

United States
International Trade Commission



INDUSTRY TRADE AND TECHNOLOGY REVIEW

OFFICE OF INDUSTRIES



PREFACE

The *Industry Trade and Technology Review (ITTR)* is a quarterly staff publication of the Office of Industries, U.S. International Trade Commission. The opinions and conclusions contained in this report are those of the authors and are not the views of the Commission as a whole or of any individual Commissioner. The report is intended to provide analysis of important issues and insights into the global position of U.S. industries, the technological competitiveness of the United States, and implications of trade and policy developments.

The information and analysis in this series 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 any statutory authority.

Inquiries or comments on items in this report may be made directly to the author, or to:

Director of Industries
U. S. International Trade Commission
500 E Street, SW
Washington, DC 20436
Fax: 202-205-3161

Industry Trade and Technology Review is posted on the Commission's Internet site at www.usitc.gov (Publications). Requests for copies of the *ITTR*, or to be added to the mailing list, should be addressed to the Office of the Secretary, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436, or by fax: 202-205-2104.

Quarterly Review Staff

Larry Brookhart
Karl Tsuji

assisted by

Zema Tucker
Sharon Greenfield
Monica Reed

Contributing Authors

William Chadwick Jr.
Ralph Watkins

Robert A. Rogowsky
Director of Operations
Acting Director of Industries

Listing of Published Articles

(June 1999 - November 2003)

June 1999

Energy services: Recent trends and future prospects
Market trends affecting the U.S. environmental services sector
Health care services: Strong fundamentals and innovations foreshadow growth in U.S. exports and foreign direct investment

October 1999

Outsourcing by the pharmaceutical industry provides opportunities for fine chemical producers worldwide
Thailand's financial crisis and progress towards recovery—Implications for U.S. trade

December 1999

Air transport services: International regulation and future prospects for liberalization
Renewed services trade negotiations in the WTO

March 2000

Machine vision: Vital technology for manufacturing industries
Agriculture in the WTO: The Seattle Ministerial and beyond

July 2000

Express services: Issues for negotiation in the World Trade Organization
Production-sharing update: Developments in 1999
Apparel market: New U.S. legislation places CBERA countries on a more equal competitive basis with Mexico

October 2000

WTO agricultural trade negotiations: An update
Steel sector explores E-Commerce although wary of quick transition
Mexico's emergence as a global automotive production center drives trade and investment

January 2001

U.S. metal mining: Recent trends and uncertainty discourage domestic exploration and investment
Factors affecting the competitive position of the Indian software industry
Manufacturing strategies of the North American major household appliance industry

March 2001

Apparel: Andean countries seek parity with Caribbean Basin countries to remain competitive in the U.S. market
Chemical trade by the Central European countries: Difficulties of sector transition
Commercialization of hybrid automobiles: Prospective demand for light metals

July 2001

Trends in China's steel consumption
Production-sharing update: Developments in 2000

Listing of Published Articles—*Continued*

October 2001

E-commerce and nonferrous metals: Despite potential, adoption has been slow
Foreign direct investment in infrastructure services in OECD countries

December 2001

Evidence of trade, income, and employment effects of NAFTA
U.S. primary aluminum: Power costs and market conditions could cause long-term restructuring

March 2002

Dyeing and finishing of apparel fabrics
WTO agricultural trade negotiations: A second update
Aluminum metal matrix composites gaining greater market acceptance

July 2002

U.S. telecommunication services: Industry and trade outlook
Mexico versus China: Factors affecting export and investment competition
Production-sharing update: Developments in 2001

October 2002

International trade in commercial equipment leasing services
International telecommunication markets: Accounting rate reform

December 2002

Major contraction of the domestic refined copper industry
Power generation and transmission equipment in the Latin American market

April 2003

WTO agricultural trade negotiations: Third update recapping the Doha Ministerial
Catalysts: An innovative industry responds to technological and competitive challenges

August 2003

Global copyright protection and the challenge of digital piracy
The measurement and effects of nontariff barriers to trade in basic telecommunication services

November 2003

Global trends in the information technology outsourcing services market
Production-sharing update: Developments in 2002

CONTENTS

	<i>Page</i>
Global trends in the information technology outsourcing services market	1
Recent economic and geo-political events	2
Front runners in the competition for cost-effective outsourcing	4
India	5
Philippines	7
China	7
Outlook	8
Production sharing update: Developments in 2002	11
Production-sharing trade reported under HTS chapter 98	14
Assembly trends in Mexico	16
Motor vehicles and parts	18
Machinery and electronic products	19
Apparel assembly in Mexico, the Caribbean Basin, and Sub-Saharan Africa	21
Appendix A: Key performance indicators of selected industries and regions	A-1
Steel:	
Figure A-1 All sectors show operating losses during second quarter 2003	A-2
Table A-1 Imports decrease and exports increase significantly during second quarter and first half 2003 compared to second quarter and first half 2002	A-2
Table A-2 Steel service centers: Shipments decrease during second quarter 2003 compared to second quarter 2002	A-3
Figure A-2 Steel mill products, all grades: Import penetration falls to multi-year low during second quarter 2003	A-3
Automobiles:	
Table A-3 U.S. sales of new passenger vehicles (cars and light trucks), domestic and imported, and share of U.S. market accounted for by sales of total imports and Japanese imports, by specified periods, January 2002-September 2003	A-4
Figure A-3 U.S. sales of new passenger vehicles (cars and light trucks) decreased in the third quarter 2003; sales of imported passenger vehicles as a percentage of total U.S. sales increased compared to second quarter 2003 at the expense of domestic vehicle sales	A-4
Unwrought Aluminum:	
Figure A-4 Imports decreased by 9.7 percent as companies worked off stocks, marking the first inventory decline since third quarter 2000	A-5
Table A-4 Import penetration declined by 2.1 percent in the second quarter of 2003 as consumption lagged and production remained stable	A-5

CONTENTS—*Continued*

Page

Appendix A: Key performance indicators of selected industries and regions—*continued*

Flat glass:

Figure A-5	Japanese monthly average imports show increase during first 8 months of 2003	A-6
------------	--	-----

Services:

Figure A-6	Balance on U.S. service trade accounts, by quarter, 2002 and 2003	A-7
Figure A-7	Surpluses on cross-border U.S. services transactions with selected trading partners, by quarter, 2001-2003	A-7

North American trade:

	North American trade highlights	A-8
Table A-5	North American trade, 1998-2002, January-June 2002, and January-June 2003	A-9

Appendix B: Statistical tables (B-1 to B-11) for U.S. imports under the production-sharing provisions of HTS heading 9802 (HTS 9802.00.60, 9802.00.80, and 9802.00.90)	B-1
---	------------

Tables B-1 to B-11	B-2 - B-20
--------------------------	------------

Appendix C: Statistical tables (C-1 to C-7) for trade under Mexico’s production-sharing provisions (Temporary Import Programs)	C-1
---	------------

Tables C-1 to C-7	C-2 - C-16
-------------------------	------------



ITC READER SATISFACTION SURVEY

Industry Trade and Technology Review

The U.S. International Trade Commission (USITC) is interested in your voluntary comments (burden less than 10 minutes) to help assess the value and quality of our reports, and to assist in improving future products. Please **return survey by facsimile (202-205-3161) or by mail** to the USITC, or visit the USITC Internet home page (http://reportweb.usitc.gov/reader_survey/readersurvey.html) to electronically submit a Web version of the survey.

(Please print; responses below not for attribution):

Your name and title: _____

Organization (if applicable): _____

Which format is most useful to you? CD-ROM Hardcopy USITC Internet site

Circle your assessment of each factor below: **SA** = strongly agree, **A** = agree, **N** = no opinion, **D** = disagree, or **SD** = strongly disagree.

Value of this report:

- ▶ Statistical data are useful SA A N D SD
- ▶ Other non-numerical facts are useful SA A N D SD
- ▶ Analysis augments statistical data/other facts SA A N D SD
- ▶ Relevant topic(s)/subject matter SA A N D SD
- ▶ Primary or leading source of information on this subject ... SA A N D SD

Quality of this report:

- ▶ Clearly written SA A N D SD
- ▶ Key issues are addressed SA A N D SD
- ▶ Charts and graphs aid understanding SA A N D SD
- ▶ References cite pertinent sources SA A N D SD

Other preferred source of information on this subject: _____

Specify chapters, sections, or topics in report that are most useful: _____

Identify any type of additional information that should have been included in report: _____

Suggestions for improving report: _____

Please update your mailing and electronic addresses below (voluntary)-

Mailing address: _____

City, state, and zip code: _____

E-mail address: _____

FOLD

UNITED STATES
INTERNATIONAL TRADE COMMISSION
WASHINGTON, DC 20436

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 12840 WASHINGTON, DC

POSTAGE WILL BE PAID BY ADDRESSEE

U.S. INTERNATIONAL TRADE COMMISSION
500 E STREET, SW.
WASHINGTON, DC 20277-2840

ATTN:
OFFICE OF INDUSTRIES
INDUSTRY TRADE AND
TECHNOLOGY REVIEW (ITTR)



Global Trends in the Information Technology Outsourcing Services Market

William Chadwick, Jr.¹
wchadwick@usitc.gov
(202) 205-3390

U.S. imports of outsourced information technology (IT) services have increased significantly over the last decade. A shortage of affordable, skilled U.S. labor during the IT industry's unprecedented expansion of the mid to late 1990s has frequently been identified as a key catalyst for this growth of imports. Responding to the opportunity presented by the U.S. market, IT services industries developed and expanded rapidly in many countries that offered wage rates lower than those generally available in the United States. Despite the significant cost advantage over domestic competitors, the demand for IT services at that time was so strong that the foreign-supplied services generally tended to supplement rather than supplant U.S.-supplied services. However, recent economic and geopolitical developments have resulted in a restructuring of the supply and demand for internationally outsourced IT services. Further, certain factors have tempered U.S. demand for such IT services from abroad, while others have made offshore suppliers more attractive. This article examines how and why business relationships developed between U.S. firms and lower-wage IT services providers, and their course in recent years. Factors examined include how the services are delivered, which services are most likely to drive future trade, and how purchasers and providers are adjusting to current economic conditions.

“Outsourcing” typically refers to the way in which a task is accomplished, rather than to a specific task itself. For example, a firm may outsource a programming project to an outside company, which then becomes responsible for some or all of the project. The term “outsourcing” is often used interchangeably with the terms “contracting out” and “subcontracting.” Subtle, yet important, differences exist, but in all these arrangements, the client defines the expected results. The distinction with outsourcing is that the client leaves the execution to the discretion of the service supplier. Not allowing the supplier this independence would defeat the purpose of outsourcing inasmuch as firms generally “outsource” to benefit from expertise or economies of scale that they do not possess.

Virtually any function or process can be outsourced. Consequently, outsourcing is common among a wide range of industries, including health care, manufacturing, financial services, and insurance, as well as IT. Within the IT industry, outsourcing is applicable to a divergent mix of activities. Startups generally focus their outsourcing on low-skill, routine activities that compete primarily on the basis of cost. More developed IT outsourcing firms tend to move towards higher value-added products that compete to a greater extent on specialized talent. For example, a decade ago, India primarily supplied the United States with low-skill IT services such as data entry. Now, more technically advanced Indian products such as software and systems development services account for a larger share of U.S. imports. India's national IT development and promotion association, Nasscom, reports that, currently, the most prominent segments of the Indian IT industry

¹ The views expressed in this article are the author's. They are not the views of the U.S. International Trade Commission (USITC) as a whole or of any individual Commissioner.

include custom applications development and maintenance, operating systems, and packaged software and support. Segments identified by Nasscom as likely to grow include systems integration, information systems community, and application outsourcing.² Other IT services that are widely outsourced include data services such as database design, programming, and maintenance. Emerging IT outsourcing areas, particularly in lower-wage markets,³ include business process outsourcing (BPO) services, which include business support functions such as human resource processing services, data conversion, industry administrative services, and back-office financial and accounting services.⁴

Companies report that advantages of outsourcing include lower costs and reduced staffing responsibilities (figure 1). Access to specialized skills may be particularly important as outsourced activities are often unrelated to the firm's principal business. Through outsourcing, firms can increase production by creating a coordinated network of employees located throughout the world that have the potential to provide services 24 hours a day. Outsourcing also allows greater flexibility in accommodating unpredictable business cycles because it reduces labor costs. However, disadvantages to outsourcing are reported to include the loss of control that is inevitable when the tools necessary to complete a project are distributed to outside parties. For example, maintaining proper security and accountability for sensitive personal or financial data becomes more difficult when several parties have access. Other risks faced by the contracting firm include (1) entrusting valuable intellectual property to the outsourcing provider; (2) losing the ability to complete the task itself as more responsibility is transferred outside the firm; (3) inadvertently becoming completely reliant on the outsourcing provider; and (4) having the outsourcing provider alter the work-in-progress in a manner unfamiliar to the contracting firm, making it difficult or impossible for the contracting firm to resume control of the project. These situations may be problematic should there be a need to shift providers or bring back the activity in-house. Managing the outsourced activity also can be unwieldy and time consuming, particularly if the provider is remotely located or there are cultural and linguistic differences. For example, verifying a service provider's purported skills may be difficult, as would be verifying that the outsourced staff specified in the contract actually does the work.

Recent Economic and Geo-Political Events

During the mid to late 1990s, as the U.S. economy expanded rapidly, many U.S.-based firms reported that a shortage of skilled IT workers limited their business development plans.⁵ Consequently, these firms

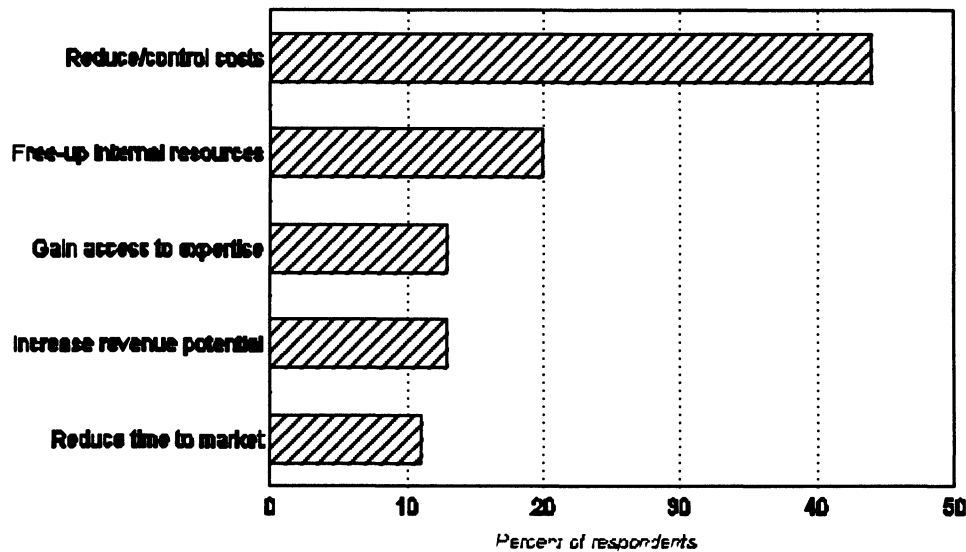
² National Association of Software and Service Companies (Nasscom), *Nasscom FY02: Software and Service Industry Performance*, July 18, 2002, found at <http://www.nasscom.org/download/FY02-results.pdf>, retrieved July 14, 2003.

³ Lower-wage countries generally fall into the World Bank low-income classification (gross national income of \$735 or less), or the lower middle-income classification (\$736 to \$2,935). World Bank, *Data & Statistics - Country Classification - Classification of Economies*, found at <http://www.worldbank.org/data/>.

⁴ IT-enabled services (ITES) represent a strong growth area for many offshore outsourcing services providers. The services themselves are often not within the IT field, but rather enabled by technological tools such as high-speed, secure global networks. Call center services, one of the highest growth ITES, frequently involve telephone- or e-mail-based customer service operations.

⁵ Prior to the crash of the global IT industry, the IT press frequently reported that it was virtually impossible for U.S. firms to meet demand for skilled software developers and other IT staff. Example of typical news article of the day: Drew Robb, "Offshore Outsourcing Nears Critical Mass-The IT Talent Shortage in the United States is Driving More Companies to use Overseas Developers," *Information Week*, June 12, 2000, found at <http://www.informationweek.com/>, retrieved Nov. 13, 2000.

Figure 1
Outsourcing abroad: Leading reported advantages



Source: *Computerworld*, May 2003.

looked abroad,⁶ where skilled workers were more readily available, and at wage rates below those of their U.S. counterparts. Encouraged by the potential of the U.S. market, IT services industries in countries such as India, the Philippines, and China grew rapidly to meet this need. For example, U.S. purchases of computer and data processing services⁷ from India and the Philippines grew from \$1 million and \$7 million in 1992, to \$122 million and \$34 million in 2001, respectively.⁸ The number of foreign workers brought in to augment the U.S. IT workforce also increased substantially during this time. In response to the strong demand (mostly from the U.S. high-technology industry) for specialty workers, Congress passed legislation in the fall of 2000 that increased the cap on temporary work visas to 195,000 for each of the next 3 years.⁹

In the years following the collapse of the tech industry, however, U.S. demand contracted considerably for IT services, both foreign as well as domestically supplied. Numerous factors have negatively affected international trade in this sector, including post-September 11 concerns ranging from personal safety to disruption of services, and the continuing tensions between India and Pakistan. However, the worldwide slowdown of the IT industry has been the principal contributing factor. During the initial phase of the downturn, IT outsourcing services providers expected an increase in business because during past periods

⁶ Outsourcing can be achieved through a variety of methods including having the work done in a foreign country by local workers, or by having a foreign worker come to the United States and work on a contract basis.

⁷ Although computer and data processing services likely contain some outsourcing services, the category does not solely measure U.S. imports of outsourced services. Rather, the values given are an indicator of the overall growth experienced within the IT sectors of the countries.

⁸ U.S. Department of Commerce (USDOC), Bureau of Economic Analysis (BEA), *Survey of Current Business*, Nov. 1996, p. 106; and Oct. 2002, p. 119.

⁹ USDOC, U.S. Census Bureau, *U.S. Census Bureau Measurement of Net International Migration to the United States: 1990 to 2000*, Dec. 2001, found at <http://www.census.gov/population/documentation/twps0051/twps0051.pdf>, retrieved Oct. 9, 2003.

of economic weakness, firms turned to outsourcing to reduce costs.¹⁰ However, the increase never materialized, inasmuch as cost reductions were not seen as sufficient relief to businesses hard hit by the widespread scope and severity of the recent downturn. Consequently, many firms eliminated all but their most essential IT services.

As the global IT industry slowly recovers, demand for IT outsourcing services is also increasing, albeit slowly. However, the turmoil has reshaped the industry's market dynamics. The most significant difference has been the transition from a sellers' to a buyers' market insofar as the availability of many outsourcing services. The decimation of many segments of the global IT industry has drastically increased the supply of workers at a time when demand has slipped. Consequently, the more intense competition from other offshore services providers, as well as from U.S. firms that now have excess capacity, has given companies seeking to outsource services greater negotiating leverage, enabling them to dictate the terms to a greater degree than was possible in the past.

Further, since September 11, companies indicate that security-related matters and international political uncertainty also have had an effect on trade. U.S. firms selecting an offshore IT services provider reportedly have become increasingly concerned with issues such as personal safety when traveling in foreign countries, project security, and continuity of service. Some offshore services providers report diminished U.S. demand due to such concerns. For example, Infosys Technologies, the second-largest Indian IT services company, reported that following U.S. State Department travel advisories,¹¹ many executives from U.S.-based client companies canceled scheduled visits to India. Service continuity concerns also moved to the forefront because many outsourced IT services provide continuous, real-time services that are vital to the firm's operations. Because any interruption in such services would cause unacceptable consequences, firms contemplated minimizing vulnerabilities by bringing IT functions back in-house or switching to more secure providers. Recently, most of the major security and continuity concerns have abated. U.S. companies are working with their outsourcing services providers to address such issues by developing business continuity and disaster recovery plans, storing critical components in the United States, and connecting via secure private networks.

Front Runners in the Competition for Cost-Effective Outsourcing

U.S. firms consider a variety of criteria before selecting an IT outsourcing provider. In today's market, labor cost is often a top priority, but not the only factor evaluated. Language compatibility, up-to-date technical expertise, reliable infrastructure, political stability, quality assurance, and tax rates are also important. In recent years, Indian-based firms have been able to offer U.S. firms the most balanced package of qualifications. Consequently, among countries offering value-oriented outsourcing services, India has become the largest supplier of low-cost IT services to the United States.¹² Numerous other countries compete with India for U.S. market share, but in the short-term, do not appear to pose significant challenges. The Russian

¹⁰ Generally, firms can save as much as 75 percent with offshore IT outsourcing operations.

¹¹ Following September 11 and during subsequent periods of increased tension between Pakistan and India, Governments of the United States, Japan, Germany, and other countries advised their citizens against traveling to South Asia, and advised those living there to leave.

¹² In 2001, India accounted for 12 percent of all U.S. imports of computer and data processing services. Only Canada exported more of these services to the United States. USDOC, BEA, *Survey of Current Business*, Nov. 1996, p. 106; and Oct. 2002, p. 119.

software industry is highly skilled, yet its labor costs, while low by U.S. standards, are higher than those of India. In contrast, Brazil, China, Malaysia, Mexico, Philippines, Taiwan, and Vietnam are among others with strong potential and may offer lower costs, but are mostly several years behind India in terms of technology and marketing capabilities.¹³

India

A large pool of English-speaking, technically proficient workers has enabled Indian outsourcing firms to successfully compete with U.S. firms, initially on the basis of cost, but more recently on expertise. While India still offers substantial price savings on lower-end IT services,¹⁴ the Indian industry is expected to increasingly offer higher-level services such as systems architecture, design, development, and technology strategy services.¹⁵ Hence, the Indian IT industry presents a formidable challenge to would-be competitors at both ends of the IT spectrum. Already well established with a worldwide reputation as a top-quality services provider, the Indian IT industry possesses highly effective marketing skills, as well as global delivery capabilities. Also, the industry is well organized and supported by a strong national IT development and promotion association, the National Association of Software and Service Companies (Nasscom). The Indian Government also has exhibited a strong interest in supporting the IT industry, for example, by implementing favorable tax incentives. In April 2001, India reduced rates for conventional telecommunication services by deregulating its international calling market. Prior to deregulation, telecommunication rates in India were among the highest in the world. Rates are now more conducive to operating cost effective, long-distance networked businesses, such as remote service centers.¹⁶

However, since the collapse of the global IT industry, Indian IT-services companies have experienced slipping profit margins. Most of the largest companies are heavily dependent on exports to the United States¹⁷ and are therefore very sensitive to fluctuations in the U.S. market. Consequently, the slowdown in the U.S. economy, as well as international events such as the "War on Terrorism,"¹⁸ are reported to have adversely affected demand for Indian IT products. Nasscom reports that while the Indian export-oriented software and services sector grew 26 percent during 2002-03, spurred by a major jump in IT services and BPO activity, the industry faces a number of challenges.¹⁹ In addition to reduced U.S. demand, the Indian software business of India faced significant pricing pressures, with average offshore rates falling from \$28-35 to \$18-25 per

¹³ For example, Vietnamese outsourcing services are reportedly 50-percent cheaper than Indian services. "Vietnam Gaining Popularity as Software Outsourcer," *Asia Computer Weekly*, June 10, 2002, found at www.asiacomputerweekly.com, retrieved July 14, 2003.

¹⁴ Depending on the scope of the work being performed and the firm's location within the United States, shipping a project offshore can reduce the costs by more than 60 percent. Manjeet Kripalani and Bruce Einhorn, "A New Battle over Offshore Outsourcing," *BusinessWeek Online*, June 9, 2003, found at <http://biz.yahoo.com/>, retrieved June 17, 2003.

¹⁵ Ed Frauenheim, "IT Migrating to Overseas Outsourcing," *CNET News.com*, Feb. 21, 2003, found at <http://zdnet.com/>, retrieved Apr. 2, 2003.

¹⁶ The government also authorized Internet telephony (voice over the Internet).

¹⁷ Nasscom reports that over 185 Fortune 500 firms outsource their software needs from India.

¹⁸ This is not to say that India is in any way involved with terrorism, but rather that events in the region may have the potential to disrupt U.S.-Indian business relationships.

¹⁹ Nasscom, *IT Software and Services Market*, found at www.nasscom.org/, retrieved June 11, 2003.

hour.²⁰ Indian firms also report increased competition across their entire range of services from U.S.-based IT consultants that face a shortage of work and are willing to lower their billing rates and accept work for which they are overqualified.

Another problem for the Indian IT industry is the appreciation of the country's currency as virtually all of the earnings of Indian software and IT services companies are from exports. The strengthening rupee has raised the cost of Indian service exports to the United States and increased costs incurred in rupees, while lowering the value of repatriated earnings. Firms such as Satyam Computer Services, the fourth-largest software services company in India, are expected to experience a significant impact from the strengthening rupee because a substantial part of its deposits are in U.S. dollars. The success in becoming a highly skilled services provider is also beginning to erode the country's competitive advantage of being a lower-wage supplier, compared with the United States and other Western countries. Already, for example, the cost of employing a top Indian software engineer is approaching that of a Western counterpart, and the global marketplace for highly skilled IT workers is expected to be equalized within a few years. One way Indian firms are improving their competitive position is to follow the example set by Western firms a decade earlier and sending IT work to cheaper locations. By re-outsourcing work outsourced by Western firms and passing on the savings indirectly, Indian firms seek to retain clients that may be otherwise attracted to directly hiring the lower-cost outsourcing provider.

Like other Indian IT firms that have experienced revenue declines due to decreased U.S. purchases, Tata Consultancy Services (TCS),²¹ the largest Indian software and services company, is taking steps to become less dependant on the U.S. market, which accounts for approximately 60 percent of its business. TCS has 100 offices in 31 countries, employs over 20,000 consultants, and earned global revenues of \$880 million in fiscal year 2002.²² Infosys Technologies,²³ another leading Indian IT firm, reports that with the United States accounting for about 75 percent of company sales, it is also looking to diversify its client base. Within the last 2 years, Infosys opened new offices in Argentina, the Netherlands, Singapore, Switzerland, and the United Arab Emirates, as well as a new development center in Japan. As with the other major IT firms, Infosys is emphasizing IT services, including credit card processing, and back-office financial and accounting services. Sales of such services have risen rapidly and are considered to have strong long-term growth potential. Bangalore-based Wipro Technologies' strategy to cope with lower profit margins is to shift to higher-end products²⁴ and to develop offshore operations that rely on the lowest-cost IT workers in areas such as the Philippines and Vietnam.

²⁰ As of Sept. 2002, average software fees, in terms of the rate per engineer-hour, had fallen more than 25 percent over the past year, reducing operating profit margins of Indian software companies by at least 5 percent since early 2001. Ashok Bhattacharjee, "U.S. Fund Bullish on Indian Tech Companies Due to Cost Edge," *Dow Jones Newswires*, Sept. 12, 2002, found at <http://online.wsj.com/>, retrieved Sept. 27, 2002.

²¹ TCS, found at <http://www.tata.com/tcs/>, retrieved June 11, 2003.

²² Six of the U.S. Fortune top-10 are TCS clients.

²³ Infosys has over 15,000 employees worldwide and reported revenues of \$754 million for the financial year ending Mar. 31, 2003. Infosys, company history, found at <http://www.infosys.com/credentials/>, retrieved June 11, 2003.

