1 billion (table 11-4). The vast majority of this increase ($1.1 billion or 75 percent) was accounted for by Japan, Mexico, Germany, Denmark, and the United Kingdom. Imports rose substantially during 1999 due largely to the continued strength of the U.S. consumer electrical and electronic products markets, and to concerns about potential wide-spread power outages associated with the Y2K transition of the computer systems of U.S. electrical energy generators. Over two-thirds of the import rise was concentrated in six product categories (table 11-4):

[8] This product grouping covers electric motors and generators; electrical generating sets driven by gasoline or diesel engines, natural gas turbines, or wind energy; parts of the foregoing; permanent and electromagnets and magnetic devices; carbon electrodes and brushes; and electrical insulators of other than glass or ceramics.

Table 11-4
Increases in U.S. imports of electric motors, generators, and related equipment, 1998 and 1999

Commodity	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
	Million dollars			
Electric generating sets with spark ignition engines	89	373	284	317
AC single-phase motors over 37.5 watts but under 735 watts	580	733	153	26
Electric generating sets, not elsewhere specified or identified	54	198	144	269
Miscellaneous parts for use in motors, generators, or power generation sets	536	677	141	26
AC generators rated over 750 kVA	46	153	107	231
Wind-powered electric generating sets	42	133	91	220
All other	3,401	3,822	421	12
Total	4,748	6,089	1,341	28

Note.--Calculations based on unrounded data.

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

Japan paced the growth of U.S. imports in this product group as its shipments rose by $407 million (53 percent) to $1.2 billion in 1999. Increased entries of electric generating sets with spark-ignition engines, which were up by $252 million (310 percent) to $333 million, accounted for most of the growth of imports from Japan. These generating sets are predominately portable gasoline engine-driven generators that are frequently used on construction sites as well as sources of emergency power for residential households. Anticipated Y2K-related computer problems potentially causing extensive blackouts stimulated widespread consumer purchases of these generators, especially towards the end of 1999. Japanese producers, notably Honda, were the major suppliers of this equipment.

U.S. imports of electric motors and generators from Mexico during 1999 increased by $274 million (18 percent) to $1.8 billion. The largest single product increase was in AC single-phase motors exceeding 74.6 watts (approximately one-tenth horsepower) but not exceeding 735 watts (just under 1 horsepower), which rose by $117 million (22 percent) to $642 million. These motors are used in a wide range of small household appliances and consumer electronics, which benefitted from sustained demand due to the strong U.S. economy. U.S. electric motor and generator manufacturers have shifted a substantial portion of the labor-intensive final assembly processes for high volume categories to Mexico to take advantage of lower Mexican labor costs and to compete more effectively with low cost foreign producers.[9] Motors and generators assembled in Mexico are used as components in a wide range of consumer electrical and electronic products made in North America.

The increase in entries of motors and generators from Germany in 1999 amounted to $114 million (33 percent) for a total of $464 million. Most of this growth was accounted for by shipments of miscellaneous generating sets that increased by $82 million (422 percent) to $101 million, largely gas turbine generating sets purchased by major industrial and commercial customers as sources of standby or emergency power. Denmark exhibited the fastest growth rate among leading suppliers to the U.S. market.

[9] U.S. exports to Mexico of electric motors, generators, and related equipment (including parts) rose by $176 million (20 percent) in 1999 to $1.1 billion. The growth in exports of these products was 64 percent as large as the expansion in U.S. imports of products in this category. Parts shipped to export processing plants accounted for a significant share of U.S. exports to Mexico.

Imports from Denmark rose by $112 million (162 percent) to $181 million in 1999, largely due to substantial growth in wind-powered generating sets and associated parts. Danish wind turbine companies have established themselves as "world class" designers of small-to medium-sized turbines due in part to support provided by the Danish Government to companies that develop non-carbon-dioxide-generating, "renewable energy" technologies.[10]

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Household Appliances, Including Commercial Applications[11]

The U.S. merchandise trade deficit in household appliances, including commercial applications (hereafter household appliances), more than doubled in 1999, widening by $1.1 billion (149 percent) to $1.8 billion, as exports declined but imports rose. Relatively unchanged or declining shipments to major export markets caused an overall decline in U.S. exports by $371 million (6 percent) to $5.5 billion. In contrast, strong domestic demand for household appliances, due to continued expansion of the U.S. economy and strong growth in housing starts throughout 1999,[12] was an important factor accounting for the $694 million (11 percent) rise in U.S. imports, which reached $7.3 billion.

A sizeable portion of U.S. household appliance trade reflects continued cross-border integration of manufacturing, and U.S.-based manufacturers' foreign direct investment through subsidiaries and joint ventures. These trends in the North American major household appliance industry resulted in higher 1999 levels of U.S. imports of household appliances from Mexico and Canada (the second- and third-largest U.S. trade partners, respectively, for these products in 1999), which together rose by $226 million (12 percent) to $2.2 billion. However, exports to these destinations remained relatively unchanged from the previous year, increasing by $17 million (less than 1 percent) to $2.4 billion. More specifically, intercompany transfers between U.S. manufacturers (e.g., Whirlpool Corp., and General Electric) and their partners or subsidiaries (Vitromatic and MABE, respectively, in Mexico; and Inglis and Camco, respectively, in Canada) were an important reason for the growth of U.S. household appliance trade in North America. Suppliers with facilities in Mexico and Canada also benefit from lower transportation costs than competitors exporting from Asia. U.S. exports of household appliances to these North American partners largely consisted of parts and components for the production of appliances re-exported back to the United States. Mexico is a particularly important source of small-sized refrigerators (less than 19 cubic feet in capacity) and gas stoves and ranges; whereas Canada is an important source for laundry products (e.g., washers and dryers), refrigerators, and vacuum cleaners.

Reduced sales to South America were primarily responsible for the overall decline in U.S. exports of household appliances in 1999, as exports to Latin America fell by $184 million (11 percent) to $1.6

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[10] See Soren Krohn, "Danish Wind Turbines: An Industrial Success Story," found at Internet address http://www.windpower.dk/articles/success.htm, retrieved May 12, 2000.

[11] These appliances are of the type found in home residences, but may also include similar appliances for commercial applications. Included are small (portable) electric appliances, laundry equipment, refrigerators, dishwashers, washing machines, electric and gas cooking stoves and ranges, vacuum cleaners, ceiling fans, window air-conditioners, floor polishers, cooking equipment, microwave ovens, and appliances not elsewhere classified, such as water heaters, and food waste disposal units.

[12] See ch. 2 for a general discussion about U.S. and international macroeconomic conditions that influenced U.S. merchandise trade performance in 1999.

billion. Traditional South American household appliance markets for regional subsidiaries of U.S.-based firms[13] contracted as a result of the various economic crises caused or exacerbated by currency devaluations (Brazil), foreign-investor uncertainty following elections (Venezuela), and political instability (Colombia, Ecuador, and Paraguay).

Rising imports from the three leading suppliers (China, Mexico, and Canada), up by $636 million, accounted for 92 percent of the entire overall increase in U.S. household appliance imports in 1999. The largest growth in such imports was for electrothermic cookers, plates, grills, and roasters, which increased by $114 million (97 percent) to $233 million. Approximately 26 percent of all 1999 U.S. imports of appliances were from China (the largest U.S. supplier), as such imports increased by $410 million (28 percent) to $1.9 billion. Joint ventures by affiliates of U.S.,- Japan-, and Taiwan-based small electric-appliance (e.g., microwave ovens and cooking stoves) producers facilitated import growth as they sought to take advantage of lower Chinese labor costs.[14] Microwave ovens supplied by Korean producers (Samsung, LG Electronics, and Daewoo) accounted for nearly 44 percent of the U.S. market for microwaves and for about three-quarters of all imports of household appliances from Korea, which increased by $103 million (19 percent) in 1999 to $634 million. U.S. consumers are attracted by newer microwave models providing advanced features and lower prices.

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Farm and Garden Machinery and Equipment

The U.S. trade surplus in farm and garden machinery and equipment (hereafter farm equipment) was reduced by $168 million (12 percent) during 1999 to $1.2 billion, the lowest level since 1995. Both U.S. imports and exports of the products declined in 1999, as world demand for farm equipment contracted in response to lower agriculture commodity prices[15] and the reluctance of farmers to purchase new machinery.[16] U.S. imports decreased by $877 million (21 percent) to $3.3 billion, tracking reduced domestic retail sales by leading manufacturers of farm equipment. U.S. imports from Canada exhibited the greatest absolute decline ($331 million or 36 percent), followed by France ($263 million or 52 percent) and the United Kingdom ($210 million or 40 percent). The most significant trade surpluses were recorded with Canada, Mexico, and Australia, all principal markets for U.S. exports. The U.S. trade balance with France in farm equipment shifted from significant deficit to surplus for the first time in 3 years. Conversely, trade deficits persisted with Japan, Italy, Germany, and the United Kingdom; however, the trade deficit with the EU as a whole decreased by $501 million (69 percent) to $1.2 billion.

The global farm equipment industry in 1999 experienced restructuring as two leading producers merged, while other companies consolidated production or announced greenfield projects. U.S.-based Case

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[13] For example, U.S.-based Whirlpool Corp., supplies the bulk of the South American market from its manufacturing subsidiary in Brazil (Multibras S.A).

[14] Labor accounts for a larger share of the total cost of producing and shipping the electrothermic-type small appliances than for larger appliances where capital equipment, raw materials, and transportation have a greater impact on overall costs.

[15] The agricultural price index decreased 13.6 percent, the most substantial decline among major commodity groups in 1999. See, World Bank, "Summary," *Global Commodity Markets*, Jan. 2000, found at Internet address, http://www.worldbank.org/prospects/gcmonline/index.htm, retrieved May 5, 2000.

[16] Deere & Company, *1999 Annual Report*, p. 11.

Corp. (Case), and Netherlands-based New Holland finalized their merger in November 1999 to become CNH Global NV. Although major producers of farm equipment maintained production facilities throughout the world, changes in worldwide demand prompted shifts in both U.S. and foreign production to accommodate current market weakness and anticipated growth opportunities. Case closed its Ontario and Minnesota manufacturing plants and moved operations to Kansas, Illinois, and North Dakota. Deere & Co. (Deere), sought to limit production through an early retirement program and summertime shutdown of its manufacturing facilities. However, Deere increased its investment in a Brazilian manufacturer (SLC-John Deere) of combines, tractors, and planters and continued plans for a joint venture in India for the production of tractors. AGCO Corp. (AGCO), closed factories in Ohio and Texas and relocated production to Kansas, Iowa, and France. German producer Claas and U.S.-owned Caterpillar are jointly building a combine harvester factory in Nebraska; production is scheduled to begin by the end of 2001.

U.S. exports

U.S. exports of farm equipment decreased by $1.0 billion (19 percent) in 1999 to $4.5 billion. The reduction in exports to the five leading markets, Canada, Australia, Argentina, Brazil, and Ukraine, accounted for 76 percent of the overall decline in U.S. exports of farm equipment. Major U.S. producers cited weakness in agricultural commodity prices and lingering effects from financial crisis in some markets, such as the devaluation of the Brazilian real in January 1999, as factors that contributed to decreased demand. For example, AGCO reported declining retail activity in Latin American markets largely due to inflationary pressures and increased input costs for farmers in Brazil, and to economic recession, lower commodity prices, and tightening credit in Argentina.[17]

Products such as tractors and combines led the decline of U.S. exports of farm equipment. U.S. exports of tractors decreased by $593 million (34 percent) to $1.2 billion, while exports of combines fell by $262 million (48 percent) to $289 million. AGCO, CNH, and Deere all reported decreased tractor and combine sales worldwide, consistent with ongoing market weakness.[18] Generally, markets in North America, Europe, and Latin America experienced growth in tractors under 40 horsepower, which was more than offset by lower sales of higher-priced row-crop tractors and combines.[19] Despite recording export declines during 1999, leading markets for U.S.-manufactured tractors continued to be Canada, Germany, and Australia; however the United Kingdom, Japan, China, and India all recorded significant increases in tractor imports from the United States. Canada, Australia, and Uzbekistan[20] together accounted for 66 percent of U.S. exports of combines.

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[17] AGCO Corp., "AGCO Reports Third Quarter Results," Oct. 28, 1999, found at Internet address http://www.agcocorp.com, retrieved Apr. 27, 2000.

[18] For example, Deere indicated that product lines most significantly impacted by weak demand for agricultural equipment, due to depressed grain and oilseed prices and lower proceeds from exports of agricultural products, included high-horsepower, high-margin tractors and combines. Deere & Company, press release "Weak Farm Conditions Lead to Lower Results at Deere," Aug. 17, 1999, found at Internet address http://www.deere.com/deerecom/_Newsroom/3rdqtr99.htm, retrieved May 1, 2000. See also AGCO Corp., press release, "AGCO Reports Third Quarter Results," Oct. 28, 1999 found at Internet address http://www.agcocorp.com/news/NewsDetail.asp?CategoryID=37&NewsID=21, retrieved Apr. 27, 2000; and CNH Global NV, press release "CNH Reports 1999 Full Year and Fourth Quarter Results," Feb, 1, 2000, found at Internet address http://today.newscast.com, retrieved Apr. 27, 2000.

[19] CNH Global NV, press release "CNH Reports 1999 Full Year and Fourth Quarter Results," Feb, 1, 2000, found at Internet address http://today.newscast.com, retrieved Apr. 27, 2000.

[20] Case has a joint venture in Uzbekistan with Tashselmash, a local farm equipment manufacturer, and Uzselkhozmash Holdings, a state farm equipment association, for the production of combine grain headers and cotton pickers.

Of the top ten leading markets for U.S. exports of farm equipment, the Netherlands, the United Kingdom, Japan, and France registered export growth of $37.1 million (59 percent), $19.3 million (10 percent), $8.6 million (9 percent), and $743,000 (less than 1 percent), respectively. Exports to these countries largely consisted of mowers and tractors. Industry reports indicated that Europe and Asia were relatively stronger markets for agricultural equipment in 1999 than were North America and Latin America.

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Table 11-5
Machinery sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

1998 USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
MM068	Wiring harnesses for motor vehicles:				
	Exports	1,315	993	-322	-24.5
	Imports	4,408	4,868	460	10.4
	Trade balance	-3,092	-3,875	-782	-25.3
MM069	Pumps for motor vehicles:				
	Exports	556	546	-11	-1.9
	Imports	780	776	-4	-0.5
	Trade balance	-223	-230	-7	-3.1
MM070	Pumps for liquids:				
	Exports	2,340	2,325	-14	-0.6
	Imports	1,587	1,643	56	3.5
	Trade balance	753	683	-70	-9.3
MM071	Air-conditioning equipment and parts:				
	Exports	5,471	5,641	170	3.1
	Imports	4,945	5,604	659	13.3
	Trade balance	526	37	-488	-92.9
MM072	Industrial thermal-processing equipment and furnaces:				
	Exports	2,352	2,292	-60	-2.6
	Imports	1,351	1,483	132	9.8
	Trade balance	1,001	809	-192	-19.2
MM073	Household appliances, including commercial applications:				
	Exports	5,895	5,524	-371	-6.3
	Imports	6,608	7,302	694	10.5
	Trade balance	-713	-1,778	-1,065	-149.3
MM074	Centrifuges and filtering and purifying equipment:				
	Exports	2,431	2,564	133	5.5
	Imports	1,442	1,783	341	23.7
	Trade balance	988	781	-208	-21.0
MM075	Wrapping, packaging, and can-sealing machinery:				
	Exports	791	766	-25	-3.2
	Imports	1,072	1,117	45	4.2
	Trade balance	-281	-351	-71	-25.2
MM076	Scales and weighing machinery:				
	Exports	147	145	-2	-1.4
	Imports	223	265	43	19.1
	Trade balance	-76	-121	-45	-59.0
MM077	Mineral processing machinery:				
	Exports	764	590	-174	-22.8
	Imports	574	667	93	16.2
	Trade balance	189	-78	-267	(3)
MM078	Farm and garden machinery and equipment:				
	Exports	5,581	4,536	-1,045	-18.7
	Imports	4,171	3,294	-877	-21.0
	Trade balance	1,410	1,242	-168	-11.9
MM079	Industrial food-processing and related machinery:				
	Exports	688	611	-77	-11.2
	Imports	619	621	2	0.3
	Trade balance	70	-9	-79	(3)

See footnote(s) at end of table.

Table 11-5
Machinery sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

1998 USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
MM080	Pulp, paper, and paperboard machinery:				
	Exports	809	738	-71	-8.8
	Imports	1,037	1,003	-34	-3.3
	Trade balance	-227	-264	-37	-16.2
MM081	Printing and related machinery:				
	Exports	1,455	1,347	-108	-7.4
	Imports	2,231	2,304	73	3.3
	Trade balance	-776	-958	-181	-23.3
MM082	Textile machinery:				
	Exports	760	682	-78	-10.3
	Imports	1,958	1,490	-468	-23.9
	Trade balance	-1,198	-808	390	32.6
MM083	Metal rolling mills:				
	Exports	252	153	-98	-39.1
	Imports	514	321	-193	-37.5
	Trade balance	-262	-168	94	35.9
MM084	Metal cutting machine tools and machine tool accessories:				
	Exports	1,985	1,773	-212	-10.7
	Imports	4,590	3,921	-669	-14.6
	Trade balance	-2,605	-2,148	457	17.5
MM085	Metal forming machine tools:				
	Exports	996	947	-49	-4.9
	Imports	1,409	1,312	-97	-6.9
	Trade balance	-413	-365	49	11.7
MM086	Non-metalworking machine tools:				
	Exports	617	792	175	28.4
	Imports	1,229	1,318	89	7.2
	Trade balance	-612	-526	86	14.0
MM087	Semiconductor manufacturing equipment and robotics:				
	Exports	7,965	7,986	20	0.3
	Imports	2,809	3,123	315	11.2
	Trade balance	5,157	4,862	-294	-5.7
MM088	Taps, cocks, valves, and similar devices:				
	Exports	2,836	2,959	123	4.4
	Imports	3,974	4,335	361	9.1
	Trade balance	-1,138	-1,376	-237	-20.8
MM089	Mechanical power transmission equipment:				
	Exports	1,011	942	-69	-6.8
	Imports	1,843	2,008	165	8.9
	Trade balance	-832	-1,066	-234	-28.1
MM090	Boilers, turbines, and related machinery:				
	Exports	1,495	1,290	-205	-13.7
	Imports	370	484	114	30.7
	Trade balance	1,125	806	-319	-28.4
MM091	Electric motors, generators, and related equipment:				
	Exports	3,955	3,728	-227	-5.7
	Imports	4,748	6,089	1,341	28.2
	Trade balance	-793	-2,362	-1,569	-197.8

See footnote(s) at end of table.

Table 11-5
Machinery sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
MM092	Electrical transformers, static converters, and inductors:				
	Exports	2,304	2,379	75	3.2
	Imports	4,485	4,950	465	10.4
	Trade balance	-2,181	-2,571	-391	-17.9
MM093	Portable electric handtools:				
	Exports	383	392	9	2.4
	Imports	834	992	158	19.0
	Trade balance	-451	-600	-149	-33.1
MM094	Nonelectrically powered handtools and parts thereof:				
	Exports	553	537	-15	-2.8
	Imports	782	890	108	13.8
	Trade balance	-230	-353	-123	-53.6
MM095	Electric lamps (bulbs) and portable electric lights:				
	Exports	896	894	-2	-0.3
	Imports	1,287	1,454	168	13.0
	Trade balance	-391	-561	-170	-43.5
MM096	Welding and soldering equipment:				
	Exports	810	989	180	22.2
	Imports	781	702	-79	-10.1
	Trade balance	29	287	258	884.7
MM097	Nonautomotive insulated electrical wire and related products:				
	Exports	2,950	3,102	152	5.2
	Imports	2,814	3,078	264	9.4
	Trade balance	135	24	-111	-82.4
MM098	Miscellaneous machinery:				
	Exports	5,750	6,843	1,093	19.0
	Imports	5,941	6,220	280	4.7
	Trade balance	-190	623	814	([3])
MM099	Molds and molding machinery:				
	Exports	1,896	1,879	-17	-0.9
	Imports	3,512	3,723	210	6.0
	Trade balance	-1,617	-1,844	-227	-14.1

[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 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
Transportation Equipment

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The U.S. trade deficit in the transportation equipment sector expanded significantly in 1999, rising by $31.4 billion (120 percent) to $57.7 billion (table 12-1). The industry/commodity groups largely responsible for the widening deficit were motor vehicles, whose trade deficit increased by $20.3 billion (26 percent) to $97.6 billion, and internal combustion piston engines, other than for aircraft (hereafter internal combustion piston engines), whose deficit rose by $1.1 billion (231 percent) to $1.5 billion. Also contributing to the sector deficit was a $2.7-billion (37-percent) decline in the trade surplus of certain motor-vehicle parts (hereafter vehicle parts), which fell to $4.6 billion during the period.

The expanding trade deficit in transportation equipment reflected substantial growth in sector imports, which rose by $29.7 billion (17 percent) to $203.7 billion in 1999. The industry/commodity groups with the leading import increases are shown in table 12-2. The aggregate import value of the top three product groups accounted for 77 percent of all transportation equipment imported into the United States during the period. U.S. exports of transportation equipment fell sightly in 1999, declining by $1.7 billion (1 percent) to $145.9 billion. The largest export declines were recorded in aircraft, spacecraft, and related equipment (hereafter aircraft), which dropped by $2.5 billion (5 percent) to $47.8 billion, and construction and mining equipment, which declined by $2.3 billion (21 percent) to $8.6 billion. In the aggregate, these exports represented almost 39 percent of all sector exports during the period. The drop in exports of aircraft, occurred during a period when the bulk of U.S. production was being delivered to domestic consumers. The decline in U.S. exports of construction and mining equipment was largely a reflection of recessionary conditions in Venezuela and the postponement and downsizing of construction and mining projects in Canada. Trade statistics for all commodity/industry groups in the transportation equipment sector are presented in table 12-3 at the end of this chapter.

U.S. BILATERAL TRADE

The principal U.S. trade partners in the transportation equipment sector during 1999 continued to be Canada, Japan, Mexico, Germany, the United Kingdom, and France. U.S. exports to Canada, the largest export market, accounted for $48.1 billion (33 percent) of U.S. transportation equipment exports in 1999, followed by Mexico, which received $11.6 billion (8 percent) of sector exports. The United Kingdom, Japan, Germany, and Saudi Arabia were the leading markets for U.S. exports of aircraft. Together, those countries accounted for 35 percent of all exports. With respect to construction and mining equipment, Canada remained the principal U.S. export market, representing 15 percent of sector exports.

Table 12-1
Transportation equipment: **U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1998 and 1999**[1]

Item	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
		Million dollars		
U.S. exports of domestic merchandise:				
Canada	44,046	48,147	4,101	9.3
Japan	9,319	8,469	-851	-9.1
Mexico	11,422	11,574	152	1.3
Germany	6,688	6,553	-136	-2.0
United Kingdom	9,842	10,313	471	4.8
France	4,833	5,740	907	18.8
Korea	2,564	2,666	101	3.9
Brazil	2,869	2,510	-358	-12.5
Sweden	1,047	1,639	592	56.6
China	3,991	2,889	-1,102	-27.6
All other	51,016	45,438	-5,579	-10.9
Total	147,639	145,937	-1,702	-1.2
EU-15	32,639	36,909	4,270	13.1
OPEC	10,815	7,516	-3,299	-30.5
Latin America	21,991	20,012	-1,979	-9.0
CBERA	1,864	1,715	-149	-8.0
Asia	27,607	22,956	-4,651	-16.8
Sub-Saharan Africa	2,186	1,700	-485	-22.2
Central and Eastern Europe	452	434	-17	-3.8
U.S. imports for consumption:				
Canada	57,174	68,522	11,348	19.8
Japan	43,333	49,436	6,103	14.1
Mexico	20,820	24,822	4,003	19.2
Germany	17,594	21,234	3,640	20.7
United Kingdom	9,020	9,687	667	7.4
France	6,867	7,801	934	13.6
Korea	2,694	4,094	1,401	52.0
Brazil	2,049	2,477	428	20.9
Sweden	3,098	2,928	-169	-5.5
China	942	1,222	280	29.8
All other	10,351	11,437	1,087	10.5
Total	173,941	203,661	29,720	17.1
EU-15	42,207	47,913	5,707	13.5
OPEC	318	351	32	10.1
Latin America	23,161	27,629	4,467	19.3
CBERA	42	50	8	18.3
Asia	49,185	57,115	7,931	16.1
Sub-Saharan Africa	105	201	96	92.0
Central and Eastern Europe	351	397	46	13.2
U.S. merchandise trade balance:				
Canada	-13,128	-20,375	-7,247	-55.2
Japan	-34,014	-40,967	-6,953	-20.4
Mexico	-9,397	-13,248	-3,851	-41.0
Germany	-10,905	-14,682	-3,776	-34.6
United Kingdom	822	626	-196	-23.9
France	-2,034	-2,061	-27	-1.3
Korea	-129	-1,429	-1,299	-1,003.6
Brazil	820	33	-786	-95.9
Sweden	-2,051	-1,289	762	37.1
China	3,049	1,667	-1,382	-45.3
All other	40,666	34,000	-6,665	-16.4
Total	-26,302	-57,724	-31,422	-119.5
EU-15	-9,567	-11,004	-1,437	-15.0
OPEC	10,496	7,165	-3,331	-31.7
Latin America	-1,170	-7,617	-6,447	-550.9
CBERA	1,822	1,665	-156	-8.6
Asia	-21,578	-34,159	-12,582	-58.3
Sub-Saharan Africa	2,081	1,500	-581	-27.9
Central and Eastern Europe	101	37	-63	-63.0

[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 1999.

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

Table 12-2
Leading increases in U.S. imports of transportation equipment, 1998 and 1999

Sector/commodity	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
	Million dollars			
Motor vehicles (ET009)	99,826	119,663	19,837	20
Certain motor-vehicles parts (ET010)	18,767	22,725	3,958	21
Internal combustion piston engines, other than for aircraft (ET002)	11,478	14,052	2,584	22
Aircraft, spacecraft, related equipment (ET013)	12,748	14,592	1,843	15
All other	31,122	32,629	1,507	5
Total	173,941	203,661	29,720	17

Note.--Calculations based on unrounded data.

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

Of the principal U.S. trade partners, Canada was also the largest recipient of all U.S. exports of transportation equipment. Those exports rose by $4.1 billion (9 percent) to $48.1 billion in 1999. The other noteworthy trade shift reflected exports to France, which increased by $907 million (19 percent) to $5.7 billion during the period. Declines were recorded in U.S. exports to both Japan and Germany. Exports to those countries fell by $851 million (9 percent) to $8.5 billion and $136 million (2 percent) to $6.6 billion, respectively.

With respect to U.S. imports of transportation equipment, Canada and Japan remained the leading foreign suppliers of transportation equipment, accounting for $68.5 billion (34 percent) and $49.4 billion (24 percent) of sector imports, respectively. Imports from Canada rose by $11.3 billion (20 percent) to $68.5 billion, whereas imports from Japan rose by $6.1 billion (14 percent) to $49.4 billion in 1999. In the aggregate, motor vehicles, aircraft, and vehicle parts represented $97.1 billion (67 percent) of sector exports and $157.0 billion (77 percent) of sector imports in 1999. Canada and Japan were the leading sources of motor vehicles, and accounted for 40 percent and 27 percent, respectively, of these imports. Increasing integration and rationalization of U.S. automotive production under the North American Free Trade Agreement (NAFTA) and the growing popularity of foreign automotive models, both by consumers and U.S. producers who rely on them to supplement U.S. automotive production, contributed to the significant rise in U.S. imports of motor vehicles in 1999. The prevailing strength of the U.S. automotive industry also enhanced the value of imports of vehicle parts and internal combustion piston engines.

COMMODITY ANALYSIS

Motor vehicles[1]

The U.S. trade deficit for motor vehicles grew by $20.3 billion (26 percent) to $97.6 billion in 1999. The growth in this deficit was almost entirely attributable to an increase in imports. The U.S. deficit with Canada, Japan, and Mexico accounted for 33 percent, 32 percent, and 14 percent, respectively, of the overall U.S. trade deficit for this product group. Despite the fact that the United States maintains a trade deficit in motor vehicles, traditional U.S. producers General Motors (GM), Ford, and the Chrysler Division

[1] This product grouping includes automobiles, trucks, buses, and bodies and chassis of the foregoing.

of DaimlerChrysler (DC) are among the leading producers in the world. Vehicles produced almost entirely in North America by GM, Ford, and Chrysler accounted for nearly 70 percent of the U.S. market for cars and trucks in 1999.[2] The persistent trade deficit can be attributed to the strategies of GM and Ford to produce in foreign markets instead of relying on exports from the United States; the increasing integration and rationalization of automotive production in the NAFTA region; and the popularity of foreign models that are produced overseas, or whose U.S. production is supplemented by imports.

U.S. imports

U.S. motor vehicle imports increased by $19.8 billion (20 percent) to $119.7 billion in 1999. Canada continued to be the largest import source, accounting for 39 percent of all such U.S. imports, while Japan accounted for 27 percent of these imports, and Mexico for 13 percent. U.S. retail sales of new motor vehicles reached an unprecedented 17.4 million units in 1999; the previous record was set in 1986 at 16.3 million. This was a 9-percent increase over sales in 1998.[3] The continuing strength of the U.S. economy[4] contributed to record vehicle sales, along with low interest rates, cut-rate incentives, and strong competition among vehicle makers that kept prices in check.[5]

From Canada, U.S. imports rose by $8.9 billion (24 percent) to $46.6 billion in 1999. The U.S.-Canadian automobile industry is fully integrated. GM, Ford, and DC consider the United States and Canada as a single unit for production planning purposes, and dominate Canadian motor vehicle production. Owing to booming markets in the United States and Canada, vehicle production in Canada increased over 18 percent in 1999 to a record 3 million units.[6]

U.S. imports from Japan increased by $3.3 billion (11 percent) to $32.1 billion in 1999. The weak market in Japan for motor vehicles combined with a robust U.S. market and sustained popularity of certain Japanese makes in the U.S. market contributed to the surge in Japanese exports to the United States.

From Mexico, U.S. imports increased by $2.6 billion (20 percent) to $15.8 billion. Similarly U.S. motor vehicle imports from Germany increased $2.6 billion (21 percent) to $15.1 billion in 1999. Rising imports from Mexico can be attributed to the increasing integration, interdependence, and rationalization of the U.S. and Mexican automotive industries; increased motor vehicle production in Mexico, which was up by 5 percent in 1999 to 1.5 million units; and continued strong motor vehicle demand in the United States. The trend in increased imports from Germany in recent years results from robust demand in the United States for motor vehicles in general, and German luxury makes in particular.

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[2] David C. Smith, "The Race for First Place," *Ward's Auto World*, Mar. 2000, p. 73.

[3] Ralph W. Morris, "Motor Vehicles, 1999," *Survey of Current Business*, Feb. 2000, p. 7.

[4] See ch. 2 for a general discussion about U.S. and international macroeconomic conditions that influence U.S. merchandise trade performance in 1999.

[5] Bill Vlasic and Mark Truby, "1999 Car Sales Hit All-Time High: Economy, Rebates Drive Historic Year," *The Detroit News via Proquest*, Jan. 6, 2000.

[6] "World Vehicle Output Tops 52 Million in 1999," *Ward's Automotive Reports*, Apr. 3, 2000, p. 2.

Aircraft, Spacecraft, and Related Equipment

The U.S. trade surplus for aircraft, spacecraft, and related equipment (hereafter aircraft) decreased by $4.3 billion (12 percent) to $33.2 billion in 1999. U.S. exports of these products declined by $2.5 billion, while U.S. imports grew by $1.8 billion. The United States remained the world's largest producer of aircraft in 1999; however, this is the first decline in the U.S. balance of trade in aircraft in 4 years. The global need to replace aging large civil aircraft (LCA), the world airlines' need to bolster a second producer, and a strong demand for additional passenger service in the United States and Western Europe have driven shipments of LCA to record highs. At the same time, new types of smaller turbofan aircraft have created new market niches and made inroads on routes dominated by turbopropeller aircraft.

U.S. exports

U.S. exports of aircraft fell by $2.5 billion (5 percent) during 1999 to $47.8 billion. The majority of this decrease came from U.S. exports of new nonmilitary passenger transports over 15,000 kilograms (kg), which declined by $4.0 billion (14 percent) to $23.7 billion. Both Boeing and Airbus Industrie, G.I.E., (Airbus) delivered record numbers of LCA in 1999. However, Boeing's deliveries were primarily to the domestic U.S. market, a change from past years' sales patterns.

U.S. exports of parts for civil aircraft[7] grew by $407 million (3 percent) to $13.2 billion. The rise in such exports reflected the increased demand of foreign aircraft manufacturers to meet their increased production demands and increased utilization of existing aircraft which led to the need for additional maintenance on these aircraft. Other parts exports also increased, including propellers and rotors, which grew by $26 million (4 percent) to $623 million, and undercarriages and parts thereof, which grew by $254 million (57 percent) to $698 million.

The United Kingdom, France, and Japan were the top three export markets for aircraft. Principal exports to the United Kingdom included new large civil transport aircraft over 15,000 kg ($3.5 billion, a 5-percent decline from 1998), parts for civil aircraft ($1.1 billion, an 11-percent increase over 1998), and new military cargo transport aircraft over 15,000 kg ($453 million, a 9-percent decline from 1998). U.S. exports of aircraft to France primarily consisted of new large civil transport aircraft over 15,000 kg ($1.1 billion, a 68 percent rise over 1998), parts for civil aircraft ($909 million, a 16-percent rise), and parts for military aircraft ($129 million, a 74-percent rise). Principal U.S. exports to Japan included new large civil transport aircraft over 15,000 kg ($2.2 billion, a 24 percent decline over 1998), parts for civil aircraft ($1.2 billion, a 12-percent rise), and parts for military aircraft ($585 million, a 6-percent decline).

U.S. imports

U.S. imports of aircraft increased by $1.8 billion (14 percent) during 1999 to $14.6 billion. Significant increases in U.S. imports in two areas accounted for the majority of this growth. These areas included new nonmilitary passenger transport aircraft exceeding 15,000 kg ($3.0 billion, or 51 percent),[8] and new nonmilitary turbofan aircraft exceeding 4,356 kg but less than 15,000 kg ($3.9 billion, or 36 percent). The growth in these imports was a direct result of the need to modernize the aging U.S. fleet of LCA and the strong demand for regional jet versus turboprop aircraft service.

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[7] Parts for civil aircraft and parts for military aircraft do not include propellers, rotors, undercarriages, and parts thereof.

[8] This category of aircraft includes LCA, which typically have more than 100 seats and are used for passenger transport.

The Boeing-McDonnell Douglas merger in 1997 cast uncertainty over the future of both production and support of McDonnell Douglas aircraft. Additionally, airlines indicated a desire to maintain two healthy large civil aircraft manufacturers. Both of these developments augured well for increased purchases of West European-made Airbus aircraft, the only other large civil aircraft manufacturer in the world that competes with Boeing.

The regional jet phenomenon continued to gain momentum in 1999. Originally conceived by the manufacturers as a marketing tool to lure passengers from airlines using turboprop aircraft, regional jets are increasingly being used for new service on "long-thin" routes,[9] or to increase a carriers' departure frequency between two airports, thus increasing service. The United States did not produce regional jet aircraft in 1999; hence, all such aircraft were of foreign manufacture.

The United Kingdom, France, and Japan were the principal U.S. trade partners in 1999. Shipments from the United Kingdom totaled $1.4 billion, and consisted primarily of parts for civil aircraft ($610 million, an increase of 15 percent over the 1998 level) and new civil transport aircraft over 15,000 kg ($239 million, an increase of 13 percent over the 1998 level). U.S. imports from France amounted to $3.5 billion (21-percent increase) in 1999. Principal imports were new large civil transport aircraft over 15,000 kg ($1.2 billion, a 21-percent rise over 1998) and new nonmilitary turbofan-powered aircraft exceeding 4,536 kg but not exceeding 15,000 kg. These aircraft are primarily business jet aircraft. Ninety-eight percent of all U.S. imports from Japan were accounted for by the imports of parts for civil aircraft. This amounted to $1.3 billion in 1999, an increase of less than 0.5 percent over the 1998 level.

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Certain Motor-Vehicle Parts[10]

The U.S. trade surplus in certain motor-vehicle parts (hereafter vehicle parts) continued its decline, falling by nearly $2.7 billion (37 percent) to $4.6 billion in 1999. The growth in the value of U.S. imports outperformed that of U.S. exports, driving the surplus decline. The strong U.S. motor vehicle market continued to support automotive components demand, as production of passenger cars and light trucks exceeded 11.5 million units for the sixth consecutive year.[11] As part of the larger automotive industry, trade shifts in vehicle parts generally reflect global production/sourcing strategies, intracompany shipments, and increased globalization of U.S. and foreign automotive firms.

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[9] Routes which have a small but consistent customer base separated by a great distance. Such a market will not support the use of large, long-range aircraft, but can be profitable with smaller, long-range aircraft. As these markets are not the predominant ones served by airlines, airframe manufacturers have not given them equal attention with the more established airline markets.

[10] Products contained in this group include body stampings, bumpers, brakes and parts, gear boxes, axles, wheels, shock absorbers, radiators, exhaust systems, clutches, steering wheels, and miscellaneous parts and accessories.

[11] "Light Vehicle Production (Millions), Plant Capacity Use (PCU), SIC 3711 Tot. Employment (1000s)," U.S. Department of Commerce (USDOC), Office of Automotive Affairs, found at Internet address http://www.ita.doc.gov/td/auto/qfact.html, retrieved May 2, 2000.

U.S. exports

The value of U.S. exports of vehicle parts rose by $1.3 billion (5 percent) to $27.3 billion in 1999. NAFTA partners Canada and Mexico accounted for 78 percent of all U.S. exports of these parts. Canada remained the leading U.S. export market for vehicle parts, accounting for 59 percent of such exports in 1999. U.S. exports to Canada rose by $1.9 billion (13 percent) to $16.2 billion. Principal exports included miscellaneous parts and accessories for motor vehicles ($4.2 billion), miscellaneous parts and accessories of vehicle bodies ($3.9 billion), and gearboxes and parts thereof ($1.9 billion). Exports to Mexico increased by $185 million (4 percent) to $5.1 billion, and represented 19 percent of U.S. exports of motor vehicle parts in 1999. Leading export categories included miscellaneous parts and accessories for motor vehicles ($2.2 billion) and miscellaneous parts and accessories of vehicle bodies ($1.5 billion).

Austria emerged as the third-leading export market in 1999, accounting for $1.1 billion (4 percent) of all U.S. exports. Austria is the European assembly base for the new Jeep Grand Cherokee and Mercedes M-Class, both of which began production in the first half of 1999. The M-Class, in particular, incorporates a large share of U.S. vehicle parts, many of which are produced at Mercedes's M-Class plant in Alabama.[12]

U.S. imports

The value of U.S. imports of vehicle parts rose by nearly $4.0 billion (21 percent) to $22.7 billion in 1999, with 76 percent ($17.3 billion) of these imports supplied by Canada, Japan, and Mexico. U.S. imports from Canada, the leading U.S. supplier, grew by $1.4 billion (19 percent) to $9.0 billion in 1999. Canadian suppliers' greater competitiveness, increased outsourcing by motor vehicle manufacturers, and the shift to higher valued modules and automotive systems have benefitted the Canadian components industry.[13] Leading components imported from Canada include miscellaneous vehicle body parts and accessories, such as truck caps and sunroofs (up 24 percent to $2.3 billion); other miscellaneous parts and accessories of motor vehicles (up 18 percent to $1.7 billion), and gear boxes for passenger vehicles (up 50 percent to $935 million).

Japan remained the second-leading source of U.S. automotive parts imports, as the value of imports increased by $1.1 billion (31 percent) to $4.6 billion in 1999. Japan's recent economic downturn and weakened currency contributed to the growth in U.S. imports of automotive parts from Japan. The leading import categories are gear boxes for passenger vehicles (up 76 percent to $792 million); miscellaneous vehicle parts (e.g., brake hoses, double flanged wheel hub units, radiator cores), up 2 percent to $628 million; and miscellaneous power train components, up 25 percent to $567 million.

Imports from Mexico, the third-leading import source, increased by $503 million (16 percent) to $3.7 billion, in response to its continued integration into the North American motor vehicle community and extensive investment in the Mexican industry.[14] The Mexican automotive parts industry is becoming increasingly sophisticated, taking on such responsibilities as component design and engineering.[15] Leading

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[12] Peter Homola, "Steyr Plant Starts Cherokee Production," *Ward's Automotive International*, Mar. 1999, pp. 1, and 12.

[13] Information from Scotia Economics Canadian Auto Report (dated Feb. 25, 1999) as reported in "Canadian Auto Part Suppliers See Large Gains," *The Autoparts Report*, Mar. 12, 1999.

[14] Investment in the Mexican automotive sector has been estimated at roughly $4 billion during 1994-97. An additional $10 billion was expected to be invested through 2000. Joel Millman, "Mexico Becomes a Leader in Car Parts," *The Wall Street Journal*, Mar. 30, 1999, p. A21.

[15] Ibid.

import categories included miscellaneous vehicle body parts and accessories, such as truck caps and sunroofs (up 6 percent to $820 million) and safety seat belts (relatively unchanged at $670 million), which together accounted for 40 percent of U.S. auto parts imports from Mexico in 1999.

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Internal Combustion Piston Engines, Other Than for Aircraft

The U.S. trade deficit in internal combustion piston engines (hereafter internal combustion piston engines) grew by $1.1 billion (230 percent) to $1.5 billion in 1999. Although U.S. exports increased by 13 percent in 1999, imports of these products increased by a larger margin, particularly from Canada and Japan. The strength of the U.S. automotive market, which has supported U.S. production in excess of 11.5 million units for 6 consecutive years,[16] has generated comparable demand for engines and components. As part of the larger automotive industry, trade shifts in internal combustion piston engines often reflect U.S. and foreign automotive firms' global production/sourcing strategies, intracompany shipments, and increased internationalization of the industry.

U.S. exports

The value of U.S. exports of internal combustion piston engines rose by $1.5 billion (14 percent) in 1999 to $12.5 billion. Canada was by far the leading U.S. market, accounting for 62 percent of these exports. Such exports rose by $1.0 billion (15 percent) to $7.7 billion in 1999. The most significant growth occurred in spark-ignition engines with a capacity greater than 2000 cubic centimeters (cc), which rose by $748 million (23 percent) to $3.9 billion and accounted for 51 percent of U.S. engine exports to Canada in 1999. Increased Canadian production of certain vehicle models equipped with U.S.-produced engines of this size, such as the Honda Odyssey and Chevrolet Silverado,[17] contributed to this export growth.

Mexico and Japan were leading secondary export markets, accounting for 11 and 4 percent, respectively, of U.S. piston engine exports in 1999. Exports to Mexico increased by $116 million (9 percent) to $1.4 billion, and exports to Japan rose by $215 million (73 percent) to $510 million.

U.S. imports

The value of U.S. imports of internal combustion piston engines rose by $2.6 billion (22 percent) to $14.1 billion in 1999. Japan emerged as the largest U.S. import source, accounting for 33 percent of all U.S. imports of this product. Imports of internal combustion piston engines from Japan rose by $1.4 billion (43 percent) to $4.7 billion in 1999. Spark-ignition engines over 2000cc (up 69 percent to $890 million) led imports from Japan in 1999, as many U.S.-based vehicle manufacturers install Japanese engines of this size

[16] USDOC, Office of Automotive Affairs, "Light Vehicle Production (Millions)."

[17] Output of the Odyssey at Honda's Alliston, Ontario plant rose from 12,460 units in 1998 to 100,623 units in 1999, and production of the Chevrolet Silverado at General Motors's Oshawa, Ontario facility increased from 79,960 units to 231,489 units in the same period. "Ward's U.S. and Canada Production by Vehicle Line," *Ward's Automotive Reports*, Jan. 10, 2000, pp. 6-7.

in certain motor vehicle models. Imports of spark-ignition engines for machinery and equipment rose by 53 percent ($186 million) to $537 million in 1999.

NAFTA partners Canada and Mexico accounted for 46 percent ($6.5 billion) of the value of all piston engine imports, in large part reflecting the integration of the North American automotive industry. Imports from Canada, the second-leading U.S. supplier, increased by $697 million (21 percent) to $4.0 billion. The improved competitiveness of the Canadian auto parts industry and greater outsourcing by automakers have contributed to increased Canadian parts purchases.[18] The leading import category was spark-ignition engines over 2000cc, which accounted for 69 percent of engine and parts imports from Canada in 1999. Imports of these engines rose by 21 percent to $2.8 billion in 1999, in part because of increased output at Ford's Windsor, Ontario engine plant to satisfy demand for V8 engines installed in certain Ford sport utility, truck, and van models assembled in the United States.[19]

The value of imports of internal combustion piston engines from Mexico grew by $255 million (11 percent) to $2.5 billion in 1999. The Mexican engine and engine parts sector has received significant investments from foreign automakers and parts producers, and is considered to be a globally competitive sector.[20] Imports of spark-ignition engines over 2000cc, the leading import category, remained relatively unchanged at $1.2 billion and accounted for nearly one-half of sector imports from Mexico.

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Construction and Mining Equipment

The U.S. trade surplus in construction and mining equipment declined for the second straight year, falling by over $1.9 billion (41 percent) to $2.7 billion in 1999. The continued decline in the trade surplus was wholly caused by a sharp decrease in U.S. exports, as U.S. imports of these products declined by $380 million (6 percent) to $5.9 billion in 1999. Japan and the United Kingdom remained the top suppliers to the United States, accounting for 40 percent of all U.S. imports in this product group.

U.S. exports

Globally, U.S. exports of construction and mining equipment fell by nearly $2.3 billion (21 percent) to $8.6 billion in 1999, primarily due to a $1.9-billion decrease (40 percent) in exports of parts for boring and sinking machinery, the primary U.S. export product. Canada remained the largest market, accounting for over 15 percent of such exports in 1999. Belgium, accounting for almost 8 percent of all exports, replaced Venezuela as the second-largest market for U.S. exports of construction and mining

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[18] *Canadian Auto Industry--Big Winner Under Free Trade*, Scotiabank Economic Report, Mar. 31, 1998; and Carlos Gomes, "Auto Parts Suppliers--Outsourcing Drives Surge in Canadian Content," *Canadian Auto Report*, Scotia Economics, Feb. 25, 1999.

[19] "Ford's Canadian Engine Plant to Expand," *The Autoparts Report*, Apr. 19, 1999, pp. 4-5; and "Ford to Boost Engine Output in Windsor," *Automotive News*, Apr. 19, 1999.

[20] USDOC, International Trade Administration (ITA), "Automotive Original Eq. Manufacturers," *Market Research Reports*, Aug. 1, 1997.

equipment in 1999--the result of a near 50-percent decline in exports to that country and a $179-million (38-percent) gain in exports to Belgium. Despite the decline, Venezuela absorbed close to 5 percent of U.S. exports and was the fourth-leading market behind Mexico, which accounted for slightly more than 5 percent of U.S. exports of construction and mining machinery in 1999.