²⁴ Wipro reports that higher-end projects involve building or designing an entire software package, while application maintenance involves overseeing existing software and includes low-profile tasks such as installing upgrades. Uday Khandeparkar, "Wipro Technologies to Focus on Higher-End Services," *The Wall Street Journal Online*, Apr. 17, 2003, found at <http://online.wsj.com/>, retrieved Apr. 30, 2003.

Philippines

The Philippines is generally considered the second-largest exporter of lower cost IT services to the United States. The Philippine outsourcing industry trails India due to factors including the lack of highly visible and effective government support, and the lack of a well-organized industry marketing and export-development effort. Also, the enforcement of laws and regulations concerning intellectual property rights is reportedly somewhat uneven, and there is a perception of political instability. Overall, the Philippine IT industry is underdeveloped, and with few major native IT companies, it lacks the scale necessary to meet the needs of the largest, most lucrative U.S. contracts. Even so, business and government are collaborating to address these short-comings and strengthen the country's outsourcing capabilities. For example, companies that establish IT business parks are exempt for 6 years from government fees, licenses, and export taxes.²⁵ Upgrades of services-enabling infrastructure has provided the country with a highly developed telecommunications infrastructure, including a nationwide fiber-optic network and multiple undersea cables to every region of the world. Longer-term strategies include improving IT education programs.

Although the Philippines aspires to offer U.S. firms an alternative to Indian outsourcing, the IT industry does not plan to compete directly with India in high-tech areas such as software engineering. Rather, the Philippine industry's reported strategy is to predominate in the field of business process outsourcing, such as medical transcription, accounting, tax preparation, and customer service call centers.²⁶

China

China is the outsourcing services provider most likely to challenge India's position as the leading exporter to the United States, although the more mature IT services providers are not likely to face any serious competition for at least a few years. In 2001, Indian software exports exceeded \$6.2 billion, but China's were only \$850 million. Currently, there are more than 520,000 IT professionals in India, compared with only 150,000 in China.²⁷ The major Chinese weakness to competing in the highly competitive global outsourcing market is the country's lack of proficiency in English, a factor that greatly favors the Indian IT industry. TCS reportedly considers China as having the potential to someday rival India as a IT services provider, but not before the firm has shifted into high-end consulting and other areas that will not directly compete with China. Other Indian representatives foresee a large segment of Chinese and Indian services as overlapping for quite some time, leaving the industry in India vulnerable to lower-cost competition.²⁸

The Chinese IT industry's potential is due, in part, to the Chinese Government reported decision to embark on a program to become a world technology leader. Program strategies include focusing the country's robust university system on developing curriculums in both computer science and English proficiency. Currently in China, at least 10 universities are being built to increase the country's supply of IT

²⁵ Stacy Collett, "The Philippines: Low Cost, but Higher Risk," *Computerworld*, Sept. 15, 2003, found at <http://www.computerworld.com/>, retrieved Oct. 9, 2003.

²⁶ Hiawatha Bray, "Philippine Leader Aims to Lure More Outsourcing," *Outsource Philippines, news & events*, May 22, 2003, found at <http://www.outsourcephilippines.org/>, retrieved June 11, 2003.

²⁷ David Murphy, "China Aims to Catchup with India in Software Industry," *The Wall Street Journal*, Sept. 11, 2002.

²⁸ The general consensus in India is that Chinese workers cost about 15-percent less than equally qualified Indians.

professionals.²⁹ Multinationals have also begun establishing operation in China, providing the opportunity for technology transfer and an increased capital base. Even so, the undertakings in China are expected to remain far more modest than those in India until skills and infrastructure improve significantly. U.S. software giant Oracle, which expects to open a research and development center in southern China, notes that the focus at the facility will be to customize existing software for the Chinese market, while the firm's sizeable Indian operations develop software for worldwide applications.³⁰

Outlook

The significant economic advantages of international outsourcing are likely to drive the market for the foreseeable future. Even so, other factors may affect U.S. expenditures (e.g., imports) on such services. Growing concerns about a major loss of IT jobs to overseas competitors have raised prospects for restrictions on U.S. purchases from offshore-based IT services providers. For example, in one of the largest offshore moves of high-paying U.S. software jobs, IBM Corp. informed its managers, beginning in October 2003, that up to 4,730 programming positions would be shifted to India, China, and other foreign locations.³¹ Rooted in the heightened security environment prevalent after September 11, the concerns have been exacerbated by the continuing dislocation of U.S. IT workers.³² Unions representing U.S. high-technology firms, as well as other labor activists, increasingly consider India the major rival for U.S. IT jobs, although China and the Philippines are also considered potentially major threats. In addition to economic considerations, the exodus of IT jobs has prompted questions about the long-term technological leadership capabilities of the United States.

At the state level, there has been growing sentiment among some public-sector organizations to limit the use of IT supplied by non-U.S. citizens, whether the work is performed in the United States or overseas. At least 9 states have considered new legislation to restrict the use of offshore services or non-U.S. citizens on state government contracts. Tactics range from requiring foreign call-center employees to identify their location, to outright bans on offshore-based services. Proposed legislation at the national level includes bills that would require U.S.-based companies seeking to use H-1B temporary work visas to fill jobs must first prove that equally qualified Americans are not available. Pressure from labor activists was instrumental in bringing about other policy developments as well. A measure that had temporarily increased the annual number of work visas issued to foreign professionals (often from India), was allowed to lapse in Congress, and new measures are under consideration to shorten the length of time such workers can remain in the United States.³³ Even so, industry representatives report that the backlash from IT job losses in the United States will most likely have only a negligible effect on the move towards offshore outsourcing.³⁴

²⁹ Steve Ulfelder, "China: Low-level Work at Lower-than-average Cost," *ComputerWorld*, Sept. 15, 2003, found at <http://www.computerworld.com/>, retrieved Oct. 14, 2003

³⁰ Bruce Einhorn, "A Chinese Software Threat? Not Yet," *BusinessWeek Online*, Apr. 29, 2002, found at <http://www.businessweek.com/print/>, retrieved June 17, 2003.

³¹ William M. Bulkeley, "IBM to Export Highly Paid Jobs to India, China," *The Wall Street Journal Online*, Dec. 15, 2003, found at <http://online.wsj.com/search>, retrieved Dec. 16, 2003.

³² Over the last 3 years, the United States has lost an estimated 150,000 IT jobs to foreign competition. Bob Davis, "With Software Jobs Migrating to India, Think Long Term," *The Wall Street Journal Online*, Oct. 6, 2003, found at <http://online.wsj.com/>, retrieved Oct. 9, 2003.

³³ Michael Schroeder and Timothy Aepfel, "Skilled Workers Mount Opposition to Free Trade, Swaying Politicians," *The Wall Street Journal*, Oct. 10, 2003, p. A1.

³⁴ Julia King, "Offshore Outsourcing is Inevitable," *ComputerWorld*, Sept. 15, 2003, found at <http://www.computerworld.com/>, retrieved Oct. 23, 2003.

While the current downturn in the worldwide IT market may have temporarily slowed the growth of internationally transacted outsourced services, the shift continues towards purchasing such services on the global market from the most advantageous provider, irregardless of location. Much like the evolution of the manufacturing industry a generation earlier, the production of IT services will migrate to new locations as market entrants offer purchasers a more competitive product. Viability will remain dependant on criteria including low labor costs, quality products, equitable investment policies, and a credible legal system that enforces contracts and other business agreements. Particularly important for outsourced IT services that rely heavily on networking and data transfer, is a solid telecommunications infrastructure for both voice and data transmission, and the availability of high-quality, low-cost bandwidth. With such an infrastructure in place, along with government and industry policies that create an environment conducive to international trade and investment, firms will increasingly shop the global market for IT services. ■

Production-Sharing Update: Developments in 2002

Ralph Watkins¹

watkins@usitc.gov

(202) 205-3492

Investment in production-sharing operations (that use U.S.-made components and materials in foreign assembly plants) is an integral part of global efforts to reduce manufacturing costs, and has contributed to the accelerated pace of cross-border integration of manufacturing in North America and the Caribbean Basin. The slow-down in the U.S. economy during 2000-02 and decline in U.S. manufacturing, however, reduced demand for assembly services in Mexico's maquiladora industry. Meanwhile, liberalized access to the U.S. apparel market through the Caribbean Basin Trade Partnership Act (CBTPA) helped assembly plants in the Caribbean Basin region maintain production levels despite intensified competition from China. This article highlights the continued role in 2002 of regional integration of manufacturing in meeting challenges to North American industrial competitiveness.

Production sharing is an important aspect of globalization. Also known as cross-border manufacturing networks, production sharing occurs when the processes used to manufacture a good are conducted in more than one country. Such rationalization of production allows companies to reduce costs or to improve response time, thereby becoming more competitive, increasing profits, or both.

In the past decade, production sharing has evolved to include the services sector. Increasingly, companies involved in services such as banking and insurance have contracted out functions such as software development, accounting, credit checks, and call centers to companies in India,² Mexico, and other relatively low-labor cost countries in Asia and the Caribbean Basin. A companion article in this issue discusses information technology outsourcing services.

Major North American production-sharing trade flows in manufactured goods include the export of machinery, components, and materials (e.g., yarns and uncut fabric) from the United States and the import of assembled motor vehicles and auto parts from Canada and Mexico; apparel from the Caribbean Basin and Mexico; and televisions, computer hardware, and telecommunications equipment from Mexico. In addition, several global electronics companies assemble semiconductors in East Asia from wafers fabricated in the United States. Although many vehicles imported into the United States from Asia and Europe contain specialized U.S.-made parts, such parts remain a small share of the total value of these vehicles.³

¹ The views expressed in this article are the author's. They are not the views of the U.S. International Trade Commission (USITC) as a whole or of any individual Commissioner.

² For a discussion of production-sharing in the service sector in India, see "Outsourcing to India: Growing Pains," *The Economist*, Apr. 23, 2003, p. 51.

³ Manufacturers in Europe also use production sharing ("outward processing") to reduce their costs, establishing assembly plants in Central European countries such as the Czech Republic, Hungary, Poland, and Slovenia. Similarly, companies in Japan, Korea, and Taiwan take advantage of duty waiver or refund (drawback)

(continued...)

In many instances, manufacturing in Mexico and the Caribbean Basin complements rather than competes with U.S. production. For many products, the alternative to assembly in the nearby lower-labor-cost countries is loss of market share to imports from Asia or a shift of production from North America to Asia.

Although economists and policy makers generally agree that production sharing accounts for a significant share of trade, statistical measurement of such trade has proven difficult. In his 1998 paper, Alexander Yeats of the World Bank estimated that production sharing accounted for at least 30 percent (\$800 billion) of trade in manufactured goods annually.⁴ However, Yeats concluded that his estimate understates the actual use of production sharing.

Recent U.S. International Trade Commission (USITC) research on production sharing has focused on two principal sources of data: U.S. imports under Harmonized Tariff Schedule (HTS) provision 9802.00.80, which permits duty-free treatment for U.S.-origin components contained in imported assembled articles, and official Mexican statistics on articles imported for use in the country's assembly plants and then re-exported. Use of HTS provision 9802.00.80 has declined, and hence the effectiveness of that provision in measuring production-sharing trade has diminished as more products have become duty free under (1) the Uruguay Round of multilateral trade agreements under the World Trade Organization (WTO);⁵ (2) the entry into force of bilateral free trade agreements; and (3) the extension of preferential access programs, such as the Generalized System of Preferences (GSP), the Caribbean Basin Economic Recovery Act (CBERA),⁶ and the Andean Trade Preference Act (ATPA).⁷

Because such a large share of U.S. imports from low-labor-cost countries is now free of duty, the principal remaining benefit from analyzing trade under HTS provision 9802.00.80 is assessing the use of U.S.-cut fabric in the assembly of apparel in the Caribbean Basin region. The data are also helpful in measuring the use of U.S. components in the assembly of dutiable manufactured goods imported from industrialized countries that do not receive preferential access to the U.S. market, such as the use of U.S.-made auto parts in the manufacture of vehicles imported from Japan and Europe. Statistical tables showing U.S. imports under

³ (...continued)

provisions and lower labor costs at special economic zones in China and export processing zones in Indonesia, Malaysia, the Philippines, and Thailand to rationalize the production of labor-intensive articles.

⁴ Yeats developed that estimate by totaling all Organization for Economic Cooperation and Development (OECD) exports of articles identified as components and parts in the Standard International Trade Classification (SITC Revision 2) group for machinery and transportation equipment (SITC 7), as well as OECD imports of such articles from developing countries. Alexander J. Yeats, *Just How Big is Production Sharing?* The World Bank Development Research Group, Policy Research Working Paper 1871, Jan. 1998.

⁵ Under the WTO and its predecessor, the General Agreement on Tariffs and Trade (GATT), many industrialized countries have eliminated tariffs on many articles, including toys, dolls, games, information technology articles, medical goods, and furniture.

⁶ Including CBERA's expansion through the CBTPA, which permits duty-free entry of apparel made from U.S. fabric that is cut in the region and apparel made from fabric woven in the region from U.S.-origin yarn. The CBTPA was implemented in Oct. 2000.

⁷ Including ATPA's expansion through the Andean Trade Partnership and Drug Eradication Act (ATPDEA), which permits duty-free entry of several types of previously excluded or partially dutiable products, including footwear, work gloves, tuna in flexible airtight containers (but not in cans), watches made from parts originating in certain communist countries, petroleum and petroleum derivatives, and certain handbags, luggage, flatgoods, textiles, and apparel. The ATPDEA became effective in Nov. 2002.

HTS provision 9802.00.80 are presented in appendix B.⁸ Official Mexican statistics remain a very reliable tool to measure production-sharing trade between the United States and Mexico, which are presented in appendix C. An assessment of developments in 2002 based on data in appendices B and C is presented on pages 12-18.

Trade legislation implementing the African Growth and Opportunity Act (AGOA) and the CBTPA in 2000, and the Andean Trade Partnership and Drug Eradication Act (ATPDEA) in 2002, had the effect of encouraging additional production-sharing investments.⁹ Qualifying apparel made from regionally cut, U.S.-formed fabric and/or U.S.-origin yarns, and imported from eligible African, Caribbean Basin, and Andean countries is reported under newly created headings 9819 (AGOA), 9820 (CBTPA), and 9821 (ATPDEA)¹⁰ of the HTS. These new production-sharing provisions were established to encourage investment and job creation in the textile and apparel sectors in these regions and to encourage the use of U.S.-origin fabrics and yarns in the production of apparel and other textile articles destined for the U.S. market.¹¹

Highlights in 2002 include—

- Although its measurement is imprecise, U.S. production-sharing trade likely decreased in 2002 as total U.S. international merchandise trade contracted by \$14 billion (0.8 percent) to \$1.8 trillion. U.S. trade with its chief production-sharing partners, Canada and Mexico, fell by 2.3 percent and 0.4 percent, respectively, in 2002 to \$353 billion and \$220 billion;¹² trade with Caribbean Basin countries grew by 2.8 percent to \$42 billion. By contrast, trade with China, very little of which was believed to be accounted for by production-sharing operations, expanded by 21.1 percent to \$145 billion.¹³
- The apparent diminished use of production sharing in 2002 by U.S. companies reflects (1) reduced consumption of manufactured goods in the United States, (2) rising production costs in Mexico, and (3) increased competition from China. Despite incremental growth of U.S. gross

⁸ Data on trade for certain tariff preference programs under HTS heading 9802 were not collected as part of the official U.S. trade statistics during Nov. 2002 to Apr. 2003. As a result, data shown in appendix B of this publication may understate actual entries under the production sharing provisions in 2002 by approximately 10 percent.

⁹ Although there has been little change to the volume of apparel imported from CBERA countries because of the CBTPA, the legislation has led to greater value being added to the apparel through more steps in the manufacturing process occurring in the region.

¹⁰ Administrative procedures regarding the duty-free treatment of qualifying apparel from the Andean region under the ATPDEA were not fully effective until Jan. 1, 2003. U.S. imports of apparel under HTS heading 9821 in 2003 will be covered in the USITC's annual report, *The Impact of the Andean Trade Preference Act*, Inv. No. 332-345, scheduled to be released in Sept. 2004, as well as future articles in this publication series.

¹¹ The CBTPA provides greater flexibility to apparel producers in the Caribbean Basin region with regard to using U.S.-cut fabric, regionally cut fabric, or regionally knit fabric (from U.S. yarn). This added flexibility improves the ability of the apparel producers to respond to the needs of their customers more quickly, thus enhancing the competitiveness of the local industry. By making Caribbean Basin apparel producers more competitive with suppliers in Asia, the U.S. textile industry increases its opportunities to sell fabric and yarn to regional apparel producers. If the Caribbean Basin producers go out of business, the export market for U.S. fabric and yarn producers will dry up.

¹² See appendix A, table A-5, for data on trade between the United States, Canada, and Mexico through June 2003. Each issue of this publication provides analysis on quarterly developments in U.S. trade with its North American Free Trade Agreement (NAFTA) partners.

¹³ For U.S. trade with leading partners in 2002, see *Shifts in U.S. Merchandise Trade 2002*, USITC pub. No. 3611, July 2003, p. 2-5.

domestic product (GDP) in 2001 and 2002, consumption of manufactured goods declined each year.¹⁴ U.S. manufacturers' shipments fell by \$238 billion (5.7 percent) in 2001 and \$79 billion (2.0 percent) in 2002.¹⁵ Meanwhile, U.S. imports of all merchandise declined by \$73 billion (6.0 percent) in 2001, but grew by \$22 billion (2.0 percent) in 2002¹⁶ as imports from China alone rose by \$23 billion (22 percent).

- The following tabulation based on data from the U.S. Census Bureau and Mexico's INEGI indicates the close linkage between manufacturing activity in the United States and the assembly industry in Mexico. The declines in exports to the United States from companies registered in Mexico under the Maquiladora Program and the Program for Temporary Importation for the Manufacture of Exports (PITEX) in 2001 and 2002 tracked the reduction in U.S. manufacturers' shipments in each year.

Year	U.S. manufacturers' shipments	Exports to the United States from Mexico's assembly industry (Maquiladora and PITEX Programs)
	—————Percent change from previous year—————	
1998	1.7	16.4
1999	3.4	18.1
2000	4.4	20.7
2001	-5.7	-4.3
2002	-2.0	-1.1

- Despite the sharp rise in U.S. imports from China in 2002, the growth in imports from China during 2000-2002 of \$25 billion was the equivalent of just 8 percent of the \$317-billion drop in U.S. manufacturers' shipments during that period. Nevertheless, certain industries are experiencing intense competition from China. A related article in the next issue of this publication series (scheduled for January 2004), "The China Challenge to Assembly in North America," will identify those industrial sectors and the implications for production-sharing operations, particularly in Mexico.

Production-Sharing Trade Reported Under HTS Chapter 98

- Combined U.S. imports under the production-sharing provisions of HTS headings 9802, 9819, and 9820 dropped by 7.7 percent in 2002 (from \$62.5 billion to \$57.7 billion) and accounted for 5.0 percent of all U.S. imports in 2002.¹⁷ All of that decrease may have been the result of a lack

¹⁴ The growth in GDP during 2000-2002 despite the decline in manufacturing reflected, in part, escalating prices for health care and education. Also, relatively low interest rates accelerated turnover in home ownership and increased spending on home improvements, adding to GDP.

¹⁵ U.S. Census Bureau (Census), *Manufacturers' Shipments, Inventories, and Orders: 1992-2002*, Aug. 2003, p. 1.

¹⁶ USITC, *Shifts in U.S. Merchandise Trade 2002*, p. 2-5.

¹⁷ Data are derived from tables 1 and 2 presented later in the section on apparel assembly, and appendix B, table B-1. Two new production-sharing headings (HTS 9819 and HTS 9820, respectively) were created with the entry into force in Oct. 2000 of AGOA and CBTPA. Both tariff headings have subheadings that permit the duty-free U.S. entry of apparel made in eligible countries of Sub-Saharan Africa and the Caribbean Basin from U.S.-origin fabric of U.S. yarn.

(continued...)

of data collection for entries under HTS subheadings 9802.00.60 and 9802.00.80 in November and December 2002 (see footnote 8). Most of the decrease in reported data is attributable to the \$3.3-billion (24-percent) reduction in imports from Mexico under HTS heading 9802 (appendix B, table B-1).

- Declining U.S. imports of electronic products accounted for over two-fifths (\$1.4 billion) of the decrease in U.S. imports under HTS heading 9802 from Mexico in 2002. A continuing shift in Mexico's apparel industry from using fabric pieces cut in the United States, to cutting U.S. fabric in Mexico or using fabric made in Mexico, accounted for another two-fifths (\$1.3 billion) of the decrease.¹⁸ Despite this decline, Mexico still accounted for over one-half (\$5.0 billion) of the \$8.6 billion of U.S. content contained in imports under the production-sharing provisions of HTS heading 9802 in 2002 (table B-2).¹⁹
- The CBTPA enabled garment producers in the Caribbean Basin region to add value to their assembly process through the operations of cutting U.S.-made fabric in the region, shrinking the garments in washing operations, screen printing, and knitting fabric in the region using U.S.-origin yarn. Such operations disqualify garments from eligibility for reduced duties under HTS provision 9802.00.80, and since October 2000, apparel produced with such regional value-added is eligible for duty-free treatment under HTS heading 9820. As a result, Caribbean Basin countries accounted for only 12 percent of U.S. content (\$1.0 billion, table B-7) contained in imports under the production-sharing provisions of HTS heading 9802 in 2002, a 75-percent reduction from the value recorded in 2001.
- As apparel companies shifted their imports from one production-sharing classification (HTS heading 9802) to another (HTS heading 9820), the share of the value of the U.S. content of imports under HTS provision 9802.00.80 from Caribbean Basin countries accounted for by apparel dropped from 90 percent in 2001 to just 60 percent in 2002.
- The Philippines, Malaysia, and Korea together accounted for 9.5 percent (\$813 million, table B-2) of U.S. content contained in imports under HTS provision 9802.00.80 in 2002. Semiconductor devices accounted for 68 percent of such imports from the three Asian countries.²⁰

¹⁷ (...continued)

In addition, subheadings of HTS 9820 permit duty-free entry of limited quantities of apparel made from knit fabric produced in CBTPA beneficiary countries from yarn formed in the United States. Imports under the production-sharing provisions of HTS headings 9819 and 9820 in 2002 are shown in tables 1 and 2 in the apparel section. Unlike entries under HTS heading 9802, entries of apparel under HTS headings 9819 and 9820 are not required to provide information on the value of the U.S.-origin fabric, yarns, or fasteners incorporated into such apparel.

¹⁸ These comparisons are based on tables B-6 in this article and in Ralph Watkins, "Production-Sharing Update: Developments in 2001," *Industry Trade and Technology Review*, USITC pub. No. 3534, July 2002, p. B-10.

¹⁹ Nearly one-third of this duty-free, U.S.-origin content from Mexico was incorporated into apparel; electronic products accounted for 22 percent; machinery and equipment, 18 percent; and motor vehicles and parts, 18 percent (table B-6).

²⁰ Data on imports under the production-sharing tariff provisions of HTS heading 9802, by country of origin and commodity group, are available from the USITC Internet-based interactive tariff and trade database (official statistics of the U.S. Department of Commerce (USDOC)), the DataWeb (<http://dataweb.usitc.gov>). Data in this article that are not shown in appendices B and C are based on data found on the DataWeb.

Assembly Trends in Mexico

- Due to the decline in the use of production-sharing provisions as more products have become duty-free under agreements or tariff-preference programs, official statistics of the Government of Mexico's Economy Ministry provide a more comprehensive measure of U.S.-Mexico production-sharing trade than statistics reported under HTS heading 9802. In contrast to the \$5.0 billion of U.S. content contained in imports from Mexico reported under HTS provision 9802.00.80, Mexico's imports of components and other inputs from the United States for use in maquiladora and PITEX assembly plants were \$60.9 billion in 2002 (appendix C, table C-4), falling by \$4.7 billion (7.1 percent) from 2001, and represented 57 percent of Mexico's total imports from the United States in 2002 (table C-2).²¹
- Mexico's exports to the United States from assembly plants operating under the Maquiladora and PITEX Programs²² fell by \$1.4 billion (1.1 percent) in 2002 to \$119.9 billion (table C-7), or 84 percent of Mexico's total exports to the United States (table C-5). Products classified in Harmonized System (HS) chapter 85 (which includes goods such as electrical machinery and equipment; television, stereo, and telecommunications equipment; household appliances; and semiconductors and other electronic components) accounted for most of the decrease in exports from assembly plants to the United States, falling by \$1.0 billion (2.5 percent) to \$40.2 billion. Exports of apparel declined by \$220 million (3 percent) to \$7.1 billion.
- Mexico had a net decline of 473 maquiladora operations during June 2000 through December 2002. These plant closures involved 300 producers of apparel, 60 makers of electronic and electrical accessories, and 60 furniture assembly plants. In 2002 alone, the number of maquiladora plants declined by 10.1 percent. Over one-half of the plant closures were in Baja California.²³
- The chief causes for the decline in the maquiladora industry during this period were the decrease in manufacturing activity in the United States and the 25-percent appreciation of the Mexican peso against the U.S. dollar during June 2000 through March 2002.²⁴ Meanwhile, the dollar was

²¹ Statistical tables covering year 2002 trade under Mexico's production-sharing provisions are provided in appendix C.

²² Companies in Mexico can operate under the Maquiladora Program or PITEX, or both, as long as the manufacturing projects are different. Until Jan. 1, 2001, companies registered under these programs were allowed to import components, materials, and machinery free of duty provided they were used in the assembly or manufacture of goods for export markets. For a discussion of changes to these programs pursuant to Article 303 of NAFTA, see Ralph Watkins, "Production-Sharing Update: Developments in 2000," *Industry Trade and Technology Review*, USITC pub. No. 3443, July 2001, pp. 11-23.

²³ U.S. Department of State (State Dept.) telegram, "Overview of Maquiladora Operations in Mexico," message reference No. 01446, prepared by the U.S. Embassy, Mexico City, Feb. 21, 2003.

²⁴ Modeling by the U.S. General Accounting Office (GAO) shows that (1) a 1-percent increase in U.S. GDP results in a 3.68-percent increase in maquiladora employment; (2) a 1-percent increase in U.S. manufacturers shipments results in a 6.7-percent increase in maquiladora employment; and (3) a 1-percent inflation-adjusted appreciation of the peso results in a 0.17-percent decrease in maquiladora employment. GAO, *Mexico's Maquiladora Decline Affects U.S.-Mexico Border Communities and Trade; Recovery Depends in Part on Mexico's Actions*, GAO-03-891, July 2003.

appreciating against most other currencies, making Mexican goods in the U.S. market less competitive with goods from Asia.

- Between October 2000 through March 2002 (16 months), the maquiladora industry lost 288,000 jobs (21-percent decrease)²⁵ as maquiladora production fell by 30 percent. Over one-half (145,000) of the jobs losses were in the electronics sector and nearly one-quarter (71,000) were in apparel production. Auto parts assembly lost 32,000 jobs.²⁶
- In addition to rising labor costs,²⁷ increased electricity costs and higher business taxes contributed to decisions by many companies to shift their sourcing from Mexico to Asia in 2001 and 2002.²⁸ Companies under pressure to reduce costs to remain competitive in the U.S. market reportedly have had to re-evaluate their Mexican operations. Products with a relatively high labor content, long production runs, few style changes, and long lead times were most susceptible to relocation (or loss of market share) to lower labor-cost countries in Asia. Examples include certain electronic components and assemblies, telephone equipment, apparel, and small appliances and motors.
- Depreciation of the peso beginning in the spring of 2002 reduced labor costs and improved the competitive position of Mexico's exports, slowing the shift of sourcing from Mexico to China in the second half of 2002. Between April 2002 and March 2003, the value of the peso dropped from 11.12 cents to 8.89 cents. During this period, manufacturing compensation (wages plus benefits) in Mexico fell from \$5.90 per hour to \$5.00 per hour.²⁹
- For certain products, there was no downturn in exports under the Maquiladora and PITEX Programs in 2002. These products included motor vehicle parts; color televisions; major household appliances; medical goods; and measuring, testing, and controlling instruments (tables C-1 and C-5).
- Based on a review of reported plant changes in Mexico³⁰ and discussions with industry representatives, to varying degrees, the following factors are ongoing competitive advantages for Mexico and encouraged continued production in Mexico in 2002 rather than shifting to Asia: (1) for certain products, production startups in Asia would require a substantial investment in capital equipment; (2) significant investment has been made in developing an experienced and skilled workforce at existing operations; (3) Mexico's lower transportation costs to the U.S. market and

²⁵ In the previous decade, employment in the maquiladora industry had more than tripled during 1990 to Oct. 2000, when it reached a peak of 1.35 million workers.

²⁶ GAO, *Mexico's Maquiladora Decline Affects U.S.-Mexico Border Communities and Trade*.

²⁷ Rising labor costs in Mexico reflected both the continuing shift towards higher skilled manufacturing jobs and the appreciation of the Mexican peso versus the U.S. dollar. However, when the peso reached 11.12 cents on Apr. 1, 2002, the Banco de Mexico relaxed its monetary policy and by the end of June 2002, the peso dropped by 10.1 percent to 10.0 cents. See "Quarterly Economic Forecast," *Mexico Watch*, July 1, 2002, p. 1ff.

²⁸ Rising crime rates in Mexico, especially kidnappings, reportedly have factored into some decisions to shift assembly operations from Mexico to Asia. "Crime in Mexico: Critical Threat," *The Economist*, June 15, 2002, p. 36.

²⁹ "Strikes Tick Up as Businesses Resist Raising Wages," *Mexico Watch*, Mar. 1, 2003, p. 8; and "The War Fallout: Souring Business Sentiment Delays Recovery," *Mexico Watch*, Apr. 1, 2003, p. 1.

³⁰ USITC staff has compiled a list of reported plant changes in Mexico during 2002 and 2003, including start ups, expansions, downsizing, closures, and shifts of product lines between plants.

shorter lead times are important for some products; (4) Mexico's more flexible production processes and workforce relative to those in China are considered advantages for products with frequent style changes; (5) Mexico's proximity to U.S. operations allows closer monitoring of production processes; and (6) duty-free treatment under the North American Free Trade Agreement (NAFTA) provides an important price advantage for products with relatively high normal trade relations (NTR) rates of duties.

Motor Vehicles and Parts

- All motor vehicle assembly plants in Mexico are registered under either PITEX or the Maquiladora Program.³¹ Mexico's imports of components classified in HS chapter 87 (transportation equipment) by PITEX and maquiladora plants fell by \$71 million (1.1 percent) to \$6.1 billion in 2002 (table C-2).³² Mexico's exports of motor vehicles to the United States from these production-sharing facilities fell by \$666 million (3.4 percent) to \$18.8 billion in 2002 (table C-1).³³ Meanwhile, Mexico's exports of certain motor vehicle parts to the United States from such assembly plants grew by \$1.0 billion (8.8 percent) to \$12.8 billion. Together, vehicles and certain parts accounted for 26 percent of Mexico's production-sharing exports to the United States.
- U.S. imports of motor vehicles from Mexico declined by 2.5 percent in 2002 (based on statistics from the U.S. Department of Commerce) despite an increase in the value of U.S. producers' shipments of automobiles and trucks that year. Reflecting consumer preferences in the domestic market, U.S. manufacturers' shipments of light trucks³⁴ grew by 9.2 percent in 2002, while shipments of passenger cars rose by only 0.6 percent.³⁵ The composition of Mexico's assembly operations (passenger cars accounted for about 53 percent of production in 2002) and soft demand for passenger cars in the United States, combined with rising production costs in Mexico relative to U.S. costs, led to a decline in U.S. imports of motor vehicles from Mexico.
- Ford Motor Co's. decision to scale back production of its Escort model in 2002 contributed to the 29-percent decrease in the company's exports of automobiles and light trucks from Mexico that year to 135,899 vehicles. Declining popularity in the United States of the New Beetle and the Jetta contributed to a 12-percent fall in Volkswagen's exports from Mexico in 2002 to 263,387 vehicles. Decreased consumer demand for the PT Cruiser led to the 6-percent decline in DaimlerChrysler's exports from Mexico to the United States to 372,636 vehicles. By contrast,

³¹ PITEX accounted for 82 percent of Mexico's motor vehicles and parts exports (HTS chapter 87) to the United States in 2002; Maquiladora Program exports accounted for 16 percent (table C-5).

³² Many inputs used in the manufacture of motor vehicles are not classified in HS chapter 87, including tires, engines, meters, gauges, pumps, glass, seats, wiring harnesses, plastics, and steel.

³³ According to official statistics of the USDOC, the leading suppliers of motor vehicles to the U.S. market in 2002 were Canada (31 percent, or \$41.6 billion), Japan (27 percent, \$35.8 billion), Mexico (16 percent, \$20.8 billion), Germany (13 percent, \$17.9 billion), and Korea (5 percent, \$6.8 billion).

³⁴ In general, "light trucks" includes pickups, sport utility vehicles, and minivans.

³⁵ Light trucks accounted for 56 percent of shipments by U.S. motor vehicle producers in value in 2002; passenger cars accounted for 38 percent. Census, *Manufacturers Shipments, Inventories, and Orders: 1992-2002*, p. 1. According to Ward's Automotive, as reported in Industrie Canada, U.S. production of light trucks increased by 11.2 percent in quantity in 2002, while passenger car production grew by 2.8 percent.

General Motors, which assembles pickups and sport utility vehicles in Mexico as well as passenger cars, saw its exports from Mexico rise by 13 percent to 397,484 vehicles.³⁶

- As the North American motor vehicle industry shifted sourcing of vehicles from assembly plants in Mexico to U.S. factories, auto parts producers in Mexico redirected a greater share of their shipments to vehicle assembly plants in the United States. The rise in Mexico's exports of certain motor vehicle parts to the United States in 2002 more than offset the reduction in exports of motor vehicles (table C-1).

Machinery and Electronic Products

- Mexico's imports of machinery and electronic products³⁷ from the United States in 2002 for use by production-sharing operations (Maquiladora and PITEX) amounted to \$26.3 billion (table C-2).³⁸ Exports to the United States from these production-sharing operations amounted to \$60.4 billion, or 97 percent of all Mexican exports of machinery and electronic products to the United States in 2002 (table C-5). This indicates that nearly all U.S. imports of machinery and electronic products from Mexico in 2002 were associated with production-sharing assembly operations.
- Electronic products³⁹ accounted for \$35.0 billion (26 percent) of U.S. imports from Mexico in 2002 (table B-6). Machinery⁴⁰ accounted for \$11.7 billion (9 percent).
- U.S. producers' shipments of computers and other electronic products fell by 8.7 percent in 2002 to \$392 billion,⁴¹ thus weakening demand for assembly services in Mexico.⁴² As a result, production-sharing trade with Mexico in the electronic products sector decreased in 2002, as total sector imports from Mexico fell by 5.9 percent (\$2.2 billion) (table B-6).
- Mexico's exports to the United States of telecommunications equipment and computers declined by 16 percent and 5 percent, respectively, in 2002 (table C-1). With Mexico's production of such

³⁶ General Motors was the leading producer of passenger and light trucks in Mexico in 2002, accounting for 29 percent of total vehicle production, followed by DaimlerChrysler at 21 percent and Volkswagen and Nissan, 19 percent each. "Detroit South Faces Competition from Detroit East," *Mexico Watch*, Aug. 1, 2003, p. 6ff. According to Ward's Automotive, light trucks accounted for 88 percent of General Motors' Mexican production of motor vehicles for export in 2002, with production of light trucks growing by 17.9 percent in 2002, while production of passenger cars fell by 15.7 percent.

³⁷ "Machinery and electronic products" discussed in this section encompass all products classified in HS chapters 84 and 85.

³⁸ Machinery and electronic products accounted for 43 percent of Mexico's production-sharing (maquiladora and PITEX) imports from the United States in 2002 (table C-2) and 50 percent of Mexico's production-sharing exports to the United States (table C-5).

³⁹ Appendix B, table B-3, lists commodity groups classified as electronic products.

⁴⁰ Products defined as "machinery" for this article include those listed under machinery and equipment in table B-6 as well as wiring harnesses and pumps for motor vehicles.

⁴¹ Census, *Manufacturers' Shipments, Inventories, and Orders: 1992-2002*, table 1.

⁴² U.S. imports of electronic products from countries other than Mexico grew by 1.0 percent (\$1.9 billion) in 2002 to \$194 billion. See John Kitzmiller, "Electronic Products," *Shifts in U.S. Merchandise Trade 2002*, USITC pub. No. 3611, July 2003, ch. 12.

equipment concentrated in Guadalajara,⁴³ that city was hit particularly hard by job losses in 2002. Many of the global leaders in the electronics products sector have established a manufacturing presence in China, creating supply chain economies there that, combined with lower costs for electricity and labor, have led some companies to shift their sourcing from Mexico to China.⁴⁴

- After falling by 4 percent in 2001, imports of machinery from Mexico rebounded in 2002, rising by 10 percent (\$1.5 billion) (USITC DataWeb and table B-6). U.S. shipments of machinery,⁴⁵ however, continued to contract in 2002, falling by 5.6 percent (\$21.3 billion).⁴⁶ For U.S. producers of many types of products in the machinery category, assembly in Mexico remains the preferred option to decrease production costs rather than shifting production or sourcing to China.⁴⁷
- Mexico's exports of machinery and electronic products to the United States from maquiladora and PITEX plants fell by \$983 million (1.6 percent) in 2002 (HS chapters 84 and 85 in table C-5). As indicated by more detailed U.S. import data, the product categories most responsible for the decrease in these sector imports from Mexico in 2002 were computer hardware, semiconductors, camcorders, cable boxes, and stereo equipment (USITC DataWeb and table B-6). Reduced imports of these products were nearly offset by increased imports of air conditioners, household appliances, medical goods, measuring and controlling instruments, motors and generators, electrical circuit apparatus, and wiring harnesses for motor vehicles.
- Mexico's production-sharing exports of major household appliances to the United States continued to rise in 2002, expanding by \$147 million (19 percent) to \$916 million, more than double the total in 2000 (table C-1). While Whirlpool consolidated production of its North American entry-level refrigerators, gas ranges, washers, and dryers at its subsidiary in Monterrey,⁴⁸ Maytag shifted some of its appliance production from the United States to Reynosa and Samsung expanded and upgraded its production in Queretaro.

⁴³ Guadalajara accounted for 70 percent of Mexico's computer production and 95 percent of its telecommunications manufacturing in 1999. State Dept. telegram, "Jalisco: Silicon Valley of the South or Maquiladora Zone for High-tech Electronics," message reference No. 081032Z, prepared by U.S. Consulate, Guadalajara, Mar. 12, 2000.

⁴⁴ Sergio Ornelas, "Rescuing Mexico's Electronics Industry," *Mexico Now*, Mar./Apr. 2003, p. 16ff.

⁴⁵ For this article, with regard to producers shipments, "machinery" consists of U.S. Census Bureau categories "Machinery" and "Electrical equipment, appliances, and components."

⁴⁶ Census, *Manufacturers' Shipments, Inventories, and Orders: 1992-2002*, table 1.

⁴⁷ Jesus Canas and Roberto Coronado, "Maquiladora Industry: Past, Present, and Future," *Business Frontier*, Federal Reserve Bank of Dallas-El Paso Branch, Issue 2, 2002; and presentation by Robert Berges, Director, Latin American Strategies, Merrill Lynch, at "Maquiladora Downturn: Structural Change or Cyclical Factors?" conference hosted by the El Paso and San Antonio Branches of the Federal Reserve Bank of Dallas, South Padre Island, TX., Nov. 21, 2003.

⁴⁸ Joel Millan, "Grupo Vitro Will Sell Unit to Whirlpool for \$540 Million," *Wall Street Journal*, Feb. 29, 2002, p. A9.

Apparel Assembly in Mexico, the Caribbean Basin, and Sub-Saharan Africa

- The use of production-sharing operations in Mexico and the Caribbean Basin ⁴⁹ region remains an essential competitive strategy for U.S. apparel companies. Such facilities are also a critical market for U.S. producers of textiles and fibers. With duty-free U.S. entry of apparel from Mexico (under NAFTA) made from North American fabric, and apparel from the Caribbean Basin region (under the CBTPA), made from U.S.-made or regionally knit fabric using U.S. yarn, production-sharing relationships have evolved from simple sewing operations to higher value-added activities such as cutting fabric, stone-washing, screen printing, adding embroidery, and knitting fabric from U.S. yarn. All of these processes disqualify apparel from entering the United States under HTS provision 9802.00.80. However, apparel subject to such operations in the Caribbean Basin can be entered free of duty under HTS heading 9820.
- Caribbean Basin countries, China, and Mexico were the leading suppliers of apparel to the United States in 2002, with Caribbean Basin countries and Mexico accounting for 95 percent of U.S. imports under all of the production-sharing provisions (table 3). The share of total U.S. apparel imports accounted for by imports under production-sharing provisions dropped from 19 percent to 17 percent in 2002. Imports of apparel under the production-sharing provisions of HTS headings 9802, 9819, and 9820⁵⁰ fell by 11 percent (\$1.4 billion) in 2002 to \$10.9 billion (tables 1, 2, 3, and B-3),⁵¹ while all other imports of apparel increased, by 2.6 percent (\$1.3 billion) to \$53.1 billion.
- U.S.-cut fabric and other components contained in apparel imported under HTS subheadings 9802.00.80 and 9802.00.90 decreased by 37 percent (\$1.4 billion) in 2002 to \$2.3 billion (table B-3). The decline largely is attributable to (1) duty-free entry of apparel imports from Mexico under NAFTA rather than entry under production-sharing provisions,⁵² (2) a shift in the location of cutting of fabric into garment pieces ready for assembly from the United States to Mexico and Caribbean Basin countries, and (3) the establishment of integrated textile mills in Mexico and the Caribbean Basin that resulted in greater use of regional fabric made from North American yarn by apparel producers in these regions rather their use of U.S.-cut fabric.⁵³

⁴⁹ Defined as those Caribbean and Central American countries designated by the President as eligible for preferential treatment under the CBTPA.

⁵⁰ Some of the provisions under HTS headings 9819 and 9820 do not include production-sharing activities with U.S. firms. See footnote 2 in table 1 and footnotes 4 and 5 in table 2.

⁵¹ Also see table 3, Ralph Watkins, "Production-Sharing Update: Developments in 2001," p. 40.

⁵² For apparel imported from Mexico to qualify for duty-free entry under HTS heading 9802.00.90, U.S.-origin fabric used in the manufacture must be cut in the United States. Apparel made from U.S.-origin fabric that is cut in Mexico is not eligible for entry under the production-sharing provisions but generally would be eligible for duty-free entry under NAFTA. To qualify for reduced duties under HTS heading 9802.00.80, imported apparel (from any source) must be made from fabric cut in the United States although that fabric can be of non-U.S. origin.

⁵³ Several U.S. and Asian textile firms located in Mexico, as well as Mexican textile firms, are benefitting from NAFTA provisions allowing duty-free, quota-free entry into the United States of apparel sewn in Mexico from fabric made in North America from North American yarn. These firms have vertically integrated production operations in Mexico to make such fabric for customers with sewing operations in Mexico. Further, some firms are offering "full-

(continued...)

Table 1

U.S. imports of apparel and other textile articles from Caribbean Basin Trade Partnership Act (CBTPA)-eligible countries under CBTPA and production-sharing provisions, 2002

(Million dollars)

Source	Duty-free under the CBTPA, assembled from			Total ^f	Partially dutyable under HTS provision 9802.00.80 ³	Entered at NTR duty rates	Grand total
	U.S. fabrics, from U.S. yarn		Regional ly knit fabrics				
	U.S.-cut fabrics ¹	Regionally cut fabrics					
Honduras	715.1	831.7	225.1	1,773.6	310.3	359.7	2,443.6
Dom. Rep.	790.8	919.9	38.9	1,761.6	272.7	139.0	2,173.3
El Salvador	370.8	530.7	136.0	1,052.7	368.9	287.8	1,709.4
Guatemala	63.4	369.5	111.5	551.6	261.5	856.6	1,669.7
Costa Rica	349.0	117.8	3.4	473.1	205.4	51.3	729.8
Nicaragua	63.7	63.9	0.1	127.7	11.2	294.1	433.1
Haiti	121.0	36.7	2.2	160.0	30.7	26.1	216.7
Jamaica	107.3	2.6	0.0	109.9	5.5	9.2	124.6
Other	19.2	1.5	0.0	20.7	8.2	9.9	38.8
Total	2,600.2	2,874.4	517.2	6,030.9	1,474.4	2,033.6	9,539.0

¹ Apparel assembled in CBTPA countries from fabrics made and cut in the United States of U.S. yarns enter free of duty under HTS provision 9802.00.80.44.

² Also includes imports of apparel made in CBERA countries from yarns or fabrics that are not produced in the United States in commercial quantities. Imports of such apparel from CBERA countries enter free of duty under the CBTPA under HTS heading 9820.

³ Includes apparel imported under HTS provisions 9802.00.80.15 and 9802.00.80.66. The latter provides a duty exemption for U.S. components returned to the United States in the form of assembled goods. In general, the duty is assessed on the value added offshore. The fabric for making the apparel components can be of either U.S. or foreign origin as long as the fabric is cut in the United States and exported ready for assembly. Apparel continuing to enter under this provision likely is made from foreign fabric that is cut in the United States or from U.S. fabric that is formed from foreign yarn.

Source: Compiled from official statistics of the U.S. Department of Commerce, Office of Textiles and Apparel. The data cover apparel and other textile articles subject to the former Multifiber Arrangement (superceded by the WTO Agreement on Textiles and Clothing), which accounted for 97 percent of total U.S. apparel imports from CBTPA countries in 2001. Non-apparel textile articles accounted for 0.7 percent of total U.S. imports of apparel and textile articles from CBTPA countries in 2002.

⁵³ (...continued)

package" options to apparel distributors and retailers, in which the mills use their own fabric to produce or outsource production of garments to customer specifications. These integrated mills, for the most part, produce cotton denim jeans and shirts, although some more recent operations use petrochemicals of Mexican origin to produce manmade fibers for use in the production of polyester/cotton-blend fabrics for apparel.

Table 2

Apparel: U.S. general imports from African Growth and Opportunity Act (AGOA)-eligible countries entered duty-free under AGOA, at reduced duties under HTS subheading 9802.00.8068, and at normal trade relations (NTR) duty rates, 2002

(1,000 dollars)

Source ¹	Duty-free under the AGOA—assembled from:					Reduced duties under "807" ⁶	NTR rates of duty	Total
	U.S. fabrics ²	Regional fabrics ³	Third-country fabrics ⁴	Other ⁵	Total			
Lesotho	0	0	317,660	0	317,660	113	3,302	321,075
Mauritius	708	89,963	0	15,827	106,499	1,693	146,270	254,462
South Africa	283	82,459	0	1,980	84,722	305	95,993	181,020
Kenya	0	0	121,305	0	121,305	0	4,178	125,483
Madagascar	0	58	68,897	6,457	75,412	0	13,925	89,337
Swaziland	82	0	73,636	0	73,718	0	15,356	89,074
Malawi	0	0	11,405	0	11,405	0	25	11,430
Botswana	0	3,707	0	0	3,707	0	2,641	6,348
Other	440	129	3,146	11	3,726	4	6,940	10,670
Total	1,513	176,316	596,049	24,275	798,152	2,115	288,632	1,088,899

¹ Ghana and Senegal were added to the list of countries designated by the President as eligible for benefits under AGOA effective Mar. 20 and Apr. 23, 2002, respectively. See *Federal Register* notices 67FR14761 and 67FR21794.

² Data in this column are for entries under two HTS provisions: (1) 9819.11.03--apparel assembled in AGOA countries from fabrics formed and cut in the United States of U.S. yarns that would otherwise have qualified for entry under subheading 9802.00.80.42 but for the fact that the apparel, after assembly, underwent further processing (e.g., embroidery or stone-washing); and (2) 9819.11.06--apparel assembled from fabrics formed in the United States but cut in AGOA countries, and sewn together with U.S. thread. There were no entries in 2002 under HTS subheading 9802.00.80.42, which provides duty-free entry for apparel assembled in AGOA countries from fabrics made and cut in the United States of U.S. yarns and not further processed.

³ Includes apparel imported from AGOA countries free of duty under HTS subheadings 9819.11.09, limited quantities of apparel knit to shape in an AGOA country from U.S. yarns, and knit apparel cut and assembled in AGOA countries from fabrics formed in such countries of U.S. yarns or from fabrics formed in such countries or the United States of U.S. yarns.

⁴ Includes entries under HTS subheading 9819.11.12, permitting duty-free treatment for limited quantities of apparel made in lesser developed AGOA countries, regardless of the country of origin of the fabric or the yarn used to make such garments.

⁵ Includes apparel imported from AGOA countries free of duty under four HTS subheadings: (1) 9819.11.15--cashmere sweaters knit-to-shape in AGOA countries; (2) 9819.11.18--wool sweaters knit-to-shape in AGOA countries; (3) 9819.11.21 and 9819.11.24--apparel assembled from fabrics or yarn designated by the President as not available in commercial quantities in the United States; and (2) 9819.11.27--certified handloomed, handmade, and folklore articles.

⁶ Includes apparel entered under HTS subheading 9802.00.80.68. This subheading provides a duty exemption for U.S. components returned to the United States in the form of finished goods. In general, the duty is assessed on the value added offshore. The fabric for making the apparel components can be of either U.S. or foreign origin as long as the fabric is cut in the United States and exported ready for assembly.

Source: Compiled from official statistics of the U.S. Department of Commerce, Office of Textiles and Apparel.

Table 3

U.S. imports of apparel from leading sources, total and under production-sharing provisions, 2002

Source	Imports under	Other	Total	Production-
	production-sharing	imports ²	imports	sharing part
	provisions ¹			of total
	Million dollars			Percent
Caribbean Basin (CBTPA-eligible)	7,451	2,021	9,472	78.7
China	66	9,536	9,602	0.7
Mexico	2,833	4,899	7,732	36.6
Sub-Saharan Africa (AGOA-eligible)	178	911	1,089	16.3
Other countries	328	35,703	36,031	0.9
Total	10,856	53,071	63,927	17.0

¹ Includes U.S. imports of apparel made from fabric subject to the former Multifiber Arrangement (MFA, superseded by the WTO Agreement on Textiles and Clothing—ATC) and containing U.S. content qualifying for import under production-sharing provisions 9802, as well as apparel imports from CBTPA-eligible countries entered under provisions 9820.11.03-9820.11.18 and from AGOA-eligible countries entered under provisions 9819.11.03-9819.11.06.

² Includes U.S. imports of apparel that do not contain qualifying U.S. content for import under production-sharing provisions, as well as imports of apparel made from fabric that is not subject to MFA quotas being phased out under the ATC.

Source: Compiled from official statistics of the U.S. Department of Commerce, Office of Textiles and Apparel (AGOA and CBTPA production-sharing imports, Tables 1 and 2 in this article) and U.S. Census Bureau (Appendix B in this report, tables B-3, B-6, and B-7).

- Flat demand for apparel in the U.S. market in 2002⁵⁴ and erosion of the share of the U.S. market supplied by Mexico, caused by higher imports from China and the Caribbean Basin, triggered cuts in textile and apparel production in Mexico. While U.S. imports of apparel from China grew by \$690 million (7.7 percent) in 2002 and imports from CBERA countries rose by \$99 million (1.1 percent) (tables 4 and 5), imports from Mexico fell by \$460 million (4.9 percent) (tables 3 and B-6 and USITC DataWeb).

⁵⁴ U.S. apparent consumption of apparel grew by \$1 billion in 2002 to \$112.057 billion. For producers shipments data, see Census, *Manufacturers' Shipments, Inventories, and Orders: 1992-2002*, p. 29. For trade data, see USITC, *Shifts in U.S. Merchandise Trade 2002*, p. C-26.

Table 4

Value of U.S. imports of apparel from Caribbean Basin Trade Partnership Act (CBTPA)-eligible countries during 1997-2002, and share entering under CBTPA preferences and/or production-sharing provisions (HTS 9802.00.15 and 9802.00.85), 2002

Source	Year						Entry under CBTPA and/or Production Sharing in 2002	
	1997	1998	1999	2000	2001	2002	Value	Share
	<i>Million dollars</i>							<i>Percent</i>
Honduras	1,659	1,873	2,158	2,323	2,344	2,440	2,082	85
Dominican Republic	2,216	2,342	2,337	2,425	2,252	2,162	2,034	94
El Salvador	1,052	1,171	1,329	1,583	1,612	1,675	1,411	84
Guatemala	962	1,136	1,233	1,487	1,604	1,659	811	49
Costa Rica	840	821	819	819	749	725	679	94
Nicaragua	182	232	277	336	374	433	139	32
Haiti	137	218	249	251	216	217	191	88
Jamaica	472	422	345	268	182	124	115	93
Other CBTPA	64	55	56	50	41	37	28	76
Total CBTPA	7,584	8,270	8,803	9,542	9,373	9,472	7,490	79

Source: Compiled from official statistics of the U.S. Department of Commerce, Office of Textiles and Apparel. The data cover apparel subject to the former Multifiber Arrangement (superceded by the WTO Agreement on Textiles and Clothing), which accounted for 97 percent of total U.S. apparel imports from CBTPA countries in 2001.

Table 5

U.S. imports of apparel from Caribbean Basin Trade Partnership Act (CBTPA)-eligible countries, 1997-2002

Source	<i>(Million square meters)</i>					
	1997	1998	1999	2000	2001	2002
Honduras	726	799	943	1028	1020	1,090
Dominican Republic	797	832	858	837	753	730
El Salvador	433	483	602	719	723	777
Guatemala	237	280	305	360	388	415
Costa Rica	302	307	346	350	350	362
Nicaragua	47	56	66	83	96	120
Haiti	77	113	127	125	109	109
Jamaica	194	171	148	126	102	84
Other CBTPA	30	25	21	23	29	27
Total CBTPA	2,843	3,066	3,416	3,651	3,570	3,714

Source: Compiled from official statistics of the U.S. Department of Commerce, Office of Textiles and Apparel. The data cover apparel subject to the former Multifiber Arrangement (superceded by the WTO Agreement on Textiles and Clothing), which accounted for 97 percent of total U.S. apparel imports from CBTPA countries in 2001.