U.S. exports to Venezuela decreased by $394 million (48 percent) to $426 million in 1999. The majority of U.S. exports to Venezuela are of certain parts for oil and gas field machinery. Exports of such products, which accounted for over two-thirds of all exports to Venezuela, fell by $314 million (53 percent) to $284 million in 1999. The decline in exports is largely the result of recessionary conditions in the Venezuelan oil sector and the economy as a whole. The state-owned oil holding company, Petroleos de Venezuela S.A., reportedly reduced industry expenditures, and Venezuela has curbed petroleum output to fulfill commitments made with OPEC producers to cut production in order to increase oil prices.[21] In addition, construction activity has wavered, declining by 22 percent alone in the first half of 1999.[22] However, despite the large decline in U.S. exports in these products in 1999, U.S. manufacturers are dominate in the Venezuelan market for construction and mining equipment. The geographical proximity of the United States allows for favorable delivery times and freight costs, as well as ease in communications and service.[23] Further, the United States enjoys a reputation for quality and innovation, and Venezuelan engineers and managers reportedly are familiar with, and prefer, U.S.-produced machines.[24] As a result, the U.S. share of the Venezuelan import market for such products is high--over 90 percent for construction machinery and roughly 80 percent for mining equipment.[25]

U.S. exports of construction and mining equipment to Canada decreased by $219 million (14 percent) to $1.3 billion in 1999. While the Canadian construction market remained relatively strong during the year, with total 1999 construction expenditures up 6 percent from 1998,[26] a number of construction projects were postponed or downsized during the period.[27] Further, depressed world metal and mineral prices, combined with economic slowdown in key markets for Canadian-mined commodities, had a negative effect on demand for mining equipment as firms curtailed expansion, cut production, or closed high-cost mining operations.[28] Overall, Canadian imports of construction and mining equipment from all sources declined in 1999. Nonetheless, the United States remained Canada's top supplier in this product

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[21] USDOC, ITA, "Venezuela--Macroeconomic Update, August 1999," *Market Research Reports*, Sept. 23, 1999, found at Internet address http://www.stat-usa.gov/, retrieved Apr. 28, 2000; and USDOC, ITA"Venezuela--Oil and Gas Field Machinery/Equipment," *Market Research Reports*, July 1, 1999, found at Internet address http://www.stat-usa.gov/, retrieved Apr. 28, 2000.

[22] USDOC, ITA, "Venezuela--Macroeconomic Update."

[23] USDOC, ITA, "Venezuela--Mining Equipment," *Market Research Reports*, June 1, 1997, found at Internet address http://www.stat-usa.gov/, retrieved Apr. 28, 2000; and USDOC, ITA, "Venezuela--Construction Machinery and Equipment," *Market Research Reports*, Apr. 1, 1999, found at Internet address http://www.stat-usa.gov/, retrieved Apr. 28, 2000.

[24] Ibid.

[25] Ibid.

[26] Canadian Construction Association, *Construction Fact Sheet*, found at Internet address http://www.cca-acc.com/, retrieved May 2, 2000.

[27] USDOC, ITA, "Canada--Construction Sector Growth," *Market Research Reports*, Mar. 4, 1999, found at Internet address http://www.stat-usa.gov/, retrieved May 2, 2000.

[28] USDOC, ITA, "Canada--Underground Mining Equipment,"*Market Research Reports*, June 1, 1999, found at Internet address http://www.stat-usa.gov/, retrieved Apr. 28, 2000; and "Canada--Coal Mining on the Rebound," *Market Research Reports*, USDOC, International Trade Administration, Sept. 21, 1999, found at Internet address http://www.stat-usa.gov/, retrieved Apr. 28, 2000.

sector, accounting for approximately one-half of Canadian imports of construction and mining equipment in 1999.[29]

The largest increase in U.S. exports occurred with respect to construction and mining equipment shipments to Belgium. Such exports grew by $179 million (38 percent) to $654 million in 1999. The greatest growth occurred in U.S. shipments to Belgium of certain buckets, shovels, grabs, and grips for various construction and mining machines. Such exports rose by $260 million (513 percent) to $311 million in 1999, making it the primary export to Belgium among all construction and mining equipment products. While an improved housing construction market may have contributed to greater demand for earthmoving equipment in Belgium in 1999, the large increase in exports is most likely the result of greater shipments of inputs and replacement parts from U.S. construction equipment manufacturers to their production and distribution facilities in Belgium.

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Aircraft Engines and Gas Turbines

In 1999, the trade surplus for aircraft engines and gas turbines (hereafter aircraft engines) improved by $1.2 billion (43 percent) to $3.9 billion in 1999. U.S. exports of these products rose to $14.2 billion, whereas U.S. imports declined by $76 million (less than 1 percent) during 1999 to $10.3 billion. Record shipments of foreign aircraft accounted for this growth.

U.S. exports

U.S. exports of aircraft engines grew by $1.1 billion (8 percent) during 1999 to $14.2 billion. The majority of this increase came from U.S. exports of turbojet engines of a thrust exceeding 25 kilonewtons (kN), or those used on LCA. Exports of these engines grew by $631 million (24 percent) to $3.3 billion, reflecting the increased demand of foreign aircraft manufacturers for U.S. engines. Record shipments of LCA by Airbus Industrie,[30] the consortium of West European aerospace companies, likely accounted for the majority of the increase, as shipments of these engines to France increased by $31.6 million (5 percent) to $699 million in 1999.

Gains were also made in U.S. exports of turbine engine parts, which rose by $489 million (6 percent) to approximately $8.8 billion. These parts accounted for over 61 percent of all U.S. exports of aircraft engines in 1999. Certain parts specifically for aircraft turbine engines rose by $337 million (25 percent) to $1.7 billion.

The United Kingdom, France, and Canada were the top three export markets for aircraft engines. Together, they accounted for nearly $6 billion (42 percent) of all U.S. exports. Each of these nations

[29] According to Canadian import statistics accessed through Strategis Canada, found at Internet address http://strategis.ic.gc.ca/sc_mrkti/tdst/engdoc/tr_homep.html, retrieved May 2, 2000.

[30] Airbus Industrie, G.I.E., deliveries for 1998, 1999, found at Internet address http://www.airbus.com/, retrieved Apr. 27, 2000.

has a thriving aircraft engine industry, which would be expected to prosper accordingly with the fortunes of the U.S. and European aircraft manufacturing industries. The rise in U.S. exports of parts also reflects increased usage of existing aircraft engines.

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Table 12-3
Transportation equipment sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

1998 USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
ET001	Aircraft engines and gas turbines:				
	Exports	13,115	14,218	1,103	8.4
	Imports	10,404	10,328	-75	-0.7
	Trade balance	2,711	3,889	1,178	43.5
ET002	Internal combustion piston engines, other than for aircraft:				
	Exports	11,015	12,522	1,507	13.7
	Imports	11,478	14,052	2,574	22.4
	Trade balance	-463	-1,530	-1,067	-230.5
ET003	Forklift trucks and similar industrial vehicles:				
	Exports	1,188	1,243	55	4.6
	Imports	1,456	1,527	71	4.9
	Trade balance	-268	-284	-16	-5.9
ET004	Construction and mining equipment:				
	Exports	10,944	8,646	-2,299	-21.0
	Imports	6,299	5,919	-380	-6.0
	Trade balance	4,645	2,727	-1,919	-41.3
ET005	Ball and rollers bearings:				
	Exports	1,141	1,098	-43	-3.8
	Imports	1,719	1,622	-97	-5.7
	Trade balance	-578	-524	54	9.4
ET006	Primary cells and batteries and electric storage batteries:				
	Exports	2,309	2,307	-2	-0.1
	Imports	2,056	2,392	336	16.3
	Trade balance	253	-84	-338	([3])
ET007	Ignition, starting, lighting, and other electrical equipment:				
	Exports	1,725	1,947	222	12.8
	Imports	2,363	2,817	454	19.2
	Trade balance	-637	-870	-233	-36.5
ET008	Rail locomotive and rolling stock:				
	Exports	1,694	1,558	-136	-8.0
	Imports	2,156	2,307	151	7.0
	Trade balance	-462	-749	-287	-62.1
ET009	Motor vehicles:				
	Exports	22,522	22,049	-472	-2.1
	Imports	99,826	119,663	19,837	19.9
	Trade balance	-77,305	-97,614	-20,309	-26.3
ET010	Certain motor-vehicle parts:				
	Exports	25,988	27,281	1,294	5.0
	Imports	18,767	22,725	3,958	21.1
	Trade balance	7,221	4,557	-2,664	-36.9
ET011	Motorcycles, mopeds, and parts:				
	Exports	626	468	-158	-25.3
	Imports	1,293	1,755	462	35.7
	Trade balance	-667	-1,287	-620	-93.0
ET012	Miscellaneous vehicles and transportation-related equipment:				
	Exports	2,962	2,762	-200	-6.7
	Imports	1,666	2,060	394	23.6
	Trade balance	1,296	702	-593	-45.8

See footnote(s) at end of table.

Table 12-3--*Continued*
Transportation equipment sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

1998 USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
ET013	Aircraft, spacecraft, and related equipment:				
	Exports	50,248	47,762	-2,486	-4.9
	Imports	12,748	14,592	1,843	14.5
	Trade balance	37,500	33,171	-4,329	-11.5
ET014	Ships, tugs, pleasure boats, and similar vessels:				
	Exports	1,765	1,682	-83	-4.7
	Imports	1,090	1,246	156	14.3
	Trade balance	675	437	-239	-35.3
ET015	Motors and engines, except internal combustion, aircraft, or electric:				
	Exports	397	394	-3	-0.8
	Imports	621	658	38	6.0
	Trade balance	-223	-264	-41	-18.2

[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 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 13
Electronic Products

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The U.S. trade deficit in electronic products expanded by $15.8 billion (31 percent) to $66.2 billion in 1999 as import growth outpaced that of exports (table 13-1). Electronic products continued to be the largest items of U.S. trade in 1999. Sector imports were $228.5 billion, representing 23 percent of all U.S. imports, which were $1.0 trillion. Sector exports were $162.2 billion and accounted for 25 percent of all exports, which reached $642.2 billion in 1999. Within the electronics products sector, the largest items of trade in 1999 were computers, peripherals, and parts (hereafter computer hardware) and semiconductors and integrated circuits (hereafter semiconductors). Together, these products accounted for 52 percent of sector imports and 47 percent of sector exports during 1999, a 1-percent increase in their share of imports and a 2-percent increase in their share of exports from 1998.

The trade deficit in computer hardware increased significantly in 1999, by $8.8 billion (26 percent) to $42.4 billion, largely due to increased imports of lower-priced computers from Mexico and China. However, the trade deficit in semiconductors decreased by $3.6 billion (87 percent) to $542 million as exports increased significantly due to greater global demand for noncommodity type semiconductors for which the United States is a world leader. The global expansion of downstream industries such as telecommunications equipment and computers has also contributed to increased U.S. exports of semiconductors. In contrast, however, the expansion of the U.S. telecommunications market has widened the trade deficit for telephone and telegraph apparatus as strong U.S. demand for products such as parts for telephonic apparatus and digital cellular telephones has caused rapid import growth. The most significant shifts in U.S. imports of electronic products occurred in computer hardware, up by $9.0 billion (12 percent) to $81.7 billion; telephone and telegraph apparatus, up by $5.8 billion (40 percent) to $20.1 billion; and semiconductors, up by $4.0 billion (12 percent) to $37.2 billion.

Japan, Singapore, and Taiwan have been the major sources of U.S. computer hardware imports for each of the last 7 years. A number of factors contributed to the growth of U.S. computer hardware imports during 1999 including greater Internet usage, the growth of electronic commerce, and the continued development of intranets by firms. These same factors led to an increase in U.S. imports of telephone and telegraph apparatus from all major sources in 1999. The expansion of the Internet, electronic commerce, and intranets have spurred telecommunications carriers to increase investments in both foreign and domestically produced equipment that can handle the large amounts of data required for these newer applications. Further, the wireless telecommunications system in the United States is rapidly changing from analog to digital, causing carriers to build new telecommunications infrastructure, consumers to replace cellular telephones, and the total number of wireless subscribers to expand as digital technology lowers prices and creates new services. U.S. imports of semiconductors from each of its principal sources, Korea, Japan, and Malaysia, increased during 1999. Korea surpassed Japan as the largest supplier of semiconductors to the U.S. market in 1999 by increasing its shipments to the United States by 27 percent. The growth of imports from Korea is largely the result of Korea’s increasing concentration on

Table 13-1
Electronic products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1998 and 1999[1]

Item	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
		Million dollars		
U.S. exports of domestic merchandise:				
Japan	14,752	14,921	169	1.1
Mexico	16,917	19,564	2,647	15.6
Canada	20,784	22,057	1,273	6.1
Korea	5,496	9,193	3,697	67.3
China	2,930	2,943	13	0.4
Taiwan	4,799	5,253	454	9.5
Malaysia	4,976	5,802	826	16.6
Singapore	6,448	6,712	264	4.1
United Kingdom	10,126	10,056	-69	-0.7
Germany	7,380	8,100	720	9.8
All other	55,925	57,638	1,713	3.1
Total	150,534	162,240	11,706	7.8
EU-15	38,938	40,864	1,926	4.9
OPEC	2,431	2,209	-222	-9.1
Latin America	29,255	31,222	1,968	6.7
CBERA	1,899	2,360	461	24.3
Asia	50,923	57,306	6,383	12.5
Sub-Saharan Africa	843	768	-75	-8.9
Central and Eastern Europe	806	841	34	4.3
U.S. imports for consumption:				
Japan	40,809	44,018	3,210	7.9
Mexico	23,222	28,793	5,571	24.0
Canada	13,101	14,609	1,508	11.5
Korea	11,154	16,100	4,946	44.3
China	17,313	20,917	3,604	20.8
Taiwan	17,007	18,399	1,392	8.2
Malaysia	14,515	16,953	2,438	16.8
Singapore	15,404	14,916	-488	-3.2
United Kingdom	5,505	5,970	465	8.4
Germany	5,771	6,572	802	13.9
All other	37,123	41,221	4,098	11.0
Total	200,924	228,469	27,545	13.7
EU-15	22,531	24,822	2,291	10.2
OPEC	1,950	2,094	144	7.4
Latin America	25,179	31,867	6,688	26.6
CBERA	1,371	2,496	1,126	82.1
Asia	134,164	150,028	15,864	11.8
Sub-Saharan Africa	35	56	21	61.1
Central and Eastern Europe	1,065	1,449	383	36.0
U.S. merchandise trade balance:				
Japan	-26,056	-29,097	-3,041	-11.7
Mexico	-6,305	-9,229	-2,923	-46.4
Canada	7,683	7,448	-235	-3.1
Korea	-5,658	-6,907	-1,249	-22.1
China	-14,383	-17,974	-3,591	-25.0
Taiwan	-12,207	-13,146	-939	-7.7
Malaysia	-9,539	-11,151	-1,612	-16.9
Singapore	-8,956	-8,204	751	8.4
United Kingdom	4,620	4,086	-534	-11.6
Germany	1,609	1,528	-82	-5.1
All other	18,802	16,417	-2,385	-12.7
Total	-50,390	-66,230	-15,840	-31.4
EU-15	16,406	16,042	-365	-2.2
OPEC	482	116	-366	-76.0
Latin America	4,076	-644	-4,720	(2)
CBERA	528	-136	-665	(2)
Asia	-83,242	-92,722	-9,481	-11.4
Sub-Saharan Africa	808	712	-97	-12.0
Central and Eastern Europe	-259	-608	-349	-134.7

[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 1999.

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

nonmemory chips that are in great demand by the U.S. telecommunications, motor vehicle, and computer industries.

The largest U.S. export shifts were in semiconductors, which increased by $7.6 billion (26 percent) to $36.6 billion, and in radio and television broadcasting equipment, which increased by $944 million (68 percent) to $2.3 billion. U.S. exports of semiconductors to each of its principal markets, Korea, Malaysia, and the Philippines, grew significantly in 1999. Exports to Korea accounted for the largest share of this growth, increasing by $2.4 billion (76 percent) to $5.6 billion in 1999. U.S. semiconductor exports to Malaysia and the Philippines generally consist of unfinished products that are assembled and tested in those countries, then returned to the United States or exported elsewhere, whereas many U.S. sector exports are consumed in Korea. The principal markets for U.S. exports of radio and television broadcasting equipment were Canada, Mexico, and Japan. U.S. exports to Canada increased 119 percent in 1999 while exports to Mexico and Japan increased by 191 percent and 162 percent, respectively. Trade statistics for all industry/commodity groups in the electronic products sector are presented in table 13-2 at the end of this chapter.

U.S. BILATERAL TRADE

The largest sources of U.S. imports of electronic products in 1999 were Japan, Mexico, and China. Together, these three countries accounted for 41 percent of sector imports. The largest markets for U.S. electronics exports in 1999 were Canada, Mexico, and Japan which collectively accounted for 35 percent of sector exports. Among the top 10 trade partners, the largest U.S. trade surplus continued to be with Canada ($7.4 billion) and the largest U.S. trade deficit continued to be with Japan ($29.1 billion). The largest shift in the trade balance was with China, where the trade deficit widened by $3.6 billion (25 percent) to $18.0 billion.

The U.S. trade deficit in electronic products with Japan widened to by $3.0 billion (12 percent) to $29.1 billion. U.S. exports to Japan increased by only 1 percent to $14.9 billion in 1999 as the Japanese economy continued to be sluggish. The U.S. economy, on the other hand, continued its vibrant growth[1] and increased its electronics imports from Japan by 8 percent to $44.0 billion. Semiconductors, computer hardware, and parts for office machines comprise a major share of U.S. trade with Japan.

The U.S. trade deficit with Mexico increased by $2.9 billion (46 percent) to $9.2 billion in 1999, as U.S. exports to Mexico increased by 16 percent to $19.6 billion and U.S. imports rose by 24 percent to $28.8 billion. Mexico exported computer hardware and television receivers to the United States, mainly from facilities located in Mexico that are affiliated with U.S. producers. Among the leading U.S. exports to Mexico were semiconductors, certain electrical apparatus, parts for office machines, and computer hardware. A large share of these items were destined for maquiladora operations where labor-intensive assembly operations were performed before they were re-imported into the United States.

During 1999, the trade surplus in electronic products with Canada decreased by 3 percent to $7.4 billion. U.S. exports of sector products to Canada increased by 6 percent to $22.1 billion and U.S. imports from Canada rose by 12 percent to $14.6 billion. Computer hardware, semiconductors, and telecommunications equipment were among the leading items of U.S. sector trade with Canada in 1999

[1] See ch. 2 for a general discussion about U.S. and international macroeconomic conditions that influenced U.S. merchandise trade performance in 1999.

and accounted for a major share of both imports and exports. These items flow across the border in both directions as parts and components are assembled into larger subassemblies and completed units.

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COMMODITY ANALYSIS

Computers, Peripherals, and Parts[2]

The U.S. trade deficit in computers, peripherals, and parts (hereafter computer hardware) rose by $8.8 billion (26 percent) to $42.4 billion during 1999, continuing a trend of rising trade deficits. As in previous years, U.S. imports of computer hardware rose as U.S. consumers purchased price-competitive personal computers (PCS) and peripherals supplied primarily by Asian producers. U.S. exports of computer hardware increased slightly during 1999, reversing last year's decrease that was caused in part by the economic downturn in Asia. Exports rose by just $269 million (0.7 percent) to $39.2 billion. As the price of PCS continued to decline and the amount of entertainment and information delivered over the PC via the Internet continued to expand, the demand for PCS grew worldwide, contributing to the increase in U.S. exports. Low PC penetration in many markets also contributed to this growth. South Korea showed the largest increase in U.S. exports, $442 million (73 percent) to $1.1 billion, driven in part by the demand for investment in an information technology infrastructure, considered critical to the country's economic recovery and development.[3]

U.S. imports

U.S. imports of computer hardware rose by $9.0 billion (12 percent) to $81.7 billion during 1999. As in previous years, this increase occurred because of intense competition among U.S. computer hardware vendors that led to continued lowering of prices of computers and peripherals, thus fueling demand and increasing the overall value of imports. Other factors that have increased demand include the continued growth in Internet use, electronic commerce, and corporate investment in computer infrastructure to implement Internet or Internet-like technologies (intranets, extranets).[4]

During 1999, Japan, Singapore, and Taiwan continued for the seventh consecutive year as the three principal sources for computer hardware imported into the United States. These producers supplied approximately 42 percent of all imports from all sources. Imports from Japan and Taiwan showed slight increases during 1999. Japan posted the larger improvement, $514 million (4 percent) to $13.6 billion, while imports from Taiwan grew by $84 million (0.9 percent) to $9.7 billion. Imports from Singapore fell for the second successive year, declining $700 million (6 percent) to $11.3 billion. Excess inventory and a

[2] This industry/commodity group, also referred to as computer hardware, is composed of finished (computers and computer peripherals) and unfinished (parts for computers and computer peripherals, such as motherboards) products.

[3] U.S. Department of Commerce (USDOC), International Trade Administration (ITA), "Computer Equipment," *U.S. Industry & Trade Outlook 2000* (New York: McGraw Hill Companies, 2000), p. 27-3.

[4] Ibid., p. 27-2.

surplus of computer equipment available worldwide, a decline in prices[5], and the continued establishment of production facilities in lower cost areas in Asia and Latin America all hindered growth in exports to the United States from Japan, Taiwan, and Singapore. For example, U.S. imports from Korea, Malaysia, China, and Mexico all increased significantly during 1999 at the expense of producers located in Japan, Singapore, and Taiwan.

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Semiconductors and Integrated Circuits

Overall trade in semiconductors grew largely as a result of growth in the Internet and communication sectors, particularly wireless telecommunications.[6] U.S. imports of semiconductors and integrated circuits (hereafter semiconductors) rose by $4.0 billion (12 percent) to $37.2 billion in 1999, after declining by 8 percent the previous year. U.S. exports rose for the fourth consecutive year, by $7.6 billion (26 percent) to $36.6 billion. As a result, the trade deficit declined for the fourth consecutive year, by $3.6 billion (87 percent) to $542 million.

U.S. exports

The major markets for U.S. exports of semiconductors were Korea, Malaysia, the Philippines, Mexico, Japan, and Canada; together these countries accounted for $22.8 billion or 69 percent of all U.S. semiconductor exports in 1999. Korea became the largest market for U.S. goods in 1999. Exports to Korea accounted for the single largest increase in exports, growing by $2.4 billion (76 percent) in 1999 to $5.6 billion. Exports to Malaysia, Mexico, the Philippines, Japan, and Taiwan also grew significantly. Exports to Malaysia and the Philippines were primarily of unfinished semiconductors requiring assembly and testing. Ultimately, these products are usually either returned to the United States or exported to a third market. Exports to Korea and Canada likely were for both consumption and for assembly and testing, whereas exports to Japan generally were for consumption.

U.S. imports

Korea, Japan, Malaysia, the Philippines, and Taiwan were the major import sources of this product group in 1999, together accounting for 70 percent of all U.S. semiconductor imports. These same partners also accounted for the greatest increases in imports. Imports from Korea increased by $1.4 billion (27 percent) to $6.6 billion, from Malaysia by $738 million (17 percent) to $5.0 billion, from Taiwan by $669 million (22 percent) to $3.7 billion, from the Philippines by $528 million (14 percent) to $4.4 billion, and from Japan by $509 million (9 percent) to $6.4 billion. In 1999, Korea overtook Japan as the largest supplier of semiconductors to the United States. Where Korea formerly had concentrated its production almost exclusively in memory chips, it is now moving towards producing nonmemory devices that are in

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[5] CNET News.com Staff, "PC Price Wars Taking Toll on Earnings," CNET News.com, Jan. 27, 2000, found at Internet address http://news.cnet.com/news/0-1006-201-1533442-0.html, retrieved May 5, 2000; and Michael Kanellos, "Intel Cuts Pentium III Prices," *CNET News.com*, Dec. 13, 1999, found at Internet address http://news.cnet.com/news/0-1006-200-1494677.html, retrieved May 5, 2000.

[6] "Semis Set to Resurge in '99--Optimism in the Sector Abounds as Capacity-Driven Price Pressure Subsides and Lead Times Begin to Stretch," *Electronic Buyers News*, July 5, 1999, found at Internet site http://www.techweb.com/se/directlink.cgi?EBN19990705S0028, retrieved Apr. 25, 2000.

demand for telecommunications and computer equipment, motor vehicles, and appliance.[7] In addition, Korean exports of memory devices benefitted from stronger pricing after several years of steep declines.

Imports of monolithic digital integrated circuits (ICs) using metal oxide silicon technology (also accounting for 68 percent of all semiconductor imports) accounted for most of the increase in semiconductor imports, growing by $2.5 billion (11 percent) to $25.2 billion. Korea, Japan, Malaysia, and the Philippines were the major suppliers of these IC products, accounting for 23 percent, 16 percent, 12 percent, and 12 percent, respectively, of imports of those products.

Production sharing plays an important role in the manufacture of semiconductors.[8] The United States is a major fabricator of unfinished chips, and exports significant quantities requiring assembly and testing before they are re-imported into the United States as finished ICs. U.S. firms have extensive production-sharing relationships with assemblers in Korea, the Philippines, Malaysia, Taiwan, Singapore, and Canada.

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Telephone and Telegraph Apparatus

U.S. trade in telephone and telegraph apparatus shifted from a surplus of $2.8 billion to a deficit of $2.4 billion during 1999 as a strong increase in U.S. demand for these products, especially cellular telephones, spurred imports. U.S. imports increased by $5.8 billion (40 percent) to $20.1 billion whereas exports increased by only $551 million (3 percent) to $17.7 billion. U.S. consumption of these products expanded by approximately 11 percent in 1999 resulting in sharp increases in U.S. imports from each of its major trade partners.[9]

U.S. imports

U.S. imports consisted mostly of low end commodity-type products such as telephone sets, cellular telephones, and parts. During 1999, U.S. imports of cellular telephones, driven by an expanding U.S. market, replaced cordless telephone sets as the leading import within the product group. Total mobile phone subscribership in the United States increased by 24 percent to 87 million in 1999.[10] Other principal import product categories include printed circuit assemblies for telephone apparatus, facsimile machines, and modems.

U.S. imports from each of its five largest sources of telephone and telegraph apparatus, Canada, Japan, Mexico, China, and Korea, increased substantially and collectively accounted for 72 percent of U.S. imports in 1999. Canada remained the largest source of these imports, supplying an additional $1.5 billion

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[7] " IC Export Rise Bridges South Korea Trade Gap," *EETimes*, Mar. 20, 2000, found at Internet website http://www.techweb.com/se/directlink.cgi?EET20000320S0036, retrieved Apr. 25, 2000

[8] USITC, *Production Sharing: Use of U.S. Components and Materials in Foreign Assembly Operations, 1994-1997*, publication 3146, Dec. 1998, pp. 3-14 through 3-18.

[9] MultiMedia Telecommunications Association (MMTA), *2000 MultiMedia Telecommunications Market Review and Forecast*, (Arlington, VA: MMTA, 2000), p. 5.

[10] Dennis H. Leibowitz and others, *The Wireless Communications Industry*, (New York: Donaldson, Lufkin, and Jenrette Securities Corporation, Winter 1999/2000), pp. 56-57.

(51 percent) in 1999 over its 1998 amount. U.S. imports from Canada consisted of a wide variety of products, of which parts for telephonic and telegraphic apparatus comprised the largest share. Canada has a number of globally competitive firms in the telephone and telegraph apparatus product group dominated by Nortel-Networks, that are well-positioned to respond to growing U.S. demand. U.S. imports from Japan, the second-largest source of imports, increased by 36 percent during 1999. Japan supplied a wide variety of finished products and parts, although these imports contained a much larger share of facsimile machines and cellular telephones than did imports from Canada. U.S. imports from Mexico and China increased by 59 percent and 27 percent, respectively, and are largely concentrated in commodity-type products such as telephone sets, pagers, and cellular telephones. A surge in imports of cellular telephones caused U.S. imports from Korea to grow by 112 percent in 1999.

The increase in U.S. demand for telephone and telegraph apparatus products that is reflected in strong import growth is driven by a number of factors affecting both wireless and wireline products. The continued expansion and upgrade of the digital wireless infrastructure and increased use of cellular telephones have boosted sales of both U.S.- and foreign-sourced equipment in the U.S. market. Similarly, the need for greater data-carrying-capacity associated with greater Internet usage and new services has prompted telecommunications carriers, the primary customers for this product group, to increase spending on new equipment. Growing competition has also contributed to market expansion. New telecommunications service providers are increasingly competing with established carriers and creating alternative networks which, in turn, cause the established carriers to upgrade to prevent the loss of market share.

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Consumer Electronics (Except Televisions)[11]

The trade deficit for the consumer electronics (except televisions) product group (hereafter consumer electronics) rose by $1.7 billion (13 percent) to $15.6 billion in 1999, growing for the fourth year in a row. Imports grew for the fourth straight year, increasing by $1.8 billion (11 percent) to $18.3 billion. Japan, China, and Mexico continued as the largest import sources, together accounting for 69 percent of all such imports. Exports reversed a decline from 1997-98, growing by $99 million (4 percent) in 1999 to $2.7 billion. North American Free Trade Agreement (NAFTA) partners Canada and Mexico continued as the largest export markets for U.S. products, accounting for 54 percent of exports.

U.S. imports

The major sources of products in this group were Japan, China, and Mexico, accounting for 29 percent, 26 percent, and 14 percent, respectively, of U.S. imports in 1999. Imports from Japan, which continued as the largest foreign supplier to the U.S. market, grew by $711 million (15 percent) to $5.3 billion, accounting for over one-third of the overall increase.

[11] Included in this group are radiobroadcast receivers, phonographs, compact disk players, audio tape recorders and players, digital versatile disk and laserdisc players, videotape recorders and players, camcorders, audio components, speakers, microphones, and combinations of the foregoing.

The products showing the greatest increase in imports included video reproducing apparatus other than magnetic tape, most likely digital versatile disk (DVD) players, which grew by $684 million (173 percent) to $1.1 billion, and digital still image video cameras, which grew by $542 million (101 percent) to $1.1 billion. Both of these products are becoming increasingly popular in the United States. Japan was the source for 56 percent of the DVD players and 71 percent of the digital still image video cameras.

The chief reason for increased imports from Japan was the strength of the U.S. economy, which has led to an increase in consumer discretionary spending.[12] Also, both of the products showing the greatest increase in imports may be used as computer peripherals, and as the household penetration rate for computers grows, so does the market for these consumer computer peripherals. According to producers in Southeastern Asia, orders for DVD players have been increasing significantly, with up to 50 percent per year increases forecast for the United States.[13] According to the Consumer Electronics Association, DVD player shipments to distributors and dealers exceeded 1 million units in the first quarter of 2000, representing a 188-percent increase over the corresponding period of 1999.[14]

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Radio and Television Broadcasting Equipment[15]

The trade deficit for radio and television broadcasting equipment grew for the second year in a row, increasing by 43 percent ($793 million) to $2.6 billion in 1999. Imports grew by $1.7 billion (54 percent) to $4.9 billion while exports grew by $944 million (68 percent) to $2.3 billion.

U.S. imports

The major import sources in 1999 were Mexico, Taiwan, and Japan, accounting for 40 percent, 17 percent, and 15 percent, respectively, of U.S. imports in this product group. Imports from Mexico grew by $661 million (40 percent) to $2.0 billion. The categories showing the greatest increases in imports in 1999 were set top boxes which increased by $549 million (88 percent) to $1.2 billion and miscellaneous transmission apparatus which increased by $292 million (18 percent) to $1.9 billion. Both of these reflect a growth in sales of digital satellite television equipment, set top boxes and miscellaneous equipment. The number of subscribers in the United States is estimated at 13.8 million households by the end of the third quarter of 2000.[16] Each household uses at least one digital satellite receiver plus one set top box per television receiver connected to the digital satellite system. Increasing consumer dissatisfaction with the

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[12] See ch. 2 for a general discussion about U.S. and international macroeconomic conditions that influenced U.S. merchandise trade performance in 1999.

[13] "DVD Player Supply Grows, Line Matures," *Asian Sources Electronics*, May 2000, pp. 80-102.

[14] Consumer Electronics Association, "Strong Sales in March Round Out Stellar First Quarter for Video," Apr. 17, 2000, found at Internet address http://www.ce.org/index.asp?area=newsroom&area2=archives, retrieved May 2, 2000.

[15] Included in this product group are transmitters, antennae, cable television transmission equipment (except cable), and satellite television receivers.

[16] Representative of Satellite Broadcast and Communications Association, telephone interview with USITC staff, May 2, 2000.

cost of cable television and the healthy U.S. economy have contributed to the growth in imports and sales of satellite receivers.

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Table 13-2
Electronic products sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
ET016	Office machines:				
	Exports	1,098	1,037	-61	-5.6
	Imports	1,856	1,784	-72	-3.9
	Trade balance	-758	-747	11	1.5
ET017	Telephone and telegraph apparatus:				
	Exports	17,167	17,717	551	3.2
	Imports	14,385	20,147	5,762	40.1
	Trade balance	2,782	-2,430	-5,212	([3])
ET018	Consumer electronics (except televisions):				
	Exports	2,579	2,678	99	3.8
	Imports	16,444	18,282	1,838	11.2
	Trade balance	-13,865	-15,604	-1,739	-12.5
ET019	Blank media:				
	Exports	2,042	1,692	-350	-17.1
	Imports	2,103	2,225	122	5.8
	Trade balance	-62	-533	-471	-765.4
ET020	Prerecorded media:				
	Exports	3,619	3,707	88	2.4
	Imports	1,135	1,252	117	10.3
	Trade balance	2,485	2,455	-29	-1.2
ET021	Navigational instruments and remote control apparatus:				
	Exports	2,585	2,530	-55	-2.1
	Imports	1,230	1,361	131	10.6
	Trade balance	1,354	1,169	-185	-13.7
ET022	Television receivers and video monitors:				
	Exports	2,142	1,104	-1,038	-48.5
	Imports	5,878	6,652	774	13.2
	Trade balance	-3,736	-5,548	-1,812	-48.5
ET023	Radio and television broadcasting equipment:				
	Exports	1,379	2,323	944	68.4
	Imports	3,211	4,948	1,736	54.1
	Trade balance	-1,832	-2,624	-793	-43.3
ET024	Electric sound and visual signaling apparatus:				
	Exports	783	858	75	9.6
	Imports	2,064	2,053	-11	-0.5
	Trade balance	-1,281	-1,195	86	6.7
ET025	Electrical capacitors and resistors:				
	Exports	2,037	2,393	356	17.5
	Imports	2,015	2,435	421	20.9
	Trade balance	22	-42	-65	([3])
ET026	Printed circuits:				
	Exports	2,178	2,386	208	9.5
	Imports	2,045	2,236	191	9.3
	Trade balance	133	150	17	12.7
ET027	Circuit apparatus exceeding 1000V:				
	Exports	584	590	5	0.9
	Imports	244	287	43	17.8
	Trade balance	340	302	-38	-11.2
ET028	Circuit apparatus not exceeding 1000V:				
	Exports	4,258	4,991	734	17.2
	Imports	5,103	5,606	503	9.9
	Trade balance	-845	-615	231	27.3

See footnote(s) at end of table.

Table 13-2--*Continued*
Electronic products sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
ET029	Circuit apparatus assemblies:				
	Exports	919	1,078	158	17.2
	Imports	1,852	2,141	289	15.6
	Trade balance	-932	-1,063	-131	-14.0
ET030	Parts of circuit apparatus:				
	Exports	1,589	1,809	220	13.8
	Imports	876	999	123	14.0
	Trade balance	713	809	97	13.6
ET031	Cathode-ray tubes:				
	Exports	2,288	2,174	-115	-5.0
	Imports	774	732	-42	-5.4
	Trade balance	1,514	1,442	-73	-4.8
ET032	Electron tubes other than CRTs:				
	Exports	183	215	32	17.6
	Imports	225	190	-34	-15.2
	Trade balance	-42	25	66	([3])
ET033	Semiconductors and integrated circuits:				
	Exports	29,055	36,615	7,561	26.0
	Imports	33,157	37,158	4,001	12.1
	Trade balance	-4,102	-542	3,560	86.8
ET034	Miscellaneous electrical equipment:				
	Exports	1,561	1,590	29	1.8
	Imports	2,161	2,358	198	9.1
	Trade balance	-600	-769	-169	-28.2
ET035	Computers, peripherals, and parts:				
	Exports	38,962	39,230	269	0.7
	Imports	72,635	81,662	9,027	12.4
	Trade balance	-33,673	-42,432	-8,759	-26.0
ET036	Photographic film and paper:				
	Exports	2,108	2,154	47	2.2
	Imports	1,861	2,009	148	7.9
	Trade balance	247	146	-101	-41.0
ET037	Optical fibers, optical fiber bundles and cables:				
	Exports	807	1,081	274	33.9
	Imports	398	729	330	82.9
	Trade balance	409	352	-56	-13.8
ET038	Optical goods, including ophthalmic goods:				
	Exports	2,438	2,682	243	10.0
	Imports	3,683	4,225	542	14.7
	Trade balance	-1,244	-1,543	-299	-24.0
ET039	Photographic cameras and equipment:				
	Exports	2,030	1,825	-205	-10.1
	Imports	6,447	5,843	-604	-9.4
	Trade balance	-4,417	-4,018	399	9.0
ET040	Medical goods:				
	Exports	11,582	12,455	873	7.5
	Imports	6,934	7,932	998	14.4
	Trade balance	4,648	4,522	-125	-2.7
ET041	Watches and clocks:				
	Exports	311	335	24	7.6
	Imports	3,100	3,136	36	1.2
	Trade balance	-2,789	-2,801	-12	-0.4

See footnote(s) at end of table.

Table 13-2--*Continued*
Electronic products sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
ET042	Drawing, drafting, and calculating instruments:				
	Exports	425	415	-10	-2.2
	Imports	427	431	3	0.8
	Trade balance	-2	-15	-13	-596.6
ET043	Measuring, testing, and controlling instruments:				
	Exports	13,825	14,575	750	5.4
	Imports	8,681	9,656	975	11.2
	Trade balance	5,143	4,919	-225	-4.4

[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 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 14
Miscellaneous Manufactures

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Led by continued expansion in U.S. imports of furniture, and works of art and miscellaneous manufactured goods, the U.S. trade deficit in the miscellaneous manufactures sector[1] expanded by $6.2 billion (16 percent) in 1999 to $45.0 billion (table 14-1). U.S. imports of miscellaneous manufacturers grew by $6.1 billion (11 percent) in 1999 to $60.3 billion, a level five times as large as U.S. exports of sector products. U.S. exports fell slightly by $81 million (0.5 percent) to $15.3 billion, despite a sharp rise in exports of precious jewelry and related articles by $304 million (59 percent) to $822 million, chiefly to the European Union (EU), Japan, and Mexico.

Production processes for goods classified in the miscellaneous manufactures sector tend to be labor-intensive, and the 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 sources of 60 percent of U.S. sector imports in 1999. Imports tend to be concentrated in products that require sewing (e.g., luggage, automobile seat covers, and baseballs), semiskilled assembly (e.g., wood furniture, lamps, and sporting goods), and low-technology injection molding (e.g., toys and dolls), or products for which there is no competing U.S. industry (e.g., home video games, umbrella frames, certain Christmas decorations, and certain works of art). The remaining less import-sensitive product groups are characterized by products with high transportation costs (e.g., upholstered furniture and fairground amusement rides), products with low raw material cost in the United States relative to those of foreign producers (e.g., baseball bats and silverware), and products for which U.S. manufacturers have superior design and production technology or copyright protection (e.g., water skis and board games).

Furniture, works of art and miscellaneous manufactured goods, and lamps and lighting fittings, combined, accounted for 70 percent ($4.3 billion) of both the import value increase in 1999 (table 14-2) and the expanded U.S. trade deficit in sector products. Consumer confidence in the U.S. economy and relatively low interest rates sustained the growth in housing construction in 1999,[2] boosting U.S. sales of both domestically produced and imported furniture, as well as of lamps and light fittings, chiefly from China. Trade statistics for all commodity/industry groups in the miscellaneous manufactures sector are presented in table 14-3 at the end of this chapter.

[1] Miscellaneous manufactures include a wide range of consumer products such as luggage, handbags, musical instruments, silverware, jewelry, bicycles, furniture, writing instruments, lamps, sporting goods, brushes, brooms, toys, dolls, games, umbrellas, Christmas ornaments, artificial flowers, typewriter ribbons, works of art, and antiques, among others.

[2] See ch. 2 for a general discussion about U.S. and international macroeconomic conditions that influenced U.S. merchandise trade performance in 1999.

Table 14-1
Miscellaneous manufactures: **U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1998 and 1999[1]**

Item	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
		Million dollars		
U.S. exports of domestic merchandise:				
China	106	113	7	6.9
Canada	3,644	3,883	239	6.6
Mexico	1,837	1,717	-120	-6.5
Japan	1,739	1,598	-141	-8.1
Italy	181	251	70	38.6
Taiwan	334	227	-107	-32.1
United Kingdom	1,214	1,382	168	13.9
France	317	345	28	8.8
Germany	554	493	-60	-10.9
Thailand	64	55	-9	-14.0
All other	5,361	5,206	-155	-2.9
Total	15,350	15,270	-81	-0.5
EU-15	3,248	3,502	255	7.8
OPEC	601	641	39	6.5
Latin America	3,170	2,913	-258	-8.1
CBERA	517	579	62	12.0
Asia	3,099	2,945	-154	-5.0
Sub-Saharan Africa	94	69	-25	-26.7
Central and Eastern Europe	58	39	-19	-32.3
U.S. imports for consumption:				
China	19,042	21,733	2,691	14.1
Canada	5,196	5,740	545	10.5
Mexico	4,175	4,697	522	12.5
Japan	4,030	4,179	149	3.7
Italy	3,376	3,689	312	9.2
Taiwan	3,106	2,969	-137	-4.4
United Kingdom	1,598	1,804	206	12.9
France	2,120	2,446	326	15.4
Germany	1,009	1,073	64	6.3
Thailand	1,189	1,435	246	20.7
All other	9,377	10,547	1,171	12.5
Total	54,219	60,312	6,093	11.2
EU-15	9,530	10,845	1,315	13.8
OPEC	804	952	148	18.4
Latin America	5,380	5,863	483	9.0
CBERA	440	475	35	8.1
Asia	32,446	35,972	3,526	10.9
Sub-Saharan Africa	90	99	9	10.2
Central and Eastern Europe	297	372	75	25.1
U.S. merchandise trade balance:				
China	-18,936	-21,620	-2,684	-14.2
Canada	-1,552	-1,858	-306	-19.7
Mexico	-2,338	-2,980	-642	-27.5
Japan	-2,290	-2,581	-290	-12.7
Italy	-3,195	-3,438	-242	-7.6
Taiwan	-2,773	-2,742	30	1.1
United Kingdom	-385	-422	-37	-9.7
France	-1,803	-2,101	-298	-16.5
Germany	-456	-580	-124	-27.2
Thailand	-1,125	-1,380	-255	-22.6
All other	-4,016	-5,342	-1,325	-33.0
Total	-38,869	-45,042	-6,173	-15.9
EU-15	-6,282	-7,343	-1,061	-16.9
OPEC	-203	-312	-109	-53.6
Latin America	-2,210	-2,950	-741	-33.5
CBERA	77	104	27	34.8
Asia	-29,347	-33,027	-3,680	-12.5
Sub-Saharan Africa	4	-30	-34	(2)
Central and Eastern Europe	-239	-332	-93	-39.0

[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 1999.

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

Table 14-2
Leading changes in U.S. imports of miscellaneous manufactures, 1998 and 1999

Sector/commodity	1998	1999	Change, 1999 from 1998	
			Absolute	*Percent*
	Million dollars			
Increases:				
Furniture (MM054)	10,417	12,775	2,358	23
Works of art and miscellaneous manufactured goods (MM064)	7,230	8,463	1,233	17
Lamps and lighting fittings (MM056)	3,167	3,858	690	22
Precious jewelry and related articles (MM051)	4,592	5,063	471	10
Seats for motor vehicles and aircraft (MM067)	2,610	3,024	415	16
Toys (MM059)	7,588	7,978	390	5
Brooms, brushes, and hair grooming articles (MM063)	698	955	258	37
All other	17,917	18,196	279	2
Total	54,219	60,312	6,093	11

Note.--Calculations based on unrounded data.

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

U.S. BILATERAL TRADE

Five factors characterized bilateral trade in the miscellaneous manufactures sector: dominance of imports of labor-intensive articles from China; consistently high level of imports of video games from Japan; rationalized production and intercompany trade between the United States and Canada; presence of two-way trade in high-end manufactured goods and trade in works of art between the United States and the EU; and increased reliance on assembly plants in Mexico by foreign manufacturers, particularly for motor vehicle seat covers. Of these five factors, the most significant development in 1999 was a $2.7 billion (14 percent) increase in U.S. imports from China to $21.7 billion (table 14-1). Among significant U.S. sector imports from China, furniture rose by $992 million (49 percent) in 1999 to $3.0 billion, whereas lamps and lighting fittings increased by $519 million (29 percent) to $2.5 billion. In contrast, U.S. exports to China in the miscellaneous manufactures sector grew by $7 million (7 percent) in 1999 to $113 million.

U.S. sector imports from the EU expanded by $1.3 billion (14 percent) in 1999 to $10.8 billion, with much of this import growth accounted for by works of art and miscellaneous manufactured goods, which grew by $855 million (24 percent) in 1999 to $4.4 billion, and furniture, which rose by $319 million (20 percent) to $1.9 billion. Sector imports from Canada rose by $545 million (11 percent) in 1999 to $5.7 billion, with furniture accounting for the bulk of this increase, rising by $506 million (16 percent) in 1999 to $3.6 billion. Imports from Mexico grew by $522 million (13 percent) in 1999 to $4.7 billion; motor vehicle seats accounted for the majority of this increase, as imports of these auto parts assembled in Mexico's maquiladora industry rose by $391 million (27 percent) to $1.8 billion in 1999.

COMMODITY ANALYSIS OF FURNITURE[3]

The U.S. trade deficit in furniture expanded by $2.4 billion (31 percent) in 1999 to $10.2 billion. Demand for imported furniture was stronger and more sustained in the United States than in other industrialized countries,[4] reflecting higher growth rates in the U.S. economy.[5] Rising trade deficits with China (up by $991 million), Canada (up by $518 million), and the EU (up by $288 million) accounted for three-quarters of the total expansion in the U.S. trade deficit in furniture in 1999. Whereas U.S. furniture imports from these suppliers rose sharply in 1999, exports to most partners were little changed, down by $35 million (1 percent) to $2.6 billion.

U.S. imports

U.S. imports of furniture rose by $2.4 billion (23 percent) in 1999 to $12.8 billion (table 14-2). The bulk of the increase in U.S. imports was accounted for by household furniture, which rose by $1.5 billion (23 percent) to $8.0 billion. Imports of office furniture grew by $238 million (17 percent) to $1.8 billion. China was the fastest-growing supplier of furniture to the U.S. market, as imports expanded by $992 million (49 percent) in 1999 to $3.0 billion. According to the China National Furniture Association, the furniture industry in China consists of over 30,000 furniture manufacturers with an estimated 2 million employees.[6] Of these firms, about 8 percent are foreign-owned firms or joint ventures.[7] The production of these firms is export oriented, much of which is directed towards the U.S. market. The principal foreign investors in the Chinese furniture industry are from Hong Kong, Taiwan, and Singapore. Foreign producers locate manufacturing operations in China in order to take advantage of the highly skilled, low-cost labor. Although certain U.S. producers have established production facilities in China, many leading U.S. furniture companies have contract agreements with manufacturers in China for labor-intensive furniture components, reportedly achieving cost savings of 30 to 50 percent over domestically made furniture components.[8] Unassembled furniture accounts for a significant portion of U.S. imports from China, and greatly reduces transportation costs, allowing certain types of wood furniture from China (as well as metal and plastic stacking chairs) to be competitive in the U.S. market.[9]

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[3] The product coverage for this furniture industry/commodity group differs from previous reports on shifts in U.S. merchandise trade because coverage for selected furnishings (pillows, quilts, and sleeping bags) under is now included in industry/commodity group CH048 household furnishings. Further, industry/commodity group MM067 has been created for seats for motor vehicles and aircraft.