- Apparel accounted for 74 percent (\$437 million) of the total duty savings under the production-sharing provisions of HTS heading 9802 in 2002 (table B-10). Total duty savings under the production-sharing provisions were 56 percent less in 2002 than 2001, as apparel producers in the Caribbean Basin region took advantage of the duty-free provisions of the CBTPA by expanding their operations (to include the cutting of U.S. fabric instead of importing pre-cut garment pieces from the United States, adopting other value-added operations not allowed under HTS provision 9802.00.80, and using regionally knit fabric). In Mexico, a growing share of apparel producers adopted similar value-added operations in 2002, shifting entry from HTS heading 9802 to NAFTA. (See box 1 for a description of the regional production processes permitted under the CBTPA.)
- China became the leading foreign supplier of apparel to the U.S. market in 2002, in terms of value, surpassing the Caribbean Basin, which remained the leading supplier in terms of quantity. China and the Caribbean Basin countries each supplied 15 percent of the U.S. market, in terms of value, followed by Mexico with a 12-percent share. Sub-Saharan Africa provided 2 percent (see table 3).
- Production of fibers, textiles, and apparel accounted for 7.1 percent of manufacturing GDP in Mexico in 2001, and 1.2 percent of total GDP according to the Economy Ministry. Reflecting the labor intensiveness, the sector accounted for 17.5 percent of Mexico's total employment in manufacturing in 2001.⁵⁵
- Apparel containing qualifying U.S.-origin content (fabric and/or yarn) and imported under the production-sharing provisions of HTS chapter 98 accounted for 79 percent of apparel imported into the United States from the Caribbean Basin in 2002,⁵⁶ 37 percent from Mexico⁵⁷ (down from 50 percent in 2001), and only 1 percent from China (see table 3).
- The pattern of U.S. apparel trade with the Caribbean Basin region has begun to change since implementation of the CBTPA in October 2000.⁵⁸ Enacted as Title II of the Trade and Development Act of 2000, the CBTPA, among other things, grants duty-free and quota-free entry to imports of qualifying apparel articles assembled in CBERA countries from fabrics made in the United States of U.S. yarns, whether the fabrics were cut to shape in the United States

⁵⁵ Susanna Werner, "Southeast Mexico," *Twin Plant News*, Sept. 2003, p. 16.

⁵⁶ The Dominican Republic and Honduras each supplied about one-quarter of total U.S. apparel imports from Caribbean Basin countries in 2002 (table 1). While apparel imports from these two countries together were virtually unchanged in 2002 from 2001 at \$4.7 billion (table 4), the share of total apparel imports from these countries accounted for by U.S.-cut fabric dropped from 52 percent in 2000 to 42 percent in 2001 and 6 percent in 2002.

⁵⁷ This share accounts for imports from Mexico of apparel made from fabric cut in the United States but not from U.S. fabric cut in Mexico.

⁵⁸ The CBTPA provides for duty-free and quota-free treatment for imports of qualifying textile and apparel articles from CBERA beneficiary countries during a transition period beginning on Oct. 1, 2000, and ending on the earlier of Sept. 30, 2008, or on the date on which the Free Trade Area of the Americas or a comparable free-trade agreement between the United States and CBERA countries enters into force. For a summary of the CBTPA, see text box 1 and USITC, *The Impact of the Caribbean Basin Economic Recovery Act*, USITC pub. No. 3636, Sept. 2003, p. 1-9ff.

Box 1 Textiles and apparel made in Caribbean Basin Recovery Act (CBERA) countries that are eligible for duty-free and quota-free entry under the United States-Caribbean Basin Trade Partnership Act (CBTPA), as amended by the Trade Act of 2002																			
Brief description of article¹	Brief description of criteria and related information																		
Apparel assembled from U.S.-formed and -cut fabric HTS 9802.00.80.44 and 9820.11.03 (the latter provision is for apparel that underwent further processing such as stone-washing or embroidering)	* Unlimited duty-free and quota-free treatment * Fabric must be made wholly of U.S. yarn * Fabric, whether knit or woven, must be dyed, printed, and finished in the United States																		
Apparel cut and assembled from U.S. fabric: HTS 9820.11.06 Woven apparel HTS 9820.11.18 Knit apparel	* Unlimited duty-free and quota-free treatment * Fabric must be made wholly of U.S. yarn * Fabric, whether knit or woven, must be dyed, printed, and finished in the United States * Apparel must be sewn together with U.S. thread																		
Certain apparel of "regional knit fabrics" – includes apparel knit-to-shape directly from U.S. yarn (other than socks) and knit apparel cut and assembled from regional or regional and U.S. fabrics: HTS 9820.11.09 Knit apparel except outerwear T-shirts HTS 9820.11.12 Outerwear T-shirts	* Fabric must be made wholly of U.S. yarn * Preferential treatment subject to "caps" for 12-month period beginning on October 1 of: <table border="1"> <thead> <tr> <th><u>Year</u></th> <th><u>HTS 9820.11.09</u></th> <th><u>HTS 9820.11.12</u></th> </tr> </thead> <tbody> <tr> <td>2000</td> <td>250 million SMEs</td> <td>4,200,000 dozen</td> </tr> <tr> <td>2001</td> <td>290 million SMEs</td> <td>4,872,000 dozen</td> </tr> <tr> <td>2002</td> <td>500 million SMEs</td> <td>9,000,000 dozen</td> </tr> <tr> <td>2003</td> <td>850 million SMEs</td> <td>10,000,000 dozen</td> </tr> <tr> <td>2004</td> <td>970 million SMEs</td> <td>12,000,000 dozen</td> </tr> </tbody> </table> Note.– SMEs are square meter equivalents. The 2004 caps apply to subsequent 12-month periods.	<u>Year</u>	<u>HTS 9820.11.09</u>	<u>HTS 9820.11.12</u>	2000	250 million SMEs	4,200,000 dozen	2001	290 million SMEs	4,872,000 dozen	2002	500 million SMEs	9,000,000 dozen	2003	850 million SMEs	10,000,000 dozen	2004	970 million SMEs	12,000,000 dozen
<u>Year</u>	<u>HTS 9820.11.09</u>	<u>HTS 9820.11.12</u>																	
2000	250 million SMEs	4,200,000 dozen																	
2001	290 million SMEs	4,872,000 dozen																	
2002	500 million SMEs	9,000,000 dozen																	
2003	850 million SMEs	10,000,000 dozen																	
2004	970 million SMEs	12,000,000 dozen																	
Brassieres cut and assembled in the United States and/or the region from U.S. fabric (HTS 9820.11.15)	* Producer must satisfy rule that the total cost of U.S. fabric components used in its brassieres in preceding 12-month period was at least 75 percent of the aggregate declared customs value of the fabric contained in all its brassieres in that period (exclusive of findings and trimmings).																		
Textile luggage cut and assembled from U.S. fabric (HTS 9820.11.21)	* Fabric must be made wholly of U.S. yarn.																		
Apparel cut and assembled from fabrics or yarn in "short supply," as identified in annex 401 of NAFTA (HTS 9820.11.24)	* Includes apparel of silk; linen; cotton velveteen and fine-wale corduroy fabric; hand-woven Harris Tweed wool fabric; woven wool fabric made with fine animal hair; high-thread count polyester-cotton woven fabric; fine-count cotton fabric for nightwear and underwear; and high-thread count woven fabric for men's and boys' shirts.																		
Apparel cut and assembled from additional fabrics or yarns designated as not available in commercial quantities in the United States (HTS 9820.11.27)	* On request of an interested party, the President may proclaim preferential treatment for apparel made from additional fabrics or yarn, if the President determines that such fabrics or yarn cannot be supplied by the domestic industry in commercial quantities in a timely manner.																		
Handloomed, handmade, and folklore articles (HTS 9820.11.30)	* Must be certified as such by exporting country																		

¹ Applies to articles ineligible for duty-free treatment under the 1983 CBERA (those of cotton, wool, and manmade fibers).

Source: United States-Caribbean Basin Trade Partnership Act, as amended by the Trade Act of 2002.

or in CBERA countries.⁵⁹ Similar to the shift in trade with Mexico, uncut U.S. fabrics are now being sent to the CBERA countries for cutting and assembly into qualifying garments, as evidenced by the fact that U.S. exports of apparel (mainly garment parts) to the CBERA countries fell by 26 percent in 2001 (the first full year of the CBTPA), whereas U.S. fabric exports to the region rose by 105 percent.

- The sluggish U.S. economy in 2002 tempered the anticipated benefits of the CBTPA. Rather than spurring new trade flows, the legislation appears primarily to have caused a shift in trade from the traditional production-sharing provisions to imports under the duty-free CBTPA provisions, thereby generating significant duty savings for U.S. firms importing apparel from the region.
- By permitting U.S. fabric to be cut in the region; allowing certain value-added operations such as embroidering, screen printing, and stone washing; and permitting the use of regionally knit fabric, the CBTPA improved the competitive position of apparel producers that have taken advantage of these provisions. Not only have costs been reduced by performing these operations in the region, producers are now able to offer potential customers a wider choice of garments and quicker response times. These improvements are considered to have slowed the region's loss of U.S. market share to imports from China.⁶⁰
- Central American countries supplied 73 percent (\$6.9 billion) of all U.S. imports from CBTPA-eligible countries in 2002 (see table 1). Honduras was the leading CBTPA supplier, accounting for 26 percent of the group total in 2002, followed by the Dominican Republic (23 percent), El Salvador and Guatemala (18 percent for each), and Costa Rica (8 percent).
- Taking advantage of duty-free access to the U.S. market under the CBTPA, U.S. imports of apparel from each of the five Central American countries, except Costa Rica, rose by 5 percent in 2002 (see table 4). U.S. imports of apparel from the Dominican Republic and Costa Rica fell by 4 percent and 3 percent, respectively, in 2002 reflecting escalating labor costs relative to other countries in the Caribbean Basin region. Because both countries have a greater supply of skilled workers than other countries in the region, they have been more successful in attracting investment in the assembly of electronic products. Those investments have contributed to rising overall labor rates in both countries. The Dominican Republic and Costa Rica accounted for 93 percent (\$1.6 billion) of total U.S. imports of electronic products from the Caribbean Basin region in 2002 (table B-7 and USITC DataWeb).
- Although textile manufacturers in Korea and Taiwan have invested in both the textile and apparel sectors throughout Central America, their most significant impact has been in Guatemala and Nicaragua.⁶¹ These companies are more inclined than regional apparel producers or North

⁵⁹ If the fabrics are cut to shape in CBERA countries, the garments must be sewn with U.S. thread.

⁶⁰ For more information on the effects of the CBTPA on production-sharing operations in the Caribbean Basin region, see USITC, *The Impact of the Caribbean Basin Economic Recovery Act*, USITC pub. No. 3636, Sept. 2003.

⁶¹ Korean firms moved their apparel operations to Guatemala due to U.S. import quotas on Korean garments under the former Multifiber Arrangement. USITC staff fieldwork in Guatemala, June 18, 2001. Taiwan has a strong presence in Nicaragua and has taken advantage of low wages, tax incentives, and geographical location, chiefly to produce textile goods for export to the United States. Klaus Blume, "Taiwan is a Big Supporter of Central America for

(continued...)

American investors to use Asian fabric. As a result, apparel incorporating U.S. fabric accounted for only 32 percent of U.S. apparel imports from Nicaragua in 2002 and 49 percent from Guatemala. By contrast, apparel made from U.S. fabric accounted for 94 percent of U.S. apparel imports from the Dominican Republic and Costa Rica, 93 percent from Jamaica, 88 percent from Haiti, 85 percent from Honduras, and 84 percent from El Salvador (see table 4).

- In total, over three-fourths of the apparel imported from CBTPA-eligible countries in 2002 was sewn from U.S. fabric. Apparel assembled from wholly formed U.S. fabric (of U.S. yarn) cut in the United States (duty-free under CBTPA) accounted for 27 percent of U.S. imports of apparel from the Caribbean Basin region in 2002 (see table 1). Apparel sewn from third-country fabric that was cut in the United States (or fabric formed in the United States from third-country yarn and cut in the United States)⁶² accounted for 15 percent. Apparel sewn from U.S.-formed fabric (of U.S. yarn) cut in a CBTPA country and apparel that was made in a CBTPA country from regionally knit fabric using U.S. yarn (both duty-free under CBTPA), accounted for 30 percent and 5 percent, respectively.
- Apparel made from fabric or yarn that was not of U.S. origin accounted for only 0.6 percent (\$39 million) of apparel imports from Caribbean Basin countries entering duty-free under CBTPA. Virtually all of that value was accounted for by imports qualifying under the “short supply” arrangement.⁶³
- By contrast, apparel made from third-country fabric (\$596 million) accounted for 75 percent of apparel imports under AGOA (see table 2). Apparel made from U.S.-cut fabric accounted for only 0.2 percent of total apparel imports from AGOA-eligible countries in 2002. Similarly, apparel made from U.S.-formed fabric (of U.S. yarn) cut in AGOA countries accounted for just 0.1 percent. Apparel entering the United States duty-free under AGOA (\$798 million) accounted for 73 percent of total apparel imports from AGOA countries in 2002, and were more than double the value entered under AGOA in 2001.
- Mauritius accounted for 51 percent (\$92 million) of U.S. production-sharing imports of apparel from AGOA-eligible countries in 2002, and South Africa, for 46 percent (\$83 million) (see table 2). Nonetheless, apparel made from U.S.-origin fabric accounted for only 0.9 percent of total U.S. apparel imports from Mauritius in 2002 and 0.3 percent of apparel imports from South Africa.

⁶¹ (...continued)

a Price,” June 1, 2001, found at <http://www.thenewsmexico.com>. Further, Taiwanese producers of denim and jeans, Roo Hsing and Nien Hsing, are investing in new facilities in Nicaragua. “Taiwanese Groups to Expand Central American Facilities,” July 2, 2002, found at <http://www.emergingtextiles.com>.

⁶² The value of the U.S.-origin cut fabric pieces and U.S.-origin fasteners is not subject to U.S. duties.

⁶³ The Trade and Development Act of 2000 authorized the President to proclaim additional preferential treatment for apparel made in AGOA and CBTPA beneficiary countries if the President determines that certain fabrics or yarn cannot be supplied by the domestic industry in commercial quantities in a timely manner, i.e., are in short supply. Additional information on apparel imports in short supply is provided at www.usitc.gov/332s/shortsup/shortsupintro.htm.

- Lesotho was the leading supplier of U.S. imports of apparel from AGOA-eligible countries, with a 29 percent of the group total in 2002, followed by Mauritius (23 percent), South Africa (17 percent), and Kenya (11 percent) (see tables 2 and 6). Lesotho was also the leading beneficiary of the AGOA, furnishing 40 percent (\$318 million) of all U.S. imports of apparel under that program, followed by Kenya (15 percent) and Mauritius (13 percent) (see table 2).

Table 6
Textiles and apparel: U.S. general imports from Sub-Saharan Africa countries since the implementation of AGOA, by quantity and value, 2001 and 2002

Source	Quantity		Value	
	2001	2002	2001	2002
	—— Million square meters ——		—— Million dollars ——	
Lesotho	51	84	215	321
Mauritius	41	47	238	255
South Africa	59	75	195	200
Kenya	19	37	65	126
Madagascar	37	22	178	89
Swaziland	11	25	48	89
Malawi	4	3	11	11
Botswana	1	3	2	6
Other	11	8	22	11
Total	234	304	975	1,120

Source: Compiled from official statistics of the U.S. Department of Commerce, Office of Textiles and Apparel.

- Apparel imports from Lesotho grew by nearly 50 percent in 2002, while imports from Kenya and Swaziland each nearly doubled in value (see table 6). Imports of apparel from Madagascar dropped by 50 percent in 2002 as the contested presidential transition led to the destruction of transportation infrastructure and disruption of manufacturing.
- Mauritius and South Africa accounted for nearly all U.S. imports under AGOA of apparel made from regional fabrics (see table 2). Importers are not eligible to enter apparel from either country into the United States free of duty if the apparel is made from third country fabric. Given the choice of using U.S., regional, or third-country fabrics, nearly all Lesser Developed Developing Country (LDDC) AGOA apparel exporters to the United States elected to use third-country fabrics. ■

APPENDIX A

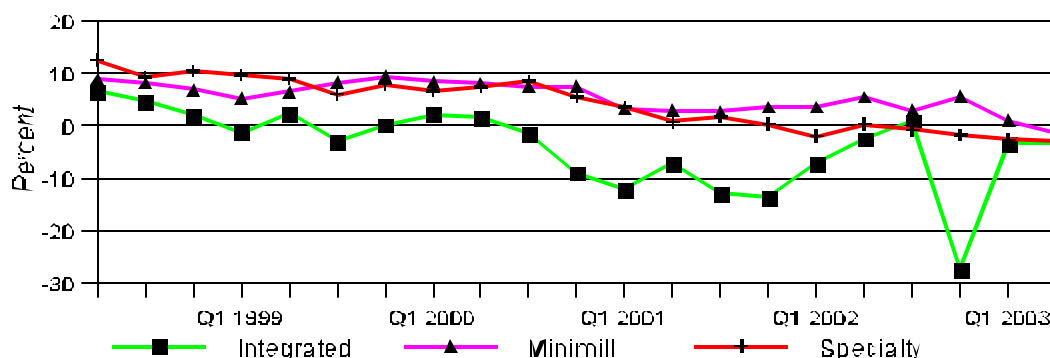
Key Performance Indicators of Selected Industries and Regions¹

Title	Author ¹	Page
Steel	Harry Lenchitz (202) 205-2737 <i>hlenchitz@usitc.gov</i>	A-2 A-3
Automobiles	Laura A. Polly (202) 205-3408 <i>polly@usitc.gov</i>	A-4
Unwrought Aluminum	Judith-Anne Webster (202) 205-3489 <i>webster@usitc.gov</i>	A-5
Flat Glass	Vincent DeSapio (202) 205-3435 <i>desapio@usitc.gov</i>	A-6
Services	Cynthia Payne (202) 205-3410 <i>payne@usitc.gov</i>	A-7
North American Trade	Ruben Mata (202) 205-3403 <i>mata@usitc.gov</i>	A-8 A-9

¹The data and views presented for the following indicators are compiled from the industry sources noted and are those of the authors. They are not the views of the United States International Trade Commission as a whole or of any individual Commissioner. Nothing contained in this information based on published sources should be construed to indicate how the Commission would find in an investigation conducted under any statutory authority.

STEEL

Figure A-1
All sectors show operating losses¹ during second quarter 2003



¹Operating income (loss) as a percent of sales. Integrated group contains 5 firms. Minimill group contains 4 firms. Specialty group contains 4 firms.

Note.—First quarter 2003 integrated group includes 1 previously untracked firm, and no longer includes 1 previously tracked firm, reflecting ownership changes in the industry.

Source: Individual company financial statements.

- Republic Engineered Products LLC, a producer of special bar quality steel, secured U.S. Bankruptcy Court approval for a \$45 million debtor-in-possession financing agreement on October 10, 2003. The agreement allowed Republic to resume operations at all 7 of its plant locations, which had been shut down for several days after filing for protection under Chapter 11 of the U.S. bankruptcy laws on October 6, 2003. See <http://www.republicengineered.com>
- Georgetown Steel Company LLC, a producer of carbon steel wire rod, shut down its mill indefinitely after filing for protection under Chapter 11 of the U.S. bankruptcy laws on October 21, 2003. Georgetown executives cited rising input costs and weak market conditions as reasons for the bankruptcy filing. See <http://www.gscrods.com>
- The Pension Benefit Guaranty Corporation assumed responsibility for the pensions of 9,200 workers and retirees of Weirton Steel Corp. on October 21, 2003. Weirton, a producer of sheet steel and tin mill products, has been operating as a debtor-in-possession since filing for protection under Chapter 11 of the U.S. bankruptcy laws on May 19, 2003. See <http://www.pbgc.gov> and <http://www.weirton.com>
- Rouge Industries and its subsidiaries, Rouge Steel Company, QS Steel, and Eveleth Taconite Company, filed for protection under Chapter 11 of the U.S. bankruptcy laws on October 22, 2003. On the same day, Rouge announced that it had reached a non-binding agreement to sell its assets to Severstal, Russia's second-largest steel producer. In accordance with the bankruptcy laws, other companies will have an opportunity to submit bids through a court-supervised process. See <http://www.rougesteel.com>

Table A-1
Imports decrease and exports increase significantly during second quarter and first half of 2003 compared to second quarter and first half of 2002

Item	Q2 2003	Percentage change, Q2 2003 from		Q1 2003 ¹	Percentage change, YTD 2003 from	
		Q2 2002	Q1 2003 ¹		YTD 2002	YTD 2003
Producers' shipments (1,000 short tons)	25,887		1.1	51,924		4.8
Finished imports (1,000 short tons)	4,391		-10.2	9,504		-11.5
Ingots, blooms, billets, and slabs (1,000 short tons) ...	1,039		-42.4	2,370		-43.3
Exports (1,000 short tons)	2,671		84.7	4,657		59.6
Apparent supply, finished (1,000 short tons)	27,607		-5.0	56,771		-1.0
Ratio of finished imports to apparent supply (percent) ..	15.9		² -0.9	16.7		² 2.0

¹ Preliminary.

² Percentage point change.

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

Source: American Iron and Steel Institute.

STEEL

Table A-2
Steel service centers: Shipments decrease during second quarter 2003 compared to second quarter 2002

Item	Mar. 2003	June 2003	Percentage change, June 2003 from		Percentage change, Q2 2003 from	
			Mar. 2003	Q2 2002	Q2 2003	Q2 2002
Shipments (1,000 short tons)	4,151	4,045	-2.6	12,956	12,641	-2.8
Ending inventories (1,000 short tons) . . .	14,181	12,836	-9.5	13,232	12,836	-3.0
Inventories on hand (months)	3.4	3.2	(¹)	3.2	3.2	(¹)

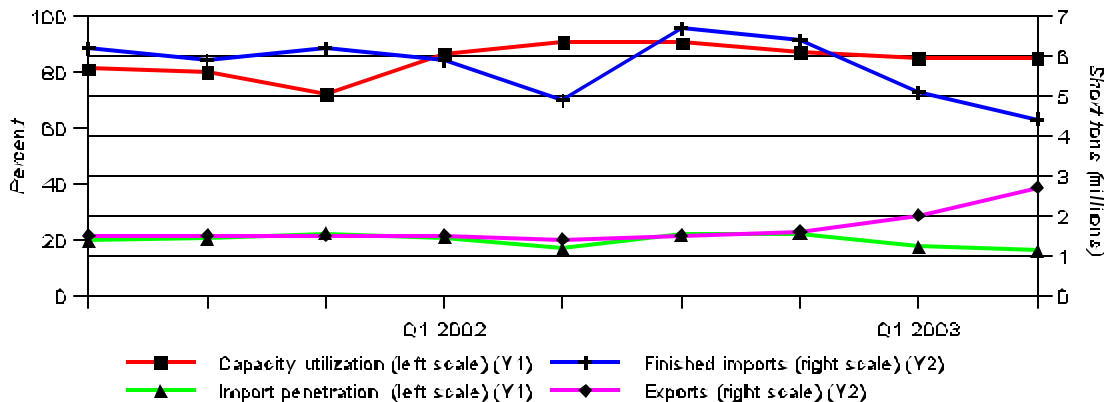
¹ Not applicable.

Note.—Metals Service Center Institute data collection and presentation methods have been updated. Data presented for second quarter 2002, second quarter 2003, and Mar. 2003 have been updated, and differ from previously published data.

Source: Metals Service Center Institute.

- U.S. service center steel shipments and inventories for second quarter 2003 were down compared to shipments and inventories for second quarter 2002 (table A-2), according to the Metals Service Center Institute. Ending inventories were down significantly as service centers increased shipments by more than 7 percent during second quarter 2003 compared to first quarter 2003. See <http://www.ssci.org>
- The American Institute for International Steel import market survey (October 2003) predicts increased imports of semifinished steel and decreased imports of hot-rolled sheet and cut-to-length plate during the next 3 to 5 months. The survey predicts no significant changes in imports of cold-rolled sheet, wire rod, corrosion resistant, merchant bar, and pipe and tube. Imports of structurals and stainless sheet are predicted to trend slightly upward. See <http://www.aiis.org>
- World crude steel production for the first 9 months of 2003 was approximately 773 million tons, an increase of more than 7 percent compared with the first 9 months of 2002, according to the International Iron and Steel Institute. China produced 176 million tons, an increase of almost 22 percent compared with the first 9 months of 2002. See <http://www.worldsteel.org>
- U.S. exports continued to increase, for the fourth consecutive quarter, during second quarter 2003, but slow growth in domestic demand left U.S. producers' capability utilization essentially unchanged. (figure A-2). See <http://www.steel.org>

Figure A-2
Steel mill products, all grades: Import penetration falls to multi-year low during second quarter 2003



Note.—Capacity utilization is the raw steel tonnage produced divided by the tonnage capability to produce raw steel for a sustained full order book.

Source: American Iron and Steel Institute.

AUTOMOBILES

Table A-3

U.S. sales of new passenger vehicles (cars and light trucks), domestic and imported, and share of U.S. market accounted for by sales of total imports and Japanese imports, by specified periods, January 2002-September 2003

Item	Percentage change				
	July.-Sept. 2003	Jan.-Sept. 2003	July-Sept. 2003		Jan.-Sept. 2003 from Jan.-Sept. 2002
			Apr.-June 2003	from Apr.-June 2003	
U.S. sales of domestic passenger vehicles (1,000 units) ¹	3,550	10,144	-1.4		-2.5
U.S. sales of imported passenger vehicles (1,000 units) ²	897	2,534	3.9		2.0
Total U.S. sales (1,000 units) ^{1,2}	4,447	12,679	-0.4		-1.7
Ratio of U.S. sales of imported passenger vehicles to total U.S. sales (percent) ^{1,2}	20.2	20.0	4.4		3.8
U.S. sales of Japanese imports as a share of the total U.S. market (percent) ¹	10.8	10.7	6.9		4.0

¹ Domestic passenger vehicles include U.S.-, Canadian-, and Mexican-built cars and light trucks sold in the United States.

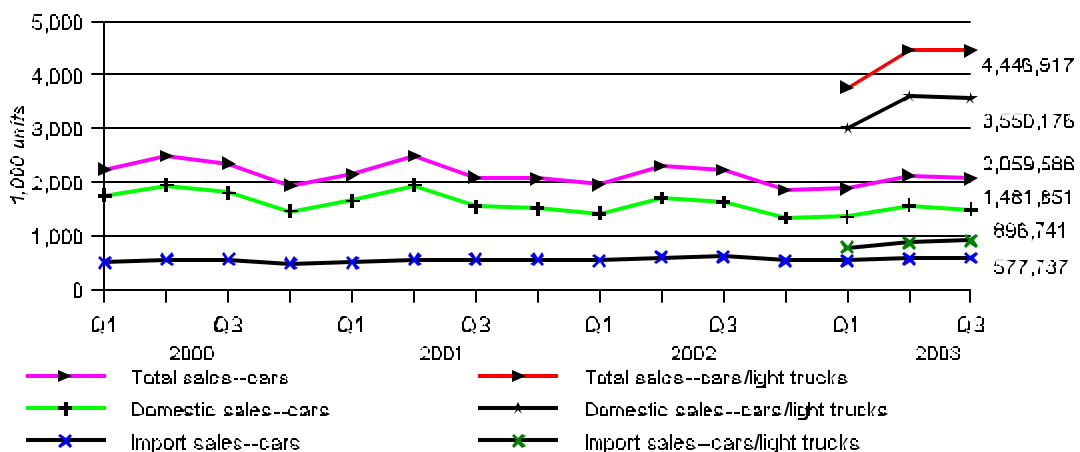
² Imported passenger vehicles do not include cars and light trucks supplied by Canada and Mexico.

Note.—Data for 2003 forward include cars and light trucks; year-to-date data for 2002 also include cars and light trucks.

Source: Compiled from data obtained from *Automotive News*.