[4] According to United Nations (UN) trade data, the United States accounted for an estimated 28 percent of world imports of furniture in 1998 (latest data available), followed by the EU with an estimated 16 percent. Official statistics of the UN.

[5] See ch. 2 for a general discussion about U.S. and international microeconomic conditions that influenced U.S. merchandise trade performance in 1999. In contrast to continued U.S. economic expansion during 1999, Japan's recession deepened during 1998 and continued in 1999; and EU growth waned during the same time period. International Monetary Fund (IMF) *Annual Report of the Executive Board for the Financial Year Ended April 30, 1999*, (Washington, DC: IMF July 30, 2000), p. 1, found at Internet address http://www.imf.org/external/pubs/ft/ar/1999/pdf/file2.pdf, retrieved Apr. 18, 2000.

[6] U.S. Department of Agriculture (USDA), Foreign Agricultural Service, "China; Forest Products Annual Report," p. 10, found at Internet address http://www.stat-usa.gov, retrieved Apr. 24, 2000.

[7] Diane Shen and Merry Cao, "China Furniture Sales," Sept. 1998, p. 3, U.S. Department of Commerce (USDOC), International Trade Administration (ITA), found at internet address http://www.stat-usa.gov, retrieved Apr. 24, 2000.

[8] Brian Carroll, "China Imports Booming," *Furniture Today*, Nov. 8, 1999, p. 1.

[9] For more detailed information and discussion of factors affecting trends and competitiveness in the furniture industry, see Josephine Spalding, *Industry and Trade Summary: Furniture*, USITC publication (forthcoming).

Canada was the largest furniture supplier, and such U.S. imports, grew by $506 million (14 percent) to $3.6 billion. Canadian furniture producers are successful in the U.S. market owing to geographic proximity, access to low-cost lumber, similar preferences in furniture design, comparable methods of manufacture, and similar channels of distribution. The bulk of Canadian furniture manufacturers are in Ontario and Quebec along the northeastern border of the United States.[10] Imports of wood household furniture from Canada grew by $270 million (21 percent) in 1999 to $1.5 billion and accounted for 54 percent of the overall increase in furniture imports from Canada that year. Canadian household furniture manufactures are particularly efficient in the manufacture of modified European-style contemporary furniture, which they can offer to the U.S. market at a lower price than EU competitors because of lower transportation costs.

U.S. furniture imports from the EU, with Italy as the leading source, rose by $288 million (20 percent) to $1.9 billion. The Italian furniture industry has a flexible structure that allows producers to respond quickly to changes in both domestic and international market trends. Representatives of Italian furniture production cooperatives meet regularly to discuss market trends, furniture designs, use of materials and technological innovation. Despite relatively high labor costs, the Italian furniture industry is competitive because it is able to offer its customers new products with short lead times. High-quality upholstered leather seating accounts for a significant portion of U.S. furniture imports from Italy.

Imports from Mexico increased by $152 million (19 percent) to $964 million. The Mexican furniture industry's competitive strength lies in its highly skilled low-cost labor force, proximity to the United States, and access to suitable domestically milled lumber. Traditionally, U.S. imports of household furniture from Mexico have consisted mostly of lower-priced Rustic-style furniture.[11] However, greater demand in the U.S.-Canadian market for rustic furniture has enabled certain low-cost East Asian producers, particularly Indonesia, to more cost-effectively ship higher volumes and compete with producers in Mexico,[12] despite relatively high transportation costs. In response to competition from East Asia, some furniture producers in Mexico are shifting production toward mid-price-range furniture influenced by European designs. Growth in Mexico's furniture industry is being is being augmented by U.S. and Canadian furniture manufacturers' investment in production facilities, in response to tight labor markets in the United States and Canada.[13]

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[10] USDOC, ITA, "The Canadian Furniture Market Overview," May 1999, p. 2, found at internet address http://strategis.ic.gc.ca, retrieved Apr. 26, 2000.

[11] Rustic style furniture has slightly uneven surfaces and a transparent finish that shows the wood grain. By focusing on this market niche, Mexican exporters avoid the highly finished and polished segment of the U.S. wood furniture market where U.S. producers dominate.

[12] Reportedly, the last five collections of Rustic furniture introduced at trade shows in Mexico have been from Indonesia. Brian Carroll, "Next Generation Rustic Expands Reach," *Furniture Today*, July 19, 1999, p. 9.

[13] Brian Carroll, "Mexico's Role Growing as Source for U.S. Product," *Furniture Today*, July 19, 1999, p. 8. HON, a U.S. producer of office furniture has recently opened a manufacturing facility in Monterrey for metal office chairs. See "Mexico Update, *Twin Plant News*, Jan. 2000, p. 1.

Table 14-3
Miscellaneous manufactures sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
MM046	Luggage, handbags, and flat goods:				
	Exports	304	329	25	8.2
	Imports	3,912	4,073	162	4.1
	Trade balance	-3,608	-3,744	-137	-3.8
MM047	Certain other leather goods:				
	Exports	106	123	16	15.5
	Imports	195	209	14	7.1
	Trade balance	-89	-86	3	2.9
MM048	Musical instruments and accessories:				
	Exports	392	360	-33	-8.3
	Imports	1,188	1,256	68	5.7
	Trade balance	-796	-896	-100	-12.6
MM049	Umbrellas, whips, riding crops, and canes:				
	Exports	11	11	([3])	3.6
	Imports	250	248	-2	-0.8
	Trade balance	-240	-237	2	1.0
MM050	Silverware and related articles of precious metal:				
	Exports	114	123	9	7.6
	Imports	158	57	-101	-63.9
	Trade balance	-44	66	110	([4])
MM051	Precious jewelry and related articles:				
	Exports	518	822	304	58.7
	Imports	4,592	5,063	471	10.3
	Trade balance	-4,073	-4,241	-167	-4.1
MM052	Costume jewelry and related articles:				
	Exports	128	133	5	3.6
	Imports	493	546	54	10.9
	Trade balance	-364	-413	-49	-13.4
MM053	Bicycles and certain parts:				
	Exports	292	271	-22	-7.4
	Imports	1,115	1,199	84	7.5
	Trade balance	-823	-928	-105	-12.8
MM054	Furniture:				
	Exports	2,632	2,597	-35	-1.3
	Imports	10,417	12,775	2,358	22.6
	Trade balance	-7,785	-10,178	-2,393	-30.7
MM055	Writing instruments and related articles:				
	Exports	373	333	-40	-10.8
	Imports	842	965	123	14.6
	Trade balance	-468	-632	-163	-34.9
MM056	Lamps and lighting fittings:				
	Exports	619	585	-34	-5.5
	Imports	3,167	3,858	690	21.8
	Trade balance	-2,548	-3,272	-725	-28.4
MM057	Prefabricated buildings:				
	Exports	385	327	-57	-14.9
	Imports	160	221	60	37.7
	Trade balance	224	107	-118	-52.5
MM058	Dolls:				
	Exports	28	25	-4	-12.8
	Imports	1,484	1,374	-110	-7.4
	Trade balance	-1,455	-1,349	106	7.3
MM059	Toys:				
	Exports	540	497	-43	-8.0

Table 14-3--Continued
Miscellaneous manufactures sector: U.S. trade for selected industry/commodity groups, 1998 and 1999[1]

USITC code[2]	Industry/commodity group	1998	1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
			Million Dollars		
	Imports	7,588	7,978	390	5.1
	Trade balance	-7,048	-7,481	-433	-6.1
MM060	Games:				
	Exports	913	936	23	2.5
	Imports	4,182	4,086	-95	-2.3
	Trade balance	-3,269	-3,150	118	3.6
MM061	Sporting goods:				
	Exports	1,688	1,621	-68	-4.0
	Imports	3,041	3,027	-14	-0.4
	Trade balance	-1,353	-1,407	-54	-4.0
MM062	Smokers' articles:				
	Exports	71	71	([3])	-0.3
	Imports	145	134	-11	-7.9
	Trade balance	-74	-63	11	15.1
MM063	Brooms, brushes, and hair grooming articles:				
	Exports	184	206	22	11.7
	Imports	698	955	258	36.9
	Trade balance	-514	-750	-236	-45.9
MM064	Works of art and miscellaneous manufactured goods:				
	Exports	1,685	1,731	46	2.7
	Imports	7,230	8,463	1,233	17.1
	Trade balance	-5,545	-6,732	-1,187	-21.4
MM065	Apparel fasteners:				
	Exports	136	140	4	2.9
	Imports	103	89	-14	-13.6
	Trade balance	33	51	18	54.0
MM066	Arms and ammunition:				
	Exports	2,348	2,152	-195	-8.3
	Imports	649	711	61	9.4
	Trade balance	1,698	1,442	-257	-15.1
MM067	Seats for motor vehicles and aircraft:				
	Exports	1,881	1,878	-3	-0.2
	Imports	2,610	3,024	415	15.9
	Trade balance	-728	-1,146	-418	-57.4

[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 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.

APPENDIX A
Industry/Commodity Groups in this Report

Industry/commodity groups have been extensively revised (e.g., new groups, combined groups, split-off groups, or shifting HTS subheadings among groups) to provide more realistic product coverage. Moreover, titles of many industry/commodity groups have been modified to be more succinct, more descriptive of the product coverage, or both.

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
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
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

Chemicals and related products sector--*Continued*

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 and apparel, and footwear sectors
(HTS chapters 39, 40, 42, 43, 50-65)

CH045 Fibers and yarns, except raw cotton and raw wool
CH046 Fabrics
CH047 Carpets and rugs
CH048 Home furnishings
CH049 Apparel
CH050 Miscellaneous textile products
CH051 Footwear

Minerals and metals sector
(HTS chapters 25, 26, 68-76, 78-84)

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
MM006 Zinc ores, concentrates, and residues
MM007 Certain ores, concentrates, ash, and residues
MM008 Precious metal ores and concentrates
MM009 Cement, stone, and related products
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
MM021 Primary iron products
MM022 Ferroalloys
MM023 Iron and steel waste and scrap
MM024 Abrasive and ferrous products
MM025 Steel mill products
MM026 Steel pipe and tube fittings and certain cast products
MM027 Fabricated structurals
MM028 Metal construction components
MM029 Metallic containers

Minerals and metals sector--*Continued*

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
MM037 Unwrought aluminum
MM038 Aluminum mill products
MM039 Lead and related articles
MM040 Zinc and related articles
MM041 Certain base metals and chemical elements
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
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
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

Transportation equipment sector-- ***Continued***

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 42, 66, 67, 71, 87, 92-97)

MM046 Luggage, handbags, and 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
MM064 Works of art and miscellaneous manufactured goods
MM065 Apparel fasteners
MM066 Arms and ammunition
MM067 Seats for motor vehicles and aircraft

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[1] This coding system (e.g., AG001) is used by the USITC to identify major groupings of the U.S. Harmonized Tariff Schedule (HTS) headings/subheadings and corresponding export categories for trade monitoring purposes. See app. B for industry and trade data for each grouping.

[2] Products in some HTS chapters are divided between sectors 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
Profile of U.S. Industry and Market, by Industry/Commodity Groups, 1995-99

Note--These data have been estimated by the Commission's international trade analysts on the basis of primary and secondary data sources including discussion 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 investigation or other work. Furthermore, these data may undergo adjustments based on revisions in tariff nomenclature, classification practices, or redefinitions of industry classes. Moreover, certain industry/commodity groups reflect significant changes from those in previous years' reports; hence, basic information on establishments, employees, capacity utilization, and shipments or production have been re-estimated for the full 5-year period (1995-99) for the affected industry/commodity groups. Likewise, export and import data reported over the full period reflect these revisions to the industry/commodity groups.

Table B-1
Agricultural products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
AG001	Certain miscellaneous animals and meats:					
	Number of establishments	132,800	136,300	130,700	126,800	134,500
	Employees (thousands)	149	140	135	141	148
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	6,700	7,450	7,600	7,150	7,650
	U.S. exports (million dollars)	1,783	1,895	1,848	1,859	1,754
	U.S. imports (million dollars)	1,071	1,146	1,262	1,373	1,513
	Apparent U.S. consumption (million dollars)	5,987	6,702	7,014	6,665	7,409
	Trade balance (million dollars)	713	748	586	485	241
	Ratio of imports to consumption (percent)	17.9	17.1	18.0	20.6	20.4
	Ratio of exports to production (percent)	26.6	25.4	24.3	26.0	22.9
AG002	Cattle and beef:					
	Number of establishments	1,182,394	1,195,200	1,169,100	1,149,200	1,097,750
	Employees (thousands)	1,292	1,269	1,152	1,238	1,240
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	41,878	40,768	40,670	35,859	37,900
	U.S. exports (million dollars)	2,648	2,447	2,573	2,382	2,753
	U.S. imports (million dollars)	2,627	2,248	2,534	2,752	2,905
	Apparent U.S. consumption (million dollars)	41,857	40,569	40,631	36,229	38,052
	Trade balance (million dollars)	21	199	39	-370	-152
	Ratio of imports to consumption (percent)	6.3	5.5	6.2	7.6	7.6
	Ratio of exports to production (percent)	6.3	6.0	6.3	6.6	7.3
AG003	Swine and pork:					
	Number of establishments	206,087	158,250	138,700	115,137	99,200
	Employees (thousands)	277	216	201	179	105
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	17,911	21,049	21,227	18,479	18,300
	U.S. exports (million dollars)	748	918	943	934	932
	U.S. imports (million dollars)	566	742	792	714	717
	Apparent U.S. consumption (million dollars)	17,730	20,873	21,075	18,259	18,085
	Trade balance (million dollars)	181	176	152	220	215
	Ratio of imports to consumption (percent)	3.2	3.6	3.8	3.9	4.0
	Ratio of exports to production (percent)	4.2	4.4	4.4	5.1	5.1
AG004	Sheep and meat of sheep:					
	Number of establishments	81,070	77,010	74,710	70,020	67,940
	Employees (thousands)	83	77	76	70	68
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	478	477	462	373	423
	U.S. exports (million dollars)	19	21	65	35	25
	U.S. imports (million dollars)	85	119	144	166	179
	Apparent U.S. consumption (million dollars)	544	575	540	504	578
	Trade balance (million dollars)	-66	-98	-78	-131	-155
	Ratio of imports to consumption (percent)	15.6	20.6	26.6	32.9	31.1
	Ratio of exports to shipments (percent)	4.1	4.4	14.2	9.4	5.9
AG005	Poultry:					
	Number of establishments	450	452	450	440	430
	Employees (thousands)	195	190	190	185	180
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. production (million dollars)	14,600	17,095	17,105	17,200	17,300
	U.S. exports (million dollars)	2,149	2,589	2,515	2,255	1,878
	U.S. imports (million dollars)	31	35	43	46	57
	Apparent U.S. consumption (million dollars)	12,482	14,541	14,633	14,990	15,479
	Trade balance (million dollars)	2,118	2,554	2,472	2,210	1,821
	Ratio of imports to consumption (percent)	0.2	0.2	0.3	0.3	0.4
	Ratio of exports to production (percent)	14.7	15.1	14.7	13.1	10.9

See footnote(s) at end of table.

Table B-1--*Continued*
Agricultural products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
AG006	Fresh or frozen fish:					
	Number of establishments	1,456	1,394	1,421	1,400	1,400
	Employees (thousands)	41	39	40	39	40
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	5,982	5,768	5,517	6,000	6,000
	U.S. exports (million dollars)	1,998	1,820	1,609	1,289	1,634
	U.S. imports (million dollars)	2,193	2,229	2,471	2,641	2,945
	Apparent U.S. consumption (million dollars)	6,177	6,177	6,379	7,353	7,310
	Trade balance (million dollars)	-195	-409	-862	-1,353	-1,310
	Ratio of imports to consumption (percent)	35.5	36.1	38.7	35.9	40.3
	Ratio of exports to shipments (percent)	33.4	31.5	29.2	21.5	27.2
AG007	Canned fish:					
	Number of establishments	40	37	38	36	36
	Employees (thousands)	8	7	7	7	7
	Capacity utilization (percent)	80	70	65	60	65
	U.S. shipments (million dollars)	1,544	1,429	1,361	1,416	1,500
	U.S. exports (million dollars)	203	185	167	170	222
	U.S. imports (million dollars)	434	453	486	530	611
	Apparent U.S. consumption (million dollars)	1,775	1,698	1,680	1,776	1,889
	Trade balance (million dollars)	-231	-269	-319	-360	-389
	Ratio of imports to consumption (percent)	24.5	26.7	28.9	29.9	32.3
	Ratio of exports to shipments (percent)	13.1	12.9	12.3	12.0	14.8
AG008	Cured and other fish:					
	Number of establishments	128	117	114	114	114
	Employees (thousands)	8	11	9	9	9
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	99	113	143	132	130
	U.S. exports (million dollars)	226	242	159	146	166
	U.S. imports (million dollars)	236	241	249	252	277
	Apparent U.S. consumption (million dollars)	109	112	233	238	241
	Trade balance (million dollars)	-10	1	-90	-106	-111
	Ratio of imports to consumption (percent)	216.9	215.0	106.8	106.1	115.0
	Ratio of exports to shipments (percent)	228.3	213.8	111.1	110.9	127.8
AG009	Shellfish:					
	Number of establishments	800	750	750	725	700
	Employees (thousands)	60	58	59	60	60
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	1,800	1,800	1,900	2,000	2,200
	U.S. exports (million dollars)	788	739	720	589	752
	U.S. imports (million dollars)	3,885	3,742	4,473	4,654	5,072
	Apparent U.S. consumption (million dollars)	4,897	4,803	5,653	6,065	6,519
	Trade balance (million dollars)	-3,097	-3,003	-3,753	-4,065	-4,319
	Ratio of imports to consumption (percent)	79.3	77.9	79.1	76.7	77.8
	Ratio of exports to production (percent)	43.8	41.0	37.9	29.5	34.2
AG010	Dairy produce:					
	Number of establishments	143,000	135,000	130,000	140,000	130,000
	Employees (thousands)	662	650	640	630	620
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	55,800	58,100	60,500	62,000	63,000
	U.S. exports (million dollars)	636	506	618	592	591
	U.S. imports (million dollars)	1,052	1,198	1,109	1,325	1,387
	Apparent U.S. consumption (million dollars)	56,216	58,793	60,992	62,733	63,796
	Trade balance (million dollars)	-416	-693	-492	-733	-796
	Ratio of imports to consumption (percent)	1.9	2.0	1.8	2.1	2.2
	Ratio of exports to shipments (percent)	1.1	0.9	1.0	1.0	0.9

See footnote(s) at end of table.

Table B-1--*Continued*
Agricultural products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
AG011	Eggs:					
	Number of establishments	70	68	68	67	65
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. production (million dollars)	6,216	6,378	6,473	6,659	6,700
	U.S. exports (million dollars)	164	207	207	207	155
	U.S. imports (million dollars)	20	24	19	14	20
	Apparent U.S. consumption (million dollars)	6,072	6,195	6,285	6,466	6,566
	Trade balance (million dollars)	144	183	188	193	134
	Ratio of imports to consumption (percent)	0.3	0.4	0.3	0.2	0.3
	Ratio of exports to production (percent)	2.6	3.2	3.2	3.1	2.3
AG012	Sugar and other sweeteners:					
	Number of establishments	95	95	95	95	93
	Employees (thousands)	30	30	29	28	28
	Capacity utilization (percent)	93	94	93	89	89
	U.S. shipments (million dollars)	8,666	10,000	10,010	10,020	10,050
	U.S. exports (million dollars)	354	381	359	381	357
	U.S. imports (million dollars)	885	1,407	1,321	1,068	879
	Apparent U.S. consumption (million dollars)	9,197	11,027	10,971	10,707	10,572
	Trade balance (million dollars)	-531	-1,027	-961	-687	-522
	Ratio of imports to consumption (percent)	9.6	12.8	12.0	10.0	8.3
	Ratio of exports to shipments (percent)	4.1	3.8	3.6	3.8	3.6
AG013	Animal feeds:					
	Number of establishments	1,875	1,850	1,825	1,800	1,800
	Employees (thousands)	56	54	53	53	53
	Capacity utilization (percent)	73	74	72	72	72
	U.S. production (million dollars)	30,980	35,181	36,899	37,486	37,960
	U.S. exports (million dollars)	3,815	4,370	4,831	4,307	3,621
	U.S. imports (million dollars)	510	689	717	661	604
	Apparent U.S. consumption (million dollars)	27,675	31,500	32,785	33,840	34,943
	Trade balance (million dollars)	3,305	3,681	4,114	3,646	3,017
	Ratio of imports to consumption (percent)	1.8	2.2	2.2	2.0	1.7
	Ratio of exports to production (percent)	12.3	12.4	13.1	11.5	9.5
AG014	Live plants:					
	Number of establishments	24,000	24,000	26,000	28,000	30,000
	Employees (thousands)	120	120	120	130	139
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	9,676	9,995	10,572	11,744	12,175
	U.S. exports (million dollars)	96	92	117	142	144
	U.S. imports (million dollars)	283	312	336	387	428
	Apparent U.S. consumption (million dollars)	9,863	10,215	10,791	11,989	12,460
	Trade balance (million dollars)	-187	-220	-219	-245	-285
	Ratio of imports to consumption (percent)	2.9	3.1	3.1	3.2	3.4
	Ratio of exports to shipments (percent)	1.0	0.9	1.1	1.2	1.2
AG015	Seeds:					
	Number of establishments	12,235	12,317	12,398	12,479	12,561
	Employees (thousands)	138	138	(2)	(2)	(2)
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	2,000	2,000	(2)	(2)	(2)
	U.S. exports (million dollars)	587	648	720	706	697
	U.S. imports (million dollars)	236	298	361	400	428
	Apparent U.S. consumption (million dollars)	1,649	1,650	(2)	(2)	(2)
	Trade balance (million dollars)	351	350	359	306	269
	Ratio of imports to consumption (percent)	14.3	18.1	(2)	(2)	(2)
	Ratio of exports to shipments (percent)	29.4	32.4	(2)	(2)	(2)

See footnote(s) at end of table.

Table B-1--*Continued*
Agricultural products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
AG016	Cut flowers:					
	Number of establishments	2,500	2,400	2,400	2,400	(2)
	Employees (thousands)	35	34	34	34	(2)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	409	447	462	437	451
	U.S. exports (million dollars)	40	48	49	45	41
	U.S. imports (million dollars)	512	573	595	614	592
	Apparent U.S. consumption (million dollars)	880	972	1,008	1,007	1,001
	Trade balance (million dollars)	-471	-525	-546	-570	-550
	Ratio of imports to consumption (percent)	58.1	58.9	59.0	61.0	59.1
	Ratio of exports to shipments (percent)	9.9	10.6	10.6	10.2	9.2
AG017	Miscellaneous vegetable substances:					
	Number of establishments	10,500	10,000	9,500	9,000	9,000
	Employees (thousands)	(2)	(2)	(2)	(2)	(2)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	1,200	1,100	1,000	900	900
	U.S. exports (million dollars)	458	449	470	462	453
	U.S. imports (million dollars)	762	792	855	993	839
	Apparent U.S. consumption (million dollars)	1,505	1,444	1,386	1,431	1,286
	Trade balance (million dollars)	-305	-344	-386	-531	-386
	Ratio of imports to consumption (percent)	50.7	54.9	61.7	69.4	65.3
	Ratio of exports to production (percent)	38.1	40.8	47.0	51.4	50.4
AG018	Fresh, chilled, or frozen vegetables:					
	Number of establishments	36,100	36,000	35,500	33,500	31,000
	Employees (thousands)	45	46	44	43	40
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	4,400	4,530	4,100	4,200	4,300
	U.S. exports (million dollars)	1,148	1,070	1,178	1,199	1,201
	U.S. imports (million dollars)	1,586	1,840	1,857	2,313	2,236
	Apparent U.S. consumption (million dollars)	4,838	5,300	4,778	5,314	5,335
	Trade balance (million dollars)	-438	-770	-678	-1,114	-1,035
	Ratio of imports to consumption (percent)	32.8	34.7	38.9	43.5	41.9
	Ratio of exports to production (percent)	26.1	23.6	28.7	28.6	27.9
AG019	Prepared or preserved vegetables, mushrooms, and olives:					
	Number of establishments	1,690	1,700	1,680	1,620	1,600
	Employees (thousands)	4	4	4	4	4
	Capacity utilization (percent)	87	88	85	87	89
	U.S. production (million dollars)	8,200	8,500	8,200	8,350	8,400
	U.S. exports (million dollars)	1,316	1,332	1,489	1,617	1,565
	U.S. imports (million dollars)	982	981	1,075	1,218	1,384
	Apparent U.S. consumption (million dollars)	7,866	8,149	7,786	7,951	8,220
	Trade balance (million dollars)	334	351	414	399	180
	Ratio of imports to consumption (percent)	12.5	12.0	13.8	15.3	16.8
	Ratio of exports to production (percent)	16.0	15.7	18.2	19.4	18.6
AG020	Edible nuts:					
	Number of establishments	38,000	38,000	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)	2,730	2,695	3,027	2,477	2,542
	U.S. exports (million dollars)	1,462	1,666	1,491	1,392	1,212
	U.S. imports (million dollars)	509	570	630	660	794
	Apparent U.S. consumption (million dollars)	1,777	1,599	2,166	1,745	2,124
	Trade balance (million dollars)	953	1,096	861	732	418
	Ratio of imports to consumption (percent)	28.7	35.7	29.1	37.8	37.4
	Ratio of exports to shipments (percent)	53.6	61.8	49.2	56.2	47.7

See footnote(s) at end of table.

Table B-1--*Continued*
Agricultural products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
AG021	Tropical fruit:					
	Number of establishments	9,000	9,000	9,000	9,000	8,500
	Employees (thousands)	25	25	25	25	20
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	355	403	376	387	498
	U.S. exports (million dollars)	76	79	70	60	64
	U.S. imports (million dollars)	1,337	1,391	1,466	1,495	1,574
	Apparent U.S. consumption (million dollars)	1,617	1,715	1,772	1,821	2,008
	Trade balance (million dollars)	-1,262	-1,312	-1,396	-1,434	-1,510
	Ratio of imports to consumption (percent)	82.7	81.1	82.7	82.1	78.4
	Ratio of exports to shipments (percent)	21.3	19.5	18.7	15.6	12.8
AG022	Citrus fruit:					
	Number of establishments	17,865	17,755	17,650	17,562	17,450
	Employees (thousands)	94	93	93	92	91
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	2,329	2,516	2,574	2,600	2,500
	U.S. exports (million dollars)	740	700	735	672	498
	U.S. imports (million dollars)	132	177	201	211	331
	Apparent U.S. consumption (million dollars)	1,721	1,992	2,039	2,139	2,333
	Trade balance (million dollars)	608	524	535	461	167
	Ratio of imports to consumption (percent)	7.7	8.9	9.8	9.9	14.2
	Ratio of exports to production (percent)	31.8	27.8	28.6	25.9	19.9
AG023	Deciduous fruit:					
	Number of establishments	82,000	82,000	82,000	82,000	81,000
	Employees (thousands)	160	160	160	160	155
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	2,305	3,003	2,215	1,886	2,058
	U.S. exports (million dollars)	718	731	780	665	743
	U.S. imports (million dollars)	181	197	187	177	268
	Apparent U.S. consumption (million dollars)	1,767	2,469	1,623	1,398	1,583
	Trade balance (million dollars)	538	534	592	488	475
	Ratio of imports to consumption (percent)	10.2	8.0	11.6	12.7	16.9
	Ratio of exports to shipments (percent)	31.2	24.3	35.2	35.3	36.1
AG024	Other fresh fruit:					
	Number of establishments	60,000	60,000	60,000	60,000	55,000
	Employees (thousands)	120	120	120	120	115
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,859	2,380	2,309	2,222	2,383
	U.S. exports (million dollars)	488	507	557	484	562
	U.S. imports (million dollars)	615	744	717	890	1,031
	Apparent U.S. consumption (million dollars)	1,986	2,617	2,469	2,628	2,852
	Trade balance (million dollars)	-127	-237	-160	-406	-469
	Ratio of imports to consumption (percent)	31.0	28.4	29.0	33.9	36.1
	Ratio of exports to shipments (percent)	26.3	21.3	24.1	21.8	23.6
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)	748	861	806	665	649
	U.S. exports (million dollars)	382	388	386	385	379
	U.S. imports (million dollars)	47	58	61	60	78
	Apparent U.S. consumption (million dollars)	414	531	481	340	348
	Trade balance (million dollars)	334	330	325	325	301
	Ratio of imports to consumption (percent)	11.4	11.0	12.7	17.7	22.3
	Ratio of exports to shipments (percent)	51.0	45.1	47.8	57.9	58.4

See footnote(s) at end of table.

Table B-1--*Continued*
Agricultural products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
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)	650	648	568	664	701
	U.S. exports (million dollars)	77	79	79	92	89
	U.S. imports (million dollars)	68	82	88	89	125
	Apparent U.S. consumption (million dollars)	641	651	577	661	738
	Trade balance (million dollars)	9	-3	-9	3	-37
	Ratio of imports to consumption (percent)	10.7	12.6	15.3	13.4	17.0
	Ratio of exports to shipments (percent)	11.9	12.2	14.0	13.8	12.7
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)	3,946	3,882	4,262	4,411	4,499
	U.S. exports (million dollars)	179	173	182	185	180
	U.S. imports (million dollars)	415	484	545	484	576
	Apparent U.S. consumption (million dollars)	4,182	4,193	4,625	4,710	4,895
	Trade balance (million dollars)	-236	-311	-363	-299	-396
	Ratio of imports to consumption (percent)	9.9	11.5	11.8	10.3	11.8
	Ratio of exports to shipments (percent)	4.5	4.5	4.3	4.2	4.0
AG028	Coffee and tea:					
	Number of establishments	(2)	(2)	247	247	247
	Employees (thousands)	(2)	(2)	13	13	13
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	(2)	(2)	(2)	(2)	(2)
	U.S. exports (million dollars)	229	237	254	263	284
	U.S. imports (million dollars)	3,427	2,958	4,071	3,656	3,114
	Apparent U.S. consumption (million dollars)	(2)	(2)	(2)	(2)	(2)
	Trade balance (million dollars)	-3,198	-2,721	-3,816	-3,393	-2,830
	Ratio of imports to consumption (percent)	(2)	(2)	(2)	(2)	(2)
	Ratio of exports to shipments (percent)	(2)	(2)	(2)	(2)	(2)
AG029	Spices:					
	Number of establishments	74	74	105	105	105
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	(2)	(2)	3,206	3,206	3,206
	U.S. exports (million dollars)	46	55	58	66	72
	U.S. imports (million dollars)	290	349	416	455	530
	Apparent U.S. consumption (million dollars)	(2)	(2)	3,564	3,595	3,664
	Trade balance (million dollars)	-243	-294	-358	-389	-458
	Ratio of imports to consumption (percent)	(2)	(2)	11.7	12.7	14.5
	Ratio of exports to shipments (percent)	(2)	(2)	1.8	2.1	2.3
AG030	Cereals:					
	Number of establishments	355,000	339,000	322,000	298,000	282,000
	Employees (thousands)	(2)	(2)	(2)	(2)	(2)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	34,700	37,700	39,900	35,600	28,770
	U.S. exports (million dollars)	14,674	16,751	11,106	9,991	10,129
	U.S. imports (million dollars)	684	791	984	773	732
	Apparent U.S. consumption (million dollars)	20,710	21,739	29,778	26,382	19,372
	Trade balance (million dollars)	13,990	15,961	10,122	9,218	9,398
	Ratio of imports to consumption (percent)	3.3	3.6	3.3	2.9	3.8
	Ratio of exports to production (percent)	42.3	44.4	27.8	28.1	35.2

See footnote(s) at end of table.

Table B-1--*Continued*
Agricultural products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
AG031	Milled grains, malts, and starches:					
	Number of establishments	490	500	505	510	515
	Employees (thousands)	21	21	21	21	21
	Capacity utilization (percent)	88	89	86	83	(2)
	U.S. production (million dollars)	11,193	11,942	12,522	12,532	12,753
	U.S. exports (million dollars)	498	429	435	417	439
	U.S. imports (million dollars)	221	265	233	258	261
	Apparent U.S. consumption (million dollars)	10,916	11,778	12,320	12,373	12,575
	Trade balance (million dollars)	277	164	202	159	178
	Ratio of imports to consumption (percent)	2.0	2.3	1.9	2.1	2.1
	Ratio of exports to production (percent)	4.5	3.6	3.5	3.3	3.4
AG032	Oilseeds:					
	Number of establishments	355,000	339,000	322,000	298,000	282,000
	Employees (thousands)	(2)	(2)	(2)	(2)	(2)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	15,030	16,000	19,100	18,900	14,900
	U.S. exports (million dollars)	5,661	7,638	7,700	5,166	4,776
	U.S. imports (million dollars)	221	279	335	315	263
	Apparent U.S. consumption (million dollars)	9,591	8,642	11,735	14,049	10,387
	Trade balance (million dollars)	5,439	7,358	7,365	4,851	4,513
	Ratio of imports to consumption (percent)	2.3	3.2	2.9	2.2	2.5
	Ratio of exports to production (percent)	37.7	47.7	40.3	27.3	32.1
AG033	Animal or vegetable fats and oils:					
	Number of establishments	527	523	519	515	510
	Employees (thousands)	27	27	26	26	26
	Capacity utilization (percent)	83	80	84	90	92
	U.S. shipments (million dollars)	7,780	8,220	8,660	10,040	7,900
	U.S. exports (million dollars)	2,529	1,826	2,173	2,763	1,947
	U.S. imports (million dollars)	1,265	1,480	1,517	1,475	1,348
	Apparent U.S. consumption (million dollars)	6,516	7,874	8,004	8,751	7,301
	Trade balance (million dollars)	1,264	346	656	1,289	599
	Ratio of imports to consumption (percent)	19.4	18.8	19.0	16.9	18.5
	Ratio of exports to shipments (percent)	32.5	22.2	25.1	27.5	24.7
AG034	Pasta, cereals, and other bakery goods:					
	Number of establishments	4,250	4,300	4,400	4,450	4,450
	Employees (thousands)	295	300	300	300	300
	Capacity utilization (percent)	77	77	77	71	72
	U.S. production (million dollars)	53,961	52,691	57,181	58,799	60,470
	U.S. exports (million dollars)	824	901	992	1,051	1,044
	U.S. imports (million dollars)	1,088	1,201	1,322	1,461	1,637
	Apparent U.S. consumption (million dollars)	54,225	52,991	57,510	59,209	61,063
	Trade balance (million dollars)	-264	-300	-329	-410	-593
	Ratio of imports to consumption (percent)	2.0	2.3	2.3	2.5	2.7
	Ratio of exports to production (percent)	1.5	1.7	1.7	1.8	1.7
AG035	Sauces, condiments, and soups:					
	Number of establishments	240	245	250	250	255
	Employees (thousands)	30	30	30	30	30
	Capacity utilization (percent)	69	69	68	68	68
	U.S. production (million dollars)	14,457	14,311	15,210	15,514	15,828
	U.S. exports (million dollars)	419	462	530	529	587
	U.S. imports (million dollars)	267	313	353	396	457
	Apparent U.S. consumption (million dollars)	14,305	14,163	15,033	15,381	15,698
	Trade balance (million dollars)	152	148	177	133	130
	Ratio of imports to consumption (percent)	1.9	2.2	2.3	2.6	2.9
	Ratio of exports to production (percent)	2.9	3.2	3.5	3.4	3.7

See footnote(s) at end of table.

Table B-1--*Continued*
Agricultural products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
AG036	Infant formulas, malt extracts, and other edible preparations:					
	Number of establishments	1,325	1,350	1,375	1,400	1,400
	Employees (thousands)	100	100	105	105	105
	Capacity utilization (percent)	68	68	65	72	72
	U.S. production (million dollars)	29,128	30,264	31,585	32,613	33,675
	U.S. exports (million dollars)	1,629	1,990	2,507	2,097	2,458
	U.S. imports (million dollars)	391	428	464	560	670
	Apparent U.S. consumption (million dollars)	27,890	28,702	29,542	31,076	31,887
	Trade balance (million dollars)	1,238	1,562	2,043	1,537	1,788
	Ratio of imports to consumption (percent)	1.4	1.5	1.6	1.8	2.1
	Ratio of exports to production (percent)	5.6	6.6	7.9	6.4	7.3
AG037	Cocoa, chocolate, and confectionery:					
	Number of establishments	970	1,000	1,000	1,010	1,200
	Employees (thousands)	68	72	73	74	80
	Capacity utilization (percent)	74	74	68	72	85
	U.S. shipments (million dollars)	11,700	12,500	12,700	12,800	14,000
	U.S. exports (million dollars)	524	586	662	602	651
	U.S. imports (million dollars)	1,478	1,806	1,910	2,183	2,123
	Apparent U.S. consumption (million dollars)	12,654	13,720	13,948	14,381	15,472
	Trade balance (million dollars)	-954	-1,220	-1,248	-1,581	-1,472
	Ratio of imports to consumption (percent)	11.7	13.2	13.7	15.2	13.7
	Ratio of exports to shipments (percent)	4.5	4.7	5.2	4.7	4.7
AG038	Fruit and vegetable juices:					
	Number of establishments	98	98	98	97	95
	Employees (thousands)	149	149	148	147	145
	Capacity utilization (percent)	90	89	83	83	83
	U.S. shipments (million dollars)	2,276	2,500	2,700	2,750	2,900
	U.S. exports (million dollars)	652	642	677	668	748
	U.S. imports (million dollars)	635	929	856	677	796
	Apparent U.S. consumption (million dollars)	2,258	2,787	2,878	2,759	2,948
	Trade balance (million dollars)	18	-287	-178	-9	-48
	Ratio of imports to consumption (percent)	28.1	33.3	29.7	24.5	27.0
	Ratio of exports to shipments (percent)	28.7	25.7	25.1	24.3	25.8
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)	70	71	67	67	67
	U.S. shipments (million dollars)	57,197	58,505	59,853	61,000	62,000
	U.S. exports (million dollars)	332	244	299	302	328
	U.S. imports (million dollars)	353	430	524	568	625
	Apparent U.S. consumption (million dollars)	57,219	58,691	60,079	61,266	62,298
	Trade balance (million dollars)	-22	-186	-226	-266	-298
	Ratio of imports to consumption (percent)	0.6	0.7	0.9	0.9	1.0
	Ratio of exports to shipments (percent)	0.6	0.4	0.5	0.5	0.5
AG040	Malt beverages:					
	Number of establishments	879	1,504	1,504	1,504	1,350
	Employees (thousands)	36	36	35	34	34
	Capacity utilization (percent)	76	76	75	82	82
	U.S. shipments (million dollars)	17,108	18,195	18,203	18,400	18,400
	U.S. exports (million dollars)	413	362	319	254	201
	U.S. imports (million dollars)	1,151	1,301	1,480	1,699	1,881
	Apparent U.S. consumption (million dollars)	17,846	19,134	19,365	19,845	20,080
	Trade balance (million dollars)	-738	-939	-1,162	-1,445	-1,680
	Ratio of imports to consumption (percent)	6.4	6.8	7.6	8.6	9.4
	Ratio of exports to shipments (percent)	2.4	2.0	1.8	1.4	1.1

See footnote(s) at end of table.

Table B-1--*Continued*
Agricultural products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
AG041	Wine and certain other fermented beverages:					
	Number of establishments	1,820	1,994	1,994	1,994	2,000
	Employees (thousands)	14	14	15	15	16
	Capacity utilization (percent)	75	73	80	79	79
	U.S. shipments (million dollars)	4,674	5,410	5,843	5,843	(2)
	U.S. exports (million dollars)	236	320	415	532	541
	U.S. imports (million dollars)	1,159	1,435	1,716	1,881	2,210
	Apparent U.S. consumption (million dollars)	5,597	6,525	7,144	7,192	(2)
	Trade balance (million dollars)	-923	-1,115	-1,301	-1,349	-1,669
	Ratio of imports to consumption (percent)	20.7	22.0	24.0	26.2	(2)
	Ratio of exports to shipments (percent)	5.0	5.9	7.1	9.1	(2)
AG042	Distilled spirits:					
	Number of establishments	66	63	60	57	57
	Employees (thousands)	7	6	6	6	6
	Capacity utilization (percent)	66	65	65	63	63
	U.S. shipments (million dollars)	3,371	3,187	3,187	3,187	3,187
	U.S. exports (million dollars)	488	574	580	506	480
	U.S. imports (million dollars)	1,629	1,843	1,968	2,086	2,383
	Apparent U.S. consumption (million dollars)	4,513	4,456	4,575	4,767	5,089
	Trade balance (million dollars)	-1,142	-1,269	-1,388	-1,580	-1,902
	Ratio of imports to consumption (percent)	36.1	41.4	43.0	43.8	46.8
	Ratio of exports to shipments (percent)	14.5	18.0	18.2	15.9	15.1
AG043	Unmanufactured tobacco:					
	Number of establishments	117,491	115,232	112,973	110,000	100,000
	Employees (thousands)	(2)	(2)	(2)	(2)	(2)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	3,084	3,140	3,328	3,328	3,461
	U.S. exports (million dollars)	1,400	1,390	1,553	1,459	1,294
	U.S. imports (million dollars)	550	923	1,089	771	711
	Apparent U.S. consumption (million dollars)	2,234	2,672	2,864	2,640	2,878
	Trade balance (million dollars)	850	468	464	688	583
	Ratio of imports to consumption (percent)	24.6	34.5	38.0	29.2	24.7
	Ratio of exports to production (percent)	45.4	44.3	46.7	43.8	37.4
AG044	Cigars and certain other manufactured tobacco:					
	Number of establishments	57	57	57	57	57
	Employees (thousands)	6	5	5	5	5
	Capacity utilization (percent)	87	86	86	75	75
	U.S. shipments (million dollars)	2,264	2,130	2,130	2,130	2,000
	U.S. exports (million dollars)	452	503	547	661	651
	U.S. imports (million dollars)	117	207	419	377	301
	Apparent U.S. consumption (million dollars)	1,930	1,835	2,002	1,846	1,650
	Trade balance (million dollars)	334	295	128	284	350
	Ratio of imports to consumption (percent)	6.1	11.3	20.9	20.4	18.2
	Ratio of exports to shipments (percent)	19.9	23.6	25.7	31.0	32.5
AG045	Cigarettes:					
	Number of establishments	11	11	11	11	10
	Employees (thousands)	25	28	25	23	21
	Capacity utilization (percent)	80	77	72	71	71
	U.S. shipments (million dollars)	26,967	28,247	28,247	28,247	29,252
	U.S. exports (million dollars)	4,770	4,736	4,409	4,166	3,232
	U.S. imports (million dollars)	51	38	44	59	112
	Apparent U.S. consumption (million dollars)	22,248	23,549	23,882	24,141	26,132
	Trade balance (million dollars)	4,719	4,698	4,365	4,106	3,120
	Ratio of imports to consumption (percent)	0.2	0.2	0.2	0.2	0.4
	Ratio of exports to shipments (percent)	17.7	16.8	15.6	14.7	11.0

See footnote(s) at end of table.

Table B-1--*Continued*
Agricultural products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
AG046	Hides, skins, and leather:					
	Number of establishments	1,220	1,220	1,220	1,220	1,220
	Employees (thousands)	18	18	18	18	18
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	5,170	5,573	5,187	5,041	5,228
	U.S. exports (million dollars)	2,319	2,216	2,310	1,934	1,850
	U.S. imports (million dollars)	1,095	1,054	1,133	1,124	1,052
	Apparent U.S. consumption (million dollars)	3,946	4,411	4,010	4,232	4,430
	Trade balance (million dollars)	1,224	1,162	1,177	809	798
	Ratio of imports to consumption (percent)	27.7	23.9	28.2	26.6	23.7
	Ratio of exports to shipments (percent)	44.9	39.8	44.5	38.4	35.4
AG047	Furskins:					
	Number of establishments	478	449	452	439	426
	Employees (thousands)	3	3	3	3	2
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	153	180	237	205	134
	U.S. exports (million dollars)	157	224	222	196	141
	U.S. imports (million dollars)	87	107	115	86	73
	Apparent U.S. consumption (million dollars)	83	63	130	96	67
	Trade balance (million dollars)	70	117	107	109	67
	Ratio of imports to consumption (percent)	105.3	169.8	88.2	90.2	109.8
	Ratio of exports to shipments (percent)	102.9	124.4	93.5	95.4	104.9
AG048	Wool and other animal hair:					
	Number of establishments	81,070	77,010	74,710	70,020	67,940
	Employees (thousands)	(2)	(2)	(2)	(2)	(2)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	86	55	60	42	28
	U.S. exports (million dollars)	35	20	17	13	22
	U.S. imports (million dollars)	214	173	179	141	70
	Apparent U.S. consumption (million dollars)	265	209	223	170	76
	Trade balance (million dollars)	-179	-154	-163	-128	-48
	Ratio of imports to consumption (percent)	80.7	83.1	80.5	82.7	92.5
	Ratio of exports to production (percent)	40.5	35.8	27.6	30.0	79.8
AG049	Cotton, not carded or combed:					
	Number of establishments	32,798	32,127	31,456	30,785	30,114
	Employees (thousands)	(2)	(2)	173,446	169,752	166,051
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	6,573	6,410	5,981	4,141	3,836
	U.S. exports (million dollars)	3,681	2,715	2,682	2,545	968
	U.S. imports (million dollars)	10	283	3	14	136
	Apparent U.S. consumption (million dollars)	2,902	3,978	3,302	1,609	3,004
	Trade balance (million dollars)	3,671	2,432	2,679	2,532	832
	Ratio of imports to consumption (percent)	0.4	7.1	0.1	0.8	4.5
	Ratio of exports to production (percent)	56.0	42.4	44.8	61.5	25.2
AG050	Ethyl alcohol for nonbeverage purposes:					
	Number of establishments	42	45	45	47	57
	Employees (thousands)	7	7	7	7	7
	Capacity utilization (percent)	80	78	80	80	78
	U.S. production (million dollars)	1,408	1,500	1,550	1,600	2,000
	U.S. exports (million dollars)	265	128	123	58	58
	U.S. imports (million dollars)	164	160	119	124	130
	Apparent U.S. consumption (million dollars)	1,306	1,532	1,546	1,666	2,073
	Trade balance (million dollars)	102	-32	4	-66	-73
	Ratio of imports to consumption (percent)	12.5	10.5	7.7	7.4	6.3
	Ratio of exports to production (percent)	18.8	8.5	7.9	3.6	2.9

[1] Capacity utilization could not be meaningfully calculated for this industry.
[2] Not available.

Note.--Calculations based on unrounded data.

Table B-2
Forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
AG051	Logs and rough wood products:					
	Number of establishments	13,000	13,000	13,500	13,500	13,800
	Employees (thousands)	85	83	85	85	85
	Capacity utilization (percent)	90	92	92	92	92
	U.S. shipments (million dollars)	16,500	15,400	13,800	15,000	15,500
	U.S. exports (million dollars)	3,039	2,909	2,399	1,927	1,885
	U.S. imports (million dollars)	400	419	420	423	495
	Apparent U.S. consumption (million dollars)	13,861	12,910	11,820	13,497	14,110
	Trade balance (million dollars)	2,639	2,490	1,980	1,503	1,390
	Ratio of imports to consumption (percent)	2.9	3.2	3.6	3.1	3.5
	Ratio of exports to shipments (percent)	18.4	18.9	17.4	12.8	12.2
AG052	Lumber:					
	Number of establishments	6,000	5,500	5,400	5,400	5,400
	Employees (thousands)	170	160	159	160	160
	Capacity utilization (percent)	90	90	90	90	(1)
	U.S. shipments (million dollars)	28,000	29,600	30,700	32,000	33,000
	U.S. exports (million dollars)	2,472	2,430	2,553	2,002	2,184
	U.S. imports (million dollars)	5,519	6,829	7,368	6,743	7,820
	Apparent U.S. consumption (million dollars)	31,047	33,999	35,515	36,741	38,636
	Trade balance (million dollars)	-3,047	-4,399	-4,815	-4,741	-5,636
	Ratio of imports to consumption (percent)	17.8	20.1	20.7	18.4	20.2
	Ratio of exports to shipments (percent)	8.8	8.2	8.3	6.3	6.6
AG053	Moldings, millwork, and joinery:					
	Number of establishments	4,500	5,000	5,200	5,300	5,400
	Employees (thousands)	110	120	160	170	170
	Capacity utilization (percent)	69	74	85	87	87
	U.S. shipments (million dollars)	15,400	16,500	22,900	25,000	25,000
	U.S. exports (million dollars)	456	563	642	548	545
	U.S. imports (million dollars)	969	1,171	1,594	1,924	2,521
	Apparent U.S. consumption (million dollars)	15,913	17,107	23,852	26,376	26,976
	Trade balance (million dollars)	-513	-607	-952	-1,376	-1,976
	Ratio of imports to consumption (percent)	6.1	6.8	6.7	7.3	9.3
	Ratio of exports to shipments (percent)	3.0	3.4	2.8	2.2	2.2
AG054	Wood veneer and wood panels:					
	Number of establishments	730	750	800	810	810
	Employees (thousands)	75	74	73	74	75
	Capacity utilization (percent)	85	90	80	82	82
	U.S. production (million dollars)	13,300	14,000	13,900	14,400	14,500
	U.S. exports (million dollars)	1,018	994	1,166	929	958
	U.S. imports (million dollars)	1,986	2,152	2,249	2,767	3,574
	Apparent U.S. consumption (million dollars)	14,268	15,158	14,983	16,238	17,115
	Trade balance (million dollars)	-968	-1,158	-1,083	-1,838	-2,615
	Ratio of imports to consumption (percent)	13.9	14.2	15.0	17.0	20.9
	Ratio of exports to production (percent)	7.7	7.1	8.4	6.5	6.6
AG055	Wooden containers:					
	Number of establishments	2,700	2,800	2,875	2,900	2,900
	Employees (thousands)	42	51	51	55	55
	Capacity utilization (percent)	80	80	80	82	82
	U.S. production (million dollars)	3,680	4,400	4,500	4,500	4,500
	U.S. exports (million dollars)	77	85	112	138	172
	U.S. imports (million dollars)	224	253	348	419	471
	Apparent U.S. consumption (million dollars)	3,827	4,568	4,736	4,781	4,799
	Trade balance (million dollars)	-147	-168	-236	-281	-299
	Ratio of imports to consumption (percent)	5.9	5.5	7.4	8.8	9.8
	Ratio of exports to production (percent)	2.1	1.9	2.5	3.1	3.8

See footnote(s) at end of table.

Table B-2--*Continued*
Forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
AG056	Tools and tool handles of wood:					
	Number of establishments	130	128	125	125	125
	Employees (thousands)	3	3	3	3	3
	Capacity utilization (percent)	75	75	75	78	(1)
	U.S. production (million dollars)	125	120	115	120	120
	U.S. exports (million dollars)	18	24	37	36	44
	U.S. imports (million dollars)	130	114	117	117	120
	Apparent U.S. consumption (million dollars)	237	210	195	201	195
	Trade balance (million dollars)	-112	-90	-80	-81	-75
	Ratio of imports to consumption (percent)	54.9	54.2	59.9	58.4	61.2
	Ratio of exports to production (percent)	14.7	19.8	32.0	30.4	36.8
AG057	Miscellaneous articles of wood:					
	Number of establishments	700	700	680	690	700
	Employees (thousands)	30	35	34	35	38
	Capacity utilization (percent)	75	80	80	80	80
	U.S. production (million dollars)	2,800	3,000	3,100	3,200	3,200
	U.S. exports (million dollars)	178	179	185	202	187
	U.S. imports (million dollars)	615	617	733	846	1,007
	Apparent U.S. consumption (million dollars)	3,238	3,438	3,647	3,844	4,021
	Trade balance (million dollars)	-438	-438	-547	-644	-821
	Ratio of imports to consumption (percent)	19.0	17.9	20.1	22.0	25.1
	Ratio of exports to production (percent)	6.3	6.0	6.0	6.3	5.8
AG058	Cork and rattan:					
	Number of establishments	35	35	30	30	30
	Employees (thousands)	2	2	2	2	(1)
	Capacity utilization (percent)	75	80	80	80	80
	U.S. production (million dollars)	90	100	112	110	110
	U.S. exports (million dollars)	65	82	76	85	90
	U.S. imports (million dollars)	408	407	407	447	450
	Apparent U.S. consumption (million dollars)	433	425	444	472	469
	Trade balance (million dollars)	-343	-325	-332	-362	-359
	Ratio of imports to consumption (percent)	94.2	95.7	91.9	94.6	95.8
	Ratio of exports to production (percent)	71.9	81.8	67.8	77.0	82.0
AG059	Wood pulp and wastepaper:					
	Number of establishments	76	78	76	80	79
	Employees (thousands)	14	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	96	93	93	91	89
	U.S. production (million dollars)	8,700	7,300	7,400	7,300	7,900
	U.S. exports (million dollars)	6,241	4,059	3,893	3,452	3,540
	U.S. imports (million dollars)	3,845	2,665	2,656	2,447	2,604
	Apparent U.S. consumption (million dollars)	6,304	5,906	6,163	6,295	6,964
	Trade balance (million dollars)	2,396	1,394	1,237	1,005	936
	Ratio of imports to consumption (percent)	61.0	45.1	43.1	38.9	37.4
	Ratio of exports to production (percent)	71.7	55.6	52.6	47.3	44.8
AG060	Paper boxes and bags:					
	Number of establishments	2,650	2,700	2,700	2,700	2,700
	Employees (thousands)	209	211	213	216	218
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. production (million dollars)	39,400	37,600	39,800	42,400	45,200
	U.S. exports (million dollars)	1,083	1,204	1,296	1,345	1,416
	U.S. imports (million dollars)	596	658	674	745	802
	Apparent U.S. consumption (million dollars)	38,913	37,054	39,178	41,800	44,585
	Trade balance (million dollars)	487	546	622	600	615
	Ratio of imports to consumption (percent)	1.5	1.8	1.7	1.8	1.8
	Ratio of exports to production (percent)	2.7	3.2	3.3	3.2	3.1

See footnote(s) at end of table.

Table B-2--*Continued*
Forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
AG061	Industrial papers and paperboards:					
	Number of establishments	377	379	378	379	367
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	93	91	95	92	96
	U.S. production (million dollars)	44,600	42,400	42,800	42,800	44,000
	U.S. exports (million dollars)	5,085	5,064	5,407	5,185	5,018
	U.S. imports (million dollars)	1,884	1,830	2,044	2,267	2,596
	Apparent U.S. consumption (million dollars)	41,399	39,166	39,437	39,882	41,579
	Trade balance (million dollars)	3,201	3,234	3,363	2,918	2,421
	Ratio of imports to consumption (percent)	4.6	4.7	5.2	5.7	6.2
	Ratio of exports to production (percent)	11.4	11.9	12.6	12.1	11.4
AG062	Newsprint:					
	Number of establishments	26	26	25	25	24
	Employees (thousands)	9	9	9	9	9
	Capacity utilization (percent)	96	96	99	97	94
	U.S. shipments (million dollars)	4,488	4,201	3,712	3,912	3,356
	U.S. exports (million dollars)	591	652	522	460	423
	U.S. imports (million dollars)	4,418	4,063	3,590	3,766	3,517
	Apparent U.S. consumption (million dollars)	8,315	7,612	6,780	7,217	6,450
	Trade balance (million dollars)	-3,827	-3,411	-3,068	-3,305	-3,094
	Ratio of imports to consumption (percent)	53.1	53.4	53.0	52.2	54.5
	Ratio of exports to shipments (percent)	13.2	15.5	14.1	11.8	12.6
AG063	Printing and writing papers:					
	Number of establishments	132	(1)	120	120	120
	Employees (thousands)	78	(1)	71	(1)	(1)
	Capacity utilization (percent)	92	91	94	92	(1)
	U.S. shipments (million dollars)	27,317	23,861	23,482	24,492	25,496
	U.S. exports (million dollars)	1,421	1,394	1,431	1,350	1,490
	U.S. imports (million dollars)	4,192	3,565	3,773	4,289	4,538
	Apparent U.S. consumption (million dollars)	30,089	26,032	25,823	27,431	28,544
	Trade balance (million dollars)	-2,772	-2,171	-2,341	-2,939	-3,048
	Ratio of imports to consumption (percent)	13.9	13.7	14.6	15.6	15.9
	Ratio of exports to shipments (percent)	5.2	5.8	6.1	5.5	5.8
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)	5,010	4,700	4,900	5,091	5,300
	U.S. exports (million dollars)	718	773	760	701	641
	U.S. imports (million dollars)	742	774	808	845	971
	Apparent U.S. consumption (million dollars)	5,034	4,701	4,948	5,235	5,630
	Trade balance (million dollars)	-24	-1	-48	-144	-330
	Ratio of imports to consumption (percent)	14.7	16.5	16.3	16.1	17.2
	Ratio of exports to shipments (percent)	14.3	16.4	15.5	13.8	12.1
AG065	Miscellaneous paper products:					
	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)	22,255	23,100	24,000	24,936	25,958
	U.S. exports (million dollars)	888	987	1,196	1,234	1,281
	U.S. imports (million dollars)	758	875	956	1,029	1,150
	Apparent U.S. consumption (million dollars)	22,125	22,988	23,761	24,732	25,827
	Trade balance (million dollars)	130	112	239	204	131
	Ratio of imports to consumption (percent)	3.4	3.8	4.0	4.2	4.5
	Ratio of exports to shipments (percent)	4.0	4.3	5.0	4.9	4.9

See footnote(s) at end of table.

Table B-2--*Continued*
Forest products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
AG066	Printed matter:					
	Number of establishments	60,000	60,000	60,000	70,000	62,000
	Employees (thousands)	1,500	1,500	1,500	1,500	1,500
	Capacity utilization (percent)	81	81	77	78	([1])
	U.S. shipments (million dollars)	180,000	187,000	206,000	217,000	229,000
	U.S. exports (million dollars)	4,113	4,109	4,287	4,308	4,195
	U.S. imports (million dollars)	2,468	2,564	2,719	2,923	3,161
	Apparent U.S. consumption (million dollars)	178,355	185,455	204,431	215,615	227,966
	Trade balance (million dollars)	1,645	1,545	1,569	1,385	1,034
	Ratio of imports to consumption (percent)	1.4	1.4	1.3	1.4	1.4
	Ratio of exports to shipments (percent)	2.3	2.2	2.1	2.0	1.8

[1] Not available.

Note.--Calculations based on unrounded data.

Table B-3
Chemicals and related products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
CH007	Major primary olefins:					
	Number of establishments	37	37	37	37	37
	Employees (thousands)	5	5	5	5	5
	Capacity utilization (percent)	98	98	95	97	98
	U.S. shipments (million dollars)	13,300	13,700	14,700	15,500	17,000
	U.S. exports (million dollars)	145	199	306	169	181
	U.S. imports (million dollars)	496	897	1,520	1,360	1,798
	Apparent U.S. consumption (million dollars)	13,652	14,398	15,914	16,691	18,617
	Trade balance (million dollars)	-352	-698	-1,214	-1,191	-1,617
	Ratio of imports to consumption (percent)	3.6	6.2	9.5	8.1	9.7
	Ratio of exports to shipments (percent)	1.1	1.5	2.1	1.1	1.1
CH008	Other olefins:					
	Number of establishments	23	23	23	23	23
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	95	95	95	97	98
	U.S. shipments (million dollars)	1,050	1,080	1,150	1,220	1,350
	U.S. exports (million dollars)	242	192	175	211	208
	U.S. imports (million dollars)	53	48	62	82	91
	Apparent U.S. consumption (million dollars)	861	936	1,037	1,091	1,233
	Trade balance (million dollars)	189	144	113	129	117
	Ratio of imports to consumption (percent)	6.1	5.1	6.0	7.5	7.4
	Ratio of exports to shipments (percent)	23.0	17.8	15.2	17.3	15.4
CH009	Primary aromatics:					
	Number of establishments	31	31	31	31	31
	Employees (thousands)	2	2	2	2	2
	Capacity utilization (percent)	80	80	80	80	80
	U.S. shipments (million dollars)	4,250	4,350	4,400	4,000	4,250
	U.S. exports (million dollars)	208	214	255	56	91
	U.S. imports (million dollars)	246	588	856	704	815
	Apparent U.S. consumption (million dollars)	4,288	4,723	5,001	4,647	4,974
	Trade balance (million dollars)	-38	-373	-601	-647	-724
	Ratio of imports to consumption (percent)	5.7	12.4	17.1	15.1	16.4
	Ratio of exports to shipments (percent)	4.9	4.9	5.8	1.4	2.1
CH010	Organic commodity chemicals:					
	Number of establishments	53	53	53	53	53
	Employees (thousands)	15	15	15	15	15
	Capacity utilization (percent)	90	90	90	88	90
	U.S. shipments (million dollars)	15,581	15,815	16,450	16,240	16,500
	U.S. exports (million dollars)	2,258	1,487	1,283	1,266	1,474
	U.S. imports (million dollars)	813	808	923	741	778
	Apparent U.S. consumption (million dollars)	14,136	15,136	16,089	15,714	15,804
	Trade balance (million dollars)	1,445	679	361	526	696
	Ratio of imports to consumption (percent)	5.8	5.3	5.7	4.7	4.9
	Ratio of exports to shipments (percent)	14.5	9.4	7.8	7.8	8.9
CH011	Organic specialty chemicals:					
	Number of establishments	250	250	250	250	250
	Employees (thousands)	95	95	95	95	95
	Capacity utilization (percent)	85	86	85	83	83
	U.S. shipments (million dollars)	8,900	9,078	9,450	9,260	9,500
	U.S. exports (million dollars)	5,635	5,911	6,756	6,616	6,940
	U.S. imports (million dollars)	4,608	5,139	5,916	5,965	6,546
	Apparent U.S. consumption (million dollars)	7,873	8,306	8,610	8,609	9,106
	Trade balance (million dollars)	1,027	772	840	651	394
	Ratio of imports to consumption (percent)	58.5	61.9	68.7	69.3	71.9
	Ratio of exports to shipments (percent)	63.3	65.1	71.5	71.4	73.0

See footnote(s) at end of table.

Table B-3--*Continued*
Chemicals and related products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
CH012	Certain organic chemicals:					
	Number of establishments	259	262	265	265	270
	Employees (thousands)	75	75	75	75	75
	Capacity utilization (percent)	89	86	87	87	85
	U.S. shipments (million dollars)	57,500	57,000	58,000	60,000	62,000
	U.S. exports (million dollars)	6,314	5,468	6,095	5,184	5,401
	U.S. imports (million dollars)	3,280	3,333	3,494	3,348	3,595
	Apparent U.S. consumption (million dollars)	54,466	54,865	55,399	58,164	60,194
	Trade balance (million dollars)	3,034	2,135	2,601	1,836	1,806
	Ratio of imports to consumption (percent)	6.0	6.1	6.3	5.8	6.0
	Ratio of exports to shipments (percent)	11.0	9.6	10.5	8.6	8.7
CH013	Miscellaneous inorganic chemicals:					
	Number of establishments	640	640	(1)	(1)	(1)
	Employees (thousands)	54	53	(1)	(1)	(1)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	8,694	8,863	8,860	8,809	(1)
	U.S. exports (million dollars)	4,081	4,203	4,860	4,419	4,365
	U.S. imports (million dollars)	4,141	4,754	5,119	4,752	4,641
	Apparent U.S. consumption (million dollars)	8,755	9,414	9,119	9,143	(1)
	Trade balance (million dollars)	-61	-551	-259	-334	-276
	Ratio of imports to consumption (percent)	47.3	50.5	56.1	52.0	(1)
	Ratio of exports to shipments (percent)	46.9	47.4	54.9	50.2	(1)
CH014	Inorganic acids:					
	Number of establishments	143	143	143	143	(1)
	Employees (thousands)	9	9	9	9	(1)
	Capacity utilization (percent)	80	80	80	82	(1)
	U.S. shipments (million dollars)	2,653	2,710	2,765	2,820	(1)
	U.S. exports (million dollars)	166	142	192	186	204
	U.S. imports (million dollars)	209	234	262	282	238
	Apparent U.S. consumption (million dollars)	2,696	2,802	2,835	2,915	(1)
	Trade balance (million dollars)	-43	-92	-70	-95	-34
	Ratio of imports to consumption (percent)	7.8	8.4	9.2	9.7	(1)
	Ratio of exports to shipments (percent)	6.3	5.2	7.0	6.6	(1)
CH015	Chlor-alkali chemicals:					
	Number of establishments	60	60	60	65	(1)
	Employees (thousands)	7	7	7	7	(1)
	Capacity utilization (percent)	95	95	95	95	(1)
	U.S. shipments (million dollars)	3,169	3,212	3,067	2,905	(1)
	U.S. exports (million dollars)	899	967	824	834	781
	U.S. imports (million dollars)	210	188	184	191	126
	Apparent U.S. consumption (million dollars)	2,480	2,433	2,426	2,263	(1)
	Trade balance (million dollars)	689	779	641	642	655
	Ratio of imports to consumption (percent)	8.5	7.7	7.6	8.5	(1)
	Ratio of exports to shipments (percent)	28.4	30.1	26.9	28.7	(1)
CH016	Fertilizers:					
	Number of establishments	350	350	350	350	350
	Employees (thousands)	37	37	37	37	37
	Capacity utilization (percent)	83	85	85	84	85
	U.S. shipments (million dollars)	9,480	9,670	9,865	9,900	10,000
	U.S. exports (million dollars)	3,319	3,151	3,138	3,339	3,032
	U.S. imports (million dollars)	2,357	2,489	2,492	2,472	2,486
	Apparent U.S. consumption (million dollars)	8,518	9,008	9,219	9,033	9,454
	Trade balance (million dollars)	962	662	646	867	546
	Ratio of imports to consumption (percent)	27.7	27.6	27.0	27.4	26.3
	Ratio of exports to shipments (percent)	35.0	32.6	31.8	33.7	30.3

See footnote(s) at end of table.

Table B-3--*Continued*
Chemicals and related products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
CH017	Paints, inks, and related items, and certain components thereof:					
	Number of establishments	1,580	1,500	1,500	1,500	1,490
	Employees (thousands)	15	15	15	15	15
	Capacity utilization (percent)	84	85	85	85	85
	U.S. shipments (million dollars)	19,673	20,100	21,500	22,800	24,000
	U.S. exports (million dollars)	2,339	2,459	2,934	3,112	3,327
	U.S. imports (million dollars)	1,424	1,504	1,726	1,755	1,959
	Apparent U.S. consumption (million dollars)	18,758	19,145	20,292	21,443	22,632
	Trade balance (million dollars)	915	955	1,208	1,357	1,368
	Ratio of imports to consumption (percent)	7.6	7.9	8.5	8.2	8.7
	Ratio of exports to shipments (percent)	11.9	12.2	13.6	13.6	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	85	85
	U.S. shipments (million dollars)	870	913	920	959	1,050
	U.S. exports (million dollars)	283	295	337	349	360
	U.S. imports (million dollars)	341	356	401	402	404
	Apparent U.S. consumption (million dollars)	928	974	983	1,012	1,093
	Trade balance (million dollars)	-58	-61	-63	-53	-43
	Ratio of imports to consumption (percent)	36.8	36.6	40.8	39.7	36.9
	Ratio of exports to shipments (percent)	32.5	32.4	36.7	36.4	34.3
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	85	85
	U.S. shipments (million dollars)	1,040	1,095	1,100	1,122	1,230
	U.S. exports (million dollars)	272	394	489	453	404
	U.S. imports (million dollars)	569	573	628	555	527
	Apparent U.S. consumption (million dollars)	1,336	1,273	1,239	1,224	1,353
	Trade balance (million dollars)	-296	-178	-139	-102	-123
	Ratio of imports to consumption (percent)	42.6	45.0	50.7	45.3	38.9
	Ratio of exports to shipments (percent)	26.2	36.0	44.4	40.3	32.8
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	85	85
	U.S. shipments (million dollars)	20	20	20	20	22
	U.S. exports (million dollars)	14	17	17	19	13
	U.S. imports (million dollars)	6	7	8	6	7
	Apparent U.S. consumption (million dollars)	12	11	11	7	16
	Trade balance (million dollars)	8	9	9	13	6
	Ratio of imports to consumption (percent)	48.6	70.5	71.6	81.6	45.3
	Ratio of exports to shipments (percent)	68.5	84.3	84.6	93.1	60.4
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	85	85
	U.S. shipments (million dollars)	10	10	10	10	10
	U.S. exports (million dollars)	17	19	21	21	21
	U.S. imports (million dollars)	52	57	62	66	71
	Apparent U.S. consumption (million dollars)	45	48	52	55	60
	Trade balance (million dollars)	-35	-38	-42	-45	-50
	Ratio of imports to consumption (percent)	114.5	119.3	120.8	119.8	118.2
	Ratio of exports to shipments (percent)	166.0	191.7	207.5	208.7	209.0

See footnote(s) at end of table.

Table B-3--*Continued*
Chemicals and related products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
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	85	85
	U.S. shipments (million dollars)	(1)	(1)	(1)	(1)	(1)
	U.S. exports (million dollars)	506	496	501	449	433
	U.S. imports (million dollars)	749	701	733	633	564
	Apparent U.S. consumption (million dollars)	(1)	(1)	(1)	(1)	(1)
	Trade balance (million dollars)	-244	-206	-231	-184	-131
	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)	20	20	20	20	20
	Capacity utilization (percent)	85	85	85	88	85
	U.S. shipments (million dollars)	4,580	4,900	5,000	5,030	5,120
	U.S. exports (million dollars)	1,971	2,016	2,279	2,396	2,211
	U.S. imports (million dollars)	1,036	1,164	1,195	1,292	1,183
	Apparent U.S. consumption (million dollars)	3,644	4,048	3,916	3,926	4,091
	Trade balance (million dollars)	936	852	1,084	1,104	1,029
	Ratio of imports to consumption (percent)	28.4	28.8	30.5	32.9	28.9
	Ratio of exports to shipments (percent)	43.0	41.2	45.6	47.6	43.2
CH024	Adhesives and glues:					
	Number of establishments	490	500	500	500	500
	Employees (thousands)	10	10	10	10	10
	Capacity utilization (percent)	84	85	86	85	85
	U.S. shipments (million dollars)	4,500	4,700	4,800	4,888	5,000
	U.S. exports (million dollars)	348	394	457	477	502
	U.S. imports (million dollars)	138	141	150	159	181
	Apparent U.S. consumption (million dollars)	4,289	4,447	4,493	4,570	4,679
	Trade balance (million dollars)	211	253	307	318	321
	Ratio of imports to consumption (percent)	3.2	3.2	3.3	3.5	3.9
	Ratio of exports to shipments (percent)	7.7	8.4	9.5	9.7	10.0
CH025	Medicinal chemicals:					
	Number of establishments	717	720	720	718	718
	Employees (thousands)	174	203	205	208	208
	Capacity utilization (percent)	85	85	85	85	85
	U.S. shipments (million dollars)	60,300	63,000	67,400	74,140	81,576
	U.S. exports (million dollars)	8,092	8,548	10,345	11,956	13,681
	U.S. imports (million dollars)	8,677	11,195	14,193	17,952	23,781
	Apparent U.S. consumption (million dollars)	60,885	65,647	71,248	80,136	91,676
	Trade balance (million dollars)	-585	-2,647	-3,848	-5,996	-10,100
	Ratio of imports to consumption (percent)	14.3	17.1	19.9	22.4	25.9
	Ratio of exports to shipments (percent)	13.4	13.6	15.3	16.1	16.8
CH026	Essential oils and other flavoring materials:					
	Number of establishments	55	53	53	53	53
	Employees (thousands)	52	50	50	50	51
	Capacity utilization (percent)	80	80	80	80	82
	U.S. shipments (million dollars)	3,000	3,000	3,100	3,200	3,400
	U.S. exports (million dollars)	914	985	1,018	916	948
	U.S. imports (million dollars)	812	782	812	836	754
	Apparent U.S. consumption (million dollars)	2,898	2,797	2,894	3,120	3,206
	Trade balance (million dollars)	102	203	206	80	194
	Ratio of imports to consumption (percent)	28.0	28.0	28.0	26.8	23.5
	Ratio of exports to shipments (percent)	30.5	32.8	32.8	28.6	27.9

See footnote(s) at end of table.

Table B-3--*Continued*
Chemicals and related products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
CH027	Perfumes, cosmetics, and toiletries:					
	Number of establishments	650	650	650	650	650
	Employees (thousands)	58	58	57	58	59
	Capacity utilization (percent)	88	85	85	87	88
	U.S. shipments (million dollars)	19,000	19,300	19,350	20,000	21,500
	U.S. exports (million dollars)	1,875	2,537	2,607	2,572	2,578
	U.S. imports (million dollars)	1,168	1,276	1,428	1,629	1,864
	Apparent U.S. consumption (million dollars)	18,293	18,039	18,171	19,057	20,786
	Trade balance (million dollars)	707	1,261	1,179	943	714
	Ratio of imports to consumption (percent)	6.4	7.1	7.9	8.6	9.0
	Ratio of exports to shipments (percent)	9.9	13.1	13.5	12.9	12.0
CH028	Soaps, detergents, and surface-active agents:					
	Number of establishments	950	950	950	950	950
	Employees (thousands)	48	48	50	50	52
	Capacity utilization (percent)	88	85	87	87	88
	U.S. shipments (million dollars)	16,500	16,500	16,600	17,000	17,700
	U.S. exports (million dollars)	1,644	1,812	2,028	1,961	2,138
	U.S. imports (million dollars)	653	756	847	875	948
	Apparent U.S. consumption (million dollars)	15,508	15,444	15,419	15,914	16,510
	Trade balance (million dollars)	992	1,056	1,181	1,086	1,190
	Ratio of imports to consumption (percent)	4.2	4.9	5.5	5.5	5.7
	Ratio of exports to shipments (percent)	10.0	11.0	12.2	11.5	12.1
CH029	Miscellaneous chemicals and specialties:					
	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)	2,203	2,383	2,610	2,619	2,536
	U.S. imports (million dollars)	1,209	1,292	1,453	1,667	1,790
	Apparent U.S. consumption (million dollars)	(1)	(1)	(1)	(1)	(1)
	Trade balance (million dollars)	994	1,092	1,157	951	746
	Ratio of imports to consumption (percent)	(1)	(1)	(1)	(1)	(1)
	Ratio of exports to shipments (percent)	(1)	(1)	(1)	(1)	(1)
CH030	Explosives, propellant powders, and related items:					
	Number of establishments	135	130	130	127	125
	Employees (thousands)	13	13	13	13	13
	Capacity utilization (percent)	89	90	90	88	87
	U.S. shipments (million dollars)	1,620	1,765	1,850	1,930	2,000
	U.S. exports (million dollars)	250	328	291	292	264
	U.S. imports (million dollars)	187	208	237	248	267
	Apparent U.S. consumption (million dollars)	1,557	1,645	1,796	1,886	2,003
	Trade balance (million dollars)	63	120	54	44	-3
	Ratio of imports to consumption (percent)	12.0	12.6	13.2	13.2	13.3
	Ratio of exports to shipments (percent)	15.4	18.6	15.7	15.2	13.2
CH031	Polyethylene resins in primary forms:					
	Number of establishments	41	42	43	43	44
	Employees (thousands)	20	20	20	20	20
	Capacity utilization (percent)	88	90	90	89	90
	U.S. shipments (million dollars)	7,671	8,400	8,600	8,600	9,000
	U.S. exports (million dollars)	1,988	2,134	2,455	2,134	2,249
	U.S. imports (million dollars)	1,192	1,086	1,261	1,150	1,329
	Apparent U.S. consumption (million dollars)	6,875	7,353	7,406	7,616	8,080
	Trade balance (million dollars)	796	1,047	1,194	984	920
	Ratio of imports to consumption (percent)	17.3	14.8	17.0	15.1	16.4
	Ratio of exports to shipments (percent)	25.9	25.4	28.5	24.8	25.0

See footnote(s) at end of table.

Table B-3--*Continued*
Chemicals and related products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
CH032	Polypropylene resins in primary forms:					
	Number of establishments	23	24	25	25	25
	Employees (thousands)	5	5	5	5	5
	Capacity utilization (percent)	87	91	94	92	95
	U.S. shipments (million dollars)	3,119	3,550	4,400	3,800	4,400
	U.S. exports (million dollars)	660	742	844	760	863
	U.S. imports (million dollars)	190	210	212	220	232
	Apparent U.S. consumption (million dollars)	2,649	3,018	3,768	3,260	3,770
	Trade balance (million dollars)	470	532	632	540	630
	Ratio of imports to consumption (percent)	7.2	7.0	5.6	6.8	6.2
	Ratio of exports to shipments (percent)	21.2	20.9	19.2	20.0	19.6
CH033	Polyvinyl chloride resins in primary forms:					
	Number of establishments	27	27	28	28	28
	Employees (thousands)	7	7	7	7	7
	Capacity utilization (percent)	97	94	95	94	94
	U.S. shipments (million dollars)	3,519	3,600	3,800	3,700	3,700
	U.S. exports (million dollars)	856	680	858	767	626
	U.S. imports (million dollars)	192	203	271	248	235
	Apparent U.S. consumption (million dollars)	2,855	3,124	3,213	3,182	3,309
	Trade balance (million dollars)	664	476	587	518	391
	Ratio of imports to consumption (percent)	6.7	6.5	8.4	7.8	7.1
	Ratio of exports to shipments (percent)	24.3	18.9	22.6	20.7	16.9
CH034	Styrene polymers in primary forms:					
	Number of establishments	68	68	69	69	69
	Employees (thousands)	11	11	11	11	11
	Capacity utilization (percent)	94	93	92	91	92
	U.S. shipments (million dollars)	5,013	5,240	5,600	5,200	5,600
	U.S. exports (million dollars)	790	799	824	779	753
	U.S. imports (million dollars)	351	335	353	418	427
	Apparent U.S. consumption (million dollars)	4,574	4,776	5,129	4,839	5,274
	Trade balance (million dollars)	439	464	471	361	326
	Ratio of imports to consumption (percent)	7.7	7.0	6.9	8.6	8.1
	Ratio of exports to shipments (percent)	15.7	15.2	14.7	15.0	13.4
CH035	Saturated polyester resins:					
	Number of establishments	50	50	50	50	50
	Employees (thousands)	6	6	6	6	6
	Capacity utilization (percent)	86	85	83	80	80
	U.S. shipments (million dollars)	4,216	4,500	4,700	4,600	4,600
	U.S. exports (million dollars)	640	623	696	626	566
	U.S. imports (million dollars)	242	230	355	451	448
	Apparent U.S. consumption (million dollars)	3,818	4,108	4,359	4,425	4,482
	Trade balance (million dollars)	398	392	341	175	118
	Ratio of imports to consumption (percent)	6.3	5.6	8.1	10.2	10.0
	Ratio of exports to shipments (percent)	15.2	13.8	14.8	13.6	12.3
CH036	Other plastics in primary forms:					
	Number of establishments	278	278	280	280	280
	Employees (thousands)	32	32	32	32	32
	Capacity utilization (percent)	92	92	90	89	(1)
	U.S. shipments (million dollars)	14,958	15,700	16,000	15,700	(1)
	U.S. exports (million dollars)	5,423	5,625	6,094	6,124	6,323
	U.S. imports (million dollars)	1,944	2,135	2,214	2,295	2,455
	Apparent U.S. consumption (million dollars)	11,479	12,209	12,120	11,871	(1)
	Trade balance (million dollars)	3,479	3,491	3,880	3,829	3,868
	Ratio of imports to consumption (percent)	16.9	17.5	18.3	19.3	(1)
	Ratio of exports to shipments (percent)	36.3	35.8	38.1	39.0	(1)

See footnote(s) at end of table.

Table B-3--*Continued*
Chemicals and related products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
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)	91	90	90	90	90
	U.S. shipments (million dollars)	1,187	1,150	1,150	1,200	1,200
	U.S. exports (million dollars)	353	361	348	322	309
	U.S. imports (million dollars)	159	143	163	175	173
	Apparent U.S. consumption (million dollars)	992	932	966	1,054	1,063
	Trade balance (million dollars)	195	218	184	146	137
	Ratio of imports to consumption (percent)	16.0	15.4	16.9	16.6	16.2
	Ratio of exports to shipments (percent)	29.8	31.4	30.2	26.8	25.8
CH038	Other synthetic rubber:					
	Number of establishments	34	34	34	34	34
	Employees (thousands)	11	11	11	11	11
	Capacity utilization (percent)	81	80	80	80	80
	U.S. shipments (million dollars)	3,111	3,100	3,100	3,200	3,300
	U.S. exports (million dollars)	1,011	1,090	1,111	1,064	1,079
	U.S. imports (million dollars)	557	565	614	669	697
	Apparent U.S. consumption (million dollars)	2,657	2,575	2,604	2,805	2,918
	Trade balance (million dollars)	454	525	496	395	382
	Ratio of imports to consumption (percent)	21.0	21.9	23.6	23.9	23.9
	Ratio of exports to shipments (percent)	32.5	35.1	35.8	33.2	32.7
CH039	Pneumatic tires and tubes (new):					
	Number of establishments	40	40	42	42	42
	Employees (thousands)	62	62	62	62	62
	Capacity utilization (percent)	98	95	92	95	95
	U.S. shipments (million dollars)	11,000	11,400	11,800	12,100	12,400
	U.S. exports (million dollars)	1,869	1,960	2,403	2,532	2,366
	U.S. imports (million dollars)	3,073	3,011	3,343	4,011	4,559
	Apparent U.S. consumption (million dollars)	12,204	12,451	12,739	13,579	14,593
	Trade balance (million dollars)	-1,204	-1,051	-939	-1,479	-2,193
	Ratio of imports to consumption (percent)	25.2	24.2	26.2	29.5	31.2
	Ratio of exports to shipments (percent)	17.0	17.2	20.4	20.9	19.1
CH040	Other tires:					
	Number of establishments	1,400	1,400	1,400	1,400	1,400
	Employees (thousands)	5	5	5	5	5
	Capacity utilization (percent)	92	90	90	90	90
	U.S. shipments (million dollars)	1,750	1,800	1,800	1,900	2,000
	U.S. exports (million dollars)	73	84	86	93	111
	U.S. imports (million dollars)	121	116	132	143	129
	Apparent U.S. consumption (million dollars)	1,797	1,832	1,846	1,950	2,018
	Trade balance (million dollars)	-47	-32	-46	-50	-18
	Ratio of imports to consumption (percent)	6.7	6.3	7.2	7.3	6.4
	Ratio of exports to shipments (percent)	4.2	4.7	4.8	4.9	5.6
CH041	Miscellaneous plastic products:					
	Number of establishments	(1)	(1)	1,900	1,900	(1)
	Employees (thousands)	(1)	(1)	131	130	(1)
	Capacity utilization (percent)	(1)	(1)	85	85	(1)
	U.S. shipments (million dollars)	(1)	(1)	19,000	19,000	(1)
	U.S. exports (million dollars)	8,334	9,201	10,525	10,882	11,816
	U.S. imports (million dollars)	7,979	8,381	9,063	9,709	10,988
	Apparent U.S. consumption (million dollars)	(1)	(1)	17,538	17,826	(1)
	Trade balance (million dollars)	356	819	1,462	1,174	828
	Ratio of imports to consumption (percent)	(1)	(1)	51.7	54.5	(1)
	Ratio of exports to shipments (percent)	(1)	(1)	55.4	57.3	(1)

See footnote(s) at end of table.

Table B-3--*Continued*
Chemicals and related products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
CH042	Miscellaneous rubber products:					
	Number of establishments	(1)	(1)	13,900	14,000	(1)
	Employees (thousands)	(1)	(1)	820,000	850,000	(1)
	Capacity utilization (percent)	(1)	(1)	85	85	(1)
	U.S. shipments (million dollars)	(1)	(1)	124,700	125,000	(1)
	U.S. exports (million dollars)	1,435	1,611	1,928	1,954	1,982
	U.S. imports (million dollars)	1,783	1,875	2,021	2,154	2,277
	Apparent U.S. consumption (million dollars)	(1)	(1)	124,793	125,200	(1)
	Trade balance (million dollars)	-348	-264	-93	-200	-295
	Ratio of imports to consumption (percent)	(1)	(1)	1.6	1.7	(1)
	Ratio of exports to shipments (percent)	(1)	(1)	1.5	1.6	(1)
CH043	Gelatin:					
	Number of establishments	8	8	8	8	8
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	90	90	92	90	90
	U.S. shipments (million dollars)	202	240	250	252	255
	U.S. exports (million dollars)	42	46	59	51	63
	U.S. imports (million dollars)	102	130	133	122	107
	Apparent U.S. consumption (million dollars)	261	324	324	323	299
	Trade balance (million dollars)	-59	-84	-74	-71	-44
	Ratio of imports to consumption (percent)	38.9	40.2	41.1	37.8	35.9
	Ratio of exports to shipments (percent)	21.0	19.3	23.6	20.1	24.9
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)	0	0	0	0	(1)
	U.S. exports (million dollars)	42	44	41	36	41
	U.S. imports (million dollars)	1,629	1,468	1,229	977	704
	Apparent U.S. consumption (million dollars)	1,587	1,424	1,189	941	(1)
	Trade balance (million dollars)	-1,587	-1,424	-1,189	-941	-664
	Ratio of imports to consumption (percent)	102.6	103.1	103.4	103.8	(1)
	Ratio of exports to shipments (percent)	(2)	(2)	(2)	(2)	(1)

[1] Not available.
[2] Not meaningful.

Note.--Calculations based on unrounded data.

Table B-4
Energy-related products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
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)	190,428	196,141	214,322	199,510	219,460
	U.S. exports (million dollars)	47	69	124	185	206
	U.S. imports (million dollars)	856	902	978	1,039	1,334
	Apparent U.S. consumption (million dollars)	191,237	196,973	215,176	200,364	220,587
	Trade balance (million dollars)	-809	-832	-854	-854	-1,127
	Ratio of imports to consumption (percent)	0.4	0.5	0.5	0.5	0.6
	Ratio of exports to shipments (percent)	(2)	(2)	0.1	0.1	0.1
CH002	Nuclear materials:					
	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)	965	1,047	1,444	1,041	950
	U.S. imports (million dollars)	1,127	1,326	1,219	1,382	1,636
	Apparent U.S. consumption (million dollars)	(1)	(1)	(1)	(1)	(1)
	Trade balance (million dollars)	-162	-279	225	-340	-686
	Ratio of imports to consumption (percent)	(1)	(1)	(1)	(1)	(1)
	Ratio of exports to shipments (percent)	(1)	(1)	(1)	(1)	(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	85	85	85	90
	U.S. shipments (million dollars)	29,700	33,173	32,658	29,965	32,965
	U.S. exports (million dollars)	4,328	4,452	4,276	3,635	2,671
	U.S. imports (million dollars)	847	1,253	1,688	1,570	1,741
	Apparent U.S. consumption (million dollars)	26,219	29,975	30,070	27,900	32,035
	Trade balance (million dollars)	3,481	3,198	2,588	2,065	930
	Ratio of imports to consumption (percent)	3.2	4.2	5.6	5.6	5.4
	Ratio of exports to shipments (percent)	14.6	13.4	13.1	12.1	8.1
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)	34,846	43,601	40,342	28,344	34,602
	U.S. exports (million dollars)	1	460	780	670	772
	U.S. imports (million dollars)	42,077	44,849	38,394	25,467	31,642
	Apparent U.S. consumption (million dollars)	76,922	87,990	77,957	53,141	65,472
	Trade balance (million dollars)	-42,076	-44,389	-37,615	-24,797	-30,870
	Ratio of imports to consumption (percent)	54.7	51.0	49.3	47.9	48.3
	Ratio of exports to shipments (percent)	(2)	1.1	1.9	2.4	2.2
CH005	Petroleum products:					
	Number of establishments	190	190	190	190	190
	Employees (thousands)	75	75	75	75	75
	Capacity utilization (percent)	85	90	90	90	90
	U.S. shipments (million dollars)	131,549	147,961	129,409	85,580	113,231
	U.S. exports (million dollars)	6,583	7,604	7,728	6,233	6,599
	U.S. imports (million dollars)	9,777	18,915	21,523	17,584	22,079
	Apparent U.S. consumption (million dollars)	134,743	159,273	143,203	96,931	128,711
	Trade balance (million dollars)	-3,194	-11,312	-13,794	-11,351	-15,480
	Ratio of imports to consumption (percent)	7.3	11.9	15.0	18.1	17.2
	Ratio of exports to shipments (percent)	5.0	5.1	6.0	7.3	5.8

See footnote(s) at end of table.

Table B-4--*Continued*
Energy-related products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
CH006	Natural gas and components:					
	Number of establishments	([1])	([1])	([1])	([1])	([1])
	Employees (thousands)	205	200	200	200	200
	Capacity utilization (percent)	80	80	80	80	80
	U.S. shipments (million dollars)	76,000	77,000	79,000	65,000	69,000
	U.S. exports (million dollars)	775	770	814	581	759
	U.S. imports (million dollars)	5,157	8,253	10,215	9,212	11,042
	Apparent U.S. consumption (million dollars)	80,382	84,484	88,401	73,630	79,282
	Trade balance (million dollars)	-4,382	-7,484	-9,401	-8,630	-10,282
	Ratio of imports to consumption (percent)	6.4	9.8	11.6	12.5	13.9
	Ratio of exports to shipments (percent)	1.0	1.0	1.0	0.9	1.1

[1] Not available.
[2] Less than 0.05 percent.

Note.--Calculations based on unrounded data.

Table B-5
Textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
CH045	Fibers and yarns, except raw cotton and raw wool:					
	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)	2,835	2,990	3,115	2,969	2,830
	U.S. imports (million dollars)	2,076	2,146	2,415	2,498	2,547
	Apparent U.S. consumption (million dollars)	(1)	(1)	(1)	(1)	(1)
	Trade balance (million dollars)	759	843	699	471	282
	Ratio of imports to consumption (percent)	(1)	(1)	(1)	(1)	(1)
	Ratio of exports to shipments (percent)	(1)	(1)	(1)	(1)	(1)
CH046	Fabrics:					
	Number of establishments	4,037	3,834	3,774	3,735	3,695
	Employees (thousands)	322	305	300	291	273
	Capacity utilization (percent)	82	82	82	75	72
	U.S. shipments (million dollars)	35,012	34,460	33,920	33,910	33,680
	U.S. exports (million dollars)	3,911	4,241	4,835	4,886	5,170
	U.S. imports (million dollars)	4,602	4,751	5,547	5,662	5,563
	Apparent U.S. consumption (million dollars)	35,704	34,970	34,633	34,686	34,073
	Trade balance (million dollars)	-692	-510	-713	-776	-393
	Ratio of imports to consumption (percent)	12.9	13.6	16.0	16.3	16.3
	Ratio of exports to shipments (percent)	11.2	12.3	14.3	14.4	15.4
CH047	Carpets and rugs:					
	Number of establishments	579	588	608	607	606
	Employees (thousands)	63	62	63	64	66
	Capacity utilization (percent)	78	76	80	72	(1)
	U.S. shipments (million dollars)	10,405	10,806	10,263	10,853	11,211
	U.S. exports (million dollars)	686	757	858	826	772
	U.S. imports (million dollars)	858	845	961	1,109	1,248
	Apparent U.S. consumption (million dollars)	10,576	10,893	10,366	11,136	11,686
	Trade balance (million dollars)	-171	-87	-103	-283	-475
	Ratio of imports to consumption (percent)	8.1	7.8	9.3	10.0	10.7
	Ratio of exports to shipments (percent)	6.6	7.0	8.4	7.6	6.9
CH048	Home furnishings:					
	Number of establishments	1,767	1,720	1,675	1,640	1,604
	Employees (thousands)	77	76	75	74	71
	Capacity utilization (percent)	74	81	82	84	84
	U.S. shipments (million dollars)	9,148	9,205	9,573	9,382	9,964
	U.S. exports (million dollars)	332	347	415	442	398
	U.S. imports (million dollars)	1,493	1,477	1,802	2,271	2,652
	Apparent U.S. consumption (million dollars)	10,309	10,335	10,959	11,211	12,218
	Trade balance (million dollars)	-1,161	-1,130	-1,386	-1,829	-2,254
	Ratio of imports to consumption (percent)	14.5	14.3	16.4	20.3	21.7
	Ratio of exports to shipments (percent)	3.6	3.8	4.3	4.7	4.0
CH049	Apparel:					
	Number of establishments	18,077	17,800	17,600	17,500	17,400
	Employees (thousands)	936	868	824	763	685
	Capacity utilization (percent)	79	80	77	71	68
	U.S. shipments (million dollars)	55,316	54,663	54,990	58,069	58,419
	U.S. exports (million dollars)	6,488	7,293	8,394	8,514	7,964
	U.S. imports (million dollars)	39,665	41,684	48,492	53,874	56,565
	Apparent U.S. consumption (million dollars)	88,493	89,054	95,088	103,430	107,020
	Trade balance (million dollars)	-33,177	-34,391	-40,098	-45,361	-48,601
	Ratio of imports to consumption (percent)	44.8	46.8	51.0	52.1	52.9
	Ratio of exports to shipments (percent)	11.7	13.3	15.3	14.7	13.6

See footnote(s) at end of table.

Table B-5--*Continued*
Textiles, apparel, and footwear sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
CH050	Miscellaneous textile products:					
	Number of establishments	(1)	(1)	(1)	(1)	(1)
	Employees (thousands)	(1)	(1)	(1)	(1)	(1)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(2)
	U.S. production (million dollars)	(1)	(1)	(1)	(1)	(1)
	U.S. exports (million dollars)	1,305	1,380	1,590	1,500	1,589
	U.S. imports (million dollars)	1,860	1,893	2,140	2,395	2,696
	Apparent U.S. consumption (million dollars)	(1)	(1)	(1)	(1)	(1)
	Trade balance (million dollars)	-556	-512	-549	-894	-1,106
	Ratio of imports to consumption (percent)	(1)	(1)	(1)	(1)	(1)
	Ratio of exports to production (percent)	(1)	(1)	(1)	(1)	(1)
CH051	Footwear:					
	Number of establishments	660	610	589	551	480
	Employees (thousands)	64	54	50	44	38
	Capacity utilization (percent)	81	74	74	75	75
	U.S. shipments (million dollars)	3,880	3,710	3,643	3,342	3,267
	U.S. exports (million dollars)	671	761	802	720	693
	U.S. imports (million dollars)	12,095	12,708	13,951	13,879	14,074
	Apparent U.S. consumption (million dollars)	15,304	15,658	16,792	16,501	16,647
	Trade balance (million dollars)	-11,424	-11,948	-13,149	-13,159	-13,380
	Ratio of imports to consumption (percent)	79.0	81.2	83.1	84.1	84.5
	Ratio of exports to shipments (percent)	17.3	20.5	22.0	21.6	21.2

[1] Not available.