- In September, the U.S. Big Three (GM, Ford, and DaimlerChrysler AG's Chrysler Group) and major suppliers Delphi and Visteon, concluded new labor contracts with the United Auto Workers (UAW). In exchange for protecting member health care benefits, the UAW accepted lower wage increases and agreed to plans to reduce overcapacity through plant closures. Such closures reportedly could affect 10 plants. The 5 firms may shed up to 50,000 employees in the next 4 years.
- U.S. production in the third quarter was affected by the electrical blackout that struck a large part of the Northeast and upper Midwest in mid-August. Automaker efforts to avoid a second blackout by running at partial capacity or delaying the restart of operations when the blackout ended compounded the loss of production. Plans for fourth quarter production could bring total U.S. production for 2003 to the industry's fourth-best year ever.
- Japanese automakers Toyota, Honda, and Nissan may end the year selling a record number of vehicles in the United States. Their forecasted sales may exceed 40 percent of total sales of U.S. Big Three nameplate vehicles. Japanese automakers - traditionally more reluctant to offer consumer incentives - have been increasing incentives, and are also aggressively seeking increased market share by lowering sticker prices on 2004 models or holding the line on new car prices. In contrast, the Big Three will be raising sticker prices for 2004 models. In August, Big Three incentives topped \$4,000 per vehicle.

Figure A-3
U.S. sales of new passenger vehicles (cars and light trucks) decreased in the third quarter 2003; sales of imported passenger vehicles as a percentage of total U.S. sale increased compared to second quarter 2003 at the expense of domestic vehicle sales

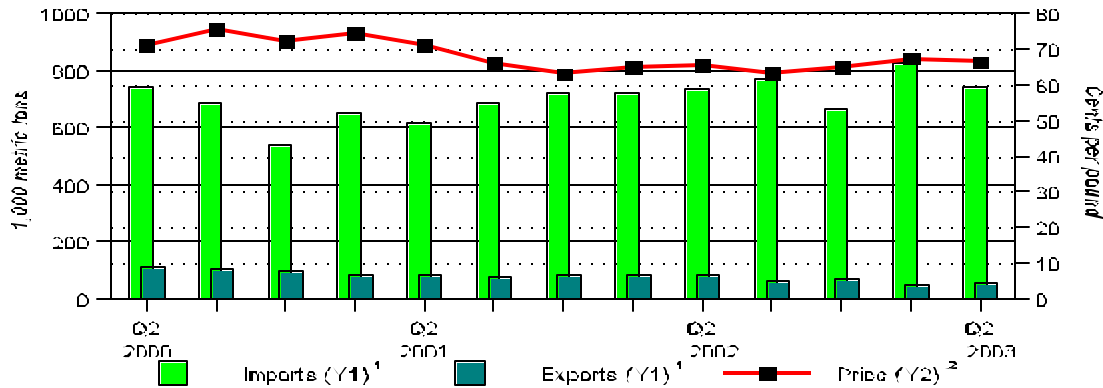


Note.—Domestic sales include U.S.-, Canadian-, and Mexican-built vehicles sold in the United States; these same units are not included in import sales. From first quarter 2003 forward, data are shown for sales of cars only as well as cars and light trucks combined (passenger vehicles).

Source: *Automotive News*, prepared by the Office of Industries.

UNWROUGHT ALUMINUM¹

Figure A-1
Imports decreased by 9.7 percent as companies worked off stocks, marking the first inventory decline since third quarter 2000



¹ Unwrought aluminum and aluminum alloys.

² Quarterly average of the monthly U.S. market price of primary aluminum ingots.

Source: Compiled by USITC staff based on data obtained from the U.S. Geological Survey.

- China is building one-third of the 10.4-ton output per year of primary aluminum capacity under construction worldwide, and many analysts are evaluating structural changes in the Chinese aluminum industry to predict the long-term outlook for aluminum. China's newly created State Development & Reform Commission recently urged local authorities not to approve any new aluminum smelting projects because of oversupply concerns as well as increasing demand on the Chinese power sector. A slowdown in the expansion of aluminum production capacity in China could support higher prices worldwide and bolster the financial prospects of an industry which has struggled for the past 3 years
- In September, the Bonneville Power Administration (BPA) in the U.S. Pacific Northwest announced a slight increase in power rates (2.2 percent) beginning October 2003. However, bulk power customers were able to negotiate a 7.4-percent reduction (bringing costs lower than their pre-October rates). Nonetheless, many aluminum companies, such as Alcoa's Intalco subsidiary, indicate that this decrease is not enough for them to consider restarting production in the Pacific Northwest. BPA's next rate adjustment is scheduled for April 1, 2004.

Table A-4
Import penetration declined by 2.1 percent in the second quarter of 2003 as consumption lagged and production remained stable

Item	Q2 2002	Q1 2003	Q2 2003	Percentage change	
				Q2 2003 from Q2 2002	Q2 2003 from Q1 2003
Primary production (1,000 metric tons)	669r	700r	674	0.7	-3.7
Secondary recovery (1,000 metric tons)	742r	721r	8	-0.5	2.4
Imports (1,000 metric tons)	738	826	746	1.1	-9.7
Import penetration (percent)	35.7	37.6	35.5	¹ -0.2	¹ -2.1
Exports (1,000 metric tons)	82	50	56	-31.7	12.0
Average nominal price (cents/lb)	65.8	67.6	66.5	0.9	-1.7
LME inventory level (1,000 metric tons)	1,255	1,318	1,142	-9.0	-13.5

¹ Percentage point change

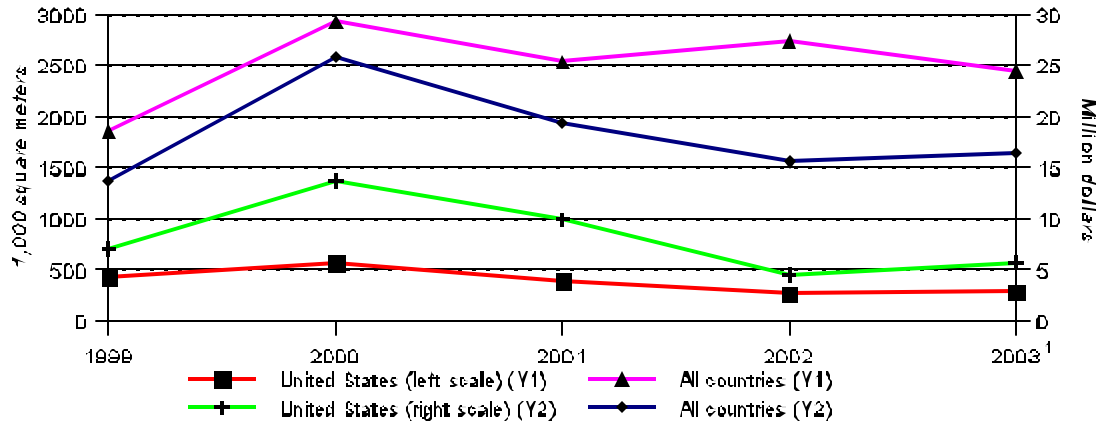
Note.—Revised data indicated by "r."

Sources: Compiled from data obtained from U.S. Geological Survey and World Bureau of Metal Statistics.

¹ Product coverage includes only unwrought aluminum and certain aluminum alloys for improved data comparability.

FLAT GLASS

Figure A-5
Japanese monthly average imports show increase during first 8 months of 2003



¹Data for Jan.-August (Latest available data).

Source: Compiled from "World Trade Atlas: Japan" at <http://www.globaltradeatlas.com> on Mar. 20, 2003 which uses official statistics provided by the Government of Japan.

Background

- Although the U.S.-Japanese agreement on Japanese market access for imports of flat glass which sought to increase access and sales of foreign flat glass in Japan expired on December 31, 1999,¹ the U.S. Government continues to urge the Japanese Government to take steps to promote access and competition in its glass market and continues to work with U.S. industry to achieve these goals.² The U.S. Government has had some success in urging Japan to modify regulations that would facilitate use of energy-efficient glass in Japan.
- U.S. and Japanese negotiators have agreed that Japan's Ministry of Trade and Industry (MITI), in conjunction with the Japan Fair Trade Commission (JFTC), should monitor Japanese flat glass manufacturers and the glass distribution system in Japan to promote competition in the sector.³

Current

- Increased Japanese demand for imported flat glass, encouraged by a somewhat more positive outlook for the Japanese economy, increased average monthly Japanese imports from all countries by 4 percent for the first 8 months of 2003 to 2.4 million square meters compared with the same period of 2002. The average monthly value of total Japanese flat glass imports increased 13 percent during the first 8 months of 2003 to \$16.4 million compared with the same period in 2002. Average monthly Japanese imports in quantity for full-year 2002 increased 8 percent over the same imports for full-year 2001.
- Average monthly Japanese imports from the United States increased by quantity and value during the first 8 months of 2003 compared to the same period in 2002 (up 6 percent to 282,000 square meters and up 27 percent to \$5.7 million, respectively) due largely to increased demand in Japan for higher-value construction-related flat glass products from the United States. Average monthly imports from the United States for full-year 2002 decreased 32 percent in quantity and 54 percent in value over the same imports for full-year 2001.

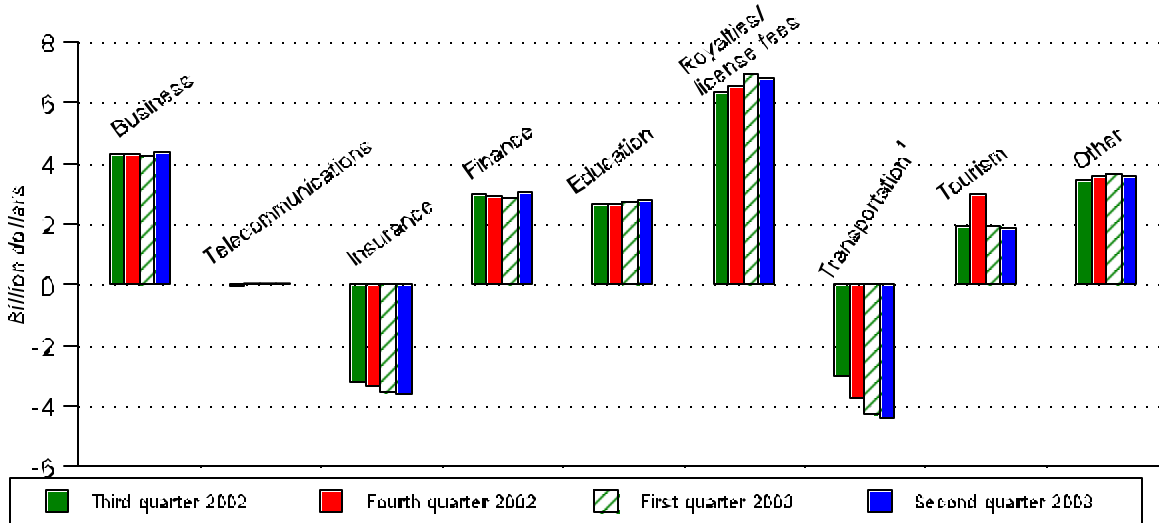
¹ Office of the U.S. Trade Representative (USTR), *The President's 1999 Annual Report on the Trade Agreements Program*, p. 227, downloaded from <http://www.ustr.gov/reports/tpa/2000index.html> on Mar. 3, 2000.

² U.S. Department of State cable, *2003 National Trade Estimate Report - Japan*, message reference No. 8640, prepared by U.S. Embassy, Tokyo, Dec. 16, 2002.

³ USTR, *Annual Submission by the Government of the United States to the Government of Japan on Deregulation and Competition Policy*, Oct. 12, 2000, p. 32.

SERVICES

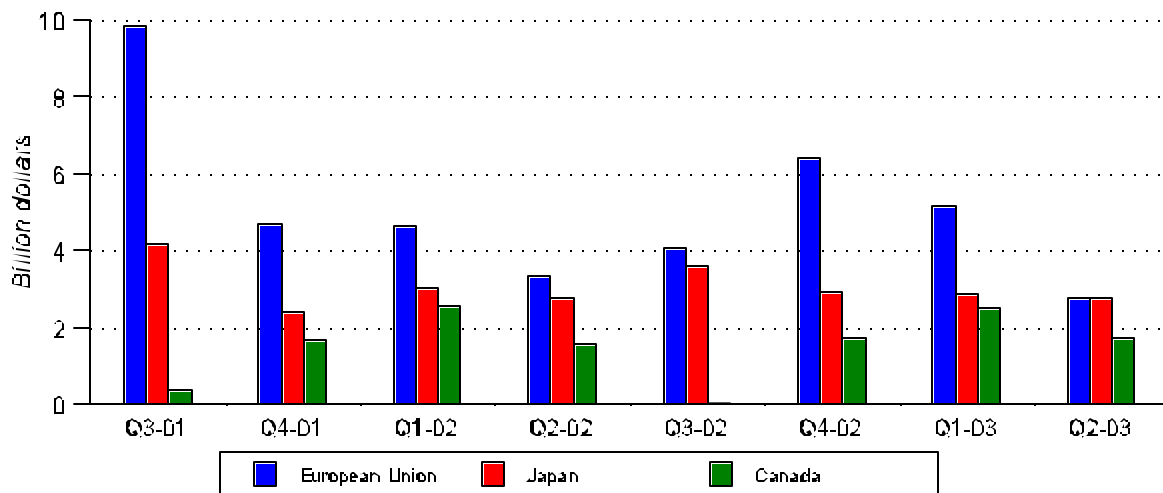
Figure A-6
 Balance on U.S. service trade accounts, by quarter, 2002 and 2003



¹ Includes passenger fares, freight and port services.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, Oct. 2003, p. 41.

Figure A-7
 Surpluses on cross-border U.S. services transactions with selected trading partners, by quarter, 2001-2003¹



¹ Private-sector transactions only; military shipments and other public-sector transactions have been excluded.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, Oct. 2003, pp. 50-55; July 2002, pp. 104-107; Jan. 2003, pp. 42-45; Oct. 2002, pp. 60-63; and July 2002, pp. 78-81.

NORTH AMERICAN TRADE HIGHLIGHTS

U.S. trade with its North American partners is highlighted in table A-5. The following is a summary of key developments in the first half of 2003.

- Total U.S. imports from Canada and Mexico increased 4.8 percent (\$8.2 billion) to \$179.1 billion during January-June 2003 over the corresponding period in 2002, with crude petroleum, petroleum products, and natural gas together accounting for 15 percent (\$27.4 billion) of the total. Higher prices for petroleum and natural gas in the first half of 2003 accounted for much of this increase, and reflected heightened demand for natural gas to fuel power-generation plants. Imports of petroleum from Canada and Mexico rose 41 percent (\$4.8 billion), while imports of natural gas from Canada nearly doubled, climbing by \$5.3 billion. Collectively, U.S. imports of all other articles from Canada and Mexico dropped 1.2 percent (\$1.9 billion).
- North American automotive trade reflects shifts in production as auto companies assembled an increasing share of their vehicles for the U.S. market in the United States rather than in Canada or Mexico. In the first half of 2003, U.S. imports of passenger cars from Mexico and Canada declined by 5 percent (\$1.2 billion),¹ while imports of certain parts for U.S. vehicle assembly plants grew by 6 percent (\$415 million) from Canada and Mexico.
- With fewer vehicles overall being assembled in Canada and Mexico for export to the United States, there was a 4-percent (\$420-million) decline in U.S. exports of auto parts to its North American partners in the first half of 2003.
- Despite appreciation of the Canadian dollar vis-a-vis the U.S. dollar, U.S. imports from Canada increased 6 percent (\$6.5 billion) in the first half of 2003, amounting to \$112 billion. In addition to the hike in imports of natural gas and petroleum (up by \$8.0 billion) and the growth in imports of certain motor vehicle parts, imports of aircraft rose by 33 percent (\$695 million) as U.S. carriers bought more regional aircraft from Bombardier.²
- The growth in U.S. imports of energy products and regional aircraft from Canada in the first half of 2003 was partially offset by reduced imports of lumber, computer parts, and telephone equipment. Decreased U.S. imports of computer and telephone equipment reflect shifting production to China and elsewhere in Asia.
- Notwithstanding a 0.3-percent contraction in Canadian GDP during the second quarter of 2003, exports to Canada from the United States increased by 5-percent (\$3.7 billion) to \$75.9 billion during January-June 2003. Exports of passenger cars and buses grew by 18 percent (\$1.4 billion). The value of natural-gas and electrical energy exports about tripled, rising by \$428 million and \$240 million, respectively.
- Mexico's GDP posted a marginal 0.2 percent second quarter-to-quarter growth (2003/2002), reflecting the nascent recovery in the U.S. economy in the first half of 2003 and reduced demand for assembly services, which account for over one-half of Mexico's exports to the United States. The slumping maquiladora sector, which employs nearly 1 million assembly workers, led to weaker-than-projected consumer confidence and less domestic spending.³
- U.S. imports from Mexico continued to be constrained by sluggishness in the U.S. economy, which accounts for nearly 85 percent of Mexico's total exports. U.S. imports from Mexico increased 2 percent (\$1.6 billion) during the first half 2003 over the corresponding period, rising to \$67 billion. Crude petroleum alone rose by 39 percent (\$1.8 billion). Imports of telephone equipment rebounded after declining sharply in 2002.

¹ Certain types of autos assembled in Mexico have lost popularity in the U.S. market, contributing to the decline in U.S. imports of passenger cars from Mexico. There has been a decrease in Mexico's production of the Ford Escort, Chrysler PT Cruiser, and Volkswagen New Beetle and Jetta. Reflecting the orientation of the U.S. consumer toward light trucks (including sport utility vehicles and minivans) rather than passenger cars, General Motors has increased sharply its imports of pickups assembled in Mexico.

² Bombardier reported that its exports of regional aircraft to the United States grew by 39 percent (\$1.1 billion) to \$4.1 billion in the first half of 2003 as major U.S. air carriers replaced older, less energy-efficient aircraft with smaller planes. "Bombardier's Second Quarter," *Newsedge*, found at <http://www.newsedge-web.com/NewsEdge>, retrieved Nov. 4, 2004.

³ "Mexican Economy at a Standstill," *Emerging Markets Online*, found at <http://www.businessmonitor.com/cgi-bin/>, retrieved June 8, 2003.

NORTH AMERICAN TRADE HIGHLIGHTS

Table A-5
North American trade, 1998-2002, January-June 2002, and January-June 2003

Item	1998	1999	2000	2001	2002	January-June		Percent change 2002/03
						2002	2003	
Value (million dollars)								
U.S.-Mexico trade:								
Total imports from Mexico	93,017	109,018	134,734	130,509	134,121	65,577	67,194	2
U.S. imports under NAFTA:								
Total value	68,326	71,317	83,995	81,162	84,747	41,477	43,111	4
Percent of total imports	73	65	62	62	63	63	64	1
Total exports to Mexico	75,369	81,381	100,442	90,537	86,076	42,512	40,395	-5
U.S. merchandise trade balance with Mexico ²								
	-17,648	-27,637	-34,292	-39,971	-48,045	-23,065	-26,799	-16
U.S. -Canada trade:								
Total imports from Canada	174,685	198,242	229,060	216,836	210,518	105,331	111,878	6
U.S. imports under NAFTA:								
Total value	111,675	115,715	123,052	113,179	115,807	58,020	59,204	2
Percent of total imports	64	58	54	52	55	55	53	1-2
Total exports to Canada	137,768	145,731	155,601	144,621	142,543	72,257	75,965	5
U.S. merchandise trade balance with Canada ³								
	-36,918	-52,511	-73,459	-72,215	-67,975	-33,073	-35,913	-9

¹Percentage-point change.

²The negative (-) symbol indicates a decline in trade, a trade deficit, or an expansion in the trade deficit. The \$48.0-billion deficit in U.S. merchandise trade with Mexico in 2002 was partially offset by a \$4.7-billion U.S. surplus in bilateral services trade.

³The \$68.0-billion deficit in U.S. merchandise trade with Canada in 2002 was partially offset by a \$5.8-billion U.S. surplus in bilateral services trade. During the first half of 2003, the U.S. surplus in bilateral services trade was \$4.3 billion, not seasonally adjusted.

Source: Compiled by USITC staff from official statistics of the U.S. Department of Commerce. Statistics on U.S. services trade with Canada and Mexico are based on preliminary data provided in U.S. Department of Commerce, Bureau of Economic Analysis, "U.S. International Transactions Accounts Data," tables 10 and 10a, found at http://www.BEA.DOC.GOV/BEA/International/BP_web/list.CFM?ANON=92.

- After passenger cars, electronic products assembled in the maquiladora sector were chiefly responsible for the decline in non-petroleum trade between the United States and Mexico. The contraction was sharpest in U.S. imports of computer equipment; radio and television transmission apparatus, television cameras, and camcorders; television receivers; and video games.⁴
- Contraction of Mexico's maquiladora sector in the first half of 2003 was chiefly responsible for the 5-percent (\$2.1-billion) decline in U.S. exports during that period (\$40.4 billion). Besides auto parts, the largest decreases in U.S. exports were of cathode ray tubes (chiefly for the assembly of television receivers and computer monitors),⁵ passenger cars, and integrated circuits and micro assemblies. These declines were partially offset by a doubling of exports of computer parts in the first half of 2003 as computer hardware assembly rebounded following a significant decline in 2002.

⁴ Microsoft has shifted its contract for the production of the X-box video game console from Mexico to China, leading to an 89-percent (\$265-million) fall in U.S. imports of games from Mexico in the first half of 2003.

⁵ Although Mexico has lost some of its dominant share of the U.S. market for televisions to China, particularly for smaller-sized models, the main reason for the decline in U.S. exports of cathode ray tubes to Mexico was the growing U.S. market for flat screen televisions (which do not use picture tubes). Exports to Mexico of liquid crystal displays, including those for flat screen televisions, nearly doubled in the first half of 2003, or by \$117 billion. Exports of other television parts increased by 9 percent (\$55 million).

APPENDIX B
Statistical Tables (B-1 to B-11) for U.S.
Imports Under the Production-Sharing
Provisions of HTS Heading 9802
(HTS 9802.00.60, 9802.00.80, and 9802.00.90)

Table B-1

U.S. imports for consumption, total and under the production-sharing provisions of HTS heading 9802, by principal sources (based on the value of U.S. components in the assembled imports in 2002), 1999-2002
(Million dollars)

Source	1999	2000	2001	2002
Total imports				
Mexico	109,018	134,734	130,509	134,121
Japan	130,951	145,742	126,139	121,262
Philippines	12,379	13,943	11,307	10,977
Dominican Republic	4,278	4,378	4,187	4,167
Costa Rica	3,954	3,555	2,912	3,146
Honduras	2,712	3,091	3,131	3,262
China	81,522	99,581	102,069	124,796
Malaysia	21,391	25,447	22,228	23,953
El Salvador	1,603	1,925	1,882	1,976
Korea	31,152	39,829	34,917	35,284
All other	618,475	733,113	693,353	691,866
Total	1,017,435	1,205,339	1,132,635	1,154,811
Production-sharing imports under HTS Chapter 98				
Mexico	25,875	19,430	13,995	10,672
Japan	15,058	17,851	18,177	19,007
Philippines	2,331	2,099	1,288	1,065
Dominican Republic	2,789	2,692	1,140	729
Costa Rica	832	880	556	343
Honduras	1,882	1,845	609	370
China	1,612	1,242	1,387	1,100
Malaysia	2,109	1,639	602	306
El Salvador	1,186	1,290	487	371
Korea	2,002	1,378	1,940	1,811
All other	22,649	20,874	20,355	18,318
Total	78,327	71,220	60,538	54,091
U.S. content of imports under HTS Chapter 98				
Mexico	13,928	10,271	6,898	5,021
Japan	576	543	729	693
Philippines	1,137	933	537	484
Dominican Republic	1,791	1,678	632	396
Costa Rica	548	568	335	195
Honduras	1,329	1,273	348	190
China	272	252	224	180
Malaysia	998	885	310	176
El Salvador	704	762	193	154
Korea	1,042	753	204	153
All other	3,034	2,541	1,418	951
Total	25,358	20,459	11,827	8,592

Note.—Calculations based on unrounded data.

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

Table B-2

U.S. imports for consumption under the production-sharing provisions (PSP) of HTS heading 9802: Total imports, imports under HTS PSP, and U.S. content, by principal sources, 2001-02

Source	2001					
	Total imports	Imports under HTS PSP	U.S. content	Total imports	Imports under HTS PSP	U.S. content
	Million dollars			Percentage		
Japan	126,139	18,177	729	11.1	30.0	6.2
Germany	58,939	9,652	177	5.2	15.9	1.5
United Kingdom	41,118	2,630	186	3.6	4.3	1.6
Sweden	8,793	2,171	27	0.8	3.6	0.2
Belgium	10,039	1,216	26	0.9	2.0	0.2
Austria	3,904	631	10	0.3	1.0	0.1
France	30,024	616	47	2.7	1.0	0.4
Netherlands	9,449	499	21	0.8	0.8	0.2
Canada	216,836	346	132	19.1	0.6	1.1
Italy	23,707	122	32	2.1	0.2	0.3
Ireland	18,599	82	16	1.6	0.1	0.1
Australia	6,333	43	11	0.6	0.1	0.1
All other	31,400	66	12	2.8	0.1	0.1
Total, developed countries	585,279	36,251	1,426	51.7	59.9	12.1
Mexico	130,509	13,995	6,898	11.5	23.1	58.3
Korea	34,917	1,940	204	3.1	3.2	1.7
China	102,069	1,387	224	9.0	2.3	1.9
Philippines	11,307	1,288	537	1.0	2.1	4.5
Dominican Republic	4,187	1,140	632	0.4	1.9	5.3
Honduras	3,131	609	348	0.3	1.0	2.9
Malaysia	22,228	602	310	2.0	1.0	2.6
Costa Rica	2,912	556	335	0.3	0.9	2.8
El Salvador	1,882	487	193	0.2	0.8	1.6
Taiwan	33,262	427	174	2.9	0.7	1.5
Guatemala	2,589	372	84	0.2	0.6	0.7
Thailand	14,672	237	93	1.3	0.4	0.8
Indonesia	9,931	218	29	0.9	0.4	0.2
Colombia	5,623	186	86	0.5	0.3	0.7
Singapore	14,899	113	38	1.3	0.2	0.3
Hong Kong	9,571	101	14	0.8	0.2	0.1
Brazil	14,415	95	3	1.3	0.2	(¹)
Haiti	263	78	48	(¹)	0.1	0.4
Vietnam	1,026	69	9	0.1	0.1	0.1
Jamaica	442	67	54	(¹)	0.1	0.5
All other	127,520	317	90	11.3	0.5	0.8
Total, less developed countries	547,356	24,287	10,401	48.3	40.1	87.9
Grand total	1,132,635	60,538	11,827	100.0	100.0	100.0

See note(s) at end of table.

Table B-2—Continued

U.S. imports for consumption under the production-sharing provisions (PSP) of HTS heading 9802: Total imports, imports under HTS PSP, and U.S. content, by principal sources, 2001-02

Source	2002					
	Total imports	Imports under HTS PSP	U.S. content	Total imports	Imports under HTS PSP	U.S. content
	Million dollars			Percentage		
Japan	121,262	19,007	693	10.5	35.1	8.1
Germany	60,985	10,223	123	5.3	18.9	1.4
United Kingdom	40,429	1,956	84	3.5	3.6	1.0
Sweden	9,241	1,759	11	0.8	3.3	0.1
Belgium	9,842	913	15	0.9	1.7	0.2
France	28,232	609	43	2.4	1.1	0.5
Netherlands	9,889	456	78	0.9	0.8	0.9
Canada	210,518	177	80	18.2	0.3	0.9
Austria	3,693	176	6	0.3	0.3	0.1
Spain	5,663	83	13	0.5	0.2	0.1
Australia	6,398	57	20	0.6	0.1	0.2
Italy	24,212	52	10	2.1	0.1	0.1
All other	48,840	64	17	4.2	0.1	0.2
Total, developed countries	579,204	35,531	1,194	50.2	65.7	13.9
Mexico	134,121	10,672	5,021	11.6	19.7	58.4
Korea	35,284	1,811	153	3.1	3.3	1.8
China	124,796	1,100	180	10.8	2.0	2.1
Philippines	10,977	1,065	484	1.0	2.0	5.6
Dominican Republic	4,167	729	396	0.4	1.3	4.6
El Salvador	1,976	371	154	0.2	0.7	1.8
Honduras	3,262	370	190	0.3	0.7	2.2
Costa Rica	3,146	343	195	0.3	0.6	2.3
Taiwan	32,054	339	131	2.8	0.6	1.5
Malaysia	23,953	306	176	2.1	0.6	2.1
Brazil	15,609	278	42	1.4	0.5	0.5
Guatemala	2,785	263	40	0.2	0.5	0.5
Indonesia	9,616	168	25	0.8	0.3	0.3
Thailand	14,796	144	48	1.3	0.3	0.6
Colombia	5,382	135	57	0.5	0.2	0.7
Vietnam	2,392	84	11	0.2	0.2	0.1
Hong Kong	9,241	66	11	0.8	0.1	0.1
Singapore	14,116	65	21	1.2	0.1	0.2
Hungary	2,638	42	10	0.2	0.1	0.1
India	11,790	41	8	1.0	0.1	0.1
All other	113,506	169	47	9.8	0.3	0.5
Total, less developed countries	575,607	18,560	7,398	49.8	34.3	86.1
Grand total	1,154,811	54,091	8,592	100.0	100.0	100.0

¹ Less than 0.5 percent.

Note.—Calculations based on unrounded data.

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

Table B-3

U.S. imports for consumption under the production-sharing provisions (PSP) of HTS heading 9802, by commodity groups, 2001-02

Commodity group	(1,000 dollars)					
	2001			2002		
	Total imports	Imports under HTS PSP	U.S. content	Total imports	Imports under HTS PSP	U.S. content
Agricultural products	52,598,671	4,200	1,417	55,591,375	1,415	670
Forest products	36,678,288	59,139	33,458	37,048,304	51,929	31,349
Chemicals, coal, petroleum, natural gas, and related products:						
Fabricated plastic and rubber products	19,192,438	167,989	86,988	21,027,750	145,531	79,140
Other energy and chemical products	193,598,300	29,483	13,684	195,696,143	14,836	7,565
Total	212,790,739	197,472	100,672	216,723,893	160,367	86,705
Textiles, apparel, and footwear:						
Textiles and textile products (except apparel)	15,950,737	357,167	202,127	17,658,550	270,220	146,729
Apparel	63,995,084	7,163,240	3,673,567	63,926,917	4,694,317	2,302,639
Footwear and parts	15,249,351	1,473,576	190,507	15,379,227	1,082,569	100,465
Total	95,195,172	8,993,983	4,066,201	96,964,694	6,047,107	2,549,833
Minerals and metals:						
Steel mill products	11,630,045	15,400	11,604	12,202,920	22,408	18,014
Copper and related products	4,296,294	6,373	1,060	3,715,267	7,995	1,139
Aluminum mill products	2,304,878	1,659	1,116	2,515,715	1,505	1,028
Builders' hardware	1,948,333	90,052	57,043	2,196,563	72,215	41,425
Other metal products	63,667,821	378,866	181,494	64,985,187	300,189	158,985
Total	83,847,370	492,350	252,317	85,615,653	404,312	220,592
Miscellaneous manufactures:						
Luggage, handbags and flat goods	4,309,464	81,991	36,736	4,412,046	62,983	23,185
Jewelry	6,188,230	55,726	30,594	7,010,545	41,800	26,504
Furniture	14,839,061	8,568	2,672	17,028,247	2,011	605
Lamps and lighting fixtures	4,147,923	22,990	11,122	4,604,852	9,656	4,936
Other miscellaneous manufactured articles	33,851,159	181,428	45,035	35,186,555	129,922	35,411
Total	63,335,837	350,703	126,159	68,242,244	246,372	90,641
Machinery and equipment:						
Air conditioning equipment	6,081,163	120,157	82,433	6,673,821	85,022	59,463
Household appliances, including commercial applications	8,355,680	328,810	179,001	9,563,516	265,064	163,157
Centrifuges, filtering and purifying equipment, and pumps for liquids	4,075,712	41,991	29,480	4,286,687	46,921	27,087
Semiconductor equipment, robots, and other equipment ...	4,388,756	2,177	1,120	3,678,725	1,460	1,115
Taps, cocks, valves, and similar devices	4,809,036	218,442	152,341	5,155,631	198,808	127,440
Electric motors generators and related equipment	7,645,853	675,374	214,265	7,177,450	485,316	147,682
Electrical transformers static converters and inductors	5,133,864	308,367	116,471	4,706,645	253,649	97,777
Powered handtools and parts thereof	2,085,544	129,403	56,164	2,395,209	63,899	34,033
Flashlights and other similar electric lights; light bulbs and fluorescent tubes; arc lights	1,785,292	101,917	64,253	1,687,205	90,277	56,675
Nonautomotive insulated electrical wire and related products	3,203,446	286,046	167,595	3,076,098	224,560	122,547

See note(s) at end of table.

Table B-3—Continued

U.S. imports for consumption under the production-sharing provisions (PSP) of HTS heading 9802, by commodity groups, 2001-02

Commodity group	(1,000 dollars)					
	2001			2002		
	Total imports	Imports under HTS PSP	U.S. content	Total imports	Imports under HTS PSP	U.S. content
Miscellaneous machinery and equipment	31,829,888	727,205	201,158	30,565,250	732,764	155,651
Total	79,394,233	2,939,890	1,264,282	78,966,236	2,447,740	992,626
Transportation equipment:						
Aircraft engines and gas turbines	13,547,537	531,197	378,204	10,993,034	230,533	125,999
Motors and engines, except internal combustion, aircraft, or electric	784,210	4,915	2,722	699,689	1,479	949
Internal combustion piston engines, other than for aircraft ..	13,656,985	644,576	45,574	14,840,724	872,937	80,354
Construction and mining equipment	5,259,909	48,313	6,360	5,302,008	46,951	6,377
Forklift trucks and similar industrial vehicles	1,423,103	0	0	1,266,173	0	0
Ball and roller bearings	1,578,882	22,901	10,452	1,598,076	19,937	9,049
Certain motor-vehicle parts	23,976,930	1,405,025	606,019	27,761,393	1,134,665	390,878
Primary cells and batteries and electric storage batteries	2,342,208	273,458	59,570	2,195,985	171,900	36,641
Ignition starting, lighting, and other electrical equipment	3,051,970	123,649	63,315	3,467,333	96,152	41,858
Rail locomotive and rolling stock ..	1,356,923	94,766	12,069	1,039,352	75,307	11,578
Automobiles, trucks, buses, and bodies and chassis of the foregoing	127,256,615	34,991,270	909,513	133,263,586	35,136,571	1,112,820
Aircraft, spacecraft, and related equipment, except engines	21,027,368	113,104	38,413	17,636,213	18,769	13,296
Ships, tugs, pleasure boats, and similar vessels	1,410,518	324,222	63,143	1,412,512	259,878	51,292
Miscellaneous vehicles and transportation-related equipment	2,364,382	14,100	4,331	2,744,023	6,355	2,417
Motorcycles, mopeds, and parts ..	2,869,653	1,293	802	2,926,865	595	333
Total	221,907,193	38,592,789	2,200,486	227,146,965	38,072,030	1,883,842
Electronic products:						
Office machines	1,817,451	60,713	19,394	1,491,147	51,587	15,818
Telephone and telegraph apparatus	27,174,433	361,864	176,545	27,948,040	203,541	74,203
Optical fibers, optical fiber bundles and cables	1,243,546	40,216	15,656	251,596	17,956	6,671
Microphones, loudspeakers, audio amplifiers, and combinations thereof	19,524,702	269,816	75,910	21,455,257	213,287	62,440
Unrecorded magnetic tapes, discs, and other media	2,422,860	19,623	2,670	2,746,053	17,174	1,996
Records, tapes, compact discs, computer software, and other recorded media	1,259,475	107	24	1,307,675	45	27
Radio navigational aid, radar, and remote control apparatus ..	1,796,476	31,579	10,651	1,858,336	22,708	5,877
Television receivers, video monitors, and combinations including television receivers	8,614,655	695,090	155,328	10,586,479	351,196	57,815
Television picture tubes and other cathode-ray tubes	612,030	98,510	54,538	607,017	48,428	23,570
Television apparatus (except receivers and monitors), including cameras camcorders and cable apparatus	6,066,057	49,273	27,030	4,977,398	25,476	13,167
Electric sound and visual signaling apparatus	1,968,189	43,258	9,381	1,796,992	16,273	5,982
Special-purpose tubes	271,236	3	0	246,726	0	0

See note(s) at end of table.

Table B-3—Continued

U.S. imports for consumption under the production-sharing provisions (PSP) of HTS heading 9802, by commodity groups, 2001-02

Commodity group	(1,000 dollars)					
	2001			2002		
	Total imports	Imports under HTS PSP	U.S. content	Total imports	Imports under HTS PSP	U.S. content
<i>Electronic products—Continued</i>						
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	13,691,870	1,389,869	707,973	13,258,405	1,009,262	464,761
Electrical capacitors and resistors	2,332,684	79,802	34,388	2,092,577	53,606	20,789
Semiconductor devices	30,015,936	2,776,279	1,466,819	25,650,639	1,976,551	1,060,601
Computer hardware	74,547,236	874,928	77,883	75,816,993	745,051	54,029
Photographic cameras and equipment	3,559,864	4,385	728	3,028,637	3,314	1,895
Photographic supplies	1,856,468	54,109	26,930	1,864,775	144,266	76,008
Medical goods	10,868,869	693,997	326,272	13,232,347	513,875	245,801
Optical goods	4,957,266	18,693	7,202	4,142,466	15,686	6,642
Drawing and mathematical calculating and measuring instruments	207,466	474	243	191,551	180	67
Watches	2,956,838	73,505	32,742	3,098,492	48,707	29,626
Measuring, testing, controlling and analyzing instruments	11,805,855	493,834	285,025	11,595,472	438,827	244,954
Total	229,571,461	8,129,927	3,513,330	229,245,068	5,916,998	2,472,740
<i>Seats, wiring, and pumps for vehicles:</i>						
Seats for motor vehicles and aircraft	3,238,876	26,996	18,284	3,886,441	20,577	12,965
Wiring harnesses for motor vehicles	4,684,352	729,203	245,683	5,301,661	703,880	246,479
Pumps for motor vehicles	788,396	20,900	4,448	913,306	17,659	3,791
Total	8,711,623	777,099	268,415	10,101,407	742,116	263,236
Special provisions	48,604,752	97	64	49,165,028	212	112
Grand total	1,132,635,340	60,537,649	11,826,801	1,154,810,867	54,090,597	8,592,345

Note.—Calculations based on unrounded data.

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

Table B-4

U.S. imports for consumption under the production-sharing provisions (PSP) of HTS heading 9802, by principal sources, 2002

Source	Total value		Duty-free value	
	Value	Percentage of total	Value	Percentage of total
	<i>Million dollars</i>		<i>Million dollars</i>	
Grand total	54,091	100.0	8,592	100.0
Top 10 sources	49,235	91.0	7,160	83.3
Japan	19,007	35.1	693	8.1
Mexico	10,672	19.7	5,021	58.4
Germany	10,223	18.9	123	1.4
United Kingdom	1,956	3.6	84	1.0
Korea	1,811	3.3	153	1.8
Sweden	1,759	3.3	11	0.1
China	1,100	2.0	180	2.1
Philippines	1,065	2.0	484	5.6
Belgium	913	1.7	15	0.2
Dominican Republic	729	1.3	396	4.6
All other	4,856	9.0	1,432	16.7

Note.—Calculations based on unrounded data.

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

Table B-5

Japan: U.S. imports for consumption, total and under the production-sharing provisions (PSP) of HTS heading 9802, by commodity groups, 2002

(1,000 dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Agricultural products:	461,084	0	0
Forest products	600,002	0	0
Chemicals, coal, petroleum, natural gas, and related products:			
Fabricated plastic and rubber products	2,189,756	101	23
Other energy and chemical products	7,117,036	0	0
Total	9,306,792	101	23
Textiles, apparel, and footwear:			
Textiles and textile products (except apparel)	515,056	945	234
Apparel	209,338	21	8
Footwear and parts	1,618	0	0
Total	726,012	966	242
Minerals and metals:			
Steel mill products	940,206	0	0
Copper and related products	131,950	639	219
Aluminum mill products	51,186	0	0
Builders' hardware	31,751	0	0
Other metal products	2,968,334	2,732	1,242
Total	4,123,426	3,371	1,462
Miscellaneous manufactures:			
Luggage, handbags and flat goods	7,495	0	0
Jewelry	27,836	2	(¹)
Furniture	42,015	0	0
Lamps and lighting fixtures	25,025	0	0
Other miscellaneous manufactured articles	3,204,046	2,064	55
Total	3,306,416	2,067	55
Machinery and equipment:			
Air conditioning equipment	812,231	0	0
Household appliances, including commercial applications	186,543	0	0
Centrifuges, filtering and purifying equipment, and pumps for liquids	455,830	0	0
Semiconductor equipment, robots, and other equipment	1,958,909	0	0
Taps, cocks, valves, and similar devices	720,190	0	0
Electric motors generators and related equipment	1,362,326	43,589	615
Electrical transformers static converters and inductors	357,739	0	0
Powered handtools and parts thereof	267,935	0	0
Flashlights and other similar electric lights; light bulbs and fluorescent tubes; arc lights	192,127	0	0
Nonautomotive insulated electrical wire and related products	116,623	52	3
Miscellaneous machinery and equipment	6,037,130	148,132	9,177
Total	12,467,583	191,772	9,795
Transportation equipment:			
Aircraft engines and gas turbines	517,323	0	0
Motors and engines, except internal combustion, aircraft, or electric	110,642	0	0
Internal combustion piston engines, other than for aircraft	4,933,151	19,561	3,158
Construction and mining equipment	1,259,388	44,334	4,015
Forklift trucks and similar industrial vehicles	232,045	0	0
Ball and roller bearings	453,916	0	0
Certain motor-vehicle parts	6,320,526	7	4
Primary cells and batteries and electric storage batteries	695,267	90,715	9,303
Ignition starting, lighting, and other electrical equipment ..	925,954	0	0

See note(s) at end of table.

Table B-5—Continued

Japan: U.S. imports for consumption, total and under the production-sharing provisions (PSP) of HTS heading 9802, by commodity groups, 2002

(1,000 dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
<i>Transportation equipment—Continued</i>			
Rail locomotive and rolling stock	170,021	2,771	920
Automobiles, trucks, buses, and bodies and chassis of the foregoing	35,846,768	18,599,339	649,912
Aircraft, spacecraft, and related equipment, except engines	1,026,601	0	0
Ships, tugs, pleasure boats, and similar vessels	82,181	0	0
Miscellaneous vehicles and transportation-related equipment	866,447	0	0
Motorcycles, mopeds, and parts	2,142,499	0	0
Total	55,582,728	18,756,728	667,312
<i>Electronic products:</i>			
Office machines	158,337	0	0
Telephone and telegraph apparatus	1,815,399	22,983	641
Optical fibers, optical fiber bundles and cables	38,144	0	0
Microphones, loudspeakers, audio amplifiers, and combinations thereof	4,485,653	28	2
Unrecorded magnetic tapes, discs, and other media	1,051,523	11	(¹)
Records, tapes, compact discs, computer software, and other recorded media	86,867	0	0
Radio navigational aid, radar, and remote control apparatus	194,630	0	0
Television receivers, video monitors, and combinations including television receivers	1,678,387	0	0
Television picture tubes and other cathode-ray tubes	159,856	63	58
Television apparatus (except receivers and monitors), including cameras camcorders and cable apparatus	367,622	107	106
Electric sound and visual signaling apparatus	226,437	0	0
Special-purpose tubes	38,829	0	0
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	1,718,791	117	43
Electrical capacitors and resistors	605,929	0	0
Semiconductor devices	2,809,075	23,057	10,691
Computer hardware	8,733,540	2,802	737
Photographic cameras and equipment	1,060,901	0	0
Photographic supplies	719,817	0	0
Medical goods	1,328,615	0	0
Optical goods	866,625	10	2
Drawing and mathematical calculating and measuring instruments	32,129	0	0
Watches	693,633	0	0
Measuring, testing, controlling and analyzing instruments	1,874,722	2,391	1,451
Total	30,745,461	51,568	13,731
<i>Seats, wiring, and pumps for vehicles:</i>			
Seats for motor vehicles and aircraft	92,750	0	0
Wiring harnesses for motor vehicles	94,679	0	0
Pumps for motor vehicles	126,880	0	0
Total	314,309	0	0
Special provisions	3,628,659	0	0
Grand total	121,262,473	19,006,573	692,620

¹ Less than \$500.

Note.—Calculations based on unrounded data.

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

Table B-6

Mexico: U.S. imports for consumption, total and under the production-sharing provisions (PSP) of HTS heading 9802, by commodity groups, 2002

(1,000 dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Agricultural products:	6,378,338	923	517
Forest products	1,037,706	49,341	29,900
Chemicals, coal, petroleum, natural gas, and related products:			
Fabricated plastic and rubber products	1,501,066	99,619	60,581
Other energy and chemical products	13,703,242	14,360	7,366
Total	15,204,308	113,978	67,946
Textiles, apparel, and footwear:			
Textiles and textile products (except apparel)	1,916,711	137,324	93,167
Apparel	7,732,337	2,832,836	1,592,466
Footwear and parts	278,567	26,269	21,633
Total	9,927,614	2,996,429	1,707,266
Minerals and metals:			
Steel mill products	1,232,377	130	40
Copper and related products	416,136	5,824	601
Aluminum mill products	48,367	73	48
Builders' hardware	551,278	71,629	41,342
Other metal products	4,764,588	269,585	146,365
Total	7,012,747	347,241	188,395
Miscellaneous manufactures:			
Luggage, handbags and flat goods	87,902	39,233	18,284
Jewelry	171,255	7,826	2,944
Furniture	992,952	1,922	593
Lamps and lighting fixtures	710,267	9,567	4,929
Other miscellaneous manufactured articles	1,696,818	26,731	8,947
Total	3,659,194	85,281	35,697
Machinery and equipment:			
Air conditioning equipment	1,483,669	83,633	58,679
Household appliances, including commercial applications	1,991,196	236,287	161,257
Centrifuges, filtering and purifying equipment, and pumps for liquids	523,341	36,472	24,194
Semiconductor equipment, robots, and other equipment	4,726	0	0
Taps, cocks, valves, and similar devices	1,157,279	197,476	126,605
Electric motors generators and related equipment	2,116,739	259,840	109,398
Electrical transformers static converters and inductors	1,393,395	215,843	85,618
Powered handtools and parts thereof	366,392	60,890	33,595
Flashlights and other similar electric lights; light bulbs and fluorescent tubes; arc lights	253,011	83,158	55,497
Nonautomotive insulated electrical wire and related products	1,161,745	219,546	119,143
Miscellaneous machinery and equipment	1,261,057	356,609	104,655
Total	11,712,550	1,749,753	878,641
Transportation equipment:			
Aircraft engines and gas turbines	176,998	66,939	46,014
Motors and engines, except internal combustion, aircraft, or electric	10,363	1,386	900
Internal combustion piston engines, other than for aircraft	2,632,555	41,962	13,505
Construction and mining equipment	348,712	170	27
Forklift trucks and similar industrial vehicles	55,145	0	0
Ball and roller bearings	71,840	18,481	8,721
Certain motor-vehicle parts	5,121,209	598,681	360,942
Primary cells and batteries and electric storage batteries	453,975	71,987	22,696
Ignition starting, lighting, and other electrical equipment	988,162	85,294	39,305

See note(s) at end of table.

Table B-6—Continued

Mexico: U.S. imports for consumption, total and under the production-sharing provisions (PSP) of HTS heading 9802, by commodity groups, 2002

(1,000 dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Transportation equipment—Continued			
Rail locomotive and rolling stock	61,652	488	192
Automobiles, trucks, buses, and bodies and chassis of the foregoing	20,793,483	617,510	301,832
Aircraft, spacecraft, and related equipment, except engines	225,339	4,708	3,291
Ships, tugs, pleasure boats, and similar vessels	14,512	0	0
Miscellaneous vehicles and transportation-related equipment	152,998	1,999	1,693
Motorcycles, mopeds, and parts	10,185	595	333
Total	31,117,128	1,510,200	799,450
Electronic products:			
Office machines	99,083	41,312	14,152
Telephone and telegraph apparatus	4,209,685	161,163	65,436
Optical fibers, optical fiber bundles and cables	59,408	17,351	6,189
Microphones, loudspeakers, audio amplifiers, and combinations thereof	2,500,530	203,146	61,273
Unrecorded magnetic tapes, discs, and other media	265,092	7,975	917
Records, tapes, compact discs, computer software, and other recorded media	88,929	0	0
Radio navigational aid, radar, and remote control apparatus	342,787	17,307	2,475
Television receivers, video monitors, and combinations including television receivers	5,165,482	346,044	54,746
Television picture tubes and other cathode-ray tubes	325,451	48,365	23,512
Television apparatus (except receivers and monitors), including cameras camcorders and cable apparatus	2,363,638	17,314	10,065
Electric sound and visual signaling apparatus	271,592	13,617	5,349
Special-purpose tubes	4,335	0	0
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	3,562,312	779,473	330,367
Electrical capacitors and resistors	473,789	46,626	18,080
Semiconductor devices	900,352	100,235	49,238
Computer hardware	8,913,316	680,506	26,522
Photographic cameras and equipment	375,797	3,250	1,869
Photographic supplies	175,526	0	0
Medical goods	1,956,922	372,290	178,434
Optical goods	74,755	5,535	3,493
Drawing and mathematical calculating and measuring instruments	8,709	101	63
Watches	71,602	46,910	29,088
Measuring, testing, controlling and analyzing instruments	2,820,289	389,937	226,221
Total	35,029,378	3,298,456	1,107,489
Seats, wiring, and pumps for vehicles:			
Seats for motor vehicles and aircraft	2,696,408	20,508	12,905
Wiring harnesses for motor vehicles	4,384,409	496,819	191,949
Pumps for motor vehicles	223,625	2,927	1,003
Total	7,304,441	520,254	205,857
Special provisions	5,737,771	7	6
Grand total	134,121,175	10,671,863	5,021,164

Note.—Calculations based on unrounded data.

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

Table B-7

Caribbean Basin Economic Recovery Act beneficiaries: U.S. imports for consumption, total and under the production-sharing provisions (PSP) of HTS heading 9802, by commodity groups, 2002
(1,000 dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Agricultural products:	3,293,782	0	0
Forest products	123,647	415	271
Chemicals, coal, petroleum, natural gas, and related products:			
Fabricated plastic and rubber products	199,435	34,508	15,644
Other energy and chemical products	3,809,405	78	8
Total	4,008,840	34,586	15,652
Textiles, apparel, and footwear:			
Textiles and textile products (except apparel)	134,880	67,579	39,159
Apparel	9,576,146	1,468,282	608,321
Footwear and parts	148,188	53,223	33,087
Total	9,859,215	1,589,084	680,567
Minerals and metals:			
Steel mill products	140,018	44	2
Copper and related products	9,813	5	1
Aluminum mill products	11,040	0	0
Builders' hardware	17,286	0	0
Other metal products	478,540	3,195	2,173
Total	656,698	3,245	2,177
Miscellaneous manufactures:			
Luggage, handbags and flat goods	43,564	2,693	1,154
Jewelry	271,118	19,757	15,291
Furniture	66,475	8	8
Lamps and lighting fixtures	2,691	0	0
Other miscellaneous manufactured articles	81,082	6,441	3,606
Total	464,931	28,900	20,060
Machinery and equipment:			
Air conditioning equipment	2,104	622	555
Household appliances, including commercial applications	48,659	0	0
Centrifuges, filtering and purifying equipment, and pumps for liquids	2,782	4	3
Semiconductor equipment, robots, and other equipment	11,019	1,460	1,115
Taps, cocks, valves, and similar devices	517	0	0
Electric motors generators and related equipment	13,363	8,983	4,024
Electrical transformers static converters and inductors	47,508	7,313	4,818
Powered handtools and parts thereof	43	0	0
Flashlights and other similar electric lights; light bulbs and fluorescent tubes; arc lights	2,084	17	15
Nonautomotive insulated electrical wire and related products	12,988	2,700	1,899
Miscellaneous machinery and equipment	23,453	7,207	5,722
Total	164,519	28,306	18,151
Transportation equipment:			
Aircraft engines and gas turbines	1,192	3	1
Motors and engines, except internal combustion, aircraft, or electric	1,351	0	0
Internal combustion piston engines, other than for aircraft	1,792	12	7
Construction and mining equipment	2,821	2,352	2,322
Forklift trucks and similar industrial vehicles	0	0	0
Ball and roller bearings	44	0	0
Certain motor-vehicle parts	13,212	3,429	3,372
Primary cells and batteries and electric storage batteries	17,422	5,652	2,041
Ignition starting, lighting, and other electrical equipment ..	27,169	0	0

See note(s) at end of table.

Table B-7—Continued

Caribbean Basin Economic Recovery Act beneficiaries: U.S. imports for consumption, total and under the production-sharing provisions (PSP) of HTS heading 9802, by commodity groups, 2002

(1,000 dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
<i>Transportation equipment—Continued</i>			
Rail locomotive and rolling stock	628	0	0
Automobiles, trucks, buses, and bodies and chassis of the foregoing	115	0	0
Aircraft, spacecraft, and related equipment, except engines	1,012	21	14
Ships, tugs, pleasure boats, and similar vessels	3,251	0	0
Miscellaneous vehicles and transportation-related equipment	31	0	0
Motorcycles, mopeds, and parts	19	0	0
Total	70,058	11,468	7,757
<i>Electronic products:</i>			
Office machines	50	0	0
Telephone and telegraph apparatus	26,609	614	538
Optical fibers, optical fiber bundles and cables	1,089	0	0
Microphones, loudspeakers, audio amplifiers, and combinations thereof	2,116	0	0
Unrecorded magnetic tapes, discs, and other media	163	0	0
Records, tapes, compact discs, computer software, and other recorded media	229	0	0
Radio navigational aid, radar, and remote control apparatus	1,862	1,585	1,230
Television receivers, video monitors, and combinations including television receivers	2,591	0	0
Television picture tubes and other cathode-ray tubes	4	0	0
Television apparatus (except receivers and monitors), including cameras camcorders and cable apparatus ..	9,377	4,034	839
Electric sound and visual signaling apparatus	42,416	341	291
Special-purpose tubes	12	0	0
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	247,316	144,602	101,757
Electrical capacitors and resistors	82,790	2,774	903
Semiconductor devices	455,791	103,333	67,502
Computer hardware	121,306	450	357
Photographic cameras and equipment	959	0	0
Photographic supplies	92	0	0
Medical goods	718,674	130,290	63,670
Optical goods	7,260	3,288	2,588
Drawing and mathematical calculating and measuring instruments	171	0	0
Watches	1,240	0	0
Measuring, testing, controlling and analyzing instruments	9,588	1,045	676
Total	1,731,705	392,357	240,351
<i>Seats, wiring, and pumps for vehicles:</i>			
Seats for motor vehicles and aircraft	211	39	37
Wiring harnesses for motor vehicles	70,177	58,538	22,063
Pumps for motor vehicles	574	0	0
Total	70,962	58,577	22,100
Special provisions	810,472	0	0
Grand total	21,254,828	2,146,937	1,007,085

Note.—Calculations based on unrounded data.