Note.--Calculations based on unrounded data.

Table B-6
Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM001	Clays and related mineral products:					
	Number of establishments	320	320	320	320	310
	Employees (thousands)	14	14	14	14	14
	Capacity utilization (percent)	78	80	84	86	(1)
	U.S. shipments (million dollars)	2,700	2,780	2,840	2,925	3,020
	U.S. exports (million dollars)	955	973	1,036	993	952
	U.S. imports (million dollars)	122	144	141	190	168
	Apparent U.S. consumption (million dollars)	1,867	1,952	1,945	2,122	2,237
	Trade balance (million dollars)	833	828	895	803	783
	Ratio of imports to consumption (percent)	6.5	7.4	7.3	8.9	7.5
	Ratio of exports to shipments (percent)	35.4	35.0	36.5	33.9	31.5
MM002	Fluorspar and miscellaneous mineral substances:					
	Number of establishments	8	8	6	6	6
	Employees (thousands)	2	2	1	1	(1)
	Capacity utilization (percent)	80	80	80	(1)	(1)
	U.S. shipments (million dollars)	40	40	38	36	37
	U.S. exports (million dollars)	76	72	62	53	74
	U.S. imports (million dollars)	108	116	155	132	146
	Apparent U.S. consumption (million dollars)	73	84	132	116	109
	Trade balance (million dollars)	-33	-44	-94	-80	-72
	Ratio of imports to consumption (percent)	149.1	137.7	117.9	114.7	133.8
	Ratio of exports to shipments (percent)	189.1	179.0	162.0	147.1	199.7
MM003	Iron ores and concentrates:					
	Number of establishments	18	14	14	12	12
	Employees (thousands)	7	8	8	7	7
	Capacity utilization (percent)	97	97	98	98	89
	U.S. shipments (million dollars)	2,200	2,300	2,300	2,600	2,300
	U.S. exports (million dollars)	184	232	235	244	243
	U.S. imports (million dollars)	486	556	551	527	399
	Apparent U.S. consumption (million dollars)	2,501	2,624	2,616	2,883	2,456
	Trade balance (million dollars)	-301	-324	-316	-283	-156
	Ratio of imports to consumption (percent)	19.4	21.2	21.1	18.3	16.2
	Ratio of exports to shipments (percent)	8.4	10.1	10.2	9.4	10.6
MM004	Copper ores and concentrates:					
	Number of establishments	40	40	35	35	35
	Employees (thousands)	14	13	13	13	13
	Capacity utilization (percent)	90	90	90	88	90
	U.S. shipments (million dollars)	3,380	2,770	2,740	1,960	1,899
	U.S. exports (million dollars)	486	287	211	63	81
	U.S. imports (million dollars)	127	70	68	228	82
	Apparent U.S. consumption (million dollars)	3,020	2,553	2,597	2,125	1,901
	Trade balance (million dollars)	360	217	143	-165	-2
	Ratio of imports to consumption (percent)	4.2	2.8	2.6	10.7	4.3
	Ratio of exports to shipments (percent)	14.4	10.4	7.7	3.2	4.2
MM005	Lead ores, concentrates, and residues:					
	Number of establishments	16	16	16	17	17
	Employees (thousands)	2	2	2	1	1
	Capacity utilization (percent)	87	87	87	87	87
	U.S. shipments (million dollars)	198	257	256	260	226
	U.S. exports (million dollars)	25	28	35	65	43
	U.S. imports (million dollars)	2	2	6	8	3
	Apparent U.S. consumption (million dollars)	176	231	226	203	186
	Trade balance (million dollars)	22	26	30	57	40
	Ratio of imports to consumption (percent)	1.3	1.0	2.4	3.9	1.9
	Ratio of exports to shipments (percent)	12.4	10.9	13.9	25.1	19.1

See footnote(s) at end of table.

Table B-6--*Continued*
Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM006	Zinc ores, concentrates, and residues:					
	Number of establishments	26	26	26	26	26
	Employees (thousands)	3	3	3	3	3
	Capacity utilization (percent)	65	65	65	65	65
	U.S. shipments (million dollars)	606	543	696	631	666
	U.S. exports (million dollars)	242	227	379	304	352
	U.S. imports (million dollars)	13	18	45	37	53
	Apparent U.S. consumption (million dollars)	377	334	363	364	367
	Trade balance (million dollars)	229	209	333	267	299
	Ratio of imports to consumption (percent)	3.3	5.3	12.5	10.1	14.3
	Ratio of exports to shipments (percent)	39.9	41.8	54.4	48.1	52.9
MM007	Certain ores, concentrates, ash, and residues:					
	Number of establishments	41	34	35	36	35
	Employees (thousands)	2	2	2	2	2
	Capacity utilization (percent)	51	52	51	53	52
	U.S. shipments (million dollars)	401	439	487	483	460
	U.S. exports (million dollars)	704	362	432	350	237
	U.S. imports (million dollars)	622	604	645	710	732
	Apparent U.S. consumption (million dollars)	319	681	700	843	955
	Trade balance (million dollars)	82	-242	-213	-360	-495
	Ratio of imports to consumption (percent)	195.0	88.7	92.2	84.2	76.6
	Ratio of exports to shipments (percent)	175.6	82.4	88.7	72.5	51.4
MM008	Precious metal ores and concentrates:					
	Number of establishments	300	320	318	321	313
	Employees (thousands)	17	18	19	19	17
	Capacity utilization (percent)	87	89	89	86	82
	U.S. shipments (million dollars)	3,359	3,493	3,393	3,133	2,778
	U.S. exports (million dollars)	8	9	21	11	40
	U.S. imports (million dollars)	87	74	38	45	4
	Apparent U.S. consumption (million dollars)	3,438	3,558	3,410	3,168	2,741
	Trade balance (million dollars)	-79	-65	-17	-35	37
	Ratio of imports to consumption (percent)	2.5	2.1	1.1	1.4	0.1
	Ratio of exports to shipments (percent)	0.2	0.2	0.6	0.3	1.5
MM009	Cement, stone, and related products:					
	Number of establishments	20,000	20,000	22,000	22,000	23,000
	Employees (thousands)	300	300	350	350	360
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	45,000	49,000	52,000	55,000	59,000
	U.S. exports (million dollars)	995	1,063	1,213	1,201	1,184
	U.S. imports (million dollars)	2,144	2,361	2,860	3,426	4,103
	Apparent U.S. consumption (million dollars)	46,149	50,297	53,647	57,226	61,919
	Trade balance (million dollars)	-1,149	-1,297	-1,647	-2,226	-2,919
	Ratio of imports to consumption (percent)	4.6	4.7	5.3	6.0	6.6
	Ratio of exports to shipments (percent)	2.2	2.2	2.3	2.2	2.0
MM010	Industrial ceramics:					
	Number of establishments	220	220	220	205	200
	Employees (thousands)	11	11	12	12	(1)
	Capacity utilization (percent)	76	76	78	80	(1)
	U.S. shipments (million dollars)	2,700	2,750	2,830	2,950	3,040
	U.S. exports (million dollars)	635	620	723	668	663
	U.S. imports (million dollars)	425	448	550	545	648
	Apparent U.S. consumption (million dollars)	2,490	2,578	2,656	2,827	3,026
	Trade balance (million dollars)	210	172	174	123	14
	Ratio of imports to consumption (percent)	17.1	17.4	20.7	19.3	21.4
	Ratio of exports to shipments (percent)	23.5	22.5	25.6	22.6	21.8

See footnote(s) at end of table.

Table B-6--*Continued*
Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM011	Ceramic bricks and similar articles:					
	Number of establishments	220	220	225	225	225
	Employees (thousands)	16	16	14	14	14
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,100	1,250	1,345	1,470	1,645
	U.S. exports (million dollars)	20	22	25	26	20
	U.S. imports (million dollars)	16	18	17	20	24
	Apparent U.S. consumption (million dollars)	1,097	1,246	1,338	1,463	1,650
	Trade balance (million dollars)	3	4	7	7	-5
	Ratio of imports to consumption (percent)	1.5	1.4	1.3	1.3	1.5
	Ratio of exports to shipments (percent)	1.8	1.8	1.8	1.8	1.2
MM012	Ceramic floor and wall tiles:					
	Number of establishments	169	169	169	169	169
	Employees (thousands)	9	9	9	9	9
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	730	800	830	840	840
	U.S. exports (million dollars)	26	25	29	27	24
	U.S. imports (million dollars)	562	628	716	860	1,019
	Apparent U.S. consumption (million dollars)	1,266	1,404	1,517	1,674	1,835
	Trade balance (million dollars)	-536	-604	-687	-834	-995
	Ratio of imports to consumption (percent)	44.4	44.8	47.2	51.4	55.5
	Ratio of exports to shipments (percent)	3.6	3.1	3.5	3.2	2.8
MM013	Ceramic household articles:					
	Number of establishments	65	65	64	63	63
	Employees (thousands)	7	6	6	6	(1)
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	414	423	421	437	470
	U.S. exports (million dollars)	99	95	101	103	109
	U.S. imports (million dollars)	1,658	1,556	1,675	1,716	1,671
	Apparent U.S. consumption (million dollars)	1,972	1,884	1,996	2,050	2,033
	Trade balance (million dollars)	-1,558	-1,461	-1,575	-1,613	-1,563
	Ratio of imports to consumption (percent)	84.0	82.6	83.9	83.7	82.2
	Ratio of exports to shipments (percent)	23.9	22.6	23.9	23.6	23.1
MM014	Flat glass:					
	Number of establishments	900	900	900	900	900
	Employees (thousands)	43	45	44	45	47
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	7,900	8,600	7,800	8,200	8,400
	U.S. exports (million dollars)	1,135	1,278	1,488	1,416	1,506
	U.S. imports (million dollars)	917	1,050	1,063	1,120	1,268
	Apparent U.S. consumption (million dollars)	7,682	8,372	7,375	7,904	8,162
	Trade balance (million dollars)	218	228	425	296	238
	Ratio of imports to consumption (percent)	11.9	12.5	14.4	14.2	15.5
	Ratio of exports to shipments (percent)	14.4	14.9	19.1	17.3	17.9
MM015	Glass containers:					
	Number of establishments	61	61	61	61	61
	Employees (thousands)	25	24	21	22	22
	Capacity utilization (percent)	90	90	94	95	(1)
	U.S. shipments (million dollars)	4,343	4,271	4,183	4,200	4,200
	U.S. exports (million dollars)	129	148	157	173	173
	U.S. imports (million dollars)	377	407	428	452	526
	Apparent U.S. consumption (million dollars)	4,591	4,530	4,454	4,479	4,553
	Trade balance (million dollars)	-248	-259	-271	-279	-353
	Ratio of imports to consumption (percent)	8.2	9.0	9.6	10.1	11.6
	Ratio of exports to shipments (percent)	3.0	3.5	3.8	4.1	4.1

See footnote(s) at end of table.

Table B-6--*Continued*
Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM016	Household glassware:					
	Number of establishments	240	240	240	240	240
	Employees (thousands)	13	12	12	11	12
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	1,800	1,800	1,700	1,700	1,700
	U.S. exports (million dollars)	198	205	250	179	183
	U.S. imports (million dollars)	729	746	818	864	937
	Apparent U.S. consumption (million dollars)	2,331	2,340	2,268	2,385	2,454
	Trade balance (million dollars)	-531	-540	-568	-685	-754
	Ratio of imports to consumption (percent)	31.3	31.9	36.1	36.2	38.2
	Ratio of exports to shipments (percent)	11.0	11.4	14.7	10.5	10.8
MM017	Miscellaneous glass products:					
	Number of establishments	510	510	510	510	510
	Employees (thousands)	16	17	18	18	18
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	3,200	3,400	3,800	3,700	3,800
	U.S. exports (million dollars)	576	604	770	662	674
	U.S. imports (million dollars)	583	679	767	702	805
	Apparent U.S. consumption (million dollars)	3,207	3,475	3,797	3,741	3,931
	Trade balance (million dollars)	-7	-75	3	-41	-131
	Ratio of imports to consumption (percent)	18.2	19.5	20.2	18.8	20.5
	Ratio of exports to shipments (percent)	18.0	17.8	20.3	17.9	17.7
MM018	Fiberglass insulation products:					
	Number of establishments	298	298	298	298	298
	Employees (thousands)	17	17	18	19	19
	Capacity utilization (percent)	90	91	91	96	(1)
	U.S. shipments (million dollars)	3,200	3,100	3,600	3,800	4,000
	U.S. exports (million dollars)	51	67	57	74	71
	U.S. imports (million dollars)	63	77	78	71	139
	Apparent U.S. consumption (million dollars)	3,212	3,110	3,621	3,797	4,069
	Trade balance (million dollars)	-12	-10	-21	3	-69
	Ratio of imports to consumption (percent)	1.9	2.5	2.1	1.9	3.4
	Ratio of exports to shipments (percent)	1.6	2.2	1.6	1.9	1.8
MM019	Natural and synthetic gemstones:					
	Number of establishments	330	330	235	235	235
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	(1)
	U.S. shipments (million dollars)	650	700	550	475	570
	U.S. exports (million dollars)	268	247	231	217	447
	U.S. imports (million dollars)	6,666	7,412	8,564	9,449	11,021
	Apparent U.S. consumption (million dollars)	7,048	7,865	8,883	9,708	11,145
	Trade balance (million dollars)	-6,398	-7,165	-8,333	-9,233	-10,575
	Ratio of imports to consumption (percent)	94.6	94.2	96.4	97.3	98.9
	Ratio of exports to shipments (percent)	41.2	35.3	42.0	45.6	78.4
MM020	Precious metals and non-numismatic coins:					
	Number of establishments	57	58	57	58	58
	Employees (thousands)	4	4	4	4	4
	Capacity utilization (percent)	82	82	82	75	74
	U.S. shipments (million dollars)	3,304	2,848	2,527	2,395	2,428
	U.S. exports (million dollars)	6,475	7,886	7,149	6,853	6,510
	U.S. imports (million dollars)	4,676	5,330	5,869	7,735	7,708
	Apparent U.S. consumption (million dollars)	1,506	292	1,247	3,278	3,626
	Trade balance (million dollars)	1,798	2,556	1,280	-883	-1,198
	Ratio of imports to consumption (percent)	310.6	1,826.2	470.8	236.0	212.6
	Ratio of exports to shipments (percent)	196.0	276.9	282.9	286.1	268.1

See footnote(s) at end of table.

Table B-6--*Continued*
Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM021	Primary iron products:					
	Number of establishments	23	22	21	23	23
	Employees (thousands)	23	22	21	22	22
	Capacity utilization (percent)	87	88	92	89	84
	U.S. shipments (million dollars)	8,500	8,200	8,300	8,400	7,300
	U.S. exports (million dollars)	13	13	19	17	14
	U.S. imports (million dollars)	541	552	608	856	643
	Apparent U.S. consumption (million dollars)	9,028	8,739	8,890	9,238	7,929
	Trade balance (million dollars)	-528	-539	-590	-838	-629
	Ratio of imports to consumption (percent)	6.0	6.3	6.8	9.3	8.1
	Ratio of exports to shipments (percent)	0.2	0.2	0.2	0.2	0.2
MM022	Ferroalloys:					
	Number of establishments	25	25	24	23	23
	Employees (thousands)	4	4	4	4	4
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(2)
	U.S. shipments (million dollars)	1,125	1,205	1,275	1,255	1,280
	U.S. exports (million dollars)	114	137	153	103	80
	U.S. imports (million dollars)	1,245	1,217	1,044	1,018	960
	Apparent U.S. consumption (million dollars)	2,256	2,286	2,166	2,169	2,160
	Trade balance (million dollars)	-1,131	-1,081	-891	-914	-880
	Ratio of imports to consumption (percent)	55.2	53.3	48.2	46.9	44.5
	Ratio of exports to shipments (percent)	10.1	11.3	12.0	8.2	6.3
MM023	Iron and steel waste and scrap:					
	Number of establishments	5,000	5,000	5,000	5,000	5,000
	Employees (thousands)	36	36	36	36	36
	Capacity utilization (percent)	90	90	90	85	80
	U.S. shipments (million dollars)	7,700	7,200	7,200	5,800	4,500
	U.S. exports (million dollars)	1,703	1,347	1,356	817	750
	U.S. imports (million dollars)	300	355	400	418	390
	Apparent U.S. consumption (million dollars)	6,298	6,208	6,244	5,401	4,140
	Trade balance (million dollars)	1,402	992	956	399	360
	Ratio of imports to consumption (percent)	4.8	5.7	6.4	7.7	9.4
	Ratio of exports to shipments (percent)	22.1	18.7	18.8	14.1	16.7
MM024	Abrasive and ferrous products:					
	Number of establishments	390	407	409	412	412
	Employees (thousands)	23	24	22	21	21
	Capacity utilization (percent)	82	80	83	85	(1)
	U.S. shipments (million dollars)	4,352	4,683	4,454	4,539	4,770
	U.S. exports (million dollars)	410	449	529	531	518
	U.S. imports (million dollars)	633	662	735	735	765
	Apparent U.S. consumption (million dollars)	4,575	4,896	4,660	4,743	5,017
	Trade balance (million dollars)	-223	-213	-206	-204	-247
	Ratio of imports to consumption (percent)	13.8	13.5	15.8	15.5	15.2
	Ratio of exports to shipments (percent)	9.4	9.6	11.9	11.7	10.9
MM025	Steel mill products:					
	Number of establishments	850	850	850	850	850
	Employees (thousands)	215	210	205	205	195
	Capacity utilization (percent)	93	91	89	87	84
	U.S. shipments (million dollars)	66,300	66,300	68,700	65,900	62,600
	U.S. exports (million dollars)	4,665	4,076	4,843	4,636	4,291
	U.S. imports (million dollars)	11,786	12,756	13,602	16,434	12,749
	Apparent U.S. consumption (million dollars)	73,421	74,980	77,458	77,698	71,058
	Trade balance (million dollars)	-7,121	-8,680	-8,758	-11,798	-8,458
	Ratio of imports to consumption (percent)	16.1	17.0	17.6	21.2	17.9
	Ratio of exports to shipments (percent)	7.0	6.1	7.1	7.0	6.9

See footnote(s) at end of table.

Table B-6--*Continued*
Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM026	Steel pipe and tube fittings and certain cast products:					
	Number of establishments	500	500	500	500	830
	Employees (thousands)	28	26	27	28	26
	Capacity utilization (percent)	82	82	83	83	75
	U.S. shipments (million dollars)	3,400	3,500	3,800	3,900	3,400
	U.S. exports (million dollars)	630	663	749	809	662
	U.S. imports (million dollars)	427	515	555	591	584
	Apparent U.S. consumption (million dollars)	3,196	3,351	3,606	3,681	3,322
	Trade balance (million dollars)	204	149	194	219	78
	Ratio of imports to consumption (percent)	13.3	15.4	15.4	16.0	17.6
	Ratio of exports to shipments (percent)	18.5	18.9	19.7	20.7	19.5
MM027	Fabricated structurals:					
	Number of establishments	2,631	2,916	3,040	3,036	3,034
	Employees (thousands)	82	88	93	94	92
	Capacity utilization (percent)	70	78	80	75	74
	U.S. shipments (million dollars)	14,846	15,318	16,083	17,047	17,481
	U.S. exports (million dollars)	143	178	189	151	186
	U.S. imports (million dollars)	143	177	205	328	432
	Apparent U.S. consumption (million dollars)	14,846	15,317	16,098	17,224	17,726
	Trade balance (million dollars)	([3])	1	-15	-177	-245
	Ratio of imports to consumption (percent)	1.0	1.2	1.3	1.9	2.4
	Ratio of exports to shipments (percent)	1.0	1.2	1.2	0.9	1.1
MM028	Metal construction components:					
	Number of establishments	3,068	2,939	2,867	2,795	2,711
	Employees (thousands)	133	136	140	142	148
	Capacity utilization (percent)	71	74	67	65	65
	U.S. shipments (million dollars)	15,111	16,600	17,964	19,329	20,489
	U.S. exports (million dollars)	483	551	689	611	579
	U.S. imports (million dollars)	258	353	435	562	693
	Apparent U.S. consumption (million dollars)	14,886	16,402	17,710	19,280	20,604
	Trade balance (million dollars)	225	198	254	49	-115
	Ratio of imports to consumption (percent)	1.7	2.2	2.5	2.9	3.4
	Ratio of exports to shipments (percent)	3.2	3.3	3.8	3.2	2.8
MM029	Metallic containers:					
	Number of establishments	521	520	520	520	520
	Employees (thousands)	59	60	60	58	58
	Capacity utilization (percent)	82	87	86	82	82
	U.S. shipments (million dollars)	16,760	16,925	18,340	18,340	18,285
	U.S. exports (million dollars)	787	796	901	819	690
	U.S. imports (million dollars)	380	449	458	463	527
	Apparent U.S. consumption (million dollars)	16,353	16,578	17,897	17,984	18,123
	Trade balance (million dollars)	407	347	443	356	162
	Ratio of imports to consumption (percent)	2.3	2.7	2.6	2.6	2.9
	Ratio of exports to shipments (percent)	4.7	4.7	4.9	4.5	3.8
MM030	Wire products of base metal:					
	Number of establishments	1,500	1,500	1,500	1,500	1,500
	Employees (thousands)	86	84	92	96	103
	Capacity utilization (percent)	([1])	([1])	([1])	([1])	([1])
	U.S. shipments (million dollars)	15,551	15,231	16,663	17,363	18,665
	U.S. exports (million dollars)	573	660	781	756	674
	U.S. imports (million dollars)	1,097	1,145	1,217	1,231	1,354
	Apparent U.S. consumption (million dollars)	16,075	15,715	17,099	17,838	19,346
	Trade balance (million dollars)	-524	-484	-436	-475	-681
	Ratio of imports to consumption (percent)	6.8	7.3	7.1	6.9	7.0
	Ratio of exports to shipments (percent)	3.7	4.3	4.7	4.4	3.6

See footnote(s) at end of table.

Table B-6--*Continued*
Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM031	Miscellaneous products of base metal:					
	Number of establishments	1,370	1,460	1,480	1,490	1,510
	Employees (thousands)	120	120	120	130	120
	Capacity utilization (percent)	75	75	75	70	70
	U.S. shipments (million dollars)	16,500	16,900	17,900	19,000	19,500
	U.S. exports (million dollars)	3,490	4,112	4,469	4,892	5,369
	U.S. imports (million dollars)	4,291	4,729	5,437	5,985	6,639
	Apparent U.S. consumption (million dollars)	17,301	17,516	18,868	20,094	20,770
	Trade balance (million dollars)	-801	-616	-968	-1,094	-1,270
	Ratio of imports to consumption (percent)	24.8	27.0	28.8	29.8	32.0
	Ratio of exports to shipments (percent)	21.2	24.3	25.0	25.7	27.5
MM032	Industrial fasteners of base metal:					
	Number of establishments	893	917	920	923	925
	Employees (thousands)	48	49	50	52	51
	Capacity utilization (percent)	79	77	78	78	78
	U.S. shipments (million dollars)	6,400	6,500	7,200	7,200	7,200
	U.S. exports (million dollars)	1,061	1,366	1,333	1,470	1,535
	U.S. imports (million dollars)	1,894	1,847	1,907	2,020	2,019
	Apparent U.S. consumption (million dollars)	7,233	6,982	7,774	7,750	7,684
	Trade balance (million dollars)	-833	-482	-574	-550	-484
	Ratio of imports to consumption (percent)	26.2	26.5	24.5	26.1	26.3
	Ratio of exports to shipments (percent)	16.6	21.0	18.5	20.4	21.3
MM033	Cooking and kitchen ware:					
	Number of establishments	130	130	130	130	130
	Employees (thousands)	50	51	51	51	51
	Capacity utilization (percent)	(1)	(1)	(1)	(1)	75
	U.S. shipments (million dollars)	1,350	1,300	1,300	1,200	1,300
	U.S. exports (million dollars)	245	278	242	244	214
	U.S. imports (million dollars)	1,158	1,140	1,303	1,393	1,585
	Apparent U.S. consumption (million dollars)	2,263	2,162	2,361	2,349	2,671
	Trade balance (million dollars)	-913	-862	-1,061	-1,149	-1,371
	Ratio of imports to consumption (percent)	51.2	52.7	55.2	59.3	59.3
	Ratio of exports to shipments (percent)	18.2	21.4	18.6	20.4	16.5
MM034	Metal and ceramic sanitary ware:					
	Number of establishments	150	150	150	150	152
	Employees (thousands)	16	16	16	15	15
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	75
	U.S. shipments (million dollars)	1,602	1,628	1,661	1,703	1,658
	U.S. exports (million dollars)	159	142	159	147	132
	U.S. imports (million dollars)	271	318	332	403	473
	Apparent U.S. consumption (million dollars)	1,714	1,804	1,834	1,960	1,999
	Trade balance (million dollars)	-112	-176	-173	-257	-341
	Ratio of imports to consumption (percent)	15.8	17.6	18.1	20.6	23.7
	Ratio of exports to shipments (percent)	9.9	8.7	9.6	8.6	7.9
MM035	Construction castings and other cast-iron articles:					
	Number of establishments	50	50	50	50	50
	Employees (thousands)	6	6	6	8	7
	Capacity utilization (percent)	84	85	85	85	85
	U.S. shipments (million dollars)	800	900	900	1,100	1,000
	U.S. exports (million dollars)	26	44	46	37	27
	U.S. imports (million dollars)	87	91	99	110	120
	Apparent U.S. consumption (million dollars)	861	947	953	1,173	1,092
	Trade balance (million dollars)	-61	-47	-53	-73	-92
	Ratio of imports to consumption (percent)	10.1	9.6	10.4	9.4	11.0
	Ratio of exports to shipments (percent)	3.2	4.9	5.1	3.3	2.7

See footnote(s) at end of table.

Table B-6--*Continued*
Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM036	Copper and related articles:					
	Number of establishments	680	675	676	673	637
	Employees (thousands)	41	40	40	41	41
	Capacity utilization (percent)	87	88	88	88	86
	U.S. shipments (million dollars)	15,000	13,200	14,000	11,700	11,600
	U.S. exports (million dollars)	2,708	2,370	2,228	1,813	1,668
	U.S. imports (million dollars)	3,401	3,472	3,743	3,359	3,726
	Apparent U.S. consumption (million dollars)	15,694	14,302	15,516	13,246	13,658
	Trade balance (million dollars)	-694	-1,102	-1,516	-1,546	-2,058
	Ratio of imports to consumption (percent)	21.7	24.3	24.1	25.4	27.3
	Ratio of exports to shipments (percent)	18.1	18.0	15.9	15.5	14.4
MM037	Unwrought aluminum:					
	Number of establishments	163	141	136	137	137
	Employees (thousands)	25	25	26	26	26
	Capacity utilization (percent)	88	87	86	86	85
	U.S. shipments (million dollars)	11,208	9,806	10,555	9,109	9,089
	U.S. exports (million dollars)	1,294	1,057	1,023	917	980
	U.S. imports (million dollars)	4,585	3,828	4,389	4,558	4,744
	Apparent U.S. consumption (million dollars)	14,499	12,578	13,921	12,750	12,853
	Trade balance (million dollars)	-3,291	-2,772	-3,366	-3,641	-3,764
	Ratio of imports to consumption (percent)	31.6	30.4	31.5	35.7	36.9
	Ratio of exports to shipments (percent)	11.5	10.8	9.7	10.1	10.8
MM038	Aluminum mill products:					
	Number of establishments	237	247	264	266	268
	Employees (thousands)	56	56	60	61	60
	Capacity utilization (percent)	85	87	88	85	84
	U.S. shipments (million dollars)	18,968	17,440	20,526	19,454	19,722
	U.S. exports (million dollars)	2,974	2,771	3,133	3,046	2,943
	U.S. imports (million dollars)	2,048	1,737	2,009	2,181	2,283
	Apparent U.S. consumption (million dollars)	18,042	16,407	19,402	18,588	19,062
	Trade balance (million dollars)	926	1,033	1,124	866	660
	Ratio of imports to consumption (percent)	11.4	10.6	10.4	11.7	12.0
	Ratio of exports to shipments (percent)	15.7	15.9	15.3	15.7	14.9
MM039	Lead and related articles:					
	Number of establishments	48	53	53	51	51
	Employees (thousands)	6	5	5	4	4
	Capacity utilization (percent)	82	82	84	84	85
	U.S. shipments (million dollars)	1,900	2,300	2,300	2,200	2,200
	U.S. exports (million dollars)	86	163	181	160	154
	U.S. imports (million dollars)	195	240	201	190	201
	Apparent U.S. consumption (million dollars)	2,009	2,377	2,319	2,230	2,246
	Trade balance (million dollars)	-109	-77	-19	-30	-46
	Ratio of imports to consumption (percent)	9.7	10.1	8.7	8.5	8.9
	Ratio of exports to shipments (percent)	4.5	7.1	7.9	7.3	7.0
MM040	Zinc and related articles:					
	Number of establishments	39	39	39	39	39
	Employees (thousands)	4	4	4	4	4
	Capacity utilization (percent)	98	98	98	98	98
	U.S. shipments (million dollars)	665	600	815	998	999
	U.S. exports (million dollars)	81	98	113	102	107
	U.S. imports (million dollars)	952	979	1,328	1,119	1,252
	Apparent U.S. consumption (million dollars)	1,535	1,482	2,030	2,015	2,144
	Trade balance (million dollars)	-870	-882	-1,215	-1,017	-1,145
	Ratio of imports to consumption (percent)	62.0	66.1	65.4	55.5	58.4
	Ratio of exports to shipments (percent)	12.2	16.3	13.9	10.2	10.7

See footnote(s) at end of table.

Table B-6--*Continued*
Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM041	Certain base metals and chemical elements:					
	Number of establishments	(1)	(1)	(1)	(1)	(1)
	Employees (thousands)	22	25	25	25	24
	Capacity utilization (percent)	82	82	82	84	74
	U.S. shipments (million dollars)	5,700	6,800	6,900	6,300	4,000
	U.S. exports (million dollars)	1,190	1,263	1,401	1,398	1,272
	U.S. imports (million dollars)	2,536	2,640	2,777	2,424	2,226
	Apparent U.S. consumption (million dollars)	7,046	8,178	8,276	7,325	4,955
	Trade balance (million dollars)	-1,346	-1,378	-1,376	-1,025	-955
	Ratio of imports to consumption (percent)	36.0	32.3	33.6	33.1	44.9
	Ratio of exports to shipments (percent)	20.9	18.6	20.3	22.2	31.8
MM042	Nonpowered handtools:					
	Number of establishments	1,250	1,220	1,200	1,150	1,100
	Employees (thousands)	121	120	123	122	121
	Capacity utilization (percent)	80	80	80	75	70
	U.S. shipments (million dollars)	13,400	13,840	13,829	14,520	15,246
	U.S. exports (million dollars)	1,639	1,732	2,188	2,060	2,031
	U.S. imports (million dollars)	2,230	2,280	2,725	2,885	2,917
	Apparent U.S. consumption (million dollars)	13,991	14,388	14,366	15,345	16,133
	Trade balance (million dollars)	-591	-548	-537	-825	-887
	Ratio of imports to consumption (percent)	15.9	15.8	19.0	18.8	18.1
	Ratio of exports to shipments (percent)	12.2	12.5	15.8	14.2	13.3
MM043	Certain cutlery, sewing implements, and related products:					
	Number of establishments	132	130	130	135	136
	Employees (thousands)	11	11	11	11	11
	Capacity utilization (percent)	89	90	86	88	75
	U.S. shipments (million dollars)	1,920	2,120	2,010	2,090	2,176
	U.S. exports (million dollars)	420	480	475	511	583
	U.S. imports (million dollars)	656	673	719	781	856
	Apparent U.S. consumption (million dollars)	2,156	2,313	2,254	2,361	2,449
	Trade balance (million dollars)	-236	-193	-244	-271	-273
	Ratio of imports to consumption (percent)	30.4	29.1	31.9	33.1	35.0
	Ratio of exports to shipments (percent)	21.9	22.6	23.6	24.4	26.8
MM044	Table flatware and related products:					
	Number of establishments	5	5	5	5	5
	Employees (thousands)	5	5	5	5	5
	Capacity utilization (percent)	90	90	93	95	95
	U.S. shipments (million dollars)	200	194	205	215	226
	U.S. exports (million dollars)	35	30	36	24	26
	U.S. imports (million dollars)	272	287	325	327	425
	Apparent U.S. consumption (million dollars)	436	452	494	518	625
	Trade balance (million dollars)	-236	-258	-289	-303	-399
	Ratio of imports to consumption (percent)	62.3	63.6	65.8	63.2	68.0
	Ratio of exports to shipments (percent)	17.7	15.4	17.6	11.4	11.6

See footnote(s) at end of table.

Table B-6--*Continued*
Minerals and metals sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM045	Certain builders' hardware:					
	Number of establishments	338	302	298	300	302
	Employees (thousands)	44	42	43	43	43
	Capacity utilization (percent)	75	76	74	71	70
	U.S. shipments (million dollars)	5,067	5,533	5,780	6,127	6,283
	U.S. exports (million dollars)	694	696	759	807	823
	U.S. imports (million dollars)	1,024	1,186	1,333	1,531	1,696
	Apparent U.S. consumption (million dollars)	5,397	6,022	6,354	6,850	7,156
	Trade balance (million dollars)	-330	-489	-574	-723	-873
	Ratio of imports to consumption (percent)	19.0	19.7	21.0	22.3	23.7
	Ratio of exports to shipments (percent)	13.7	12.6	13.1	13.2	13.1

[1] Not available.
[2] Capacity utilization could not be meaningfully calculated for this industry.
[3] Less than $500,000.

Note.--Calculations based on unrounded data.

Table B-7
Machinery sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
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)	4,620	4,755	5,110	5,460	6,150
	U.S. exports (million dollars)	1,302	1,366	1,453	1,315	993
	U.S. imports (million dollars)	3,441	3,733	4,280	4,408	4,868
	Apparent U.S. consumption (million dollars)	6,759	7,122	7,937	8,552	10,025
	Trade balance (million dollars)	-2,139	-2,367	-2,827	-3,092	-3,875
	Ratio of imports to consumption (percent)	50.9	52.4	53.9	51.5	48.6
	Ratio of exports to shipments (percent)	28.2	28.7	28.4	24.1	16.1
MM069	Pumps for motor vehicles:					
	Number of establishments	172	178	183	192	202
	Employees (thousands)	25	26	26	27	27
	Capacity utilization (percent)	69	70	71	72	72
	U.S. shipments (million dollars)	2,512	2,590	2,705	2,840	2,982
	U.S. exports (million dollars)	334	350	432	556	546
	U.S. imports (million dollars)	720	716	767	780	776
	Apparent U.S. consumption (million dollars)	2,898	2,956	3,040	3,063	3,212
	Trade balance (million dollars)	-386	-366	-335	-223	-230
	Ratio of imports to consumption (percent)	24.8	24.2	25.2	25.5	24.2
	Ratio of exports to shipments (percent)	13.3	13.5	16.0	19.6	18.3
MM070	Pumps for liquids:					
	Number of establishments	385	395	407	425	450
	Employees (thousands)	30	30	31	32	36
	Capacity utilization (percent)	72	73	73	68	69
	U.S. shipments (million dollars)	5,620	5,715	5,892	6,289	6,603
	U.S. exports (million dollars)	2,034	2,154	2,546	2,340	2,325
	U.S. imports (million dollars)	1,247	1,345	1,436	1,587	1,643
	Apparent U.S. consumption (million dollars)	4,833	4,906	4,782	5,536	5,920
	Trade balance (million dollars)	787	809	1,110	753	683
	Ratio of imports to consumption (percent)	25.8	27.4	30.0	28.7	27.7
	Ratio of exports to shipments (percent)	36.2	37.7	43.2	37.2	35.2
MM071	Air-conditioning equipment and parts:					
	Number of establishments	1,275	1,300	1,222	1,205	1,225
	Employees (thousands)	152	155	146	140	148
	Capacity utilization (percent)	85	87	77	75	73
	U.S. shipments (million dollars)	26,946	28,293	26,595	25,528	26,500
	U.S. exports (million dollars)	4,538	4,988	5,726	5,471	5,641
	U.S. imports (million dollars)	4,129	4,576	4,433	4,945	5,604
	Apparent U.S. consumption (million dollars)	26,537	27,881	25,301	25,002	26,463
	Trade balance (million dollars)	409	412	1,294	526	37
	Ratio of imports to consumption (percent)	15.6	16.4	17.5	19.8	21.2
	Ratio of exports to shipments (percent)	16.8	17.6	21.5	21.4	21.3
MM072	Industrial thermal-processing equipment and furnaces:					
	Number of establishments	308	315	300	290	329
	Employees (thousands)	35	36	34	32	33
	Capacity utilization (percent)	67	70	67	68	67
	U.S. shipments (million dollars)	3,549	3,726	3,539	3,610	3,715
	U.S. exports (million dollars)	2,144	2,212	2,567	2,352	2,292
	U.S. imports (million dollars)	1,123	1,368	1,313	1,351	1,483
	Apparent U.S. consumption (million dollars)	2,528	2,882	2,285	2,609	2,906
	Trade balance (million dollars)	1,021	844	1,254	1,001	809
	Ratio of imports to consumption (percent)	44.4	47.5	57.4	51.8	51.0
	Ratio of exports to shipments (percent)	60.4	59.4	72.5	65.2	61.7

See footnote(s) at end of table.

Table B-7--*Continued*
Machinery sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM073	Household appliances, including commercial applications:					
	Number of establishments	367	374	390	406	426
	Employees (thousands)	121	120	115	117	118
	Capacity utilization (percent)	79	76	73	72	73
	U.S. shipments (million dollars)	21,776	22,157	21,203	22,014	23,103
	U.S. exports (million dollars)	5,029	5,503	5,990	5,895	5,524
	U.S. imports (million dollars)	5,253	5,468	5,916	6,608	7,302
	Apparent U.S. consumption (million dollars)	22,000	22,122	21,129	22,727	24,881
	Trade balance (million dollars)	-224	35	74	-713	-1,778
	Ratio of imports to consumption (percent)	23.9	24.7	28.0	29.1	29.3
	Ratio of exports to shipments (percent)	23.1	24.8	28.2	26.8	23.9
MM074	Centrifuges and filtering and purifying equipment:					
	Number of establishments	280	280	280	280	281
	Employees (thousands)	29	32	32	32	33
	Capacity utilization (percent)	70	69	70	70	71
	U.S. shipments (million dollars)	4,086	4,455	4,500	4,815	5,080
	U.S. exports (million dollars)	2,117	2,365	2,822	2,431	2,564
	U.S. imports (million dollars)	1,248	1,391	1,325	1,442	1,783
	Apparent U.S. consumption (million dollars)	3,217	3,481	3,004	3,827	4,299
	Trade balance (million dollars)	869	974	1,496	988	781
	Ratio of imports to consumption (percent)	38.8	40.0	44.1	37.7	41.5
	Ratio of exports to shipments (percent)	51.8	53.1	62.7	50.5	50.5
MM075	Wrapping, packaging, and can-sealing machinery:					
	Number of establishments	629	687	719	751	782
	Employees (thousands)	17	16	17	17	18
	Capacity utilization (percent)	81	77	73	71	72
	U.S. shipments (million dollars)	4,185	4,056	4,379	4,613	4,848
	U.S. exports (million dollars)	839	841	871	791	766
	U.S. imports (million dollars)	932	1,042	1,104	1,072	1,117
	Apparent U.S. consumption (million dollars)	4,278	4,257	4,612	4,894	5,199
	Trade balance (million dollars)	-93	-201	-233	-281	-351
	Ratio of imports to consumption (percent)	21.8	24.5	23.9	21.9	21.5
	Ratio of exports to shipments (percent)	20.1	20.7	19.9	17.2	15.8
MM076	Scales and weighing machinery:					
	Number of establishments	120	116	115	114	113
	Employees (thousands)	6	5	5	5	5
	Capacity utilization (percent)	71	68	62	60	60
	U.S. shipments (million dollars)	643	729	691	694	696
	U.S. exports (million dollars)	127	136	154	147	145
	U.S. imports (million dollars)	201	197	228	223	265
	Apparent U.S. consumption (million dollars)	716	790	765	770	817
	Trade balance (million dollars)	-73	-61	-74	-76	-121
	Ratio of imports to consumption (percent)	28.0	24.9	29.8	28.9	32.5
	Ratio of exports to shipments (percent)	19.8	18.7	22.3	21.2	20.8
MM077	Mineral processing machinery:					
	Number of establishments	90	90	90	90	90
	Employees (thousands)	7	7	7	7	7
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(1)
	U.S. shipments (million dollars)	619	605	673	675	521
	U.S. exports (million dollars)	673	674	915	764	590
	U.S. imports (million dollars)	371	432	508	574	667
	Apparent U.S. consumption (million dollars)	317	363	266	486	599
	Trade balance (million dollars)	302	242	407	189	-78
	Ratio of imports to consumption (percent)	117.0	119.0	191.2	118.3	111.5
	Ratio of exports to shipments (percent)	108.7	111.4	136.0	113.2	113.2

See footnote(s) at end of table.

Table B-7--*Continued*
Machinery sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM078	Farm and garden machinery and equipment:					
	Number of establishments	1,870	1,820	1,800	1,890	1,870
	Employees (thousands)	100	98	101	101	96
	Capacity utilization (percent)	72	74	76	70	63
	U.S. shipments (million dollars)	16,200	16,810	17,675	18,846	17,300
	U.S. exports (million dollars)	4,325	4,859	5,877	5,581	4,536
	U.S. imports (million dollars)	3,479	3,384	3,891	4,171	3,294
	Apparent U.S. consumption (million dollars)	15,354	15,334	15,689	17,436	16,058
	Trade balance (million dollars)	846	1,476	1,986	1,410	1,242
	Ratio of imports to consumption (percent)	22.7	22.1	24.8	23.9	20.5
	Ratio of exports to shipments (percent)	26.7	28.9	33.2	29.6	26.2
MM079	Industrial food-processing and related machinery:					
	Number of establishments	531	526	531	535	540
	Employees (thousands)	20	21	20	20	20
	Capacity utilization (percent)	71	71	72	68	70
	U.S. shipments (million dollars)	2,819	2,798	2,950	3,051	3,151
	U.S. exports (million dollars)	694	708	697	688	611
	U.S. imports (million dollars)	552	505	549	619	621
	Apparent U.S. consumption (million dollars)	2,677	2,595	2,803	2,981	3,160
	Trade balance (million dollars)	142	203	147	70	-9
	Ratio of imports to consumption (percent)	20.6	19.5	19.6	20.8	19.6
	Ratio of exports to shipments (percent)	24.6	25.3	23.6	22.6	19.4
MM080	Pulp, paper, and paperboard machinery:					
	Number of establishments	337	346	355	358	366
	Employees (thousands)	19	20	20	20	20
	Capacity utilization (percent)	92	87	79	73	73
	U.S. shipments (million dollars)	3,424	3,419	3,461	3,619	3,777
	U.S. exports (million dollars)	857	851	990	809	738
	U.S. imports (million dollars)	978	1,178	1,105	1,037	1,003
	Apparent U.S. consumption (million dollars)	3,545	3,746	3,576	3,846	4,041
	Trade balance (million dollars)	-121	-327	-115	-227	-264
	Ratio of imports to consumption (percent)	27.6	31.4	30.9	27.0	24.8
	Ratio of exports to shipments (percent)	25.0	24.9	28.6	22.4	19.6
MM081	Printing and related machinery:					
	Number of establishments	500	522	533	545	556
	Employees (thousands)	22	22	19	18	18
	Capacity utilization (percent)	74	74	70	72	72
	U.S. shipments (million dollars)	3,498	3,654	3,299	3,309	3,320
	U.S. exports (million dollars)	1,297	1,421	1,486	1,455	1,347
	U.S. imports (million dollars)	2,009	1,796	2,048	2,231	2,304
	Apparent U.S. consumption (million dollars)	4,210	4,029	3,861	4,085	4,278
	Trade balance (million dollars)	-712	-375	-562	-776	-958
	Ratio of imports to consumption (percent)	47.7	44.6	53.0	54.6	53.9
	Ratio of exports to shipments (percent)	37.1	38.9	45.0	44.0	40.6
MM082	Textile machinery:					
	Number of establishments	500	500	500	500	500
	Employees (thousands)	17	16	17	16	16
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(1)
	U.S. shipments (million dollars)	1,620	1,475	1,642	1,724	1,546
	U.S. exports (million dollars)	752	728	849	760	682
	U.S. imports (million dollars)	1,752	1,528	1,686	1,958	1,490
	Apparent U.S. consumption (million dollars)	2,620	2,275	2,479	2,922	2,354
	Trade balance (million dollars)	-1,000	-800	-837	-1,198	-808
	Ratio of imports to consumption (percent)	66.9	67.2	68.0	67.0	63.3
	Ratio of exports to shipments (percent)	46.4	49.3	51.7	44.1	44.1

See footnote(s) at end of table.

Table B-7--*Continued*
Machinery sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM083	Metal rolling mills:					
	Number of establishments	15	15	15	15	15
	Employees (thousands)	3	3	3	3	3
	Capacity utilization (percent)	(2)	(2)	(2)	(2)	(1)
	U.S. shipments (million dollars)	610	722	762	840	511
	U.S. exports (million dollars)	235	205	262	252	153
	U.S. imports (million dollars)	278	533	394	514	321
	Apparent U.S. consumption (million dollars)	653	1,050	894	1,102	679
	Trade balance (million dollars)	-43	-328	-132	-262	-168
	Ratio of imports to consumption (percent)	42.6	50.7	44.1	46.6	47.3
	Ratio of exports to shipments (percent)	38.5	28.4	34.4	30.0	30.0
MM084	Metal cutting machine tools and machine tool accessories:					
	Number of establishments	800	750	750	720	700
	Employees (thousands)	88	87	88	87	83
	Capacity utilization (percent)	76	74	73	70	70
	U.S. shipments (million dollars)	6,580	6,627	7,138	7,021	5,908
	U.S. exports (million dollars)	1,722	2,228	2,206	1,985	1,773
	U.S. imports (million dollars)	3,512	3,880	4,298	4,590	3,921
	Apparent U.S. consumption (million dollars)	8,370	8,279	9,230	9,626	8,056
	Trade balance (million dollars)	-1,790	-1,652	-2,092	-2,605	-2,148
	Ratio of imports to consumption (percent)	42.0	46.9	46.6	47.7	48.7
	Ratio of exports to shipments (percent)	26.2	33.6	30.9	28.3	30.0
MM085	Metal forming machine tools:					
	Number of establishments	340	340	310	300	(1)
	Employees (thousands)	18	18	17	16	(1)
	Capacity utilization (percent)	80	76	86	80	80
	U.S. shipments (million dollars)	3,050	3,052	3,204	3,089	2,994
	U.S. exports (million dollars)	862	1,033	1,054	996	947
	U.S. imports (million dollars)	1,125	1,226	1,355	1,409	1,312
	Apparent U.S. consumption (million dollars)	3,313	3,245	3,505	3,502	3,359
	Trade balance (million dollars)	-263	-193	-301	-413	-365
	Ratio of imports to consumption (percent)	34.0	37.8	38.6	40.2	39.1
	Ratio of exports to shipments (percent)	28.3	33.9	32.9	32.2	31.6
MM086	Non-metalworking machine tools:					
	Number of establishments	330	330	300	290	280
	Employees (thousands)	16	17	18	20	21
	Capacity utilization (percent)	85	85	85	80	80
	U.S. shipments (million dollars)	2,564	2,900	3,126	3,283	3,446
	U.S. exports (million dollars)	1,456	1,368	1,610	617	792
	U.S. imports (million dollars)	993	1,207	1,464	1,229	1,318
	Apparent U.S. consumption (million dollars)	2,101	2,739	2,980	3,895	3,972
	Trade balance (million dollars)	463	161	146	-612	-526
	Ratio of imports to consumption (percent)	47.3	44.1	49.1	31.5	33.2
	Ratio of exports to shipments (percent)	56.8	47.2	51.5	18.8	23.0
MM087	Semiconductor manufacturing equipment and robotics:					
	Number of establishments	440	420	420	400	410
	Employees (thousands)	44	53	53	50	52
	Capacity utilization (percent)	100	100	98	70	75
	U.S. shipments (million dollars)	12,655	15,474	13,498	12,608	13,112
	U.S. exports (million dollars)	6,059	5,417	5,787	7,965	7,986
	U.S. imports (million dollars)	2,008	2,019	3,289	2,809	3,123
	Apparent U.S. consumption (million dollars)	8,604	12,076	11,000	7,451	8,250
	Trade balance (million dollars)	4,051	3,398	2,498	5,157	4,862
	Ratio of imports to consumption (percent)	23.3	16.7	29.9	37.7	37.9
	Ratio of exports to shipments (percent)	47.9	35.0	42.9	63.2	60.9

See footnote(s) at end of table.