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

Table B-8
U.S. imports for consumption under HTS heading 9802.00.60, by country and commodity groups, 2002

(1,000 dollars)

Commodity group	Mexico	France	Canada	Germany	U.K.	All other	Total
Steel mill products	130	23	22,021	91	0	99	22,364
Aircraft engines and gas turbines	39,717	71,605	26	0	927	308	112,583
Internal combustion piston engines, other than for aircraft	0	0	6	13,584	0	0	13,590
Certain motor-vehicle parts ...	26,342	0	413	47	0	1,913	28,715
Aircraft, spacecraft, and related equipment, except engines	0	0	10,560	0	0	43	10,602
All other	8,066	0	6,775	82	2,712	4,373	22,009
Total	74,255	71,628	39,801	13,804	3,639	6,735	209,863

Note.—Calculations based on unrounded data.

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

Table B-9
Mexico: U.S. imports for consumption under HTS heading 9802.00.90, by commodity groups, 2001 and 2002

(1,000 dollars)

Commodity group	2001	2002
Textiles, apparel, and footwear:		
Textiles and textile products (except apparel)	28,299	21,155
Apparel	2,243,159	1,542,068
Footwear and parts	1	4
Miscellaneous manufactures:		
Luggage, handbags and flat goods	26,268	8,686
Other miscellaneous manufactured articles	2	0
Total	2,297,730	1,571,912

Note.—Calculations based on unrounded data.

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

Table B-10
Duty savings from use of the production-sharing provisions of HTS heading 9802, by commodity groups, 2002

Commodity group	Total value	U.S. content	Percent dutiable	Nominal rate ¹		Effective rate ²	Duty savings
				Percent			
		1,000 dollars				1,000 dollars	
Agricultural products	1,415	670	53	4	2	23	
Forest products	51,929	31,349	40	2	1	696	
Fabricated plastic and rubber products	145,531	79,140	46	4	2	3,272	
Other energy and chemical products	14,836	7,565	49	1	(^a)	58	
Textiles and textile products (except apparel)	270,220	146,729	46	5	2	7,975	
Apparel	4,694,317	2,302,639	51	18	9	436,656	
Footwear and parts	1,082,569	100,465	91	12	11	11,761	
Steel mill products	22,408	18,014	20	1	(^a)	209	
Copper and related products	7,995	1,139	86	2	2	20	
Aluminum mill products	1,505	1,028	32	4	1	45	
Builders' hardware	72,215	41,425	43	5	2	1,902	
Other metal products	300,189	158,985	47	4	2	7,093	
Luggage, handbags and flat goods	62,983	23,185	63	15	10	3,417	
Jewelry	41,800	26,504	37	6	2	1,568	
Furniture	2,011	605	70	0	0	0	
Lamps and lighting fixtures	9,656	4,936	49	5	2	263	
Other miscellaneous manufactured articles	129,922	35,411	73	5	4	1,439	
Air conditioning equipment	85,022	59,463	30	2	(^a)	1,214	
Household appliances, including commercial applications	265,064	163,157	38	1	1	1,166	
Centrifuges, filtering and purifying equipment, and pumps for liquids	46,921	27,087	42	0	0	0	
Semiconductor equipment, robots, and other equipment	1,460	1,115	24	0	0	0	
Taps, cocks, valves, and similar devices	198,808	127,440	36	2	1	2,599	
Electric motors generators and related equipment	485,316	147,682	70	3	2	4,914	
Electrical transformers static converters and inductors	253,649	97,777	61	2	1	1,749	
Powered handtools and parts thereof	63,899	34,033	47	(^a)	(^a)	6	
Flashlights and other similar electric lights; light bulbs and fluorescent tubes; arc lights	90,277	56,675	37	2	1	1,382	
Nonautomotive insulated electrical wire and related products	224,560	122,547	45	2	1	2,973	
Miscellaneous machinery and equipment	732,764	155,651	79	3	3	2,880	
Aircraft engines and gas turbines	230,533	125,999	45	2	1	3,020	
Motors and engines, except internal combustion, aircraft, or electric	1,479	949	36	0	0	0	
Internal combustion piston engines, other than for aircraft	872,937	80,354	91	2	2	1,913	

See note(s) at end of table.

Table B-10—Continued
Duty savings from use of the production-sharing provisions of HTS heading 9802, by commodity groups, 2002

Commodity group	Total value	U.S. content	Percent dutiable	Nominal rate ¹	Effective rate ²	Duty savings
Construction and mining equipment	46,951	6,377	86	0	0	0
Ball and roller bearings	19,937	9,049	55	7	3	773
Certain motor-vehicle parts	1,134,665	390,878	66	3	2	9,772
Primary cells and batteries and electric storage batteries	171,900	36,641	79	3	2	919
Ignition starting, lighting, and other electrical equipment	96,152	41,858	56	2	1	1,009
Rail locomotive and rolling stock	75,307	11,578	85	3	3	414
Automobiles, trucks, buses, and bodies and chassis of the foregoing	35,136,571	1,112,820	97	3	2	38,932
Aircraft, spacecraft, and related equipment, except engines	18,769	13,296	29	0	0	0
Ships, tugs, pleasure boats, and similar vessels	259,878	51,292	80	1	1	767
Miscellaneous vehicles and transportation-related equipment	6,355	2,417	62	(³)	(³)	(⁴)
Motorcycles, mopeds, and parts	595	333	44	0	0	0
Office machines	51,587	15,818	69	1	1	253
Telephone and telegraph apparatus	203,541	74,203	64	(³)	(³)	2
Optical fibers, optical fiber bundles and cables	17,956	6,671	63	(³)	(³)	2
Microphones, loudspeakers, audio amplifiers, and combinations thereof	213,287	62,440	71	5	3	2,983
Unrecorded magnetic tapes, discs, and other media	17,174	1,996	88	0	0	0
Records, tapes, compact discs, computer software, and other recorded media	45	27	39	0	0	0
Radio navigational aid, radar, and remote control apparatus	22,708	5,877	74	3	3	71
Television receivers, video monitors, and combinations including television receivers	351,196	57,815	84	4	4	2,260
Television picture tubes and other cathode-ray tubes	48,428	23,570	51	1	(³)	331
Television apparatus (except receivers and monitors), including cameras camcorders and cable apparatus	25,476	13,167	48	2	1	255
Electric sound and visual signaling apparatus	16,273	5,982	63	1	1	70
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	1,009,262	464,761	54	2	1	10,602
Electrical capacitors and resistors	53,606	20,789	61	(³)	(³)	40

See note(s) at end of table.

Table B-10—Continued
Duty savings from use of the production-sharing provisions of HTS heading 9802, by commodity groups, 2002

Commodity group	Total value — 1,000 dollars	U.S. content	Percent dutiable	Nominal rate ¹ Percent	Effective rate ²	Duty savings 1,000 dollars
Semiconductor devices	1,976,551	1,060,601	46	0	0	0
Computer hardware	745,051	54,029	93	0	0	0
Photographic cameras and equipment	3,314	1,895	43	(3)	(3)	1
Photographic supplies	144,266	76,008	47	4	2	2,808
Medical goods	513,875	245,801	52	(3)	(3)	27
Optical goods	15,686	6,642	58	3	2	224
Drawing and mathematical calculating and measuring instruments	180	67	63	4	3	2
Watches	48,707	29,626	39	10	4	2,925
Measuring, testing, controlling and analyzing instruments	438,827	244,954	44	1	1	3,632
Seats for motor vehicles and aircraft	20,577	12,965	37	0	0	0
Wiring harnesses for motor vehicles	703,880	246,479	65	5	3	12,324
Pumps for motor vehicles	17,659	3,791	79	3	2	95
Special Provisions	212	112	47	0	0	0
Total	54,090,597	8,592,345	84	4	3	591,705

¹ Trade-weighted average rate of duty applicable to the products imported under HTS 9802.00.80 for each monitoring group. This is the rate that is applied to the dutiable portion of such imports.

² Trade-weighted average rate of duty after accounting for the duty-free U.S.-origin content of imports under provision 9802.00.80.

³ Less than 0.5 percent.

⁴ Less than \$500.

Note.—Calculations based on unrounded data.

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

Table B-11

U.S. imports under the production-sharing provisions of HTS heading 9802 for all countries, by North American Industry Classification System (NAICS) code, 2001 and 2002

(Million dollars)

NAICS code	Description	2001		2002	
		Total	U.S. content	Total	U.S. content
11199	All other agricultural products	()	()	()	()
11251	Farmed fish and related products	()	()	0	0
11411	Fish, fresh, chilled or frozen and other marine products	1	()	()	()
21232	Sand, gravel, clay and refractory minerals	()	()	()	()
21239	Other nonmetallic minerals	0	0	0	0
31122	Starch and vegetable fats and oils	0	0	0	0
31134	Nonchocolate confectionery products	()	()	0	0
31142	Fruits and vegetables	2	()	0	0
31171	Seafood products, prepared, canned and packaged	()	()	0	0
31192	Coffee and tea	()	()	0	0
31311	Fibers, yarns, and threads	()	()	0	0
31321	Broadwoven fabrics	1	()	1	()
31322	Narrow fabrics	3	1	4	3
31323	Nonwoven fabrics	()	()	()	()
31324	Knit fabrics and lace	1	()	1	()
31331	Textile and fabric finishing mill products	()	()	0	0
31332	Coated fabrics	55	19	42	13
31411	Carpets and rugs	1	1	1	1
31412	Curtains and linens	50	32	49	30
31491	Textile bags and canvas	28	7	20	5
31499	All other textile products	100	60	75	46
31511	Hosiery and socks	402	353	382	333
31522	Men's and boys' apparel	4,977	2,972	3,249	1,901
31523	Women's and girls' apparel	4,522	2,387	3,219	1,665
31529	Other apparel	173	85	92	31
31599	Apparel accessories	267	207	154	116
31611	Leather and hide tanning	()	()	()	()
31621	Footwear	1,408	144	1,041	73
31699	Other leather products	139	82	97	50
32111	Sawmill and wood products	0	0	()	()
32121	Veneer, plywood, and engineered wood products	()	()	2	1
32191	Millwork	1	()	1	()
32192	Wood containers and pallets	()	()	()	()
32199	All other wood products	()	()	()	()
32221	Paperboard containers	1	1	()	()
32222	Paper bags and coated and treated paper	10	4	10	7
32229	Other converted paper products	32	17	28	15
32311	Print and stationery articles	11	6	3	2
32513	Synthetic dyes and pigments	()	()	0	0
32518	Other basic inorganic chemicals	()	()	()	()
32519	Other basic organic chemicals	()	()	()	()
32521	Resin and synthetic rubbers	()	()	()	()
32522	Artificial and synthetic fibers and filaments	()	()	()	()
32541	Pharmaceuticals and medicines	()	()	()	()
32551	Paints and coatings	()	()	()	()
32561	Soaps and cleaning compounds	1	()	1	()
32562	Perfumes, makeups and other toiletries	13	4	()	()
32592	Explosives and accessories	9	6	8	4
32599	All other chemical products and preparations	54	27	145	77
32611	Plastics, films, sheets and bags	1	1	8	3
32612	Plastics pipes, pipe fittings, and profile shapes	3	1	1	()
32616	Plastics bottles	15	3	12	3
32619	Other plastics products	104	54	86	45
32622	Rubber and plastics hoses and belting	22	19	26	21
32629	Other rubber products	13	3	10	2
32711	Pottery, ceramics and plumbing fixtures	93	14	67	12
32721	Glass and glass products	46	22	40	16
32791	Abrasive products	3	1	()	()
32799	All other nonmetallic mineral products	4	3	3	3
33111	Iron and steel and ferroalloy	18	14	25	20
33122	Rolling and drawing of purchased steel	1	()	1	()
33131	Alumina and aluminum and processing	2	1	2	1
33141	Nonferrous metal (except aluminum) smelting and refining	()	()	1	1

See note(s) at end of table.

Table B-11—Continued

U.S. imports under the production-sharing provisions of HTS heading 9802 for all countries, by North American Industry Classification System (NAICS) code, 2001 and 2002

(Million dollars)

NAICS code	Description	2001		2002	
		Total	U.S. content	Total	U.S. content
33142	Copper rolling, drawing, extruding, and alloying	(¹)	(¹)	1	(¹)
33149	Nonferrous metals (except copper and aluminum) rolling, drawing, extruding, and alloying	25	11	2	1
33151	Ferrous metal foundries	2	1	3	2
33211	Crowns, closures, seals and other packing accessories	0	0	(¹)	(¹)
33221	Cutlery and handtools	21	12	13	8
33231	Plate work and fabricated structural products	22	11	19	9
33232	Ornamental and architectural metal products	9	4	10	4
33241	Power boilers and heat exchangers	1	1	34	5
33242	Metal tanks (heavy gauge)	2	1	(¹)	(¹)
33243	Metal cans, boxes, and other metal containers (light gauge)	0	0	(¹)	(¹)
33251	Hardware	153	108	153	106
33261	Springs and wire products	2	2	1	1
33272	Bolts, nuts, screws, rivets, washers and other turned products	8	3	3	1
33291	Metal valves	222	154	205	129
33299	Other fabricated metal products	79	44	56	29
33311	Agricultural implements	65	45	68	40
33312	Construction machinery	241	74	237	70
33313	Mining and oil and gas field machinery	15	4	4	1
33321	Sawmill and woodworking machinery	12	3	12	4
33322	Plastics and rubber industry machinery	(¹)	(¹)	1	(¹)
33329	Other industrial machinery	15	3	2	1
33331	Commercial and service industry machinery	81	26	59	21
33341	Ventilation, heating, air-conditioning, and commercial refrigeration equipment	67	35	42	18
33351	Metalworking machinery	146	37	75	13
33361	Engines, turbines and power transmission equipment	791	437	760	237
33391	Pumps and compressors	66	53	73	54
33392	Material handling equipment	28	9	35	11
33399	Other general purpose machinery	135	55	51	31
33411	Computer equipment	776	38	660	14
33421	Telephone apparatus	210	131	95	61
33422	Radio and television broadcasting and wireless communications equipment	42	23	23	12
33429	Other communications equipment	59	2	14	2
33431	Audio and video equipment	906	227	510	118
33441	Semiconductors and other electronic components	3,969	1,982	2,902	1,375
33451	Navigational, measuring, electromedical, and control instruments	630	344	530	289
33461	Magnetic and optical media	20	3	17	2
33511	Electric lamp bulbs and parts	102	64	90	57
33512	Lighting fixtures	23	11	10	5
33521	Small electrical appliances	237	137	214	141
33522	Major appliances	191	56	172	51
33531	Electrical equipment	1,324	545	890	374
33591	Batteries	264	54	162	32
33592	Communication and energy wires and cables	320	177	242	129
33593	Wiring devices	293	148	224	106
33599	Electrical equipment and components, nesoi	97	35	53	23
33611	Automobiles and light duty motor vehicles, including chassis	34,359	711	34,331	781
33612	Heavy duty trucks and chassis	627	192	783	318
33621	Motor vehicle bodies and trailers	2	(¹)	2	2
33631	Motor vehicle gasoline engines and engine parts	577	19	675	19

See note(s) at end of table.

Table B-11—Continued

U.S. imports under the production-sharing provisions of HTS heading 9802 for all countries, by North American Industry Classification System (NAICS) code, 2001 and 2002

(Million dollars)

NAICS code	Description	2001		2002	
		Total	U.S. content	Total	U.S. content
33632	Motor vehicle electrical and electronic equipment	850	307	800	288
33633	Motor vehicle steering and suspension components (except spring)	3	2	2	1
33634	Motor vehicle brake systems	35	24	8	5
33635	Motor vehicle transmission and power train parts	539	21	491	8
33636	Motor vehicle seating and interior trim	420	315	275	183
33639	Motor vehicle parts, nesoi	480	286	393	212
33641	Aerospace products and parts	121	42	25	16
33651	Railroad rolling stock	93	11	72	10
33661	Ships and boats	324	63	260	51
33699	Transportation equipment, nesoi	59	9	33	7
33712	Household and institutional furniture	10	3	2	1
33721	Office furniture (including fixtures)	(¹)	(¹)	(¹)	(¹)
33792	Blinds and shades	47	31	44	29
33911	Medical equipment and supplies	702	365	529	259
33991	Jewelry and silverware	56	31	42	27
33992	Sporting and athletic goods	53	12	34	9
33993	Dolls, toys, and games	11	2	31	9
33994	Office supplies (except paper)	3	2	3	1
33995	Signs	(¹)	(¹)	(¹)	(¹)
33999	Other manufactured commodities	79	37	14	6
91000	Waste and scrap	1	1	1	(¹)
92000	Used or second-hand merchandise	0	0	(¹)	(¹)
98000	Goods returned to Canada (exports only); U.S. goods returned and reimported items (imports only)	(¹)	(¹)	(¹)	(¹)
99000	Special classification provisions, nesoi	(¹)	(¹)	(¹)	(¹)
	Total	63,709	14,153	56,485	10,332

¹ Less than \$500,000.

Note.—Calculations based on unrounded data.

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

APPENDIX C

Selected Statistical Tables (C-1 to C-7) for Trade under Mexico's Production-Sharing Provisions (Temporary Import Programs)

Table C-1

Mexico's exports to the United States¹ under Temporary Import Programs (TIPs) (Maquiladora and Program for Temporary Importation to Manufacture Exported Products (PITEX)), by leading product sectors, 1999-2002

Products sectors (HS range)	Exports under TIPs				Total exports to the U.S. In 2002	TIP share of total exports to the United States
	1999	2000	2001	2002		Percent
	Million dollars					
Motor Vehicles ²	15,798	19,344	19,427	18,761	18,805	100
Certain motor-vehicle parts ³	10,611	11,933	11,795	12,832	13,501	95
Apparel and other textile articles (61-63,65)	7,843	8,648	7,962	7,888	8,114	97
Color television receivers and parts (8528.12, 8529.90, 8540.11, 8540.91)	6,892	7,859	7,756	7,977	7,983	100
Radio transmission and reception apparatus (8525, 8527, and 8529 (pt))	5,324	7,749	7,728	6,521	6,585	99
Computers ⁴ (8471)	5,701	7,186	8,685	8,294	8,380	99
Electrical circuit apparatus (8534, 8535, 8536, 8537, 8538)	3,358	4,898	4,235	4,861	4,966	98
Measuring testing, and controlling instruments (9024, 9025, 9027, 9028, 9029, 9030, 9031, 9032, 9033 (pt))	1,314	1,588	1,833	1,871	1,922	97
Major household appliances (8418, 8422.11, 8422.19, 8450, 8451)	434	454	769	916	929	99
All other	47,749	57,135	51,096	50,014	71,454	70
Total	105,024	126,794	121,286	119,935	142,639	84

¹ Official Mexican statistics on Mexico's exports to the United States in 2002 were valued 6-percent larger than official U.S. statistics on U.S. imports from Mexico. Much of the difference in the reported trade levels can be attributed to maquiladora shipments to U.S. distribution centers that are later re-exported to global markets. Significant discrepancies between U.S. and Mexican data on an individual product basis can be caused by differences in classification.

² Covers HS numbers 8701.20, 8702, 8703.22 to 8703.90, 8704.21 to 8704.90, 8706.00.03, 8706.00.05, 8706.00.15.20, 8707.10.00.20, 8707.90.50.20, 8707.90.50.40, and 8707.90.50.60.

³ The products covered in the "certain motor-vehicle parts" sector include body stampings, engines and parts, bumpers, brakes and parts, gear boxes, axles, wheels, shock absorbers, radiators, exhaust systems, clutches, steering wheels, wiring harnesses, car seats and parts, and miscellaneous parts and accessories; these products include HS numbers 8407, 8408, 8409, 8544.30, 8708, 9401.20. In the tables in appendix B, however, the category "certain motor-vehicle parts" does not include engines, wiring harnesses, or seats and parts.

⁴ Includes related computer equipment, such as monitors, and other display units, keyboards, printers, magnetic and optical readers, and disk drives and other storage units.

Source: Compiled from "World Trade Atlas: Mexico Edition, December 2000," which used data provided by INEGI, the statistical agency of the Government of Mexico.

Table C-2

Mexico's imports (Maquiladora Program and Program for Temporary Importation to Manufacture Exported Products (PITEX), and other), from the United States, 2002

(Million U.S. dollars)

HS No.	HS categories	Mexico's imports from the United States				U.S. exports to Mexico: General
		Maqui-ladora	PITEX	Other	Total	
01	Live animals	0	0	151	151	140
02	Meat and edible offal	2	78	1,456	1,536	1,133
03	Fish and seafood	2	0	25	27	45
04	Dairy produce; eggs; honey; edible animal products ..	1	1	236	238	183
05	Other products of animal origin	4	0	84	88	239
06	Live trees & plants; cut flowers & ornamental foliage ..	3	0	26	29	22
07	Edible vegetables and certain roots and tubers	1	3	181	185	130
08	Edible fruit and nuts; peel of citrus fruit or melons	10	1	342	353	259
09	Coffee, tea, mate and spices	0	2	17	19	12
10	Cereals	0	3	1,609	1,612	1,609
11	Milling products; malt; starches; inulin; wheat gluten ..	3	10	316	329	268
12	Oil seeds & oleaginous fruits; misc. grains, seeds, & fruits; industrial or medicinal plants; straw & fodder	2	0	1,079	1,081	1,117
13	Lac; gums; resins & other vegetable saps & extracts ..	0	0	32	32	32
14	Vegetable plaiting materials & veg. products, nesoi ...	0	0	1	1	3
15	Animal or vegetable fats, oils, & waxes; edible fats ...	2	4	384	390	460
16	Edible preparations of meat, fish, or seafood	0	0	131	131	94
17	Sugars and sugar confectionery	27	4	75	106	65
18	Cocoa and cocoa preparations	3	2	97	102	87
19	Preparations of cereals, flour, starch, or milk	0	0	214	214	128
20	Preparations of vegetables, fruit, nuts, parts of plants	4	0	222	226	148
21	Miscellaneous edible preparations	7	5	550	562	437
22	Beverages, spirits, and vinegar	1	0	167	168	169
23	Residues, waste of the food industries; animal feed ..	0	1	411	412	306
24	Tobacco and manufactured tobacco substitutes	2	0	4	6	15
25	Salt; sulfur; earths & stone; plaster, lime, and cement	23	27	117	167	101
26	Ores, slag and ash	2	68	17	87	132
27	Mineral fuels, oils, waxes; bituminous substances	31	331	2,941	3,303	3,280
28	Inorganic chemicals; compounds of precious metals, rare-earth metals, or radioactive elements or isotopes	38	198	311	547	469
29	Organic chemicals	48	479	1,376	1,903	1,929
30	Pharmaceutical products	58	8	320	386	375
31	Fertilizers	1	2	204	207	196
32	Tanning or dyeing extracts; tannins; dyes, pigments, other coloring matter; paints & varnishes; putty; inks	178	62	438	678	485
33	Essential oils; perfume; cosmetic/ toilet preparations	19	13	348	380	393
34	Soap; lubricating products; waxes; polishing/scouring products; candles; modeling pastes; dental plaster	46	15	244	305	205
35	Albumoidal substances; starches; glues; enzymes ...	65	26	146	237	181
36	Explosives; fireworks; matches; combustible prep	98	0	15	113	63
37	Photographic or cinematographic goods	45	188	228	461	553
38	Miscellaneous chemical products	274	190	766	1,230	760
39	Plastics and articles thereof	4,972	967	2,978	8,917	6,689
40	Rubber and articles thereof	585	386	801	1,772	1,156
41	Raw hides and skins (other than furskins) and leather	259	141	175	575	399

Table C-2—Continued

Mexico's imports (Maquiladora Program and Program for Temporary Importation to Manufacture Exported Products (PITEX), and other), from the United States, 2002

(Million U.S. dollars)

HS No.	HS categories	Mexico's imports from the United States				U.S. exports to Mexico: General
		Maqui-ladora	PITEX	Other	Total	
42	Leather articles; saddlery; travel goods; handbags	117	21	20	158	74
43	Furskins and artificial fur; manufactures thereof	1	0	1	2	2
44	Wood and articles of wood; wood charcoal	255	50	207	512	417
45	Cork and articles of cork	2	0	2	4	3
46	Manufactures of straw; basketware and wickerwork . . .	0	0	1	1	1
47	Wood pulp; waste and scrap paper and paperboard . .	2	9	454	465	472
48	Paper & paperboard; articles of pulp, paper, paperbd	1,201	368	1,158	2,727	2,079
49	Printed products, including books, newspapers, plans	180	15	216	411	281
50	Silk, including yarns and woven fabrics thereof	0	0	1	1	2
51	Wool & animal hair, yarns & woven fabrics thereof	18	15	6	39	20
52	Cotton, including yarns and woven fabrics thereof	609	148	518	1,275	1,037
53	Other vegetable textile fibers; yarns and fabrics of such vegetable fibers and paper	1	0	1	2	2
54	Manmade filaments, including yarns & woven fabrics	454	122	199	775	683
55	Manmade staple fibers, incl. yarns & woven fabrics . . .	335	83	163	581	317
56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof	208	32	106	346	281
57	Carpets and other textile floor coverings	52	59	39	150	99
58	Special woven fabrics; tufted textile fabrics; ace; tapestries; trimmings; embroidery	467	60	25	552	266
59	Impregnated, coated, covered or laminated textile fabrics; textile articles suitable for industrial use	438	41	75	554	472
60	Knitted or crocheted fabrics	248	99	51	398	332
61	Knitted or crocheted apparel	1,096	153	143	1,392	1,041
62	Woven apparel	645	112	130	887	794
63	Other textile articles; needlecraft; used clothing	94	7	60	161	107
64	Footwear and parts	43	2	10	55	107
65	Headgear and parts	6	0	7	13	11
66	Umbrellas, walking sticks, whips, and riding crops . . .	0	0	2	2	2
67	Articles of feathers and down; artificial flowers; articles of human hair	0	0	2	2	7
68	Articles of stone, plaster, cement, asbestos, or mica . .	69	15	121	205	139
69	Ceramic products	33	37	65	135	172
70	Glass and glassware	296	160	196	652	516
71	Natural or cultured pearls; precious or semiprecious stones; precious-metal and imitation jewelry; coin . .	196	34	258	488	517
72	Iron and steel	462	409	601	1,472	1,098
73	Articles of iron or steel	1,947	479	681	3,107	1,750
74	Copper and articles thereof	639	157	96	892	585
75	Nickel and articles thereof	20	35	9	64	87
76	Aluminum and articles thereof	790	167	566	1,523	1,096
78	Lead and articles thereof	9	1	12	22	19
79	Zinc and articles thereof	35	1	6	42	36
80	Tin and articles thereof	9	3	10	22	10
81	Other articles of base metals; cermets; articles thereof	237	7	15	259	83

Table C-2—Continued
Mexico's imports (Maquiladora Program and Program for Temporary Importation to Manufacture Exported Products (PITEX), and other), from the United States, 2002

(Million U.S. dollars)

HS No.	HS categories	Mexico's imports from the United States				U.S. exports to Mexico: General
		Maquiladora	PITEX	Other	Total	
82	Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal	49	16	373	438	286
83	Miscellaneous articles of base metal	637	305	214	1,156	805
84	Machinery and mechanical appliances, including nuclear reactors, boilers, computer hardware, & parts	2,906	4,195	7,838	14,939	14,860
85	Electrical machinery & equipment; sound recorders & reproducers; television equip.; parts & accessories	17,029	2,149	4,219	23,397	21,902
86	Railway locomotives, rolling stock, track fixtures and parts; traffic signaling equipment	37	48	37	122	108
87	Other vehicles, incl. automobiles, trucks, buses, parts	1,146	4,995	5,379	11,520	10,696
88	Aircraft, spacecraft, and parts thereof	10	6	105	121	468
89	Ships, boats and floating structures	0	6	22	28	84
90	Optical, photographic, cinematographic, measuring, checking, precision, or medical instruments, & parts	1,449	633	1,244	3,326	3,438
91	Clocks and watches and parts thereof	14	0	20	34	50
92	Musical instruments; parts and accessories thereof . .	9	0	8	17	20
93	Arms and ammunition; parts and accessories thereof	0	1	10	11	3
94	Furniture; bedding, mattresses, & cushions; lamps & lighting fittings; illuminated signs; prefab buildings . .	252	332	423	1,007	1,091
95	Toys, games & sports equip.; parts & accessories	103	36	134	273	278
96	Miscellaneous manufactured articles	206	20	101	327	223
97	Works of art, collectors' pieces and antiques	0	0	3	3	14
	Total	41,877	18,858	45,598	106,333	93,810
	Other	85	29	104	218	3,721
	Grand total	41,962	18,887	45,702	106,551	97,531

Source: Compiled from "World Trade Atlas: Mexico Edition, December 2002," which used data provided by INEGI, the statistical agency of the Government of Mexico.

Table C-3

Mexico's imports (Maquiladora Program and Program for Temporary Importation to Manufacture Exported Products (PITEX), and other), from all countries except the United States, 2002

(Million U.S. dollars)

HS No.	HS categories	Maqui- ladora	PITEX	Other	Total
01	Live animals	0	0	75	75
02	Meat and edible offal	1	8	354	363
03	Fish and seafood	0	0	91	91
04	Dairy produce; eggs; honey; edible animal products	11	20	386	417
05	Other products of animal origin	0	2	17	19
06	Live trees & plants; cut flowers & ornamental foliage	0	0	20	20
07	Edible vegetables and certain roots and tubers	0	2	39	41
08	Edible fruit and nuts; peel of citrus fruit or melons	0	7	146	153
09	Coffee, tea, mate and spices	0	3	57	60
10	Cereals	0	0	147	147
11	Milling products; malt; starches; inulin; wheat gluten	0	0	33	33
12	Oil seeds & oleaginous fruits; misc. grains, seeds, & fruits; industrial or medicinal plants; straw & fodder	1	0	345	346
13	Lac; gums; resins & other vegetable saps & extracts	1	3	34	38
14	Vegetable plaiting materials & veg. products, nesoi	0	5	11	16
15	Animal or vegetable fats, oils, & waxes; edible fats	0	3	149	152
16	Edible preparations of meat, fish, or seafood	0	0	31	31
17	Sugars and sugar confectionery	0	0	32	32
18	Cocoa and cocoa preparations	1	1	83	85
19	Preparations of cereals, flour, starch, or milk	0	1	171	172
20	Preparations of vegetables, fruit, nuts, parts of plants	0	0	94	94
21	Miscellaneous edible preparations	0	9	70	79
22	Beverages, spirits, and vinegar	0	0	198	198
23	Residues, waste of the food industries; animal feed	0	0	51	51
24	Tobacco and manufactured tobacco substitutes	0	5	48	53
25	Salt; sulfur; earths & stone; plaster, lime, and cement	36	41	60	137
26	Ores, slag and ash	0	287	31	318
27	Mineral fuels, oils, waxes; bituminous substances	3	89	1,057	1,149
28	Inorganic chemicals; compounds of precious metals, rare- earth metals, or radioactive elements or isotopes	30	42	134	206
29	Organic chemicals	3	250	1,559	1,812
30	Pharmaceutical products	0	17	1,060	1,077
31	Fertilizers	0	4	221	225
32	Tanning or dyeing extracts; tannins; dyes, pigments, other coloring matter; paints & varnishes; putty; inks	28	15	270	313
33	Essential oils; perfume; cosmetic/ toilet preparations	1	4	450	455
34	Soap; lubricating products; waxes; polishing/scouring products; candles; modeling pastes; dental plaster	5	5	83	93
35	Albumoidal substances; starches; glues; enzymes	10	5	115	130
36	Explosives; fireworks; matches; combustible prep	12	1	7	20
37	Photographic or cinematographic goods	119	11	92	222
38	Miscellaneous chemical products	13	20	452	485
39	Plastics and articles thereof	513	164	941	1,618
40	Rubber and articles thereof	55	105	575	735
41	Raw hides and skins (other than furskins) and leather	161	56	78	295
42	Leather articles; saddlery; travel goods; handbags	51	6	175	232

Table C-3—Continued

Mexico's imports (Maquiladora Program and Program for Temporary Importation to Manufacture Exported Products (PITEX), and other), from all countries except the United States, 2002

(Million U.S. dollars)

HS No.	HS categories	Maqui- ladora	PITEX	Other	Total
43	Furskins and artificial fur; manufactures thereof	0	1	2	3
44	Wood and articles of wood; wood charcoal	40	45	354	439
45	Cork and articles of cork	1	1	4	6
46	Manufactures of straw; basketware and wickerwork	0	0	4	4
47	Wood pulp; waste and scrap paper and paperboard	1	0	92	93
48	Paper & paperboard; articles of pulp, paper, paperbd	102	16	474	592
49	Printed products, including books, newspapers, plans	38	2	320	360
50	Silk, including yarns and woven fabrics thereof	1	1	5	7
51	Wool & animal hair, yarns & woven fabrics thereof	5	33	45	83
52	Cotton, including yarns and woven fabrics thereof	93	80	94	267
53	Other vegetable textile fibers; yarns and fabrics of such vegetable fibers and paper	0	5	7	12
54	Manmade filaments, including yarns & woven fabrics	49	166	147	362
55	Manmade staple fibers, incl. yarns & woven fabrics	27	73	91	191
56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof	6	7	42	55
57	Carpets and other textile floor coverings	0	2	21	23
58	Special woven fabrics; tufted textile fabrics; ace; tapestries; trimmings; embroidery	24	17	38	79
59	Impregnated, coated, covered or laminated textile fabrics; textile articles suitable for industrial use	19	17	59	95
60	Knitted or crocheted fabrics	47	36	57	140
61	Knitted or crocheted apparel	20	16	361	397
62	Woven apparel	61	31	431	523
63	Other textile articles; needlecraft; used clothing	9	3	48	60
64	Footwear and parts	5	1	277	283
65	Headgear and parts	1	1	28	30
66	Umbrellas, walking sticks, whips, and riding crops	0	0	13	13
67	Articles of feathers and down; artificial flowers; articles of human hair	1	1	25	27
68	Articles of stone, plaster, cement, asbestos, or mica	7	11	72	90
69	Ceramic products	9	22	199	230
70	Glass and glassware	200	25	175	400
71	Natural or cultured pearls; precious or semiprecious stones; precious-metal and imitation jewelry; coin	52	43	134	229
72	Iron and steel	82	768	881	1,731
73	Articles of iron or steel	312	173	539	1,024
74	Copper and articles thereof	41	32	237	310
75	Nickel and articles thereof	6	2	16	24
76	Aluminum and articles thereof	51	153	308	512
78	Lead and articles thereof	2	0	11	13
79	Zinc and articles thereof	1	0	8	9
80	Tin and articles thereof	3	1	2	6
81	Other articles of base metals; cermets; articles thereof	6	2	11	19
82	Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal	4	12	334	350
83	Miscellaneous articles of base metal	56	72	170	298

Table C-3—Continued

Mexico's imports (Maquiladora Program and Program for Temporary Importation to Manufacture Exported Products (PITEX), and other), from all countries except the United States, 2002

(Million U.S. dollars)

HS No.	HS categories	Maquiladora	PITEX	Other	Total
84	Machinery and mechanical appliances, including nuclear reactors, boilers, computer hardware, & parts	4,041	2,039	6,979	13,059
85	Electrical machinery & equipment; sound recorders & reproducers; television equip.; parts & accessories	9,580	2,258	4,461	16,299
86	Railway locomotives, rolling stock, track fixtures and parts; traffic signaling equipment	77	1	11	89
87	Other vehicles, incl. automobiles, trucks, buses, parts	66	1,425	5,415	6,906
88	Aircraft, spacecraft, and parts thereof	1	4	56	61
89	Ships, boats and floating structures	0	0	7	7
90	Optical, photographic, cinematographic, measuring, checking, precision, or medical instruments, & parts	365	257	989	1,611
91	Clocks and watches and parts thereof	5	3	152	160
92	Musical instruments; parts and accessories thereof	1	1	42	44
93	Arms and ammunition; parts and accessories thereof	0	0	26	26
94	Furniture; bedding, mattresses, & cushions; lamps & lighting fittings; illuminated signs; prefab buildings	38	24	392	454
95	Toys, games & sports equip.; parts & accessories	83	12	492	587
96	Miscellaneous manufactured articles	41	7	159	207
97	Works of art, collectors' pieces and antiques	0	1	6	7
	Total	16,735	9,094	35,365	61,194
	Other	597	136	198	931
	Grand total	17,332	9,230	35,563	62,125

Source: Compiled from "World Trade Atlas: Mexico Edition, December 2002," which used data provided by INEGI, the statistical agency of the Government of Mexico.

Table C-4

Total imports into Mexico under Temporary Import Programs (Maquiladora and Program for Temporary Importation to Manufacture Exported Products), by leading sources, 1999-2002

Source	1999	2000	2001	2002	Percentage of total in 2002
	<i>Million dollars</i>				
United States	65,221	78,933	65,511	60,849	70
Japan	2,637	3,581	5,214	6,066	7
Taiwan	837	1,116	2,068	3,282	4
China	741	1,084	1,744	3,192	4
Korea, South	2,004	2,671	2,321	2,464	3
Malaysia	692	950	1,559	1,546	2
Singapore	317	341	812	1,161	1
Thailand	239	344	416	593	1
Philippines	317	523	732	815	1
Canada	908	1,409	1,394	1,306	1
All other	5,554	6,728	6,119	6,140	7
Total	79,467	97,680	87,890	87,414	100

Source: Compiled from "World Trade Atlas: Mexico Edition, December 2002," which used data provided by INEGI, the statistical agency of the Government of Mexico.

Table C-5

Mexico's exports (Maquiladora Program and Program for Temporary Importation to Manufacture Exported Products (PITEX), and other), to the United States, 2002

(Million U.S. dollars)

HS No.	HS categories	Mexico's exports to the United States				U.S. imports from Mexico: General
		Maqui- ladora	PITEX	Other	Total	
01	Live animals	0	0	352	352	303
02	Meat and edible offal	0	58	97	155	16
03	Fish and seafood	12	36	358	406	344
04	Dairy produce; eggs; honey; edible animal products	0	8	21	29	32
05	Other products of animal origin	2	2	3	7	19
06	Live trees & plants; cut flowers & ornamental foliage	0	13	27	40	43
07	Edible vegetables and certain roots and tubers	45	1,146	953	2,144	1,799
08	Edible fruit and nuts; peel of citrus fruit or melons	0	303	388	691	769
09	Coffee, tea, mate and spices	0	29	122	151	183
10	Cereals	0	0	21	21	4
11	Milling products; malt; starches; inulin; wheat gluten	0	2	6	8	9
12	Oil seeds & oleaginous fruits; misc. grains, seeds, & fruits; industrial or medicinal plants; straw & fodder	0	5	41	46	28
13	Lac; gums; resins & other vegetable saps & extracts	0	13	7	20	32
14	Vegetable plaiting materials & veg. products, nesoi ..	0	0	15	15	22
15	Animal or vegetable fats, oils, & waxes; edible fats ..	1	0	24	25	22
16	Edible preparations of meat, fish, or seafood	10	22	49	81	41
17	Sugars and sugar confectionery	66	62	110	238	273
18	Cocoa and cocoa preparations	17	26	22	65	60
19	Preparations of cereals, flour, starch, or milk	8	62	143	213	206
20	Preparations of vegetables, fruit, nuts, parts of plants	37	47	175	259	295
21	Miscellaneous edible preparations	17	33	167	217	173
22	Beverages, spirits, and vinegar	126	1,052	472	1,650	1,615
23	Residues, waste of the food industries; animal feed	2	0	18	20	11
24	Tobacco and manufactured tobacco substitutes	0	2	32	34	21
25	Salt; sulfur; earths & stone; plaster, lime, and cement	0	7	200	207	178
26	Ores, slag and ash	0	19	11	30	42
27	Mineral fuels, oils, waxes; bituminous substances ...	0	1	11,112	11,113	11,566
28	Inorganic chemicals; compounds of precious metals, rare-earth metals, or radioactive elements or isotopes	47	122	88	257	242
29	Organic chemicals	8	119	155	282	575
30	Pharmaceutical products	89	27	39	155	176
31	Fertilizers	0	9	3	12	11
32	Tanning or dyeing extracts; tannins; dyes, pigments, other coloring matter; paints & varnishes; putty; inks	132	25	87	244	119
33	Essential oils; perfume; cosmetic/ toilet preparations	40	42	111	193	81
34	Soap; lubricating products; waxes; polishing/ scouring products; candles; modeling pastes; dental plaster	30	50	242	322	242
35	Albumoidal substances; starches; glues; enzymes ..	3	3	15	21	13
36	Explosives; fireworks; matches; combustible prep ...	15	0	12	27	26
37	Photographic or cinematographic goods	26	180	7	213	177
38	Miscellaneous chemical products	62	64	91	217	177
39	Plastics and articles thereof	1,460	494	444	2,398	1,332
40	Rubber and articles thereof	239	156	233	628	609
41	Raw hides and skins (other than furskins) and leather	121	32	22	175	60

Table C-5—Continued

Mexico's exports (Maquiladora Program and Program for Temporary Importation to Manufacture Exported Products (PITEX), and other), to the United States, 2002

(Million U.S. dollars)

HS No.	HS categories	Mexico's exports to the United States				U.S. imports from Mexico: General
		Maqui- ladora	PITEX	Other	Total	
42	Leather articles; saddlery; travel goods; handbags . . .	100	44	24	168	154
43	Furskins and artificial fur; manufactures thereof	0	0	1	1	1
44	Wood and articles of wood; wood charcoal	181	85	81	347	296
45	Cork and articles of cork	3	0	0	3	1
46	Manufactures of straw; basketware and wickerwork . .	0	0	2	2	1
47	Wood pulp; waste and scrap paper and paperboard	20	1	4	25	5
48	Paper & paperboard; articles of pulp, paper, paperbd	375	130	274	779	572
49	Printed products, including books, newspapers, plans	156	14	44	214	162
50	Silk, including yarns and woven fabrics thereof	0	0	0	0	0
51	Wool & animal hair, yarns & woven fabrics thereof . . .	11	2	21	34	31
52	Cotton, including yarns and woven fabrics thereof . . .	43	42	100	185	182
53	Other vegetable textile fibers; yarns and fabrics of such vegetable fibers and paper	0	1	0	1	1
54	Manmade filaments, including yarns & woven fabrics	63	172	86	321	240
55	Manmade staple fibers, incl. yarns & woven fabrics . .	34	31	114	179	165
56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof	50	35	56	141	122
57	Carpets and other textile floor coverings	18	9	7	34	16
58	Special woven fabrics; tufted textile fabrics; ace; tapestries; trimmings; embroidery	107	3	21	131	45
59	Impregnated, coated, covered or laminated textile fabrics; textile articles suitable for industrial use . . .	23	11	25	59	73
60	Knitted or crocheted fabrics	24	46	20	90	82
61	Knitted or crocheted apparel	1,970	847	76	2,893	3,135
62	Woven apparel	3,103	1,142	55	4,300	4,504
63	Other textile articles; needlecraft; used clothing	647	137	80	864	732
64	Footwear and parts	114	85	108	307	279
65	Headgear and parts	33	9	14	56	52
66	Umbrellas, walking sticks, whips, and riding crops . .	3	1	0	4	3
67	Articles of feathers and down; artificial flowers; articles of human hair	3	0	1	4	1
68	Articles of stone, plaster, cement, asbestos, or mica	109	47	160	316	308
69	Ceramic products	76	268	165	509	465
70	Glass and glassware	208	593	107	908	802
71	Natural or cultured pearls; precious or semiprecious stones; precious-metal and imitation jewelry; coin	237	160	529	926	635
72	Iron and steel	96	821	254	1,171	1,104
73	Articles of iron or steel	850	735	416	2,001	1,698
74	Copper and articles thereof	127	176	197	500	419
75	Nickel and articles thereof	11	3	0	14	10
76	Aluminum and articles thereof	441	106	92	639	364
78	Lead and articles thereof	1	3	1	5	5
79	Zinc and articles thereof	27	81	41	149	153
80	Tin and articles thereof	0	0	1	1	2
81	Other articles of base metals; cermets; articles thereof	10	3	1	14	8

Table C-5—Continued

Mexico's exports (Maquiladora Program and Program for Temporary Importation to Manufacture Exported Products (PITEX), and other), to the United States, 2002

(Million U.S. dollars)

HS No.	HS categories	Mexico's exports to the United States				U.S. imports from Mexico: General
		Maqui- ladora	PITEX	Other	Total	
82	Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal	411	109	23	543	209
83	Miscellaneous articles of base metal	1,028	208	107	1,343	929
84	Machinery and mechanical appliances, including nuclear reactors, boilers, computer hardware, & parts	12,917	7,202	926	21,045	17,790
85	Electrical machinery & equipment; sound recorders & reproducers; television equip.; parts & accessories	37,043	3,190	718	40,951	32,606
86	Railway locomotives, rolling stock, track fixtures and parts; traffic signaling equipment	375	81	19	475	62
87	Other vehicles, incl. automobiles, trucks, buses, parts	4,016	20,717	545	25,278	26,194
88	Aircraft, spacecraft, and parts thereof	42	171	158	371	225
89	Ships, boats and floating structures	14	11	2	27	13
90	Optical, photographic, cinematographic, measuring, checking, precision, or medical instruments, & parts	3,968	892	102	4,962	5,337
91	Clocks and watches and parts thereof	97	6	2	105	72
92	Musical instruments; parts and accessories thereof	39	0	1	40	31
93	Arms and ammunition; parts and accessories thereof	5	7	4	16	19
94	Furniture; bedding, mattresses, & cushions; lamps & lighting fittings; illuminated signs; prefab buildings	3,337	609	262	4,208	4,543
95	Toys, games & sports equip.; parts & accessories	948	48	27	1,023	1,220
96	Miscellaneous manufactured articles	369	64	66	499	349
97	Works of art, collectors' pieces and antiques	0	0	4	4	14
	Total	76,498	43,429	22,639	142,566	128,387
	Other	0	1	66	67	5,737
	Grand total	76,498	43,430	22,705	142,633	134,124

Source: Compiled from "World Trade Atlas: Mexico Edition, December 2002," which used data provided by INEGI, the statistical agency of the Government of Mexico.

Table C-6

Mexico's exports (Maquiladora Program and Program for Temporary Importation to Manufacture Exported Products (PITEX), and other), to all countries except the United States, 2002

(Million U.S. dollars)

HS No.	HS categories	Maqui- ladora	PITEX	Other	Total
01	Live animals	0	0	0	0
02	Meat and edible offal	1	45	4	50
03	Fish and seafood	0	17	80	97
04	Dairy produce; eggs; honey; edible animal products	0	37	41	78
05	Other products of animal origin	0	0	0	0
06	Live trees & plants; cut flowers & ornamental foliage	0	0	9	9
07	Edible vegetables and certain roots and tubers	1	10	89	100
08	Edible fruit and nuts; peel of citrus fruit or melons	0	28	66	94
09	Coffee, tea, mate and spices	0	22	50	72
10	Cereals	0	0	71	71
11	Milling products; malt; starches; inulin; wheat gluten	0	1	18	19
12	Oil seeds & oleaginous fruits; misc. grains, seeds, & fruits; industrial or medicinal plants; straw & fodder	0	0	10	10
13	Lac; gums; resins & other vegetable saps & extracts	0	21	8	29
14	Vegetable plaiting materials & veg. products, nesoi	0	1	4	5
15	Animal or vegetable fats, oils, & waxes; edible fats	0	2	13	15
16	Edible preparations of meat, fish, or seafood	1	4	21	26
17	Sugars and sugar confectionery	0	29	86	115
18	Cocoa and cocoa preparations	0	3	4	7
19	Preparations of cereals, flour, starch, or milk	0	47	37	84
20	Preparations of vegetables, fruit, nuts, parts of plants	0	20	48	68
21	Miscellaneous edible preparations	0	23	72	95
22	Beverages, spirits, and vinegar	0	167	107	274
23	Residues, waste of the food industries; animal feed	0	0	20	20
24	Tobacco and manufactured tobacco substitutes	0	22	2	24
25	Salt; sulfur; earths & stone; plaster, lime, and cement	0	1	55	56
26	Ores, slag and ash	0	33	106	139
27	Mineral fuels, oils, waxes; bituminous substances	0	16	3,182	3,198
28	Inorganic chemicals; compounds of precious metals, rare-earth metals, or radioactive elements or isotopes ..	2	70	69	141
29	Organic chemicals	0	576	208	784
30	Pharmaceutical products	0	137	677	814
31	Fertilizers	0	18	6	24
32	Tanning or dyeing extracts; tannins; dyes, pigments, other coloring matter; paints & varnishes; putty; inks	0	177	65	242
33	Essential oils; perfume; cosmetic/ toilet preparations	5	26	410	441
34	Soap; lubricating products; waxes; polishing/scouring products; candles; modeling pastes; dental plaster	0	12	171	183
35	Albumoidal substances; starches; glues; enzymes	0	3	20	23
36	Explosives; fireworks; matches; combustible prep	0	0	4	4
37	Photographic or cinematographic goods	2	97	13	112
38	Miscellaneous chemical products	0	40	73	113
39	Plastics and articles thereof	20	159	319	498
40	Rubber and articles thereof	0	18	43	61
41	Raw hides and skins (other than furskins) and leather	11	27	7	45

Table C-6—Continued

Mexico's exports (Maquiladora Program and Program for Temporary Importation to Manufacture Exported Products (PITEX), and other), to all countries except the United States, 2002

(Million U.S. dollars)

HS No.	HS categories	Maqui- ladora	PITEX	Other	Total
42	Leather articles; saddlery; travel goods; handbags	4	3	9	16
43	Furskins and artificial fur; manufactures thereof	0	0	0	0
44	Wood and articles of wood; wood charcoal	0	3	9	12
45	Cork and articles of cork	0	0	0	0
46	Manufactures of straw; basketware and wickerwork	0	0	0	0
47	Wood pulp; waste and scrap paper and paperboard	0	0	0	0
48	Paper & paperboard; articles of pulp, paper, paperbd	0	37	133	170
49	Printed products, including books, newspapers, plans	0	0	85	85
50	Silk, including yarns and woven fabrics thereof	0	0	0	0
51	Wool & animal hair, yarns & woven fabrics thereof	0	5	7	12
52	Cotton, including yarns and woven fabrics thereof	18	14	36	68
53	Other vegetable textile fibers; yarns and fabrics of such vegetable fibers and paper	0	0	0	0
54	Manmade filaments, including yarns & woven fabrics	0	17	56	73
55	Manmade staple fibers, incl. yarns & woven fabrics	0	83	63	146
56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof	0	7	21	28
57	Carpets and other textile floor coverings	0	26	2	28
58	Special woven fabrics; tufted textile fabrics; ace; tapestries; trimmings; embroidery	1	3	22	26
59	Impregnated, coated, covered or laminated textile fabrics; textile articles suitable for industrial use	0	4	31	35
60	Knitted or crocheted fabrics	0	2	2	4
61	Knitted or crocheted apparel	204	46	24	274
62	Woven apparel	87	39	34	160
63	Other textile articles; needlecraft; used clothing	0	10	11	21
64	Footwear and parts	0	2	20	22
65	Headgear and parts	0	0	4	4
66	Umbrellas, walking sticks, whips, and riding crops	0	0	0	0
67	Articles of feathers and down; artificial flowers; articles of human hair	0	0	0	0
68	Articles of stone, plaster, cement, asbestos, or mica	0	4	25	29
69	Ceramic products	0	19	28	47
70	Glass and glassware	3	47	49	99
71	Natural or cultured pearls; precious or semiprecious stones; precious-metal and imitation jewelry; coin	2	18	59	79
72	Iron and steel	10	138	24	172
73	Articles of iron or steel	1	162	142	305
74	Copper and articles thereof	0	4	28	32
75	Nickel and articles thereof	0	0	0	0
76	Aluminum and articles thereof	1	21	56	78
78	Lead and articles thereof	0	1	2	3
79	Zinc and articles thereof	0	18	5	23
80	Tin and articles thereof	0	0	0	0
81	Other articles of base metals; cermets; articles thereof	0	6	1	7

Table C-6—Continued

Mexico's exports (Maquiladora Program and Program for Temporary Importation to Manufacture Exported Products (PITEX), and other), to all countries except the United States in 2002

(Million U.S. dollars)

HS No.	HS categories	Maqui- ladora	PITEX	Other	Total
82	Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal	3	40	69	112
83	Miscellaneous articles of base metal	0	19	44	63
84	Machinery and mechanical appliances, including nuclear reactors, boilers, computer hardware, & parts . . .	320	2,176	341	2,837
85	Electrical machinery & equipment; sound recorders & reproducers; television equip.; parts & accessories	523	577	274	1,374
86	Railway locomotives, rolling stock, track fixtures and parts; traffic signaling equipment	0	11	5	16
87	Other vehicles, incl. automobiles, trucks, buses, parts	41	2,471	97	2,609
88	Aircraft, spacecraft, and parts thereof	0	17	12	29
89	Ships, boats and floating structures	0	2	4	6
90	Optical, photographic, cinematographic, measuring, checking, precision, or medical instruments, & parts	48	185	52	285
91	Clocks and watches and parts thereof	0	5	3	8
92	Musical instruments; parts and accessories thereof	1	0	0	1
93	Arms and ammunition; parts and accessories thereof	0	0	1	1
94	Furniture; bedding, mattresses, & cushions; lamps & lighting fittings; illuminated signs; prefab buildings	6	39	46	91
95	Toys, games & sports equip.; parts & accessories	276	28	9	313
96	Miscellaneous manufactured articles	3	3	45	51
97	Works of art, collectors' pieces and antiques	0	0	1	1
	Total	1,595	8,221	7,927	17,743
	Other	0	1	30	31
	Grand total	1,595	8,222	7,957	17,774

Source: Compiled from "World Trade Atlas: Mexico Edition, December 2002," which used data provided by INEGI, the statistical agency of the Government of Mexico.

Table C-7

Total exports from Mexico under Temporary Import Programs (Maquiladora and Program for Temporary Importation to Manufacture Exported Products), by leading markets, 1999-2002

Source	1999	2000	2001	2002	Percentage of total in 2002
	<i>Million dollars</i>				
United States	105,024	126,794	121,286	119,928	92
Canada	2,002	2,840	2,611	2,430	2
Germany	1,919	1,311	1,276	971	1
China	121	191	252	449	(¹)
Japan	369	456	297	387	(¹)
United Kingdom	436	524	416	351	(¹)
Brazil	269	379	422	334	(¹)
Netherlands	336	349	424	474	(¹)
Colombia	170	196	208	276	(¹)
Belgium	151	135	220	252	(¹)
All other	4,017	4,076	3,998	3,893	3
Total	114,814	137,251	131,410	129,745	100

¹ Less than 0.5 percent.

Source: Compiled from "World Trade Atlas: Mexico Edition, December 2002," which used data provided by INEGI, the statistical agency of the Government of Mexico.