Table B-7--*Continued*
Machinery sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM088	Taps, cocks, valves, and similar devices:					
	Number of establishments	893	890	935	825	797
	Employees (thousands)	74	72	74	72	70
	Capacity utilization (percent)	76	76	78	75	75
	U.S. shipments (million dollars)	10,355	10,614	11,144	11,033	11,687
	U.S. exports (million dollars)	2,180	2,423	2,745	2,836	2,959
	U.S. imports (million dollars)	2,931	3,128	3,566	3,974	4,335
	Apparent U.S. consumption (million dollars)	11,107	11,319	11,965	12,171	13,063
	Trade balance (million dollars)	-752	-705	-821	-1,138	-1,376
	Ratio of imports to consumption (percent)	26.4	27.6	29.8	32.7	33.2
	Ratio of exports to shipments (percent)	21.0	22.8	24.6	25.7	25.3
MM089	Mechanical power transmission equipment:					
	Number of establishments	230	210	210	210	200
	Employees (thousands)	40	38	39	40	38
	Capacity utilization (percent)	72	76	77	80	75
	U.S. shipments (million dollars)	4,334	4,551	4,609	4,812	4,969
	U.S. exports (million dollars)	818	889	1,027	1,011	942
	U.S. imports (million dollars)	1,607	1,607	1,650	1,843	2,008
	Apparent U.S. consumption (million dollars)	5,123	5,269	5,232	5,644	6,035
	Trade balance (million dollars)	-789	-718	-623	-832	-1,066
	Ratio of imports to consumption (percent)	31.4	30.5	31.5	32.7	33.3
	Ratio of exports to shipments (percent)	18.9	19.5	22.3	21.0	19.0
MM090	Boilers, turbines, and related machinery:					
	Number of establishments	30	30	30	28	28
	Employees (thousands)	9	9	9	8	8
	Capacity utilization (percent)	65	70	73	70	70
	U.S. shipments (million dollars)	1,589	1,721	1,577	1,594	1,610
	U.S. exports (million dollars)	1,540	1,560	1,864	1,495	1,290
	U.S. imports (million dollars)	363	499	345	370	484
	Apparent U.S. consumption (million dollars)	412	661	58	469	804
	Trade balance (million dollars)	1,177	1,060	1,519	1,125	806
	Ratio of imports to consumption (percent)	88.1	75.6	591.3	79.0	60.2
	Ratio of exports to shipments (percent)	96.9	90.6	118.2	93.8	80.1
MM091	Electric motors, generators, and related equipment:					
	Number of establishments	510	510	515	515	510
	Employees (thousands)	96	96	94	95	95
	Capacity utilization (percent)	80	81	74	76	75
	U.S. shipments (million dollars)	17,770	17,800	18,250	19,100	19,150
	U.S. exports (million dollars)	3,383	3,308	3,843	3,955	3,728
	U.S. imports (million dollars)	3,878	3,874	4,178	4,748	6,089
	Apparent U.S. consumption (million dollars)	18,265	18,366	18,585	19,893	21,512
	Trade balance (million dollars)	-495	-566	-335	-793	-2,362
	Ratio of imports to consumption (percent)	21.2	21.1	22.5	23.9	28.3
	Ratio of exports to shipments (percent)	19.0	18.6	21.1	20.7	19.5
MM092	Electrical transformers, static converters, and inductors:					
	Number of establishments	410	415	415	415	420
	Employees (thousands)	56	58	59	58	57
	Capacity utilization (percent)	74	75	76	74	76
	U.S. shipments (million dollars)	7,585	7,700	8,350	8,570	8,600
	U.S. exports (million dollars)	2,000	1,924	2,485	2,304	2,379
	U.S. imports (million dollars)	3,537	3,632	4,294	4,485	4,950
	Apparent U.S. consumption (million dollars)	9,123	9,409	10,159	10,751	11,171
	Trade balance (million dollars)	-1,538	-1,709	-1,809	-2,181	-2,571
	Ratio of imports to consumption (percent)	38.8	38.6	42.3	41.7	44.3
	Ratio of exports to shipments (percent)	26.4	25.0	29.8	26.9	27.7

See footnote(s) at end of table.

Table B-7--*Continued*
Machinery sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM093	Portable electric handtools:					
	Number of establishments	30	30	29	30	28
	Employees (thousands)	10	10	10	10	10
	Capacity utilization (percent)	80	78	80	82	81
	U.S. shipments (million dollars)	1,930	2,060	2,020	2,150	2,280
	U.S. exports (million dollars)	369	333	443	383	392
	U.S. imports (million dollars)	481	607	765	834	992
	Apparent U.S. consumption (million dollars)	2,042	2,335	2,342	2,601	2,880
	Trade balance (million dollars)	-112	-275	-322	-451	-600
	Ratio of imports to consumption (percent)	23.6	26.0	32.7	32.1	34.5
	Ratio of exports to shipments (percent)	19.1	16.1	21.9	17.8	17.2
MM094	Nonelectrically powered handtools and parts thereof:					
	Number of establishments	46	42	42	38	38
	Employees (thousands)	12	12	12	11	12
	Capacity utilization (percent)	80	77	80	77	78
	U.S. shipments (million dollars)	1,558	1,800	1,769	1,822	1,877
	U.S. exports (million dollars)	462	478	579	553	537
	U.S. imports (million dollars)	661	684	735	782	890
	Apparent U.S. consumption (million dollars)	1,757	2,006	1,925	2,052	2,230
	Trade balance (million dollars)	-199	-206	-156	-230	-353
	Ratio of imports to consumption (percent)	37.6	34.1	38.2	38.1	39.9
	Ratio of exports to shipments (percent)	29.7	26.6	32.7	30.3	28.6
MM095	Electric lamps (bulbs) and portable electric lights:					
	Number of establishments	125	127	125	120	120
	Employees (thousands)	25	26	27	28	27
	Capacity utilization (percent)	72	71	70	73	70
	U.S. shipments (million dollars)	3,200	3,400	3,500	3,650	3,600
	U.S. exports (million dollars)	786	833	955	896	894
	U.S. imports (million dollars)	1,097	1,153	1,215	1,287	1,454
	Apparent U.S. consumption (million dollars)	3,511	3,720	3,760	4,041	4,161
	Trade balance (million dollars)	-311	-320	-260	-391	-561
	Ratio of imports to consumption (percent)	31.3	31.0	32.3	31.8	35.0
	Ratio of exports to shipments (percent)	24.6	24.5	27.3	24.5	24.8
MM096	Welding and soldering equipment:					
	Number of establishments	225	250	245	245	250
	Employees (thousands)	16	16	17	17	18
	Capacity utilization (percent)	74	79	78	78	78
	U.S. shipments (million dollars)	3,600	3,880	4,062	4,300	4,500
	U.S. exports (million dollars)	695	744	982	810	989
	U.S. imports (million dollars)	643	731	863	781	702
	Apparent U.S. consumption (million dollars)	3,548	3,867	3,943	4,271	4,213
	Trade balance (million dollars)	52	13	119	29	287
	Ratio of imports to consumption (percent)	18.1	18.9	21.9	18.3	16.7
	Ratio of exports to shipments (percent)	19.3	19.2	24.2	18.8	22.0
MM097	Nonautomotive insulated electrical wire and related products:					
	Number of establishments	535	535	530	530	525
	Employees (thousands)	87	90	91	92	91
	Capacity utilization (percent)	85	85	83	85	80
	U.S. shipments (million dollars)	16,565	17,200	18,450	19,750	19,700
	U.S. exports (million dollars)	2,272	2,578	3,045	2,950	3,102
	U.S. imports (million dollars)	1,959	2,202	2,540	2,814	3,078
	Apparent U.S. consumption (million dollars)	16,252	16,825	17,945	19,615	19,676
	Trade balance (million dollars)	313	375	505	135	24
	Ratio of imports to consumption (percent)	12.1	13.1	14.2	14.3	15.6
	Ratio of exports to shipments (percent)	13.7	15.0	16.5	14.9	15.7

See footnote(s) at end of table.

Table B-7--*Continued*
Machinery sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM098	Miscellaneous machinery:					
	Number of establishments	5,500	5,500	5,550	5,550	5,560
	Employees (thousands)	230	230	230	230	235
	Capacity utilization (percent)	([1])	([1])	([1])	([1])	([1])
	U.S. shipments (million dollars)	24,000	24,000	26,712	29,000	34,510
	U.S. exports (million dollars)	4,998	6,828	7,624	5,750	6,843
	U.S. imports (million dollars)	4,523	4,969	4,890	5,941	6,220
	Apparent U.S. consumption (million dollars)	23,525	22,141	23,978	29,190	33,887
	Trade balance (million dollars)	475	1,859	2,734	-190	623
	Ratio of imports to consumption (percent)	19.2	22.4	20.4	20.4	18.4
	Ratio of exports to shipments (percent)	20.8	28.5	28.5	19.8	19.8
MM099	Molds and molding machinery:					
	Number of establishments	120	120	120	120	120
	Employees (thousands)	8	8	8	8	8
	Capacity utilization (percent)	([2])	([2])	([2])	([2])	([1])
	U.S. shipments (million dollars)	4,775	4,922	5,478	5,750	5,233
	U.S. exports (million dollars)	1,427	1,585	1,866	1,896	1,879
	U.S. imports (million dollars)	3,811	3,323	3,422	3,512	3,723
	Apparent U.S. consumption (million dollars)	7,158	6,659	7,034	7,367	7,077
	Trade balance (million dollars)	-2,383	-1,737	-1,556	-1,617	-1,844
	Ratio of imports to consumption (percent)	53.2	49.9	48.7	47.7	52.6
	Ratio of exports to shipments (percent)	29.9	32.2	34.1	33.0	35.9

[1] Not available.
[2] Capacity utilization could not be meaningfully calculated for this industry.

Note.--Calculations based on unrounded data.

Table B-8
Transportation equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
ET001	Aircraft engines and gas turbines:					
	Number of establishments	30	30	30	30	28
	Employees (thousands)	114	122	91	131	127
	Capacity utilization (percent)	80	85	90	95	95
	U.S. shipments (million dollars)	19,502	22,902	20,656	21,859	21,879
	U.S. exports (million dollars)	8,641	8,963	11,594	13,115	14,218
	U.S. imports (million dollars)	5,285	6,241	8,380	10,404	10,328
	Apparent U.S. consumption (million dollars)	16,146	20,180	17,443	19,148	17,990
	Trade balance (million dollars)	3,356	2,722	3,213	2,711	3,889
	Ratio of imports to consumption (percent)	32.7	30.9	48.0	54.3	57.4
	Ratio of exports to shipments (percent)	44.3	39.1	56.1	60.0	65.0
ET002	Internal combustion piston engines, other than for aircraft:					
	Number of establishments	1,100	1,100	1,500	1,500	1,500
	Employees (thousands)	150	150	160	160	160
	Capacity utilization (percent)	82	85	85	85	88
	U.S. shipments (million dollars)	43,600	46,900	48,750	52,700	57,000
	U.S. exports (million dollars)	8,906	9,167	10,625	11,015	12,522
	U.S. imports (million dollars)	8,508	9,533	9,987	11,478	14,052
	Apparent U.S. consumption (million dollars)	43,202	47,266	48,112	53,163	58,530
	Trade balance (million dollars)	398	-366	638	-463	-1,530
	Ratio of imports to consumption (percent)	19.7	20.2	20.8	21.6	24.0
	Ratio of exports to shipments (percent)	20.4	19.5	21.8	20.9	22.0
ET003	Forklift trucks and similar industrial vehicles:					
	Number of establishments	450	450	460	455	453
	Employees (thousands)	20	21	26	25	25
	Capacity utilization (percent)	68	70	71	78	80
	U.S. shipments (million dollars)	4,600	4,866	5,532	5,940	6,100
	U.S. exports (million dollars)	928	920	1,161	1,188	1,243
	U.S. imports (million dollars)	1,136	1,007	1,164	1,456	1,527
	Apparent U.S. consumption (million dollars)	4,808	4,954	5,535	6,208	6,384
	Trade balance (million dollars)	-208	-88	-3	-268	-284
	Ratio of imports to consumption (percent)	23.6	20.3	21.0	23.4	23.9
	Ratio of exports to shipments (percent)	20.2	18.9	21.0	20.0	20.4
ET004	Construction and mining equipment:					
	Number of establishments	1,640	1,660	1,663	1,661	1,664
	Employees (thousands)	103	113	117	115	118
	Capacity utilization (percent)	75	81	85	87	86
	U.S. shipments (million dollars)	22,500	28,670	30,549	38,646	36,750
	U.S. exports (million dollars)	8,001	9,248	10,512	10,944	8,646
	U.S. imports (million dollars)	3,902	4,032	4,988	6,299	5,919
	Apparent U.S. consumption (million dollars)	18,401	23,454	25,025	34,001	34,023
	Trade balance (million dollars)	4,099	5,216	5,524	4,645	2,727
	Ratio of imports to consumption (percent)	21.2	17.2	19.9	18.5	17.4
	Ratio of exports to shipments (percent)	35.6	32.3	34.4	28.3	23.5
ET005	Ball and rollers bearings:					
	Number of establishments	180	182	184	183	183
	Employees (thousands)	35	36	37	37	37
	Capacity utilization (percent)	79	80	83	82	82
	U.S. shipments (million dollars)	5,205	5,488	6,091	5,878	5,900
	U.S. exports (million dollars)	967	1,008	1,140	1,141	1,098
	U.S. imports (million dollars)	1,520	1,526	1,615	1,719	1,622
	Apparent U.S. consumption (million dollars)	5,758	6,006	6,566	6,456	6,424
	Trade balance (million dollars)	-553	-518	-475	-578	-524
	Ratio of imports to consumption (percent)	26.4	25.4	24.6	26.6	25.2
	Ratio of exports to shipments (percent)	18.6	18.4	18.7	19.4	18.6

Table B-8--*Continued*
Transportation equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
ET006	Primary cells and batteries and electric storage batteries:					
	Number of establishments	222	222	180	180	180
	Employees (thousands)	32	32	32	32	32
	Capacity utilization (percent)	87	85	80	80	82
	U.S. shipments (million dollars)	5,900	6,075	6,700	7,000	7,400
	U.S. exports (million dollars)	1,208	2,309	2,527	2,309	2,307
	U.S. imports (million dollars)	1,637	1,826	2,017	2,056	2,392
	Apparent U.S. consumption (million dollars)	6,329	5,592	6,189	6,747	7,484
	Trade balance (million dollars)	-429	483	511	253	-84
	Ratio of imports to consumption (percent)	25.9	32.7	32.6	30.5	32.0
	Ratio of exports to shipments (percent)	20.5	38.0	37.7	33.0	31.2
ET007	Ignition, starting, lighting, and other electrical equipment:					
	Number of establishments	525	525	700	700	700
	Employees (thousands)	64	64	76	76	76
	Capacity utilization (percent)	75	75	75	78	80
	U.S. shipments (million dollars)	8,500	8,500	9,300	9,800	10,300
	U.S. exports (million dollars)	1,336	1,404	1,579	1,725	1,947
	U.S. imports (million dollars)	1,833	2,032	2,170	2,363	2,817
	Apparent U.S. consumption (million dollars)	8,997	9,129	9,891	10,437	11,170
	Trade balance (million dollars)	-497	-629	-591	-637	-870
	Ratio of imports to consumption (percent)	20.4	22.3	21.9	22.6	25.2
	Ratio of exports to shipments (percent)	15.7	16.5	17.0	17.6	18.9
ET008	Rail locomotive and rolling stock:					
	Number of establishments	140	140	142	140	145
	Employees (thousands)	25	25	27	27	29
	Capacity utilization (percent)	95	93	95	95	97
	U.S. shipments (million dollars)	5,623	5,305	5,700	6,000	6,800
	U.S. exports (million dollars)	877	851	1,229	1,694	1,558
	U.S. imports (million dollars)	1,292	1,312	1,372	2,156	2,307
	Apparent U.S. consumption (million dollars)	6,037	5,766	5,843	6,462	7,549
	Trade balance (million dollars)	-414	-461	-143	-462	-749
	Ratio of imports to consumption (percent)	21.4	22.8	23.5	33.4	30.6
	Ratio of exports to shipments (percent)	15.6	16.1	21.6	28.2	22.9
ET009	Motor vehicles:					
	Number of establishments	1,280	1,280	1,284	1,288	1,290
	Employees (thousands)	300	295	297	300	300
	Capacity utilization (percent)	85	85	87	87	90
	U.S. shipments (million dollars)	231,140	228,444	233,106	240,099	261,708
	U.S. exports (million dollars)	21,337	22,681	24,372	22,522	22,049
	U.S. imports (million dollars)	84,215	87,114	92,984	99,826	119,663
	Apparent U.S. consumption (million dollars)	294,017	292,877	301,718	317,404	359,322
	Trade balance (million dollars)	-62,877	-64,433	-68,612	-77,305	-97,614
	Ratio of imports to consumption (percent)	28.6	29.7	30.8	31.5	33.3
	Ratio of exports to shipments (percent)	9.2	9.9	10.5	9.4	8.4
ET010	Certain motor-vehicle parts:					
	Number of establishments	2,500	2,500	3,300	3,300	3,300
	Employees (thousands)	375	375	505	505	505
	Capacity utilization (percent)	81	78	78	80	83
	U.S. shipments (million dollars)	85,000	92,400	106,000	116,000	128,000
	U.S. exports (million dollars)	22,265	22,793	26,324	25,988	27,281
	U.S. imports (million dollars)	16,298	16,867	17,804	18,767	22,725
	Apparent U.S. consumption (million dollars)	79,033	86,473	97,480	108,779	123,443
	Trade balance (million dollars)	5,967	5,927	8,520	7,221	4,557
	Ratio of imports to consumption (percent)	20.6	19.5	18.3	17.3	18.4
	Ratio of exports to shipments (percent)	26.2	24.7	24.8	22.4	21.3

Table B-8--*Continued*
Transportation equipment sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
ET011	Motorcycles, mopeds, and parts:					
	Number of establishments	45	45	48	48	50
	Employees (thousands)	8	8	8	8	9
	Capacity utilization (percent)	88	89	86	90	88
	U.S. shipments (million dollars)	1,560	1,700	1,850	2,000	2,200
	U.S. exports (million dollars)	593	638	666	626	468
	U.S. imports (million dollars)	1,162	1,137	1,104	1,293	1,755
	Apparent U.S. consumption (million dollars)	2,128	2,199	2,288	2,667	3,487
	Trade balance (million dollars)	-568	-499	-438	-667	-1,287
	Ratio of imports to consumption (percent)	54.6	51.7	48.3	48.5	50.3
	Ratio of exports to shipments (percent)	38.0	37.6	36.0	31.3	21.3
ET012	Miscellaneous vehicles and transportation-related equipment:					
	Number of establishments	1,200	1,200	1,200	1,202	1,203
	Employees (thousands)	36	36	35	36	36
	Capacity utilization (percent)	62	64	63	63	65
	U.S. shipments (million dollars)	5,900	5,900	5,782	5,924	6,100
	U.S. exports (million dollars)	3,396	3,980	3,166	2,962	2,762
	U.S. imports (million dollars)	1,510	1,418	1,522	1,666	2,060
	Apparent U.S. consumption (million dollars)	4,013	3,338	4,137	4,628	5,398
	Trade balance (million dollars)	1,887	2,562	1,645	1,296	702
	Ratio of imports to consumption (percent)	37.6	42.5	36.8	36.0	38.2
	Ratio of exports to shipments (percent)	57.6	67.5	54.8	50.0	45.3
ET013	Aircraft, spacecraft, and related equipment:					
	Number of establishments	275	280	260	250	230
	Employees (thousands)	386	473	498	464	433
	Capacity utilization (percent)	80	85	90	95	95
	U.S. shipments (million dollars)	48,716	53,555	65,962	79,265	79,126
	U.S. exports (million dollars)	23,839	30,754	38,698	50,248	47,762
	U.S. imports (million dollars)	6,135	7,353	9,459	12,748	14,592
	Apparent U.S. consumption (million dollars)	31,012	30,154	36,723	41,765	45,955
	Trade balance (million dollars)	17,704	23,401	29,239	37,500	33,171
	Ratio of imports to consumption (percent)	19.8	24.4	25.8	30.5	31.8
	Ratio of exports to shipments (percent)	48.9	57.4	58.7	63.4	60.4
ET014	Ships, tugs, pleasure boats, and similar vessels:					
	Number of establishments	2,200	2,100	2,100	2,100	2,000
	Employees (thousands)	145	140	138	135	133
	Capacity utilization (percent)	75	70	70	70	72
	U.S. shipments (million dollars)	14,992	14,800	14,600	14,500	15,200
	U.S. exports (million dollars)	1,220	1,058	1,408	1,765	1,682
	U.S. imports (million dollars)	919	1,130	924	1,090	1,246
	Apparent U.S. consumption (million dollars)	14,691	14,872	14,115	13,825	14,763
	Trade balance (million dollars)	301	-72	485	675	437
	Ratio of imports to consumption (percent)	6.3	7.6	6.5	7.9	8.4
	Ratio of exports to shipments (percent)	8.1	7.1	9.6	12.2	11.1
ET015	Motors and engines, except internal combustion, aircraft, or electric:					
	Number of establishments	325	325	350	350	350
	Employees (thousands)	31	31	30	30	30
	Capacity utilization (percent)	86	85	85	85	85
	U.S. shipments (million dollars)	4,200	4,250	4,400	4,500	4,500
	U.S. exports (million dollars)	315	335	402	397	394
	U.S. imports (million dollars)	474	511	567	621	658
	Apparent U.S. consumption (million dollars)	4,359	4,426	4,566	4,723	4,764
	Trade balance (million dollars)	-159	-176	-166	-223	-264
	Ratio of imports to consumption (percent)	10.9	11.5	12.4	13.1	13.8
	Ratio of exports to shipments (percent)	7.5	7.9	9.1	8.8	8.8

Note.--Calculations based on unrounded table.

Table B-9
Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
ET016	Office machines:					
	Number of establishments	157	157	137	137	137
	Employees (thousands)	29	30	10	11	10
	Capacity utilization (percent)	79	76	65	56	56
	U.S. shipments (million dollars)	3,803	3,842	2,668	2,675	2,530
	U.S. exports (million dollars)	837	990	1,102	1,098	1,037
	U.S. imports (million dollars)	1,820	1,769	1,898	1,856	1,784
	Apparent U.S. consumption (million dollars)	4,787	4,621	3,465	3,433	3,277
	Trade balance (million dollars)	-984	-779	-797	-758	-747
	Ratio of imports to consumption (percent)	38.0	38.3	54.8	54.1	54.4
	Ratio of exports to shipments (percent)	22.0	25.8	41.3	41.0	41.0
ET017	Telephone and telegraph apparatus:					
	Number of establishments	944	972	1,000	1,028	1,056
	Employees (thousands)	235	239	246	241	241
	Capacity utilization (percent)	72	70	70	70	71
	U.S. shipments (million dollars)	47,885	56,805	63,740	67,409	75,131
	U.S. exports (million dollars)	14,193	14,477	17,441	17,167	17,717
	U.S. imports (million dollars)	10,023	10,706	12,465	14,385	20,147
	Apparent U.S. consumption (million dollars)	43,715	53,034	58,765	64,627	77,561
	Trade balance (million dollars)	4,170	3,771	4,975	2,782	-2,430
	Ratio of imports to consumption (percent)	22.9	20.2	21.2	22.3	26.0
	Ratio of exports to shipments (percent)	29.6	25.5	27.4	25.5	23.6
ET018	Consumer electronics (except televisions):					
	Number of establishments	170	170	180	200	210
	Employees (thousands)	17	19	22	30	30
	Capacity utilization (percent)	69	69	65	67	68
	U.S. shipments (million dollars)	3,025	3,335	3,810	5,420	5,700
	U.S. exports (million dollars)	2,451	2,710	3,011	2,579	2,678
	U.S. imports (million dollars)	16,396	14,613	15,160	16,444	18,282
	Apparent U.S. consumption (million dollars)	16,971	15,238	15,959	19,285	21,304
	Trade balance (million dollars)	-13,946	-11,903	-12,149	-13,865	-15,604
	Ratio of imports to consumption (percent)	96.6	95.9	95.0	85.3	85.8
	Ratio of exports to shipments (percent)	81.0	81.3	79.0	47.6	47.0
ET019	Blank media:					
	Number of establishments	176	213	258	312	377
	Employees (thousands)	18	19	21	24	26
	Capacity utilization (percent)	87	87	79	78	78
	U.S. shipments (million dollars)	5,017	5,366	5,739	4,868	4,552
	U.S. exports (million dollars)	2,030	2,670	2,603	2,042	1,692
	U.S. imports (million dollars)	1,936	2,072	2,090	2,103	2,225
	Apparent U.S. consumption (million dollars)	4,923	4,767	5,226	4,930	5,085
	Trade balance (million dollars)	94	599	513	-62	-533
	Ratio of imports to consumption (percent)	39.3	43.5	40.0	42.7	43.8
	Ratio of exports to shipments (percent)	40.5	49.8	45.4	41.9	37.2
ET020	Prerecorded media:					
	Number of establishments	12,522	12,773	13,028	13,289	13,555
	Employees (thousands)	243	265	291	322	368
	Capacity utilization (percent)	84	79	79	83	87
	U.S. shipments (million dollars)	30,800	55,000	58,000	64,000	73,000
	U.S. exports (million dollars)	3,814	3,453	3,785	3,619	3,707
	U.S. imports (million dollars)	916	994	981	1,135	1,252
	Apparent U.S. consumption (million dollars)	27,902	52,541	55,196	61,515	70,545
	Trade balance (million dollars)	2,898	2,459	2,804	2,485	2,455
	Ratio of imports to consumption (percent)	3.3	1.9	1.8	1.8	1.8
	Ratio of exports to shipments (percent)	12.4	6.3	6.5	5.7	5.1

See footnote(s) at end of table.

Table B-9--*Continued*
Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
ET021	Navigational instruments and remote control apparatus:					
	Number of establishments	105	105	105	105	210
	Employees (thousands)	115	115	115	115	230
	Capacity utilization (percent)	75	75	75	75	([1])
	U.S. production (million dollars)	14,000	14,050	15,000	15,100	31,000
	U.S. exports (million dollars)	1,958	2,025	2,493	2,585	2,530
	U.S. imports (million dollars)	878	946	1,169	1,230	1,361
	Apparent U.S. consumption (million dollars)	12,920	12,971	13,676	13,746	29,831
	Trade balance (million dollars)	1,080	1,079	1,324	1,354	1,169
	Ratio of imports to consumption (percent)	6.8	7.3	8.5	9.0	4.6
	Ratio of exports to production (percent)	14.0	14.4	16.6	17.1	8.2
ET022	Television receivers and video monitors:					
	Number of establishments	13	13	14	12	11
	Employees (thousands)	10	9	8	7	6
	Capacity utilization (percent)	69	69	65	67	68
	U.S. shipments (million dollars)	5,145	4,650	4,365	3,765	3,000
	U.S. exports (million dollars)	1,217	1,190	1,398	2,142	1,104
	U.S. imports (million dollars)	4,932	4,916	4,895	5,878	6,652
	Apparent U.S. consumption (million dollars)	8,859	8,376	7,862	7,501	8,548
	Trade balance (million dollars)	-3,714	-3,726	-3,497	-3,736	-5,548
	Ratio of imports to consumption (percent)	55.7	58.7	62.3	78.4	77.8
	Ratio of exports to shipments (percent)	23.7	25.6	32.0	56.9	36.8
ET023	Radio and television broadcasting equipment:					
	Number of establishments	100	105	115	120	125
	Employees (thousands)	12	11	14	15	15
	Capacity utilization (percent)	71	68	70	63	65
	U.S. shipments (million dollars)	2,845	3,000	3,350	3,500	3,650
	U.S. exports (million dollars)	710	845	1,697	1,379	2,323
	U.S. imports (million dollars)	2,076	2,885	2,594	3,211	4,948
	Apparent U.S. consumption (million dollars)	4,211	5,040	4,246	5,332	6,274
	Trade balance (million dollars)	-1,366	-2,040	-896	-1,832	-2,624
	Ratio of imports to consumption (percent)	49.3	57.2	61.1	60.2	78.9
	Ratio of exports to shipments (percent)	24.9	28.2	50.7	39.4	63.7
ET024	Electric sound and visual signaling apparatus:					
	Number of establishments	517	517	499	499	499
	Employees (thousands)	19	21	21	22	23
	Capacity utilization (percent)	66	73	69	65	65
	U.S. shipments (million dollars)	2,951	3,706	3,553	3,820	4,185
	U.S. exports (million dollars)	690	786	730	783	858
	U.S. imports (million dollars)	1,726	1,846	1,979	2,064	2,053
	Apparent U.S. consumption (million dollars)	3,987	4,765	4,802	5,101	5,380
	Trade balance (million dollars)	-1,036	-1,059	-1,249	-1,281	-1,195
	Ratio of imports to consumption (percent)	43.3	38.7	41.2	40.5	38.2
	Ratio of exports to shipments (percent)	23.4	21.2	20.5	20.5	20.5
ET025	Electrical capacitors and resistors:					
	Number of establishments	170	170	175	170	170
	Employees (thousands)	32	29	30	28	32
	Capacity utilization (percent)	80	75	75	65	80
	U.S. shipments (million dollars)	2,738	2,565	3,092	2,838	3,100
	U.S. exports (million dollars)	1,591	1,840	2,212	2,037	2,393
	U.S. imports (million dollars)	1,894	1,729	1,971	2,015	2,435
	Apparent U.S. consumption (million dollars)	3,041	2,454	2,851	2,816	3,142
	Trade balance (million dollars)	-303	111	241	22	-42
	Ratio of imports to consumption (percent)	62.3	70.4	69.1	71.6	77.5
	Ratio of exports to shipments (percent)	58.1	71.7	71.5	71.8	77.2

See footnote(s) at end of table.

Table B-9--*Continued*
Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
ET026	Printed circuits:					
	Number of establishments	586	575	558	600	610
	Employees (thousands)	79	80	81	82	84
	Capacity utilization (percent)	81	77	76	73	78
	U.S. shipments (million dollars)	8,367	8,216	8,702	9,425	10,500
	U.S. exports (million dollars)	1,651	1,694	2,007	2,178	2,386
	U.S. imports (million dollars)	1,840	1,849	2,071	2,045	2,236
	Apparent U.S. consumption (million dollars)	8,556	8,371	8,766	9,292	10,350
	Trade balance (million dollars)	-189	-155	-64	133	150
	Ratio of imports to consumption (percent)	21.5	22.1	23.6	22.0	21.6
	Ratio of exports to shipments (percent)	19.7	20.6	23.1	23.1	22.7
ET027	Circuit apparatus exceeding 1000V:					
	Number of establishments	200	200	200	200	200
	Employees (thousands)	15	15	15	15	15
	Capacity utilization (percent)	76	78	78	75	75
	U.S. shipments (million dollars)	3,500	4,000	4,300	4,700	5,000
	U.S. exports (million dollars)	598	601	602	584	590
	U.S. imports (million dollars)	222	192	223	244	287
	Apparent U.S. consumption (million dollars)	3,124	3,591	3,921	4,360	4,698
	Trade balance (million dollars)	376	409	379	340	302
	Ratio of imports to consumption (percent)	7.1	5.3	5.7	5.6	6.1
	Ratio of exports to shipments (percent)	17.1	15.0	14.0	12.4	11.8
ET028	Circuit apparatus not exceeding 1000V:					
	Number of establishments	600	600	600	600	600
	Employees (thousands)	50	50	50	50	50
	Capacity utilization (percent)	76	78	78	75	75
	U.S. shipments (million dollars)	11,500	12,000	13,000	14,000	15,000
	U.S. exports (million dollars)	3,496	3,813	4,119	4,258	4,991
	U.S. imports (million dollars)	4,554	4,636	5,135	5,103	5,606
	Apparent U.S. consumption (million dollars)	12,558	12,823	14,016	14,845	15,615
	Trade balance (million dollars)	-1,058	-823	-1,016	-845	-615
	Ratio of imports to consumption (percent)	36.3	36.2	36.6	34.4	35.9
	Ratio of exports to shipments (percent)	30.4	31.8	31.7	30.4	33.3
ET029	Circuit apparatus assemblies:					
	Number of establishments	200	200	200	200	200
	Employees (thousands)	15	15	15	15	15
	Capacity utilization (percent)	76	78	78	75	75
	U.S. shipments (million dollars)	3,500	4,000	4,300	4,700	5,000
	U.S. exports (million dollars)	708	802	928	919	1,078
	U.S. imports (million dollars)	1,050	1,317	1,644	1,852	2,141
	Apparent U.S. consumption (million dollars)	3,842	4,515	5,017	5,632	6,063
	Trade balance (million dollars)	-342	-515	-717	-932	-1,063
	Ratio of imports to consumption (percent)	27.3	29.2	32.8	32.9	35.3
	Ratio of exports to shipments (percent)	20.2	20.0	21.6	19.6	21.6
ET030	Parts of circuit apparatus:					
	Number of establishments	200	200	200	200	200
	Employees (thousands)	15	15	15	15	15
	Capacity utilization (percent)	76	78	78	75	75
	U.S. shipments (million dollars)	3,500	4,000	4,300	4,700	5,000
	U.S. exports (million dollars)	1,050	1,291	1,613	1,589	1,809
	U.S. imports (million dollars)	862	835	891	876	999
	Apparent U.S. consumption (million dollars)	3,312	3,544	3,578	3,987	4,191
	Trade balance (million dollars)	188	456	722	713	809
	Ratio of imports to consumption (percent)	26.0	23.6	24.9	22.0	23.8
	Ratio of exports to shipments (percent)	30.0	32.3	37.5	33.8	36.2

See footnote(s) at end of table.

Table B-9--*Continued*
Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
ET031	Cathode-ray tubes:					
	Number of establishments	19	18	18	18	18
	Employees (thousands)	16	15	15	14	14
	Capacity utilization (percent)	85	85	85	85	88
	U.S. shipments (million dollars)	2,910	3,270	3,435	3,370	3,300
	U.S. exports (million dollars)	1,364	1,549	2,058	2,288	2,174
	U.S. imports (million dollars)	1,099	970	856	774	732
	Apparent U.S. consumption (million dollars)	2,645	2,691	2,233	1,856	1,858
	Trade balance (million dollars)	265	579	1,202	1,514	1,442
	Ratio of imports to consumption (percent)	41.6	36.0	38.3	41.7	39.4
	Ratio of exports to shipments (percent)	46.9	47.4	59.9	67.9	65.9
ET032	Electron tubes other than CRTs:					
	Number of establishments	38	38	38	43	43
	Employees (thousands)	5	5	5	4	4
	Capacity utilization (percent)	84	86	79	72	70
	U.S. shipments (million dollars)	855	611	655	625	600
	U.S. exports (million dollars)	177	171	200	183	215
	U.S. imports (million dollars)	291	269	267	225	190
	Apparent U.S. consumption (million dollars)	969	710	722	667	575
	Trade balance (million dollars)	-114	-99	-67	-42	25
	Ratio of imports to consumption (percent)	30.0	38.0	37.0	33.7	33.1
	Ratio of exports to shipments (percent)	20.7	27.9	30.6	29.3	35.9
ET033	Semiconductors and integrated circuits:					
	Number of establishments	500	500	500	500	500
	Employees (thousands)	235	260	278	287	295
	Capacity utilization (percent)	88	86	88	84	90
	U.S. shipments (million dollars)	63,086	65,423	68,725	70,400	80,000
	U.S. exports (million dollars)	23,189	24,001	28,861	29,055	36,615
	U.S. imports (million dollars)	38,618	36,256	36,266	33,157	37,158
	Apparent U.S. consumption (million dollars)	78,515	77,678	76,130	74,502	80,542
	Trade balance (million dollars)	-15,429	-12,255	-7,405	-4,102	-542
	Ratio of imports to consumption (percent)	49.2	46.7	47.6	44.5	46.1
	Ratio of exports to shipments (percent)	36.8	36.7	42.0	41.3	45.8
ET034	Miscellaneous electrical equipment:					
	Number of establishments	640	650	650	650	1,300
	Employees (thousands)	23	24	24	24	48
	Capacity utilization (percent)	70	71	68	61	(1)
	U.S. production (million dollars)	3,800	4,000	4,200	4,400	9,600
	U.S. exports (million dollars)	2,656	1,662	1,882	1,561	1,590
	U.S. imports (million dollars)	1,955	1,782	2,001	2,161	2,358
	Apparent U.S. consumption (million dollars)	3,099	4,120	4,320	5,000	10,369
	Trade balance (million dollars)	701	-120	-120	-600	-769
	Ratio of imports to consumption (percent)	63.1	43.3	46.3	43.2	22.7
	Ratio of exports to production (percent)	69.9	41.6	44.8	35.5	16.6
ET035	Computers, peripherals, and parts:					
	Number of establishments	785	795	795	760	750
	Employees (thousands)	210	221	230	245	230
	Capacity utilization (percent)	90	88	85	84	84
	U.S. shipments (million dollars)	73,150	82,733	92,661	106,453	115,000
	U.S. exports (million dollars)	34,622	38,137	42,071	38,962	39,230
	U.S. imports (million dollars)	56,688	61,884	70,365	72,635	81,662
	Apparent U.S. consumption (million dollars)	95,215	106,480	120,955	140,126	157,432
	Trade balance (million dollars)	-22,065	-23,747	-28,294	-33,673	-42,432
	Ratio of imports to consumption (percent)	59.5	58.1	58.2	51.8	51.9
	Ratio of exports to shipments (percent)	47.3	46.1	45.4	36.6	34.1

See footnote(s) at end of table.

Table B-9--*Continued*
Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
ET036	Photographic film and paper:					
	Number of establishments	540	540	310	310	310
	Employees (thousands)	37	36	39	43	44
	Capacity utilization (percent)	83	82	82	83	83
	U.S. shipments (million dollars)	12,993	13,378	12,829	14,053	14,360
	U.S. exports (million dollars)	1,877	2,249	2,401	2,108	2,154
	U.S. imports (million dollars)	1,878	1,852	1,914	1,861	2,009
	Apparent U.S. consumption (million dollars)	12,994	12,981	12,341	13,806	14,214
	Trade balance (million dollars)	-1	397	488	247	146
	Ratio of imports to consumption (percent)	14.5	14.3	15.5	13.5	14.1
	Ratio of exports to shipments (percent)	14.4	16.8	18.7	15.0	15.0
ET037	Optical fibers, optical fiber bundles and cables:					
	Number of establishments	60	62	63	64	65
	Employees (thousands)	9	10	11	12	13
	Capacity utilization (percent)	90	92	93	95	95
	U.S. shipments (million dollars)	2,750	2,807	3,228	3,712	4,000
	U.S. exports (million dollars)	475	646	806	807	1,081
	U.S. imports (million dollars)	154	216	272	398	729
	Apparent U.S. consumption (million dollars)	2,429	2,377	2,694	3,303	3,648
	Trade balance (million dollars)	321	430	534	409	352
	Ratio of imports to consumption (percent)	6.3	9.1	10.1	12.1	20.0
	Ratio of exports to shipments (percent)	17.3	23.0	25.0	21.7	27.0
ET038	Optical goods, including ophthalmic goods:					
	Number of establishments	900	905	904	905	905
	Employees (thousands)	58	60	60	60	61
	Capacity utilization (percent)	78	82	83	85	87
	U.S. shipments (million dollars)	4,900	5,400	5,700	5,900	6,100
	U.S. exports (million dollars)	1,527	1,941	2,380	2,438	2,682
	U.S. imports (million dollars)	2,820	3,114	3,397	3,683	4,225
	Apparent U.S. consumption (million dollars)	6,193	6,573	6,717	7,144	7,643
	Trade balance (million dollars)	-1,293	-1,173	-1,017	-1,244	-1,543
	Ratio of imports to consumption (percent)	45.5	47.4	50.6	51.5	55.3
	Ratio of exports to shipments (percent)	31.2	35.9	41.8	41.3	44.0
ET039	Photographic cameras and equipment:					
	Number of establishments	360	360	428	428	428
	Employees (thousands)	24	24	25	26	23
	Capacity utilization (percent)	83	82	83	79	79
	U.S. shipments (million dollars)	8,662	8,919	8,410	8,826	7,935
	U.S. exports (million dollars)	1,795	1,992	1,936	2,030	1,825
	U.S. imports (million dollars)	6,235	6,319	6,732	6,447	5,843
	Apparent U.S. consumption (million dollars)	13,101	13,247	13,206	13,243	11,953
	Trade balance (million dollars)	-4,439	-4,328	-4,796	-4,417	-4,018
	Ratio of imports to consumption (percent)	47.6	47.7	51.0	48.7	48.9
	Ratio of exports to shipments (percent)	20.7	22.3	23.0	23.0	23.0
ET040	Medical goods:					
	Number of establishments	2,325	2,338	2,340	2,338	2,340
	Employees (thousands)	180	181	182	182	183
	Capacity utilization (percent)	88	90	90	89	91
	U.S. shipments (million dollars)	27,000	28,900	30,200	30,800	31,500
	U.S. exports (million dollars)	8,966	10,217	11,226	11,582	12,455
	U.S. imports (million dollars)	4,951	5,368	5,895	6,934	7,932
	Apparent U.S. consumption (million dollars)	22,985	24,050	24,869	26,152	26,978
	Trade balance (million dollars)	4,015	4,850	5,331	4,648	4,522
	Ratio of imports to consumption (percent)	21.5	22.3	23.7	26.5	29.4
	Ratio of exports to shipments (percent)	33.2	35.4	37.2	37.6	39.5

See footnote(s) at end of table.

Table B-9--*Continued*
Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
ET041	Watches and clocks:					
	Number of establishments	180	180	145	145	145
	Employees (thousands)	7	6	6	6	7
	Capacity utilization (percent)	65	67	70	52	52
	U.S. shipments (million dollars)	786	785	921	927	999
	U.S. exports (million dollars)	247	277	309	311	335
	U.S. imports (million dollars)	2,673	2,715	2,758	3,100	3,136
	Apparent U.S. consumption (million dollars)	3,212	3,223	3,370	3,716	3,800
	Trade balance (million dollars)	-2,426	-2,438	-2,449	-2,789	-2,801
	Ratio of imports to consumption (percent)	83.2	84.2	81.8	83.4	82.5
	Ratio of exports to shipments (percent)	31.4	35.3	33.6	33.6	33.5
ET042	Drawing, drafting, and calculating instruments:					
	Number of establishments	175	175	175	175	175
	Employees (thousands)	6	6	7	8	10
	Capacity utilization (percent)	64	65	70	75	75
	U.S. shipments (million dollars)	545	550	578	595	605
	U.S. exports (million dollars)	172	275	400	425	415
	U.S. imports (million dollars)	401	385	428	427	431
	Apparent U.S. consumption (million dollars)	774	660	606	597	620
	Trade balance (million dollars)	-229	-110	-28	-2	-15
	Ratio of imports to consumption (percent)	51.8	58.3	70.7	71.5	69.4
	Ratio of exports to shipments (percent)	31.5	50.0	69.2	71.4	68.7
ET043	Measuring, testing, and controlling instruments:					
	Number of establishments	3,235	3,235	3,235	3,235	3,235
	Employees (thousands)	240	240	245	245	245
	Capacity utilization (percent)	75	75	75	75	75
	U.S. shipments (million dollars)	28,100	33,400	36,100	38,400	39,200
	U.S. exports (million dollars)	11,722	12,515	14,344	13,825	14,575
	U.S. imports (million dollars)	6,675	7,073	8,039	8,681	9,656
	Apparent U.S. consumption (million dollars)	23,053	27,958	29,795	33,257	34,281
	Trade balance (million dollars)	5,047	5,442	6,305	5,143	4,919
	Ratio of imports to consumption (percent)	29.0	25.3	27.0	26.1	28.2
	Ratio of exports to shipments (percent)	41.7	37.5	39.7	36.0	37.2

[1] Capacity utilization could not be meaningfully calculated for this industry.

Note.--Calculations based on unrounded data.

Table B-10
Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM046	Luggage, handbags, and flat goods:					
	Number of establishments	590	580	593	530	470
	Employees (thousands)	19	19	18	17	15
	Capacity utilization (percent)	67	73	66	67	65
	U.S. shipments (million dollars)	1,531	1,515	1,865	1,675	1,495
	U.S. exports (million dollars)	253	306	331	304	329
	U.S. imports (million dollars)	3,333	3,512	3,779	3,912	4,073
	Apparent U.S. consumption (million dollars)	4,610	4,721	5,313	5,283	5,239
	Trade balance (million dollars)	-3,079	-3,206	-3,448	-3,608	-3,744
	Ratio of imports to consumption (percent)	72.3	74.4	71.1	74.0	77.7
	Ratio of exports to shipments (percent)	16.5	20.2	17.7	18.1	22.0
MM047	Certain other leather goods:					
	Number of establishments	445	445	434	450	450
	Employees (thousands)	7	7	9	9	9
	Capacity utilization (percent)	76	75	67	56	60
	U.S. shipments (million dollars)	512	521	655	690	730
	U.S. exports (million dollars)	93	80	103	106	123
	U.S. imports (million dollars)	229	239	198	195	209
	Apparent U.S. consumption (million dollars)	648	681	750	779	816
	Trade balance (million dollars)	-136	-160	-95	-89	-86
	Ratio of imports to consumption (percent)	35.4	35.2	26.4	25.1	25.6
	Ratio of exports to shipments (percent)	18.2	15.3	15.7	15.4	16.8
MM048	Musical instruments and accessories:					
	Number of establishments	530	540	571	580	600
	Employees (thousands)	13	13	13	13	13
	Capacity utilization (percent)	80	79	73	75	75
	U.S. shipments (million dollars)	1,167	1,182	1,229	1,282	1,330
	U.S. exports (million dollars)	418	432	425	392	360
	U.S. imports (million dollars)	1,015	995	1,063	1,188	1,256
	Apparent U.S. consumption (million dollars)	1,765	1,745	1,867	2,078	2,226
	Trade balance (million dollars)	-598	-563	-638	-796	-896
	Ratio of imports to consumption (percent)	57.5	57.0	57.0	57.2	56.4
	Ratio of exports to shipments (percent)	35.8	36.5	34.6	30.6	27.0
MM049	Umbrellas, whips, riding crops, and canes:					
	Number of establishments	17	17	17	16	16
	Employees (thousands)	485	490	490	495	495
	Capacity utilization (percent)	76	74	73	73	73
	U.S. shipments (million dollars)	67	69	70	72	74
	U.S. exports (million dollars)	10	9	11	11	11
	U.S. imports (million dollars)	198	196	233	250	248
	Apparent U.S. consumption (million dollars)	255	256	291	312	311
	Trade balance (million dollars)	-188	-187	-221	-240	-237
	Ratio of imports to consumption (percent)	77.8	76.4	79.9	80.3	79.8
	Ratio of exports to shipments (percent)	15.4	12.5	16.2	14.9	15.0
MM050	Silverware and related articles of precious metal:					
	Number of establishments	44	42	42	41	41
	Employees (thousands)	3	3	3	3	3
	Capacity utilization (percent)	80	80	85	88	90
	U.S. shipments (million dollars)	185	205	215	220	235
	U.S. exports (million dollars)	74	103	109	114	123
	U.S. imports (million dollars)	139	83	78	158	57
	Apparent U.S. consumption (million dollars)	250	186	184	264	169
	Trade balance (million dollars)	-65	19	31	-44	66
	Ratio of imports to consumption (percent)	55.4	44.9	42.3	59.9	33.7
	Ratio of exports to shipments (percent)	39.8	50.1	50.5	51.8	52.2

Table B-10--*Continued*
Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM051	Precious jewelry and related articles:					
	Number of establishments	2,220	2,214	2,290	2,290	2,290
	Employees (thousands)	30	29	35	35	35
	Capacity utilization (percent)	80	82	78	75	74
	U.S. shipments (million dollars)	4,035	4,015	4,720	4,735	4,760
	U.S. exports (million dollars)	386	402	486	518	822
	U.S. imports (million dollars)	3,642	3,790	4,021	4,592	5,063
	Apparent U.S. consumption (million dollars)	7,291	7,403	8,256	8,808	9,001
	Trade balance (million dollars)	-3,256	-3,388	-3,536	-4,073	-4,241
	Ratio of imports to consumption (percent)	50.0	51.2	48.7	52.1	56.2
	Ratio of exports to shipments (percent)	9.6	10.0	10.3	10.9	17.3
MM052	Costume jewelry and related articles:					
	Number of establishments	900	875	840	810	780
	Employees (thousands)	16	15	13	12	12
	Capacity utilization (percent)	75	71	72	64	64
	U.S. shipments (million dollars)	1,770	1,665	1,230	1,200	1,180
	U.S. exports (million dollars)	124	113	136	128	133
	U.S. imports (million dollars)	493	462	464	493	546
	Apparent U.S. consumption (million dollars)	2,139	2,013	1,558	1,564	1,593
	Trade balance (million dollars)	-369	-348	-328	-364	-413
	Ratio of imports to consumption (percent)	23.1	22.9	29.8	31.5	34.3
	Ratio of exports to shipments (percent)	7.0	6.8	11.1	10.7	11.3
MM053	Bicycles and certain parts:					
	Number of establishments	190	205	225	200	160
	Employees (thousands)	7	7	8	6	5
	Capacity utilization (percent)	67	70	70	65	60
	U.S. shipments (million dollars)	1,140	1,095	1,280	1,130	920
	U.S. exports (million dollars)	257	268	310	292	271
	U.S. imports (million dollars)	968	878	979	1,115	1,199
	Apparent U.S. consumption (million dollars)	1,852	1,705	1,949	1,953	1,848
	Trade balance (million dollars)	-712	-610	-669	-823	-928
	Ratio of imports to consumption (percent)	52.3	51.5	50.2	57.1	64.9
	Ratio of exports to shipments (percent)	22.5	24.4	24.2	25.9	29.4
MM054	Furniture:					
	Number of establishments	18,600	18,600	18,700	18,800	18,800
	Employees (thousands)	470	485	500	530	535
	Capacity utilization (percent)	74	75	77	74	75
	U.S. shipments (million dollars)	51,000	53,000	56,690	61,800	66,500
	U.S. exports (million dollars)	2,074	2,164	2,513	2,632	2,597
	U.S. imports (million dollars)	6,413	7,254	8,666	10,417	12,775
	Apparent U.S. consumption (million dollars)	55,339	58,090	62,843	69,585	76,678
	Trade balance (million dollars)	-4,339	-5,090	-6,153	-7,785	-10,178
	Ratio of imports to consumption (percent)	11.6	12.5	13.8	15.0	16.7
	Ratio of exports to shipments (percent)	4.1	4.1	4.4	4.3	3.9
MM055	Writing instruments and related articles:					
	Number of establishments	200	200	190	190	190
	Employees (thousands)	12	12	12	12	12
	Capacity utilization (percent)	81	79	74	69	70
	U.S. shipments (million dollars)	1,690	1,850	2,100	2,250	2,400
	U.S. exports (million dollars)	264	304	400	373	333
	U.S. imports (million dollars)	668	719	800	842	965
	Apparent U.S. consumption (million dollars)	2,094	2,265	2,500	2,718	3,032
	Trade balance (million dollars)	-404	-415	-400	-468	-632
	Ratio of imports to consumption (percent)	31.9	31.7	32.0	31.0	31.8
	Ratio of exports to shipments (percent)	15.6	16.4	19.1	16.6	13.9

Table B-10--*Continued*
Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM056	Lamps and lighting fittings:					
	Number of establishments	1,560	1,550	1,550	1,550	1,550
	Employees (thousands)	62	60	62	62	62
	Capacity utilization (percent)	80	80	85	88	87
	U.S. shipments (million dollars)	8,400	8,650	9,515	9,990	10,090
	U.S. exports (million dollars)	543	529	655	619	585
	U.S. imports (million dollars)	2,198	2,422	2,729	3,167	3,858
	Apparent U.S. consumption (million dollars)	10,055	10,543	11,589	12,538	13,362
	Trade balance (million dollars)	-1,655	-1,893	-2,074	-2,548	-3,272
	Ratio of imports to consumption (percent)	21.9	23.0	23.6	25.3	28.9
	Ratio of exports to shipments (percent)	6.5	6.1	6.9	6.2	5.8
MM057	Prefabricated buildings:					
	Number of establishments	1,400	1,500	1,631	1,700	1,700
	Employees (thousands)	86	91	92	104	111
	Capacity utilization (percent)	79	75	77	73	73
	U.S. shipments (million dollars)	15,210	16,401	16,904	19,800	21,700
	U.S. exports (million dollars)	409	465	463	385	327
	U.S. imports (million dollars)	67	92	129	160	221
	Apparent U.S. consumption (million dollars)	14,868	16,028	16,570	19,576	21,593
	Trade balance (million dollars)	342	373	334	224	107
	Ratio of imports to consumption (percent)	0.5	0.6	0.8	0.8	1.0
	Ratio of exports to shipments (percent)	2.7	2.8	2.7	1.9	1.5
MM058	Dolls:					
	Number of establishments	160	158	158	150	150
	Employees (thousands)	3	3	3	2	2
	Capacity utilization (percent)	69	63	58	47	47
	U.S. shipments (million dollars)	100	110	140	110	100
	U.S. exports (million dollars)	28	26	30	28	25
	U.S. imports (million dollars)	1,167	1,356	1,516	1,484	1,374
	Apparent U.S. consumption (million dollars)	1,238	1,440	1,626	1,565	1,449
	Trade balance (million dollars)	-1,138	-1,330	-1,486	-1,455	-1,349
	Ratio of imports to consumption (percent)	94.2	94.2	93.2	94.8	94.8
	Ratio of exports to shipments (percent)	28.4	23.8	21.6	25.8	24.7
MM059	Toys:					
	Number of establishments	342	339	333	333	330
	Employees (thousands)	14	13	13	12	12
	Capacity utilization (percent)	70	66	71	62	62
	U.S. shipments (million dollars)	3,150	2,900	2,980	2,940	2,910
	U.S. exports (million dollars)	577	585	617	540	497
	U.S. imports (million dollars)	4,589	5,554	6,814	7,588	7,978
	Apparent U.S. consumption (million dollars)	7,162	7,869	9,178	9,988	10,391
	Trade balance (million dollars)	-4,012	-4,969	-6,198	-7,048	-7,481
	Ratio of imports to consumption (percent)	64.1	70.6	74.2	76.0	76.8
	Ratio of exports to shipments (percent)	18.3	20.2	20.7	18.4	17.1
MM060	Games:					
	Number of establishments	315	310	310	300	300
	Employees (thousands)	45	45	45	42	42
	Capacity utilization (percent)	81	81	82	79	78
	U.S. shipments (million dollars)	2,345	2,390	2,415	2,120	2,130
	U.S. exports (million dollars)	1,042	1,021	1,057	913	936
	U.S. imports (million dollars)	2,432	2,792	3,936	4,182	4,086
	Apparent U.S. consumption (million dollars)	3,735	4,161	5,293	5,389	5,280
	Trade balance (million dollars)	-1,390	-1,771	-2,878	-3,269	-3,150
	Ratio of imports to consumption (percent)	65.1	67.1	74.4	77.6	77.4
	Ratio of exports to shipments (percent)	44.4	42.7	43.8	43.1	43.9

Table B-10--*Continued*
Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM061	Sporting goods:					
	Number of establishments	2,135	2,138	2,142	2,144	2,140
	Employees (thousands)	58	60	62	62	62
	Capacity utilization (percent)	73	69	70	70	68
	U.S. shipments (million dollars)	8,225	8,698	9,161	9,300	9,260
	U.S. exports (million dollars)	1,731	1,900	1,934	1,688	1,621
	U.S. imports (million dollars)	2,956	3,068	3,070	3,041	3,027
	Apparent U.S. consumption (million dollars)	9,450	9,866	10,298	10,653	10,667
	Trade balance (million dollars)	-1,225	-1,168	-1,137	-1,353	-1,407
	Ratio of imports to consumption (percent)	31.3	31.1	29.8	28.5	28.4
	Ratio of exports to shipments (percent)	21.0	21.8	21.1	18.2	17.5
MM062	Smokers' articles:					
	Number of establishments	10	10	10	11	11
	Employees (thousands)	1	1	1	1	1
	Capacity utilization (percent)	70	75	70	75	80
	U.S. shipments (million dollars)	170	195	190	200	210
	U.S. exports (million dollars)	85	97	88	71	71
	U.S. imports (million dollars)	153	149	139	145	134
	Apparent U.S. consumption (million dollars)	238	247	241	274	273
	Trade balance (million dollars)	-68	-52	-51	-74	-63
	Ratio of imports to consumption (percent)	64.1	60.2	57.6	53.0	49.0
	Ratio of exports to shipments (percent)	49.7	49.5	46.3	35.6	33.8
MM063	Brooms, brushes, and hair grooming articles:					
	Number of establishments	280	280	280	275	270
	Employees (thousands)	10	10	10	9	9
	Capacity utilization (percent)	75	75	75	75	75
	U.S. shipments (million dollars)	1,700	1,900	1,995	2,000	2,100
	U.S. exports (million dollars)	149	163	176	184	206
	U.S. imports (million dollars)	610	625	655	698	955
	Apparent U.S. consumption (million dollars)	2,161	2,362	2,474	2,514	2,850
	Trade balance (million dollars)	-461	-462	-479	-514	-750
	Ratio of imports to consumption (percent)	28.2	26.5	26.5	27.8	33.5
	Ratio of exports to shipments (percent)	8.8	8.6	8.8	9.2	9.8
MM064	Works of art and miscellaneous manufactured goods:					
	Number of establishments	2,880	2,900	2,950	2,950	3,000
	Employees (thousands)	100	105	110	110	115
	Capacity utilization (percent)	72	72	72	73	73
	U.S. shipments (million dollars)	33,010	33,990	34,430	35,270	37,000
	U.S. exports (million dollars)	1,555	1,369	1,655	1,685	1,731
	U.S. imports (million dollars)	5,303	5,366	6,390	7,230	8,463
	Apparent U.S. consumption (million dollars)	36,758	37,987	39,164	40,815	43,732
	Trade balance (million dollars)	-3,748	-3,997	-4,734	-5,545	-6,732
	Ratio of imports to consumption (percent)	14.4	14.1	16.3	17.7	19.4
	Ratio of exports to shipments (percent)	4.7	4.0	4.8	4.8	4.7
MM065	Apparel fasteners:					
	Number of establishments	90	90	90	90	90
	Employees (thousands)	5	5	5	5	5
	Capacity utilization (percent)	85	90	90	90	90
	U.S. shipments (million dollars)	500	515	541	550	570
	U.S. exports (million dollars)	84	98	119	136	140
	U.S. imports (million dollars)	127	123	126	103	89
	Apparent U.S. consumption (million dollars)	543	541	548	517	519
	Trade balance (million dollars)	-43	-26	-7	33	51
	Ratio of imports to consumption (percent)	23.3	22.8	22.9	19.9	17.1
	Ratio of exports to shipments (percent)	16.7	19.0	21.9	24.7	24.5

Table B-10--*Continued*
Miscellaneous manufactures sector: Profile of U.S. industry and market, by industry/commodity groups, 1995-99

USITC code	Industry/commodity group	1995	1996	1997	1998	1999
MM066	Arms and ammunition:					
	Number of establishments	275	271	311	310	310
	Employees (thousands)	19	18	17	17	17
	Capacity utilization (percent)	77	69	70	77	75
	U.S. shipments (million dollars)	2,159	1,975	2,037	2,100	2,100
	U.S. exports (million dollars)	2,662	2,606	2,395	2,348	2,152
	U.S. imports (million dollars)	657	598	611	649	711
	Apparent U.S. consumption (million dollars)	154	-33	253	402	658
	Trade balance (million dollars)	2,005	2,008	1,784	1,698	1,442
	Ratio of imports to consumption (percent)	426.2	-1,792.1	241.7	161.7	108.0
	Ratio of exports to shipments (percent)	123.3	132.0	117.6	111.8	102.5
MM067	Seats for motor vehicles and aircraft:					
	Number of establishments	190	195	195	200	200
	Employees (thousands)	17,000	17,500	21,000	23,000	25,000
	Capacity utilization (percent)	79	79	77	76	76
	U.S. shipments (million dollars)	4,700	4,900	5,862	6,540	7,520
	U.S. exports (million dollars)	1,150	1,276	1,551	1,881	1,878
	U.S. imports (million dollars)	1,761	1,981	2,264	2,610	3,024
	Apparent U.S. consumption (million dollars)	5,311	5,604	6,575	7,268	8,666
	Trade balance (million dollars)	-611	-704	-713	-728	-1,146
	Ratio of imports to consumption (percent)	33.2	35.3	34.4	35.9	34.9
	Ratio of exports to shipments (percent)	24.5	26.0	26.5	28.8	25.0

Note.--Calculations based on unrounded data.

APPENDIX C
Industry/Commodity Groups with Most Significant Shifts, 1998 and 1999

Table C-1
Domestic export increases: Ranking of top 20 industry/commodity groups, 1998 and 1999

USITC code	Industry/commodity group	U.S. exports		Change, 1999 from 1998	
		1998	1999	Absolute	*Percent*
		Million Dollars			
Rank order based on change in absolute value growth:					
ET033	Semiconductors and integrated circuits	29,055	36,615	7,561	26.0
CH025	Medicinal chemicals	11,956	13,681	1,725	14.4
ET002	Internal combustion piston engines, other than for aircraft	11,015	12,522	1,507	13.7
ET010	Certain motor-vehicle parts	25,988	27,281	1,294	5.0
ET001	Aircraft engines and gas turbines	13,115	14,218	1,103	8.4
MM098	Miscellaneous machinery	5,750	6,843	1,093	19.0
ET023	Radio and television broadcasting equipment	1,379	2,323	944	68.4
CH041	Miscellaneous plastic products	10,882	11,816	933	8.6
ET040	Medical goods	11,582	12,455	873	7.5
ET043	Measuring, testing, and controlling instruments	13,825	14,575	750	5.4
ET028	Circuit apparatus not exceeding 1000V	4,258	4,991	734	17.2
ET017	Telephone and telegraph apparatus	17,167	17,717	551	3.2
MM031	Miscellaneous products of base metal	4,892	5,369	477	9.8
AG002	Cattle and beef	2,382	2,753	371	15.6
CH005	Petroleum products	6,233	6,599	366	5.9
AG036	Infant formulas, malt extracts, and other edible preparations	2,097	2,458	361	17.2
ET025	Electrical capacitors and resistors	2,037	2,393	356	17.5
AG006	Fresh or frozen fish	1,289	1,634	346	26.8
CH011	Organic specialty chemicals	6,616	6,940	324	4.9
MM051	Precious jewelry and related articles	518	822	304	58.7
Rank order based on change in percentage growth:					
MM008	Precious metal ores and concentrates	11	40	30	278.3
MM019	Natural and synthetic gemstones	217	447	230	106.3
AG048	Wool and other animal hair	13	22	10	77.4
ET023	Radio and television broadcasting equipment	1,379	2,323	944	68.4
CH009	Primary aromatics	56	91	34	60.8
MM051	Precious jewelry and related articles	518	822	304	58.7
MM002	Fluorspar and miscellaneous mineral substances	53	74	21	39.5
ET037	Optical fibers, optical fiber bundles and cables	807	1,081	274	33.9
CH006	Natural gas and components	581	759	178	30.6
AG007	Canned fish	170	222	52	30.4
MM086	Non-metalworking machine tools	617	792	175	28.4
MM004	Copper ores and concentrates	63	81	18	28.0
AG009	Shellfish	589	752	163	27.7
AG006	Fresh or frozen fish	1,289	1,634	346	26.8
ET033	Semiconductors and integrated circuits	29,055	36,615	7,561	26.0
CH043	Gelatin	51	63	13	25.0
AG055	Wooden containers	138	172	34	24.5
MM027	Fabricated structurals	151	186	35	23.4
MM096	Welding and soldering equipment	810	989	180	22.2
AG056	Tools and tool handles of wood	36	44	8	21.1

Note.--Calculations based on unrounded data.

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

Table C-2
Domestic export declines: Ranking of top 20 industry/commodity groups, 1998 and 1999

USITC code	Industry/commodity group	U.S. exports 1998	U.S. exports 1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
Rank order based on change in absolute value decline:					
ET013	Aircraft, spacecraft, and related equipment	50,248	47,762	-2,486	-4.9
ET004	Construction and mining equipment	10,944	8,646	-2,299	-21.0
AG049	Cotton, not carded or combed	2,545	968	-1,577	-62.0
MM078	Farm and garden machinery and equipment	5,581	4,536	-1,045	-18.7
ET022	Television receivers and video monitors	2,142	1,104	-1,038	-48.5
CH003	Coal, coke, and related chemical products	3,635	2,671	-964	-26.5
AG045	Cigarettes	4,166	3,232	-934	-22.4
AG033	Animal or vegetable fats and oils	2,763	1,947	-816	-29.5
AG013	Animal feeds	4,307	3,621	-686	-15.9
CH049	Apparel	8,514	7,964	-549	-6.5
ET009	Motor vehicles	22,522	22,049	-472	-2.1
AG032	Oilseeds	5,166	4,776	-390	-7.5
AG005	Poultry	2,255	1,878	-377	-16.7
MM073	Household appliances, including commercial applications	5,895	5,524	-371	-6.3
ET019	Blank media	2,042	1,692	-350	-17.1
MM025	Steel mill products	4,636	4,291	-346	-7.5
MM020	Precious metals and non-numismatic coins	6,853	6,510	-343	-5.0
MM068	Wiring harnesses for motor vehicles	1,315	993	-322	-24.5
CH016	Fertilizers	3,339	3,032	-307	-9.2
MM091	Electric motors, generators, and related equipment	3,955	3,728	-227	-5.7
Rank order based on change in percentage decline:					
AG049	Cotton, not carded or combed	2,545	968	-1,577	-62.0
ET022	Television receivers and video monitors	2,142	1,104	-1,038	-48.5
MM083	Metal rolling mills	252	153	-98	-39.1
MM005	Lead ores, concentrates, and residues	65	43	-22	-33.7
MM007	Certain ores, concentrates, ash, and residues	350	237	-114	-32.4
AG033	Animal or vegetable fats and oils	2,763	1,947	-816	-29.5
AG004	Sheep and meat of sheep	35	25	-10	-29.3
CH020	Synthetic tanning agents	19	13	-5	-28.6
AG047	Furskins	196	141	-55	-28.2
CH003	Coal, coke, and related chemical products	3,635	2,671	-964	-26.5
AG022	Citrus fruit	672	498	-174	-25.9
ET011	Motorcycles, mopeds, and parts	626	468	-158	-25.3
AG011	Eggs	207	155	-52	-25.3
MM035	Construction castings and other cast-iron articles	37	27	-9	-25.1
MM011	Ceramic bricks and similar articles	26	20	-7	-24.8
MM068	Wiring harnesses for motor vehicles	1,315	993	-322	-24.5
MM077	Mineral processing machinery	764	590	-174	-22.8
AG045	Cigarettes	4,166	3,232	-934	-22.4
MM022	Ferroalloys	103	80	-23	-22.3
ET004	Construction and mining equipment	10,944	8,646	-2,299	-21.0

Note.--Calculations based on unrounded data.

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

Table C-3
Domestic import increases: Ranking of top 20 industry/commodity groups, 1998 and 1999

USITC code	Industry/commodity group	U.S. imports		Change, 1999 from 1998	
		1998	1999	Absolute	*Percent*
		Million Dollars			
Rank order based on change in absolute value growth:					
ET009	Motor vehicles	99,826	119,663	19,837	19.9
ET035	Computers, peripherals, and parts	72,635	81,662	9,027	12.4
CH004	Crude petroleum	25,467	31,642	6,175	24.2
CH025	Medicinal chemicals	17,952	23,781	5,829	32.5
ET017	Telephone and telegraph apparatus	14,385	20,147	5,762	40.1
CH005	Petroleum products	17,584	22,079	4,495	25.6
ET033	Semiconductors and integrated circuits	33,157	37,158	4,001	12.1
ET010	Certain motor-vehicle parts	18,767	22,725	3,958	21.1
CH049	Apparel	53,874	56,565	2,691	5.0
ET002	Internal combustion piston engines, other than for aircraft	11,478	14,052	2,574	22.4
MM054	Furniture	10,417	12,775	2,358	22.6
ET013	Aircraft, spacecraft, and related equipment	12,748	14,592	1,843	14.5
ET018	Consumer electronics (except televisions)	16,444	18,282	1,838	11.2
CH006	Natural gas and components	9,212	11,042	1,830	19.9
ET023	Radio and television broadcasting equipment	3,211	4,948	1,736	54.1
MM019	Natural and synthetic gemstones	9,449	11,021	1,572	16.6
MM091	Electric motors, generators, and related equipment	4,748	6,089	1,341	28.2
CH041	Miscellaneous plastic products	9,709	10,988	1,279	13.2
MM064	Works of art and miscellaneous manufactured goods	7,230	8,463	1,233	17.1
AG052	Lumber	6,743	7,820	1,077	16.0
Rank order based on change in percentage growth:					
AG049	Cotton, not carded or combed	14	136	123	905.6
MM018	Fiberglass insulation products	71	139	68	95.2
AG045	Cigarettes	59	112	52	87.8
ET037	Optical fibers, optical fiber bundles and cables	398	729	330	82.9
AG022	Citrus fruit	211	331	119	56.5
ET023	Radio and television broadcasting equipment	3,211	4,948	1,736	54.1
AG023	Deciduous fruit	177	268	91	51.4
AG011	Eggs	14	20	7	49.4
MM006	Zinc ores, concentrates, and residues	37	53	16	42.9
AG026	Frozen fruit	89	125	37	41.4
ET017	Telephone and telegraph apparatus	14,385	20,147	5,762	40.1
MM057	Prefabricated buildings	160	221	60	37.7
MM063	Brooms, brushes, and hair grooming articles	698	955	258	36.9
ET011	Motorcycles, mopeds, and parts	1,293	1,755	462	35.7
CH025	Medicinal chemicals	17,952	23,781	5,829	32.5
CH007	Major primary olefins	1,360	1,798	438	32.2
MM027	Fabricated structurals	328	432	103	31.5
AG053	Moldings, millwork, and joinery	1,924	2,521	597	31.0
MM090	Boilers, turbines, and related machinery	370	484	114	30.7
MM044	Table flatware and related products	327	425	98	29.9

Note.--Calculations based on unrounded data.

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

Table C-4
Domestic import declines: Ranking of top 20 industry/commodity groups, 1998 and 1999

USITC code	Industry/commodity group	U.S. imports 1998	U.S. imports 1999	Change, 1999 from 1998 Absolute	Change, 1999 from 1998 *Percent*
		Million Dollars			
Rank order based on change in absolute value decline:					
MM025	Steel mill products	16,434	12,749	-3,685	-22.4
MM078	Farm and garden machinery and equipment	4,171	3,294	-877	-21.0
MM084	Metal cutting machine tools and machine tool accessories	4,590	3,921	-669	-14.6
ET039	Photographic cameras and equipment	6,447	5,843	-604	-9.4
AG028	Coffee and tea	3,656	3,114	-542	-14.8
MM082	Textile machinery	1,958	1,490	-468	-23.9
ET004	Construction and mining equipment	6,299	5,919	-380	-6.0
CH044	Natural rubber	977	704	-272	-27.9
AG062	Newsprint	3,766	3,517	-248	-6.6
MM021	Primary iron products	856	643	-213	-24.8
MM041	Certain base metals and chemical elements	2,424	2,226	-197	-8.1
MM083	Metal rolling mills	514	321	-193	-37.5
AG012	Sugar and other sweeteners	1,068	879	-188	-17.7
AG017	Miscellaneous vegetable substances	993	839	-154	-15.5
MM004	Copper ores and concentrates	228	82	-146	-64.0
MM003	Iron ores and concentrates	527	399	-129	-24.4
AG033	Animal or vegetable fats and oils	1,475	1,348	-126	-8.6
CH013	Miscellaneous inorganic chemicals	4,752	4,641	-111	-2.3
MM058	Dolls	1,484	1,374	-110	-7.4
CH023	Pesticide products and formulations	1,292	1,183	-109	-8.5
Rank order based on change in percentage decline:					
MM008	Precious metal ores and concentrates	45	4	-42	-92.0
MM004	Copper ores and concentrates	228	82	-146	-64.0
MM050	Silverware and related articles of precious metal	158	57	-101	-63.9
MM005	Lead ores, concentrates, and residues	8	3	-4	-55.8
AG048	Wool and other animal hair	141	70	-71	-50.2
MM083	Metal rolling mills	514	321	-193	-37.5
CH015	Chlor-alkali chemicals	191	126	-66	-34.3
CH044	Natural rubber	977	704	-272	-27.9
MM021	Primary iron products	856	643	-213	-24.8
MM003	Iron ores and concentrates	527	399	-129	-24.4
MM082	Textile machinery	1,958	1,490	-468	-23.9
MM025	Steel mill products	16,434	12,749	-3,685	-22.4
MM078	Farm and garden machinery and equipment	4,171	3,294	-877	-21.0
AG044	Cigars and certain other manufactured tobacco	377	301	-76	-20.2
AG012	Sugar and other sweeteners	1,068	879	-188	-17.7
AG032	Oilseeds	315	263	-51	-16.3
CH014	Inorganic acids	282	238	-44	-15.6
AG017	Miscellaneous vegetable substances	993	839	-154	-15.5
AG047	Furskins	86	73	-13	-15.2
ET032	Electron tubes other than CRTs	225	190	-34	-15.2

Note.--Calculations based on unrounded data.

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

Table C-5
U.S. trade position increases: Ranking of top 30 industry/commodity groups, 1998 and 1999

USITC code	Industry/commodity group	U.S. balance		Change, 1999 from 1998	
		1998	1999	Absolute	*Percent*
		Million Dollars			
ET033	Semiconductors and integrated circuits	-4,102	-542	3,560	86.8
MM025	Steel mill products	-11,798	-8,458	3,339	28.3
ET001	Aircraft engines and gas turbines	2,711	3,889	1,178	43.5
MM098	Miscellaneous machinery	-190	623	814	[1]
AG028	Coffee and tea	-3,393	-2,830	563	16.6
MM084	Metal cutting machine tools and machine tool accessories	-2,605	-2,148	457	17.5
ET039	Photographic cameras and equipment	-4,417	-4,018	399	9.0
MM082	Textile machinery	-1,198	-808	390	32.6
CH046	Fabrics	-776	-393	383	49.4
CH044	Natural rubber	-941	-664	277	29.5
MM096	Welding and soldering equipment	29	287	258	884.7
AG036	Infant formulas, malt extracts, and other edible preparations	1,537	1,788	251	16.3
ET028	Circuit apparatus not exceeding 1000V	-845	-615	231	27.3
AG002	Cattle and beef	-370	-152	218	58.9
AG062	Newsprint	-3,305	-3,094	211	6.4
MM021	Primary iron products	-838	-629	209	25.0
AG030	Cereals	9,218	9,398	179	1.9
CH010	Organic commodity chemicals	526	696	170	32.4
AG012	Sugar and other sweeteners	-687	-522	164	23.9
MM004	Copper ores and concentrates	-165	-2	163	99.1
AG017	Miscellaneous vegetable substances	-531	-386	145	27.3
MM003	Iron ores and concentrates	-283	-156	127	44.9
MM060	Games	-3,269	-3,150	118	3.6
CH026	Essential oils and other flavoring materials	80	194	113	141.1
MM050	Silverware and related articles of precious metal	-44	66	110	[1]
AG037	Cocoa, chocolate, and confectionery	-1,581	-1,472	109	6.9
MM058	Dolls	-1,455	-1,349	106	7.3
CH028	Soaps, detergents, and surface-active agents	1,086	1,190	104	9.6
ET030	Parts of circuit apparatus	713	809	97	13.6
MM083	Metal rolling mills	-262	-168	94	35.9

[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 C-6
U.S. trade position declines: Ranking of top 30 industry/commodity groups, 1998 and 1999

USITC code	Industry/commodity group	U.S. balance		Change, 1999 from 1998	
		1998	1999	Absolute	*Percent*
		Million Dollars			
ET009	Motor vehicles	-77,305	-97,614	-20,309	-26.3
ET035	Computers, peripherals, and parts	-33,673	-42,432	-8,759	-26.0
CH004	Crude petroleum	-24,797	-30,870	-6,074	-24.5
ET017	Telephone and telegraph apparatus	2,782	-2,430	-5,212	([1])
ET013	Aircraft, spacecraft, and related equipment	37,500	33,171	-4,329	-11.5
CH005	Petroleum products	-11,351	-15,480	-4,129	-36.4
CH025	Medicinal chemicals	-5,996	-10,100	-4,105	-68.5
CH049	Apparel	-45,361	-48,601	-3,240	-7.1
ET010	Certain motor-vehicle parts	7,221	4,557	-2,664	-36.9
MM054	Furniture	-7,785	-10,178	-2,393	-30.7
ET004	Construction and mining equipment	4,645	2,727	-1,919	-41.3
ET022	Television receivers and video monitors	-3,736	-5,548	-1,812	-48.5
ET018	Consumer electronics (except televisions)	-13,865	-15,604	-1,739	-12.5
AG049	Cotton, not carded or combed	2,532	832	-1,700	-67.1
CH006	Natural gas and components	-8,630	-10,282	-1,652	-19.1
MM091	Electric motors, generators, and related equipment	-793	-2,362	-1,569	-197.8
MM019	Natural and synthetic gemstones	-9,233	-10,575	-1,342	-14.5
MM064	Works of art and miscellaneous manufactured goods	-5,545	-6,732	-1,187	-21.4
CH003	Coal, coke, and related chemical products	2,065	930	-1,135	-55.0
ET002	Internal combustion piston engines, other than for aircraft	-463	-1,530	-1,067	-230.5
MM073	Household appliances, including commercial applications	-713	-1,778	-1,065	-149.3
AG045	Cigarettes	4,106	3,120	-987	-24.0
AG052	Lumber	-4,741	-5,636	-895	-18.9
ET023	Radio and television broadcasting equipment	-1,832	-2,624	-793	-43.3
MM068	Wiring harnesses for motor vehicles	-3,092	-3,875	-782	-25.3
AG054	Wood veneer and wood panels	-1,838	-2,615	-778	-42.3
MM056	Lamps and lighting fittings	-2,548	-3,272	-725	-28.4
CH039	Pneumatic tires and tubes (new)	-1,479	-2,193	-713	-48.2
MM009	Cement, stone, and related products	-2,226	-2,919	-693	-31.2
AG033	Animal or vegetable fats and oils	1,289	599	-690	-53.5

[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.

APPENDIX D
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
Panama
Paraguay

LATIN AMERICA–*Continued*

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
Lesotho
Liberia
Madagascar
Malawi
Mali

SUB-SAHARAN AFRICA–*Continued*

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 E
Status of Antidumping and Countervailing Duty Order 5-Year (Sunset) Reviews

Table E-1
Status of antidumping and countervailing duty order 5-year (sunset) reviews (as of August 2000)

Month and year of initiation	Country	Product (Suspension Agreement (SA))	Status[1]
July 1998	Canada	Steel Jacks	R
July 1998	Japan	Fish Netting of Manmade Fiber	R
July 1998	France	Large Power Transformers	R
July 1998	Italy	Large Power Transformers	R
July 1998	Japan	Large Power Transformers	R
July 1998	Japan	Bicycle Speedometers	R
July 1998	Australia	Canned Bartlett Pears	R
July 1998	Japan	Roller Chain	R
August 1998	Sweden	Stainless Steel Plate	R
August 1998	Japan	Synthetic Methionine	R
August 1998	Japan	Polychloroprene Rubber	C
August 1998	Canada	Elemental Sulphur	R
August 1998	Canada	Racing Plates	R
August 1998	Japan	Acrylic Sheet	R
August 1998	Japan	Melamine	C
September 1998	Brazil	Cotton Yarn	R
September 1998	Italy	Pressure Sensitive Plastic Tape	C
September 1998	Germany	Animal Glue	R
September 1998	Austria	Railway Track Maintenance Equipment	R
September 1998	Japan	Impression Fabric	R
September 1998	Japan	Prestressed Concrete Steel Wire Strand	C
September 1998	Finland	Rayon Staple Fiber	R
September 1998	Sweden	Rayon Staple Fiber	R
October 1998	European Union	Sugar	C
October 1998	Belgium	Sugar	C
October 1998	France	Sugar	C
October 1998	Germany	Sugar	C
October 1998	Canada	Sugar and Syrups	R
October 1998	Japan	Television Receivers	R
October 1998	Korea	Color Television Receivers	R
October 1998	Taiwan	Color Television Receivers	R
October 1998	Japan	Small Electric Motors (SA)	R
October 1998	France	Anhydrous Sodium Metasilicate	C
October 1998	France	Sorbitol	C
October 1998	Japan	High Power Microwave Amplifiers	R
October 1998	Germany	Barium Carbonate	R
October 1998	China	Barium Chloride	C
November 1998	China	Griege Polyester Cotton Print Cloth	C
November 1998	Argentina[2]	Carbon Steel Wire Rod (SA)	R
November 1998	Argentina	Carbon Steel Wire Rods	R
November 1998	Singapore	Refrigeration Compressors (SA)	R
November 1998	Spain	Potassium Permanganate	R
November 1998	China	Potassium Permanganate	C
November 1998	China	Chloropicrin	C
November 1998	India	Iron Metal Castings	R
November 1998	Canada	Iron Construction Castings	C
November 1998	Brazil	Iron Construction Castings	C
November 1998	China	Iron Construction Castings	C
November 1998	Brazil[2]	Heavy Iron Construction Castings	C
November 1998	Italy	Brass Fire Protection Equipment	R
December 1998	Colombia	Textiles and Textile Products (SA)	R

See footnotes at end of table.

Table E-1--*Continued*
Status of antidumping and countervailing duty order 5-year (sunset) reviews (as of August 2000)

Month and year of initiation	Country	Product (Suspension Agreement (SA))	Status[1]
December 1998	Thailand	Certain Textile Mill Products (SA)	R
December 1998	Brazil[2]	Frozen Concentrated Orange Juice (SA)	R
December 1998	Brazil	Frozen Concentrated Orange Juice	C
December 1998	Japan	Calcium Hypochlorite	R
December 1998	Brazil	Castor Oil Products	R
December 1998	China	Sebacic Acid	C
December 1998	Canada	Red Raspberries	R
December 1998	Canada	Live Swine	R
December 1998	Brazil	Agricultural Tillage Tools	R
December 1998	Argentina	Barbed Wire and Barbless Wire Strand	C
January 1999	New Zealand	Brazing Copper Wire and Rod	R
January 1999	South Africa	Brazing Copper Wire and Rod	R
January 1999	Japan	Cellular Mobile Telephones and Subassemblies	R
January 1999	China	Natural Bristle Paint Brushes	C
January 1999	China	Cotton Shop Towels	C
January 1999	Pakistan	Cotton Shop Towels	C
January 1999	Peru	Cotton Shop Towels (SA)	R
January 1999	Bangladesh	Cotton Shop Towels	C
January 1999	China	Petroleum Wax Candles	C
January 1999	Japan	Steel Wire Rope	R
January 1999	Mexico	Carbon Steel Wire Rope	R
January 1999	Korea	Carbon Steel Wire Rope	R
January 1999	Brazil	Malleable Cast Iron Pipe Fittings	R
January 1999	Korea	Malleable Cast Iron Pipe Fittings	C
January 1999	Taiwan	Malleable Cast Iron Pipe Fittings	R
January 1999	Japan	Malleable Cast Iron Pipe Fittings	C
January 1999	Thailand	Malleable Cast Iron Pipe Fittings	R
February 1999	China	Porcelain-on-Steel Cooking Ware	C
February 1999	Mexico	Porcelain-on-Steel Cooking Ware	C
February 1999	Taiwan	Porcelain-on-Steel Cooking Ware	C
February 1999	Mexico[2]	Porcelain-on-Steel Cooking Ware	R
February 1999	Korea[2]	Top-of-the-Stove Stainless Steel Cooking Ware	C
February 1999	Korea	Top-of-the-Stove Stainless Steel Cooking Ware	C
February 1999	Taiwan[2]	Top-of-the-Stove Stainless Steel Cooking Ware	C
February 1999	Taiwan	Top-of-the-Stove Stainless Steel Cooking Ware	C
February 1999	Netherlands	Standard Chrysanthemums	R
February 1999	Peru	Pompon Chrysanthemums	R
February 1999	Colombia	Fresh Cut Flowers	R
February 1999	Ecuador	Fresh Cut Flowers	R
February 1999	Mexico	Fresh Cut Flowers	R
February 1999	Chile[2]	Standard Carnations	R
February 1999	Chile	Standard Carnations	R
February 1999	Kenya	Standard Carnations	R
February 1999	Brazil[2]	Brass Sheet and Strip	C
February 1999	Brazil	Brass Sheet and Strip	C
February 1999	Canada	Brass Sheet and Strip	C
February 1999	Korea	Brass Sheet and Strip	R
February 1999	France[2]	Brass Sheet and Strip	C
February 1999	France	Brass Sheet and Strip	C
February 1999	Germany	Brass Sheet and Strip	C
February 1999	Italy	Brass Sheet and Strip	C
February 1999	Sweden	Brass Sheet and Strip	R
February 1999	Japan	Brass Sheet and Strip	C
February 1999	Netherlands	Brass Sheet and Strip	R

See footnotes at end of table.

Table E-1--*Continued*
Status of antidumping and countervailing duty order 5-year (sunset) reviews (as of August 2000)

Month and year of initiation	Country	Product (Suspension Agreement (SA))	Status[1]
March 1999	Armenia	Solid Urea	R
March 1999	Azerbaijan	Solid Urea	R
March 1999	Belarus	Solid Urea	C
March 1999	Estonia	Solid Urea	C
March 1999	Georgia	Solid Urea	R
March 1999	Kazakstan	Solid Urea	R
March 1999	Kyrgyzstan	Solid Urea	R
March 1999	Latvia	Solid Urea	R
March 1999	Lithuania	Solid Urea	C
March 1999	Moldova	Solid Urea	R
March 1999	Romania	Solid Urea	C
March 1999	Russia	Solid Urea	C
March 1999	Tajikistan	Solid Urea	C
March 1999	Turkmenistan	Solid Urea	C
March 1999	Ukraine	Solid Urea	C
March 1999	Uzbekistan	Solid Urea	C
March 1999	Israel	Industrial Phosphoric Acid	R
March 1999	Israel[2]	Industrial Phosphoric Acid	R
March 1999	Belgium	Industrial Phosphoric Acid	R
March 1999	Turkey	Aspirin	C
March 1999	Canada	Color Picture Tubes	R
March 1999	Japan	Color Picture Tubes	R
March 1999	Korea	Color Picture Tubes	R
March 1999	Singapore	Color Picture Tubes	R
April 1999	Canada	Potassium Chloride (Potash) (SA)	R
April 1999	Japan	Tapered Roller Bearings, 4 Inches and Under	R
April 1999	China	Tapered Roller Bearings	C
April 1999	Hungary	Tapered Roller Bearings	R
April 1999	Romania	Tapered Roller Bearings	R
April 1999	Japan	Tapered Roller Bearings, Over 4 Inches	R
April 1999	France	Ball Bearings	C
April 1999	Germany	Ball Bearings	C
April 1999	Italy	Ball Bearings	C
April 1999	Japan	Ball Bearings	C
April 1999	Romania	Ball Bearings	R
April 1999	Singapore	Ball Bearings	C
April 1999	Sweden	Ball Bearings	R
April 1999	United Kingdom	Ball Bearings	C
April 1999	France	Spherical Plain Bearings	C
April 1999	Germany	Spherical Plain Bearings	R
April 1999	Japan	Spherical Plain Bearings	R
April 1999	Germany	Cylindrical Roller Bearings	R
April 1999	Italy	Cylindrical Roller Bearings	R
April 1999	Japan	Cylindrical Roller Bearings	R
April 1999	France	Cylindrical Roller Bearings	R
April 1999	Sweden	Cylindrical Roller Bearings	R
April 1999	United Kingdom	Cylindrical Roller Bearings	R
April 1999	Japan	Internal Combustion Industrial Forklift Trucks	C
April 1999	Japan	Nitrile Rubber	R
May 1999	Taiwan	Small Diameter Carbon Steel Pipe and Tube	C
May 1999	Singapore	Small Diameter Standard & Rectangular Pipe and Tube	R
May 1999	Turkey[2]	Welded Carbon Steel Standard Pipe	C
May 1999	Turkey[2]	Welded Carbon Steel Line Pipe	R

See footnotes at end of table.

Table E-1--*Continued*
Status of antidumping and countervailing duty order 5-year (sunset) reviews (as of August 2000)

Month and year of initiation	Country	Product (Suspension Agreement (SA))	Status[1]
May 1999	Thailand	Welded Carbon Steel Pipe and Tube	C
May 1999	India	Welded Carbon Steel Pipe and Tube	C
May 1999	Turkey	Welded Carbon Steel Pipe and Tube	C
May 1999	Canada	Oil Country Tubular Goods	R
May 1999	Taiwan	Oil Country Tubular Goods	R
May 1999	Israel[2]	Oil Country Tubular Goods	R
May 1999	Israel	Oil Country Tubular Goods	R
May 1999	Taiwan	Light Walled Rectangular Tubing	C
May 1999	Argentina	Light Walled Rectangular Tubing	C
May 1999	Brazil	Circular-Welded Non-Alloy Steel Pipe	C
May 1999	Korea	Circular-Welded Non-Alloy Steel Pipe	C
May 1999	Mexico	Circular-Welded Non-Alloy Steel Pipe	C
May 1999	Taiwan	Circular-Welded Non-Alloy Pipe	C
May 1999	Venezuela	Circular-Welded Non-Alloy Pipe	R
May 1999	Japan	Granular Polytetrafluoroetheylene Resin	C
May 1999	Italy	Granular Polytetraflouroetheylene Resin	C
May 1999	Brazil	Carbon Steel Butt-Weld Pipe Fittings	C
May 1999	Taiwan	Carbon Steel Butt-Weld Pipe Fittings	C
May 1999	Japan	Carbon Steel Butt-Weld Pipe Fittings	C
May 1999	China	Carbon Steel Butt-Weld Pipe Fittings	C
May 1999	Thailand	Carbon Steel Butt-Weld Pipe Fittings	C
May 1999	Japan	3.5 Inch Micro Disks	R
May 1999	Greece	Electrolytic Manganese Dioxide	R
May 1999	Japan	Electrolytic Manganese Dioxide	R
June 1999	Germany	Industrial Belts Except Synchronous and V-Belts	R
June 1999	Italy	Industrial Synchronous and V-Belts	R
June 1999	Japan	Industrial Belts	R
June 1999	Singapore	Industrial V-Belts	R
June 1999	France	Industrial Nitrocellulose	C
June 1999	Brazil	Industrial Nitrocellulose	C
June 1999	China	Industrial Nitrocellulose	C
June 1999	Germany	Industrial Nitrocellulose	C
June 1999	Japan	Industrial Nitrocellulose	C
June 1999	Korea	Industrial Nitrocellulose	C
June 1999	United Kingdom	Industrial Nitrocellulose	C
June 1999	Yugoslavia	Industrial Nitrocellulose	R
June 1999	Canada	Steel Rail	C
June 1999	Canada[2]	Steel Rail	C
June 1999	Japan	Drafting Machines	C
June 1999	Japan	Small Business Telephone Systems	R
June 1999	Taiwan	Small Business Telephone Systems	R
June 1999	Korea	Small Business Telephone Systems	R
June 1999	Japan	Mechanical Transfer Presses	C
June 1999	Japan	Multiangle Laser Light Scattering Instruments	R
June 1999	Japan	Benzyl Paraben	R
July 1999	China	Bars and Wedges	C
July 1999	China	Axes and Adzes	C
July 1999	China	Picks and Mattocks	C
July 1999	China	Hammers and Sledges	C
July 1999	China	Sulfur Chemicals (Sodium Thiosulfate)	C
July 1999	Germany	Sulfur Chemicals (Sodium Thiosulfate)	C
July 1999	United Kingdom	Sulfur Chemicals (Sodium Thiosulfate)	C
July 1999	Spain[2]	Stainless Steel Wire Rod	R
July 1999	India	Stainless Steel Wire Rod	C

See footnotes at end of table.

Table E-1--*Continued*
Status of antidumping and countervailing duty order 5-year (sunset) reviews (as of August 2000)

Month and year of initiation	Country	Product (Suspension Agreement (SA))	Status[1]
July 1999	Brazil	Stainless Steel Wire Rod	C
July 1999	France	Stainless Steel Wire Rod	C
July 1999	Sweden	Stainless Steel Hollow Products	R
July 1999	Korea	Welded ASTM A-312 Stainless Steel Pipe	F
July 1999	Taiwan	Welded ASTM A-312 Stainless Steel Pipe	F
July 1999	Norway[2]	Fresh and Chilled Atlantic Salmon	C
July 1999	Norway	Fresh and Chilled Atlantic Salmon	C
July 1999	Korea	Polyethylene Terephthalate Film	C
July 1999	China	Sparklers	C
July 1999	Japan	Stainless Steel Butt-Weld Pipe Fittings	C
July 1999	Korea	Stainless Steel Butt-Weld Pipe Fittings	C
July 1999	Taiwan	Stainless Steel Butt-Weld Pipe Fittings	C
August 1999	Japan	Gray Portland Cement and Clinker	F
August 1999	Mexico	Gray Portland Cement and Clinker	F
August 1999	Venezuela	Gray Portland Cement and Clinker	F
August 1999	Venezuela[2]	Gray Portland Cement and Clinker	F
August 1999	Japan	Electroluminescent Flat-panel Displays	C
August 1999	China	Chrome-plated Lug Nuts	F
August 1999	Taiwan	Chrome-plated Lug Nuts	F
August 1999	China	Tungsten Ore Concentrates	R
August 1999	New Zealand	Fresh Kiwifruit	R
August 1999	Canada	Alloy Magnesium	C
August 1999	Canada	Pure Magnesium	C
August 1999	Canada[2]	Pure Magnesium	C
August 1999	Malaysia	Extruded Rubber Thread	C
August 1999	Kyrgyzstan	Uranium (SA)	R
August 1999	Russia	Uranium (SA)	C
August 1999	Ukraine	Uranium	R
August 1999	Uzbekistan	Uranium (SA)	R
September 1999	Taiwan	Carbon Steel Plate	F
September 1999	Sweden	Cold-rolled Carbon Steel Flat Products	F
September 1999	Germany[2]	Cold-rolled Carbon Steel Flat Products	F
September 1999	Germany	Cold-rolled Carbon Steel Flat Products	F
September 1999	Korea[2]	Cold-rolled Carbon Steel Flat Products	F
September 1999	Korea	Cold-rolled Carbon Steel Flat Products	F
September 1999	Netherlands	Cold-rolled Carbon Steel Flat Products	F
September 1999	Australia	Corrosion-resistant Carbon Steel Flat Products	F
September 1999	Canada	Corrosion-resistant Carbon Steel Flat Products	F
September 1999	France[2]	Corrosion-resistant Carbon Steel Flat Products	F
September 1999	France	Corrosion-resistant Carbon Steel Flat Products	F
September 1999	Germany[2]	Corrosion-resistant Carbon Steel Flat Products	F
September 1999	Germany	Corrosion-resistant Carbon Steel Flat Products	F
September 1999	Japan	Corrosion-resistant Carbon Steel Flat Products	F
September 1999	Korea[2]	Corrosion-resistant Carbon Steel Flat Products	F
September 1999	Korea	Corrosion-resistant Carbon Steel Flat Products	F
September 1999	Belgium[2]	Cut-to-length Carbon Steel Plate	F
September 1999	Belgium	Cut-to-length Carbon Steel Plate	F
September 1999	Brazil[2]	Cut-to-length Carbon Steel Plate	F
September 1999	Brazil	Cut-to-length Carbon Steel Plate	F
September 1999	Canada	Cut-to-length Carbon Steel Plate	F
September 1999	Finland	Cut-to-length Carbon Steel Plate	F
September 1999	Germany[2]	Cut-to-length Carbon Steel Plate	F
September 1999	Germany	Cut-to-length Carbon Steel Plate	F
September 1999	Mexico[2]	Cut-to-length Carbon Steel Plate	F

See footnotes at end of table.

Table E-1--*Continued*
Status of antidumping and countervailing duty order 5-year (sunset) reviews (as of August 2000)

Month and year of initiation	Country	Product (Suspension Agreement (SA))	Status[1]
September 1999	Mexico	Cut-to-length Carbon Steel Plate	F
September 1999	Poland	Cut-to-length Carbon Steel Plate	F
September 1999	Romania	Cut-to-length Carbon Steel Plate	F
September 1999	Spain[2]	Cut-to-length Carbon Steel Plate	F
September 1999	Spain	Cut-to-length Carbon Steel Plate	F
September 1999	Sweden[2]	Cut-to-length Carbon Steel Plate	F
September 1999	Sweden	Cut-to-length Carbon Steel Plate	F
September 1999	United Kingdom[2]	Cut-to-length Carbon Steel Plate	F
September 1999	United Kingdom	Cut-to-length Carbon Steel Plate	F
October 1999	China	Sulfanilic Acid	C
October 1999	India[2]	Sulfanilic Acid	C
October 1999	India	Sulfanilic Acid	C
October 1999	Brazil[2]	Hot-rolled Lead/bismuth Carbon Steel Products	R
October 1999	Brazil	Hot-rolled Lead/bismuth Carbon Steel Products	R
October 1999	France[2]	Hot-rolled Lead/bismuth Carbon Steel Products	R
October 1999	France	Hot-rolled Lead/bismuth Carbon Steel Products	R
October 1999	Germany[2]	Hot-rolled Lead/bismuth Carbon Steel Products	R
October 1999	Germany	Hot-rolled Lead/bismuth Carbon Steel Products	R
October 1999	United Kingdom[2]	Hot-rolled Lead/bismuth Carbon Steel Products	R
October 1999	United Kingdom	Hot-rolled Lead/bismuth Carbon Steel Products	R
November 1999	China	Silicon Metal	F
November 1999	Brazil	Silicon Metal	F
November 1999	Argentina	Silicon Metal	F
November 1999	Korea	DRAMs of 1 Megabit and Above	F
November 1999	Japan	Professional Electric Cutting Tools	R
November 1999	Taiwan	Helical Spring Lockwashers	F
November 1999	China	Helical Spring Lockwashers	F
November 1999	China	Compact Ductile Iron Waterworks Fittings	R
November 1999	Ukraine	Silicomanganese	F
November 1999	Brazil	Silicomanganese	F
November 1999	China	Silicomanganese	F
December 1999	India	Forged Stainless Steel Flanges	C
December 1999	Taiwan	Forged Stainless Steel Flanges	C
December 1999	Japan	Defrost Timers	R
December 1999	Netherlands	Aramid Fiber	F
December 1999	Italy[2]	Grain-oriented Silicon Electrical Steel	F
December 1999	Italy	Grain-oriented Silicon Electrical Steel	F
December 1999	Japan	Grain-oriented Silicon Electrical Steel	F
December 1999	Japan	Color Negative Photo Paper and Chemicals (SA)	R
December 1999	Netherlands	Color Negative Photo Paper and Chemicals (SA)	R
December 1999	China	Fresh Garlic	F
December 1999	China	Paper Clips	C
December 1999	China	Cased Pencils	C
January 2000	China	Coumarin	C
January 2000	Brazil	Stainless Steel Bar	F
January 2000	India	Stainless Steel Bar	F
January 2000	Japan	Stainless Steel Bar	F
January 2000	Spain	Stainless Steel Bar	F
February 2000	China	Glycine	C
April 2000	China	Pure Magnesium	C

See footnotes at end of table.

Table E-1--*Continued*
Status of antidumping and countervailing duty order 5-year (sunset) reviews (as of August 2000)

Month and year of initiation	Country	Product (Suspension Agreement (SA))	Status[1]
April 2000	Russia	Pure Magnesium	R
May 2000	China	Furfuryl Alcohol	F
May 2000	Thailand	Furfuryl Alcohol	F
June 2000	Thailand	Canned Pineapple	I
June 2000	Russia	Ferrovanadium and Nitrided Vanadium	I
July 2000	China	Honey	I
July 2000	Argentina	Oil Country Tubular Goods	I
July 2000	Italy	Oil Country Tubular Goods	I
July 2000	Italy[2]	Oil Country Tubular Goods	I
July 2000	Japan	Oil Country Tubular Goods	I
July 2000	Korea	Oil Country Tubular Goods	I
July 2000	Mexico	Oil Country Tubular Goods	I
July 2000	Argentina	Seamless Pipe	I
July 2000	Brazil	Seamless Pipe	I
July 2000	Germany	Seamless Pipe	I
July 2000	Italy	Seamless Pipe	I
July 2000	Italy[2]	Seamless Pipe	I

[1] Status codes:
- I ..... Instituted and proceeding to the next decision point
- F ..... USITC full review determination
- R ..... Order revoked
- C ..... Order continued

[2] Countervailing duty order review.

Source: Compiled by USITC staff.

APPENDIX F
Status of WTO Cases Involving the United States

Table F-1
Status of World Trade Organization (WTO) dispute settlement cases involving the United States (as of June 2000)

Month and year of initiation	Case No.	Complaintant(s)	Respondent(s)	Case title	Status[1]
April 1995	WT/DS3	United States	Korea	Measures Concerning the Testing and Inspection of Agricultural Products	PC
April 1995	WT/DS21	United States	Australia	Measures Affecting the Importation of Salmonids	AP
May 1995	WT/DS5	United States	Korea	Measures Concerning the Shelf-Life of Products	S/I
July 1995	WT/DS6	Japan	United States	Imposition of Import Duties on Automobiles from Japan Under Section 301 and 304 of the Trade Act of 1974	S/I
July 1995	WT/DS13	United States	European Community	Duties on Imports of Grain	S/I
September 1995	WT/DS11	Canada, European Community, United States	Japan	Taxes on Alcoholic Beverages	C
January 1996	WT/DS2, DS4	Venezuela, Brazil	United States	Standards for Reformulated and Conventional Gasoline	C
February 1996	WT/DS27	Ecuador, Guatemala, Honduras, Mexico, United States	European Community	Regime for the Importation, Sale, and Distribution of Bananas	CR
February 1996	WT/DS28	United States	Japan	Measures Concerning Sound Recordings	S/I
March 1996	WT/DS31	United States	Canada	Certain Measures Concerning Periodicals	C
March 1996	WT/DS32	India	United States	Measures Affecting Imports of Women's and Girl's Coats	S/I
March 1996	WT/DS35	Argentina, Australia, Canada, New Zealand, Thailand, United States	Hungary	Export Subsidies in Respect of Agricultural Products	S/I
April 1996	WT/DS26	United States	European Community	Measures Affecting Meat and Meat Products (Hormones)	CR
April 1996	WT/DS33	India	United States	Measure Affecting Imports of Woven Wool Shirts and Blouses	C
April 1996	WT/DS36	United States	Pakistan	Patent Protection for Pharmaceutical and Agricultural and Chemical Products	S/I
April 1996	WT/DS37	United States	Portugal	Patent Protection Under the Industrial Property Act	S/I
April 1996	WT/DS39	European Community	United States	Tariff Increases on Products from the European Communities	S/I
May 1996	WT/DS38	European Community	United States	The Cuban Liberty and Democratic Solidarity Act	S/I

See notes at end of table.

Table F-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States (as of June 2000)

Month and year of initiation	Case No.	Complaintant(s)	Respondent(s)	Case title	Status[1]
May 1996	WT/DS41	United States	Korea	Measures Concerning Inspection of Agricultural Products	PC
June 1996	WT/DS43	United States	Turkey	Taxation of Foreign Film Revenues	S/I
June 1996	WT/DS44	United States	Japan	Measures Affecting Consumer Photographic Film and Paper	C
June 1996	WT/DS45	United States	Japan	Measures Affecting Distribution Services	PC
July 1996	WT/DS49	Mexico	U.S.	Anti-Dumping Investigation Regarding Imports of Fresh or Chilled Tomatoes from Mexico	S/I
July 1996	WT/DS50	United States	India	Patent Protection for Pharmaceutical and Agricultural Chemical Products	C
August 1996	WT/DS52	United States	Brazil	Certain Measures Affecting Trade and Investment in the Automotive Sector	PC
October 1996	WT/DS59	United States	Indonesia	Certain Measures Affecting the Automobile Industry	C
October 1996	WT/DS56	United States	Argentina	Certain Measures Affecting Imports of Footwear, Textiles, Apparel and Other Items	C
October 1996	WT/DS57	United States	Australia	Textiles, Clothing and Footwear Import Credit Scheme	S/I
October 1996	WT/DS58	India	United States	Import Prohibition of Certain Shrimp and Shrimp Products	C
October 1996	WT/DS61	Phillippines	United States	Import Prohibition of Certain Shrimp and Shrimp Products	PC
November 1996	WT/DS24	Costa Rica	United States	Restrictions on Imports of Cotton and Man-Made Fiber Underwear	C
November 1996	WT/DS63	European Community	United States	Anti-Dumping Measures on Imports of Solid Urea from the Former German Democratic Republic	PC
January 1997	WT/DS65	United States	Brazil	Certain Measures Affecting Trade and Investment in the Automotive Sector	PC
February 1997	WT/DS62,67,68	United States	European Community	Customs Classification of Certain Computer Equipment	C
April 1997	WT/DS74/1	United States	Phillippines	Measures Affecting Pork and Poultry	S/I
April 1997	WT/DS76/1	United States	Japan	Measures Affecting Agricultural Products	C

See notes at end of table.

Table F-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States (as of June 2000)

Month and year of initiation	Case No.	Complaintant(s)	Respondent(s)	Case title	Status[1]
April 1997	WT/DS78/1	Colombia	United States	Safeguard Measure Against Imports of Broom Corn Brooms	PC
May 1997	WT/DS80	United States	Belgium	Measures Affecting Commercial Telephone Directory Services	PC
May 1997	WT/DS82/1	United States	Ireland	Measures Affecting the Grant of Copyright and Neighboring Rights	PC
May 1997	WT/DS83/1	United States	Denmark	Measures Affecting the Enforcement of Intellectual Property Rights	PC
May 1997	WT/DS84/1	United States	Korea	Taxes on Alcoholic Beverages	C
May 1997	WT/DS85/1	European Community	United States	Measures Affecting Textiles and Apparel Products	S/I
May 1997	WT/DS86/1	United States	Sweden	Measures Affecting the Enforcement of Intellectual Property Rights	S/I
June 1997	WT/DS88/1	European Community	United States	Measure Affecting Government Procurement	S/I
July 1997	WT/DS89/1	Korea	United States	Anti-Dumping Duties on Imports of Colour Television Receivers from Korea	S/I
July 1997	WT/DS90/1	United States	India	Quantitative Restrictions on Imports of Agricultural, Textile, and Industrial Products	C
July 1997	WT/DS95/1	Japan	United States	Measure Affecting Government Procurement	S/I
August 1997	WT/DS97/1	Chile	United States	Countervailing Duty Investigation of Imports of Salmon from Chile	PC
August 1997	WT/DS99/1	Korea	United States	Anti-Dumping Duty on Dynamic Random Access Memory Semiconductors	C
August 1997	WT/DS100/1	European Community	United States	Measures Affecting Imports of Poultry Products	PC
September 1997	WT/DS101/1	United States	Mexico	Anti-Dumping Investigation of High Fructose Corn Syrup	PC
October 1997	WT/DS102/1	United States	Phillippines	Measures Affecting Pork and Poultry	S/I
October 1997	WT/DS103/1	United States	Canada	Measures Affecting the Importation of Milk and the Exportation of Dairy Products	C
October 1997	WT/DS104/1	United States	European Community	Measures Affecting the Exportation of Processed Cheese	PC
November 1997	WT/DS106/1	United States	Australia	Subsidies Provided to Producers and Exporters of Automotive Leather	S/I

See notes at end of table.

Table F-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States (as of June 2000)

Month and year of initiation	Case No.	Complaintant(s)	Respondent(s)	Case title	Status[1]
November 1997	WT/DS108/1	European Community	United States	Tax Treatment for "Foreign Sales Corporations"	RA
December 1997	WT/DS109/1	United States	Chile	Taxes on Alcoholic Beverages	PC
December 1997	WT/DS111/1	Argentina	United States	Tariff Rate Quota for Imports of Groundnuts	PC
January 1998	WT/DS115/1	United States	European Community	Measures Affecting the Grant of Copyright and Neighboring Rights	PC
February 1998	WT/DS118/1	European Community	United States	Harbour Maintenance Tax	PC
April 1998	WT/DS124/1	United States	European Community	Enforcement of Intellectual Property Rights for Motion Pictures and Television Programs	PC
April 1998	WT/DS125/1	United States	Greece	Enforcement of Intellectual Property Rights for Motion Pictures and Television Programs	PC
May 1998	WT/DS126/1	United States	Australia	Subsidies Provided to Producers and Exporters of Automotive Leather	C
May 1998	WT/DS127/1	United States	Belgium	Certain Income Tax Measures Constituting Subsidies	PC
May 1998	WT/DS128/1	United States	Netherlands	Certain Income Tax Measures Constituting Subsidies	PC
May 1998	WT/DS129/1	United States	Greece	Certain Income Tax Measures Constituting Subsidies	PC
May 1998	WT/DS130/1	United States	Ireland	Certain Income Tax Measures Constituting Subsidies	PC
May 1998	WT/DS131/1	United States	France	Certain Income Tax Measures Constituting Subsidies	PC
May 1998	WT/DS132	United States	Mexico	Anti-Dumping Investigation of High-Fructose Corn Syrup	RA
June 1998	WT/DS136	European Community	United States	Anti-Dumping Act of 1916 (1)	A
June 1998	WT/DS138	European Community	United States	Imposition of Countervailing Duties on Certain Hot-rolled Lead and Bismuth Carbon Steel Products Originating in United Kingdom	RA
September 1998	WT/DS144/1	Canada	United States	Certain Measures Affecting the Import of Cattle, Swine, and Grain from Canada	PC
November 1998	WT/DS151/1	European Community	United States	Measures Affecting Textiles and Apparel Products	PC
November 1998	WT/DS152/1	European Community	United States	Sections 301-310 of the Trade Act of 1974	RA
January 1999	WT/DS160/1	European Community	United States	Section 110(5) of the U.S. Copyright Act	RI

See notes at end of table.

Table F-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States (as of June 2000)

Month and year of initiation	Case No.	Complaintant(s)	Respondent(s)	Case title	Status[1]
February 1999	WT/DS161/1	United States	Korea	Measures Affecting Imports of Fresh, Chilled, and Frozen Beef	AP
February 1999	WT/DS162/1	Japan	United States	Anti-Dumping Act of 1916 (II)	A
February 1999	WT/DS163/1	United States	Korea	Measures Affecting Government Procurement	RA
March 1999	WT/DS164/1	United States	Argentina	Measures Affecting Imports of Footwear	AP
March 1999	WT/DS165/1	European Community	United States	Import Measure on Certain Products from the European Communities	AP
March 1999	WT/DS166/1	European Community	United States	Definitive Safeguard Measure on Imports of Wheat Gluten from the European Communities	AP
March 1999	WT/DS167/1	Canada	United States	Countervailing Duty Investigation with respect to Live Cattle from Canada	PC
May 1999	WT/DS170/1	United States	Canada	Patent Protection Term	A
May 1999	WT/DS171/1	United States	Argentina	Patent Protection for Pharmaceuticals and Test Data Protection for Agricultural Chemicals	PC
May 1999	WT/DS172/1	United States	European Community	Measures Relating to the Development of a Flight Management System	PC
May 1999	WT/DS173/1	United States	France	Measure Relating to the Development of a Flight Management System	PC
May 1999	WT/DS175/1	United States	India	Measures Relating to Trade and Investment in the Motor Vehicle Sector	PC
June 1999	WT/DS174/1	United States	European Community	Protection of Trademarks and Geographical Indications for Agricultural Products and Foodstuffs	PC
July 1999	WT/DS176/1	European Community	United States	Section 211 Omnibus Appropriations Act	PC
July 1999	WT/DS177/1	New Zealand	United States	Safeguard Measure on Imports of Fresh, Chilled or Frozen Lamb from New Zealand	AP
July 1999	WT/DS178/1	Australia	United States	Safeguard Measure on Imports of Lamb Meat from Australia	AP
July 1999	WT/DS179	Korea	United States	Anti-Dumping Measure on Stainless Steel Plate in Coils and Stainless Steel Sheet and Strip from Korea	AP
September 1999	WT/DS180/1	Canada	United States	Reclassification of Certain Sugar Syrups	PC
November 1999	WT/DS184/1	Japan	United States	Anti-Dumping Measures on Certain Hot-Rolled Steel	

See notes at end of table.

Table F-1--*Continued*
Status of World Trade Organization (WTO) dispute settlement cases involving the United States (as of June 2000)

Month and year of initiation	Case No.	Complaintant(s)	Respondent(s)	Case title	Status[1]
				Products from Japan	AP
January 2000	WT/DS186/1	European Community	United States	Section 337 of the Tariff Act of 1930 and Amendments Thereto	PC
April 2000	WT/DS192/1	Pakistan	United States	Transitional Safeguard Measure on Combed Cotton Yarn from Pakistan	AP
May 2000	WT/DS194/1	Canada	United States	Measures Treating Export Restraints As Subsidies	PC
May 2000	WT/DS195/1	United States	Phillippines	Measures Affecting Trade and Investment in the Motor Vehicle Sector	PC
May 2000	WT/DS196/1	United States	Argentina	Certain Measures on the Protection of Patents and Test Data	PC
May 2000	WT/DS197/1	United States	Brazil	Measures on Minimum Import Prices	PC
May 2000	WT/DS198/1	United States	Romania	Measures on Minimum Import Prices	PC
May 2000	WT/DS199/1	United States	Brazil	Measures Affecting Patent Protection	PC
June 2000	WT/DS200/1	European Community	United States	Section 306 of the Trade Act of 1974 and Amendments Thereto	PC
June 2000	WT/DS202/1	Korea	United States	Definitive Safeguard Measures on Imports of Circular Welded Carbon Quality Line Pipe from Korea	PC

[1] Status codes:
- RA . . . . Report appealed
- A . . . . . Appellate Body reports issued/Panel reports appealed
- RI . . . . . Panel reports issued
- AP . . . . . Active panels
- PC . . . . . Pending consultations
- C . . . . . Completed cases
- CR . . . . Completed cases--retaliation authorized, in the process of implementation
- S/I . . . . . Settled or inactive

Source: Compiled by USITC staff from World Trade Organization (WTO) Secretariat, *Overview of the State-of-Play of WTO Disputes*, (Geneva: WTO Secretariat, June 22, 2000).

APPENDIX G
Background on Exchange Rate Shifts

BACKGROUND ON EXCHANGE RATE SHIFTS

Introduction

This appendix provides a general background on exchange rates, and describes their interactions with trade flows. More specifically, it discusses the general behavior of the U.S. dollar relative to foreign currencies during the period 1995-99, and the relationship of exchange rate changes to recent trends in U.S. exports and imports.

The appendix is divided into three sections. The first section provides a brief overview of exchange rates and the relationship between exchange rates and trade flows. The second section shows nominal exchange rates against the dollar on an annual basis during 1995-99 for selected individual countries and shows nominal and real exchange rate indexes for selected country groups. Exchange rate movements and policy actions by monetary authorities in 1999 also are discussed in the section, with an emphasis on the appreciation of the Japanese yen and the depreciation of the euro. The third section examines the consideration of dollarization programs by selected countries.

Exchange Rate Determinants and Trade[1]

An exchange rate is simply the number of units of a country's currency exchangeable for one unit of another country's currency. A country's currency "appreciates" when its value increases relative to a foreign currency, i.e., one unit of its currency purchases more units of the foreign currency. Likewise a country's currency "depreciates" when its value decreases relative to a foreign currency; i.e., one unit of its currency purchases fewer units of the foreign currency.[2] For example, if 1 U.S. dollar is worth (can purchase) 100 Japanese yen at the beginning of a period, but can purchase 150 yen at the end of the period, the dollar has risen in value (has appreciated) because it can purchase more yen. Alternatively, in dollar terms, the yen is said to have depreciated from $0.0100 to $0.0067.

Under a system of flexible or floating exchange rates, market or "nominal" exchange rates[3] of freely convertible currencies are determined by the demand for, and the supply of, the domestic currency in the foreign exchange market, derived from international transactions of goods, services, assets, and financial instruments. The demand for foreign currencies is influenced by the same forces that influence demand for domestic currency. Foreign demand for U.S. dollars is based on other countries' purchases of U.S. goods and services, investments in the United States, and the holding 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 the holding of balances in foreign currencies.

Exchange rate shifts can significantly affect trade flows because they change the relative prices of goods and services, assuming all other factors remain unchanged. A foreign currency depreciation (U.S. dollar appreciation) 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.

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[1] For a more detailed discussion, see Charles Yost, "Background on Exchange Rate Shifts," *Shifts in U.S. Merchandise Trade in 1998*, Investigation No. 332-340, USITC, publication 3220, Aug. 1999, pp. F-1 through F-20.

[2] The terms "revaluation" and "devaluation" often are, but should not be, used interchangeably with "appreciation" and "depreciation," respectively; economists apply the terms "revaluation" and "devaluation" to fixed exchange-rate regimes and "appreciation" and "depreciation" to flexible exchange-rate regimes.

[3] Nominal rates are reported on the financial pages of major newspapers and are distinguished from real (inflation-adjusted) exchange rates discussed later.

imports. The converse also is true when the dollar depreciates.[4] If the value of the U.S. dollar rises (appreciates), the price competitiveness of U.S. merchandise falls in foreign markets and the price competitiveness of foreign merchandise rises in the U.S. market.

A significant source of uncertainty in conducting international trade 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 and a loss to the other party involved in the transaction (absent hedging 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. U.S. companies derive a number of benefits from the fact that the U.S. dollar is the premier international currency for both international trade and financial transactions.[5]

Changes in the Nominal and Real Value of the Dollar

Nominal exchange rates of selected foreign currencies against the U.S. dollar on an annual basis during 1995-99 are shown in table G-1. Only the Canadian dollar, Chinese yuan, and British pound were relatively little changed over the past 5 years. Compared to other major industrialized trade partners in 1999, the dollar appreciated significantly against the euro in its first year of operation, but depreciated substantially against the Japanese yen. In contrast, the Korean won, Malaysian ringgit, Mexican peso, and Thai baht all depreciated by approximately 50 percent over the 5-year period, whereas the Brazilian real lost one-half its value in 1999 alone. Appreciation of the Thai and Korean currencies in 1999 compared to the previous year largely reflects the progress towards economic recovery from the Asian financial crisis.[6]

The average foreign exchange value of the U.S. dollar against a broad group of 35 major trade partners' currencies was little changed in 1999 compared to the previous year (table G-2)[7] as the U.S. dollar appreciated only slightly, on a nominal basis, from 116.48 in 1998 to 116.87 in 1999.[8] Offsetting pressures on the dollar were largely responsible for this pattern; continued strong growth of the U.S. economy relative to foreign economies supported the dollar, whereas continuing increases in U.S.

[4] Although this discussion has focused on merchandise trade, exchange rate changes also affect international capital flows by affecting the present value of cash flows from capital investments and purchases of foreign intangible assets.

[5] Benefits include the convenience factor enabling exporters, importers, borrowers, and 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. Council of Economic Advisors (CEA), *Economic Report of the President*, together with the *Annual Report of the Council of Economic Advisors*, Feb. 2000, pp. 299-300.

[6] See ch. 3 for more details about these countries' economic recoveries.

[7] The broad index of the Federal Reserve Board is a weighted average of the foreign exchange values of the U.S. dollar against the currencies of a group of 35 currencies until Jan.1, 1999, when the euro replaced the 11 euro-area countries. The index weights, which change over time, are derived from U.S. export shares and from U.S. and foreign import shares.

[8] The dollar depreciated slightly on a real basis from 99.35 in 1998 to 98.87 in 1999 for this broad index on a different base, with 1973=100.

Table G-1
Nominal exchange rates for selected trade partners, annual averages

Country (currency)	1995	1996	1997	1998	1999
	Exchange rate (*foreign currency per U.S. dollar, except as noted*)[1]				
Brazil (real)	0.9162	1.0051	1.0779	1.1605	1.8207
Canada (dollar)	1.3725	1.3638	1.3849	1.4836	1.4858
China (yuan)	8.3700	8.3389	8.3193	8.3008	8.2781
Germany (deutsche mark)	1.4321	1.5049	1.7348	1.7597	([2])
Japan (yen)	93.96	108.78	121.06	130.99	113.73
Korea (won)	772.69	805.00	947.65	1,400.40	1,189.84
Malaysia (ringgit)	2.5073	2.5154	2.8173	3.9254	3.8000
Mexico (peso)	6.447	7.600	7.918	9.152	9.553
Thailand (baht)	24.921	25.359	31.072	41.262	37.887
United Kingdom (pound[3])	1.5785	1.5607	1.6376	1.6573	1.6172
	Change over the preceding period (*percent*)				
Brazil (real)	([2])	9.7	7.2	7.7	56.9
Canada (dollar)	([4])	-0.1	1.5	7.1	([4])
China (yuan)	-3.1	([4])	([4])	([4])	([4])
Germany (deutsche mark)	6.9	1.4	-1.4	1.4	([2])
Japan (yen)	-8.0	15.8	11.3	8.2	-13.2
Korea (won)	-4.2	4.2	17.7	47.8	-15.0
Malaysia (ringgit)	-4.4	([3])	12.0	39.3	-3.2
Mexico (peso)	([2])	17.9	4.2	15.6	4.4
Thailand (baht)	-1.0	1.8	22.5	32.8	-8.2
United Kingdom (pound[2])	3.0	-1.1	4.9	1.2	-2.4

[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] Not available.
[3] U.S. dollars per pound.
[4] Less than 0.1 percent.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, (various months) 1999-2000.

Table G-2
Nominal and real weighted average indexes of foreign exchange value of the U.S. dollar versus currencies of groups of trade partners, annual averages

Index (base period = 100)	**1995**	**1996**	**1997**	**1998**	**1999**
			Nominal		
Broad[1] (Jan. 1997=100)	92.52	97.40	104.44	116.48	116.87
Major currencies[2] (Mar. 1973=100)	81.39	84.60	91.24	95.79	94.07
Other important trading partners[3] (Jan. 1997=100)	92.51	98.26	104.67	126.03	129.94
			Nominal change over the preceding period (*percent*)		
Broad[1] (Jan. 1997=100)	([4])	5.3	7.2	11.5	([5])
Major currencies[2] (Mar. 1973=100)	([4])	3.9	7.8	5.0	-1.8
Other important trading partners[3] (Jan. 1997=100)	([4])	6.2	6.5	20.4	3.1
			Real		
Broad[1] (Mar. 1973=100)	83.95	86.72	91.33	99.36	98.76
Major currencies[2] (Mar. 1973=100)	80.78	84.95	92.25	97.25	96.75
Other important trading partners[3] (Mar. 1973=100)	109.80	94.69	95.87	108.52	107.74
			Real change over the preceding period (*percent*)		
Broad[1] (Mar. 1973=100)	([4])	3.3	5.3	8.8	-0.1
Major currencies[2] (Mar. 1973=100)	([4])	5.2	8.6	5.4	-0.1
Other important trading partners[3] (Mar. 1973=100)	([4])	-13.8	1.2	13.2	-0.1

[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, 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.

[4] Not applicable.

[5] Less than 0.1 percent.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, (various months) 1999-2000.

external deficits may have held down the dollar because of investor concerns that the associated strong net demand for dollar assets might prove unsustainable.[9]

Yen appreciation

The Japanese yen had depreciated significantly against the dollar during 1995-98, falling 39 percent to ¥130.99 in 1998 (table G-1). However, in 1999 the yen appreciated 13 percent on balance against the dollar, due to a combination of more favorable than anticipated growth, trade and current account balance reports, portfolio flows, and Bank of Japan intervention in the foreign exchange markets.[10] The following tabulation highlights the yen-dollar exchange rate in 1999:[11]

Time frame	**Exchange rate** (*yen per dollar*)
Beginning of year	112.80
End of year	102.16
Low (May 19)	124.45
High (December 22)	101.53
First quarter (average)	116.48
Second quarter (average)	120.83
Third quarter (average)	113.15
Fourth quarter (average)	104.40

At the beginning of the year, the yen traded at ¥112.80 to the dollar, but soon appreciated to a multi-year high to date of ¥108.22 to the dollar on January 11 as Japanese investors reallocated funds from U.S. to European and Japanese assets.[12] However, the next day, the dollar gained back the previous day's loss as the Bank of Japan reportedly intervened in the foreign exchange market as a sign of resistance to yen appreciation below ¥110 per dollar.

The dollar subsequently traded in the ¥110-117 range, amidst commentary from Japanese officials against excessive strength of the yen and continued disparity between U.S. and Japanese economic growth. The dollar began to appreciate steadily against the yen through early March 1999, attributed to a combination of factors, including action by the Bank of Japan to guide the overnight call rate to as low as 2 basis points, growing expectation of a shift to monetary targeting in Japan, official efforts to contain the rapid rise in Japanese bond yields, and signs of persistent strength in the U.S. economy. The dollar reached a quarterly high of ¥123.75 on March 4, before drifting back to ¥118.80. During the second quarter 1999, the dollar was largely unchanged against the yen.

In third quarter 1999, the dollar depreciated 12.1 percent against the yen, a reflection of more balanced growth among the world's major economies. Substantial appreciation of the yen was accompanied by sizable portfolio in-flows as investors reacted to less favorable risk-adjusted returns in global capital

[9] Board of Governors of the Federal Reserve System (Fed. Res. Board), *Monetary Policy Report*, Feb. 17, 2000, p. 28.

[10] Ibid.

[11] Fed. Res. Board, *Federal Reserve Bulletin*, (various months) 1999-2000.

[12] Fed. Res. Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations*, Jan.-Mar. 1999, p. 1.

markets in favor of Japanese assets.[13] Surprisingly strong Japanese economic growth reports also boosted the yen. Growth of gross domestic product (GDP) in first quarter 1999 was revised upward to a rate of 2.0 percent over growth in fourth quarter 1998 and growth in the second quarter was a surprisingly positive rate of 0.2 percent when investors and market analysts had expected a contraction.[14] In its September 21 meeting the Bank of Japan's Policy Board decided to maintain its zero interest-rate policy, and the Governor of the Bank of Japan issued a statement that the Bank shared the Japanese Government's concern about yen appreciation.[15] Hence, on several occasions during third quarter 1999, the Bank of Japan bought dollars and sold yen in foreign exchange markets to restrain yen appreciation.

The yen rose steadily during fourth quarter 1999 to a 4-year high of ¥101.53 against the dollar, at a time of continued perceptions of improvement in Japan's economy, capital flows into Japanese assets, but uncertainty regarding additional stimulus by the Bank of Japan. Authorities confirmed several more Japanese interventions in the foreign exchange markets.[16] Reflecting growing confidence that Japan's economic cycle was turning up, foreign investors increased their direct and portfolio investments in Japan. Foreign direct investment increased to ¥1.3 trillion in the first half of 1999, twice the amount for all of 1998. As the yen's continued appreciation reduced the value of foreign assets for Japanese investors, hedging or liquidation of these positions was encouraged. Repatriated capital created additional demand for yen. The value of the yen closed out the year at ¥102.16.[17]

Euro depreciation

The euro was formally inaugurated on January 1, 1999, as a composite of the currencies of the 11 European Union (EU) countries[18] that opted to join the European Economic and Monetary Union (EMU). The benefits of EMU are those of any single currency within a single market (and may accelerate the development of a single market in Europe), and also include lower cross-border currency conversion costs, estimated by the European Commission at more than $13 billion per year.[19] The euro should foster new investment opportunities because a single currency may lead to added depth, liquidity, and enhance the financial infrastructure of a consolidated Europe.[20] The following tabulation highlights the euro-dollar exchange rate in 1999:[21]

[13] Ibid., July-Sept. 1999, pp. 1, and 6-7.

[14] Ibid., p. 2.

[15] Ibid., p. 6.

[16] Ibid., Oct.-Dec. 1999, p. 1.

[17] Official statistics of the Fed. Res. Board.

[18] The 11 EU countries of the euro area are Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal, and Spain.

[19] Alan C. Shapiro, *Multinational Financial Management*, (Upper Saddle, NJ: Prentice-Hall, 1999), p. 100, citing an European Commission report.

[20] See Yost, "Background on Exchange Rate Shifts."

[21] Fed. Res. Board, *Federal Reserve Bulletin*, (various months) 1999-2000.

Time frame	Exchange rate (*dollars per euro*)
Beginning of year	1.1668
End of year	1.0070
Low (December 3)	1.0016
High (January 4)	1.1812
First quarter (average)	1.1227
Second quarter (average)	1.0569
Third quarter (average)	1.0491
Fourth quarter (average)	1.0381

The value of the euro at its creation was just under $1.1668[22] and on the first day of trading its value moved higher. However, it soon began to weaken against the dollar amidst indications of slow economic growth in the euro-area. The dollar also strengthened as the differential between U.S. and European interest rates moved in favor of the dollar.[23] The euro approached parity with the dollar in early July and then rebounded, partly on signs of European recovery. However, the euro weakened again in the fall and approached parity with the dollar (and briefly below in intra-day trading) in December.[24] Portfolio outflows contributed to the continued depreciation of the euro. On balance, the dollar appreciated by 16 percent relative to the euro over full-year 1999. Although the euro's foreign exchange value weakened, the volume of euro-denominated transactions expanded rapidly, especially of debt securities. The volume of international bonds denominated in euros exceeded dollar-denominated issuance during 1999.[25]

The depreciation of the euro surprised many commentators, who had expected rapid appreciation of the euro because of the relative current account positions of the United States and the euro area.[26] Instead, the euro area experienced a growth setback in 1999, whereas the U.S. economy experienced continued rapid growth. GDP in the euro area had increased by 2.3 percent through third quarter 1999, but subsequently, the European Commission forecast an increase of only 2.1 percent for the full year.[27] Unemployment remained high in the euro area at 9.6 percent by the end of 1999, whereas the United States enjoyed unemployment of less than 5 percent. Productivity growth was accelerating in the United States, whereas there were few signs of much-needed structural reforms in Continental Europe, and political resistance was developing to a proposed withholding tax on investment income.[28]

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[22] European Commission, "Official ECU Exchange Rates Calculated and Published by the European Commission," found at Internet address, http://www.europa.eu.int/comm/economy_finance/xecud.htm, retrieved Aug. 4, 2000.

[23] Fed. Res. Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations*, Jan.-Mar. 1999, p. 1.

[24] Mark A. Wynne, Global Economy, "The Dollar-Euro Exchange Rate-So Far," Fed. Res. Bank of Dallas, p. 1, found at Internet address http://www.dallasfed.org/htm/eyi/global.html, retrieved May 10, 2000. The euro subsequently closed below parity on Jan. 27, 2000, and on May 3, 2000, was valued at 0.8891dollars. Official statistics of the Fed. Res. Board.

[25] Mark A. Wynne, "EMU at 1," *Economic and Financial Review*, First Quarter 2000, Fed. Res. Bank of Dallas, p. 14.

[26] Wynne, "The Dollar-Euro Exchange Rate-So Far," p. 1.

[27] Ibid., p. 2.

[28] Fed. Res. Board, *Monetary Policy Report*, Section 1, Feb. 17, 2000, p. 29

Exchange Rate Stability and Convertibility

Exchange rates are dependent not only on basic economic factors, but also on a wide range of policy factors, including domestic monetary and fiscal policies, independence of the country's central bank, exchange controls and openness of its capital market,[29] and arrangements for payments and receipts. Also important is the government's intervention policy, reflecting its desire to maintain exchange rate stability,[30] 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.[31] The U.S. dollar is classified as "independently floating."

Most governments also periodically intervene in order to stabilize disorderly foreign exchange markets, and to ensure that their capital markets are insulated from external exchange rate crises that may escalate into banking and general financial crises. U.S. authorities purchase dollars from time to time to resist downward pressure on the dollar exchange rate and occasionally sell dollars to resist strong upward pressure. The United States undertook no dollar intervention operations from mid-1995 until mid-1998. During 1998, U.S. monetary authorities intervened in the foreign exchange markets on one occasion, on June 17, selling a total of $833 million and buying Japanese yen.[32] The U.S. monetary authorities did not intervene in the foreign exchange markets during 1999.[33]

Most of the leading U.S. trade partners maintain floating exchange rates, and their central banks intervene selectively or not at all.[34] Several others do not, preferring instead to maintain an organized floating exchange rate, or managed float. For example, the People's Bank of China announces a reference rate against the U.S. dollar, the Hong Kong dollar, and Japanese yen based on the weighted-average price of foreign exchange transactions on the previous day. This reference rate is then used to establish the current day's maximum trading limits in the interbank foreign exchange market. The central banks of several others have announced their intentions to intervene should they consider market conditions disorderly or if their currency's foreign exchange value fluctuates beyond a stated range of parity against other currencies or a basket of currencies.

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[29] 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).

[30] 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. Yost, "Background on Exchange Rate Shifts."

[31] For a description of the five types of arrangements for exchange rates, each of which represents efforts by the central bank to stabilize the country's exchange rate against those of its trade partners, see IMF, *Exchange Arrangements and Exchange Restrictions, Annual Report 1999,* Appendix 1. Also, for a chart of exchange rate arrangements, see IMF, *International Financial Statistics*, monthly series, p. 8.

[32] The mark and the yen have been the only two currencies in which the United States has conducted its intervention operations.

[33] Fed. Res. Bank of New York, *Treasury and Federal Reserve Foreign Exchange Operations,* Apr.-June 1999, p. 1.

[34] Those allowing their currency's exchange value to float freely include Canada, Japan, Korea, Mexico, Singapore, and Taiwan

Dollarization[35]

The adoption of a common currency with a strong monetary regime, such as the euro, has some interesting parallels with another monetary phenomenon--"dollarization"[36] This is a program in which a country officially or unofficially uses a foreign currency (in this case the U.S. dollar) as its domestic currency or as a medium of account alongside a domestic currency. For example, an estimated 85 percent of the value of all bank accounts in Peru, 75 percent in Uruguay, and 65 percent in Argentina are held in U.S. dollars.[37] More than one-half of all U.S. Federal Reserve notes, mainly $100 bills, are believed to be held abroad by foreigners.[38] There are 29 countries or dependent territories that officially use a foreign currency (table G-3):

Table G-3
Some countries and territories that officially adopted other currencies as of January 2000

Currency adopted	Country or territory
U.S. dollar	East Timor, Guam, Marshall Islands, Micronesia, Northern Mariana Islands, Palau, Panama, Pitcairn Island, Puerto Rico, American Samoa, Turks and Caicos Islands, Virgin Islands
Australian dollar	Cocos Islands, Kiribati, Nauru, Norfolk Island, Tuvalu
New Zealand dollar	Cook Islands, Niue, Pitcairn Island, Tokelau
French franc	Andorra, Monaco
Italian lira	San Marino, Vatican City
Spanish peseta	Andorra
Turkish lira	Northern Cyprus
Danish krone	Greenland
Swiss franc	Liechtenstein
British pound	Saint Helena

Source: Kurt Schuler, Table 2, *Basics of Dollarization*, Joint Economic Committee Staff Report, U.S. Congress, Jan. 2000, p. 5.

[35] For a more detailed discussion, see also Thomas Jennings, "Dollarization: A Primer," *International Economic Review*, USITC publication 3298, Apr./May 2000.

[36] After adoption of the euro this year, some have suggested that Canada should adopt the U.S. dollar. Andrew Berg and Eduardo Borensztein, "The Dollarization Debate, *Finance and Development*, IMF, vol. 37, No. 1, p. 38, found at Internet address http://www.imf.org/external/pubs/ft/fandd/2000/03/berg.htm, retrieved May 10, 2000. According to the Fed. Res. Bank of Dallas, there was a very heated debate on this suggestion at this year's meetings of the Canadian Economics Association. See "What is Dollarization?" found at Internet address http://www.dallasfed.org/htm/eyi/money/html, retrieved May 10, 2000.

[37] Fed. Res. Bank of Dallas, "Dollarization: The Greenback Goes Global," found at Internet address http://www.dallasfed.org/htm/eyi/money.html, retrieved May 10, 2000.

[38] Kurt Schuler, *Basics of Dollarization*, Joint Economic Committee Staff Report, U.S. Congress, Jan. 2000, p. 3.

In today's modern, globalized, high-volume financial markets, currency speculation has made the old system of managed float problematic, especially for smaller countries. Even a large country, such as Brazil in early 1999, was forced to devalue its currency in the face of financial crisis. Moreover, Brazil's devaluation had a large adverse effect on neighboring Argentina, one of its largest trade partners.[39] Argentina's response was to consider dollarization, which would have imposed an even more rigid exchange rate system than its existing currency board with a fixed exchange rate to the dollar. When Ecuador's economy imploded in 1999, its President also proposed official dollarization.

The primary attraction of dollarization is one of confidence. Under official dollarization, all values are converted to a dollar basis. The entire monetary accounting system (e.g., debts, assets, contracts, etc.,) is converted to the U.S. dollar. As the premier international monetary asset, the dollar assures currency stability, at least more so than most other national currencies. Adoption of the dollar fixes the exchange rate, which provides two principal advantages: the reduction of transactions costs and risks which together discourage trade and investment, and the establishment of a credible anchor for monetary policy.[40] Risk premiums and historical tendencies toward inflation are reduced or eliminated, and fiscal policy discipline is encouraged. The central bank can no longer print money to finance monetary policies that may lead to inflation.

However, the loss of monetary autonomy is one of the principal down sides of dollarization because it also means a loss of an independent monetary policy. If the U.S. dollar is the adopted foreign currency, then the monetary policy of the United States will be the norm.[41] 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.[42] Profits from seigniorage, the difference between the cost of printing currency and its face value, would be lost; any such profits would be gained by the United States, which produces more currency to satisfy currency demand in the affected country. Moreover, there is also a potential loss of national pride or prestige as domestic currency often reflects the national character in portraits of famous people, events, monuments, etc.

The recent public interest in dollarization arose in large part due to the economic crises confronting Argentina and Ecuador. According to some observers, and contrary to popular perception, the dollarization of the Argentine economy was not an opportunistic response to the financial crisis in Brazil.[43] Argentine monetary authorities had been working on their plan for over a year with the view that if market pressure ever became too strong they would go beyond their currency board to full dollarization. According to the

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[39] Sidney Weintraub, "The Dollarization Debate," *Issues in International Political Economy*, Center for Strategic and International Studies, No. 2, Feb. 2000, p. 1.

[40] Jeffrey A. Frankel, "Dollarization: Fad or Future for Latin America," *IMF Economic Forum*, June 24, 1999, p. 3.

[41] David Hale argues that developing countries largely dependent on commodity trade should not choose the U.S. dollar as a monetary base, but instead opt for a stable currency more in line with their own requirements, such as the Australian dollar. David D. Hale, "Should Argentina Dollarize? No Way," *The International Economy*, May/June 1999, p. 58.

[42] 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 on occasion had system-wide problems that were weathered at less taxpayer expense than countries with central banks. Schuler, *Basics of Dollarization*, p. 15.

[43] Philipp Hilderrand and Klaus Regling, "Should Argentina Dollarize? Absolutely," *The International Economy*, May/June 1999, p. 56.

International Monetary Fund (IMF), currently, Argentina's monetary and fiscal policies are successfully maintaining the currency peg along with a well-capitalized banking system.[44]

Ecuador's economic situation deteriorated in 1997-98, and it plunged into a general economic crisis in 1999. Real GDP had stagnated, but then fell by 8 percent in 1999, the unemployment rate almost doubled to 17 percent, and annual inflation in consumer prices was 90 percent in early 2000.[45] The President of Ecuador proposed official dollarization at 25,000 sucres per U.S. dollar, but was forced from office. The subsequent administration has decided to continue with the dollarization program as proposed, and along with a 12-month stand-by credit worth approximately $305 million U.S. dollars from the IMF. The IMF indicates that it appears that confidence is returning,[46] as interest rates have sharply declined, and there has been a net inflow of deposits into banks since the dollarization announcement. However, dollarization itself will not assure success; significant fiscal, structural, and social reforms will be necessary for economic success.[47]

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[44] IMF, "Press Conference On Exchange Rate Regimes in an Increasingly Integrated World Economy, Friday, Apr. 14, 2000," [Partial Transcript], IMF Research Department, found at Internet address http://www.imf.org/external/np/tr/2000/TR000414.HTM, retrieved May 25, 2000.

[45] IMF, "IMF Approves Stand-By Credit for Ecuador," press release No. 00/32, Apr. 19, 2000, found at Internet address http://www.imf.org/external/np/sec/pr/2000/PR0032.HTM, retrieved May 25, 2000.

[46] Ibid.

[47] IMF, "Memorandum of Economic Policies of the Government of Ecuador for 2000," Apr. 4, 2000, found at Internet address http://www.imf.org/external/np/loi/2000/ecu/01/index.htm, retrieved May 25, 2000.