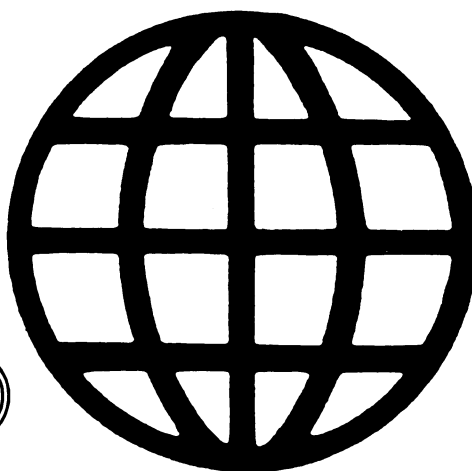


# INDUSTRY TRADE AND TECHNOLOGY REVIEW



# PREFACE

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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 it contains are those of the authors and do not necessarily reflect the views of the Commission 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.

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Forces behind restructuring in U.S. apparel retailing and its effect on the U.S. apparel industry  
Steel in residential construction: A potentially significant developing market

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Comparison of production-sharing operations in the Caribbean Basin with those in Mexico and in selected East Asian countries  
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## December 1995

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China's evolving grain trade opens new marketing opportunities for U.S. exporters  
NAFTA update: Early signs confirm benefits

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The development of information technology in the Arab world

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# Textiles and Apparel: New U.S. Trade Program Likely to Spur Imports from Israel and Jordan

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*U.S. legislation enacted in October 1996 restored tariff preferences previously granted to imports of products made in the West Bank and Gaza Strip, and provided for the establishment of "qualifying industrial zones" (QIZs) in Israel and Egypt or Israel and Jordan from which goods can enter the United States free of duty. The trade benefits are intended to create economic opportunities for the Palestinian people in the West Bank and Gaza Strip and to promote economic cooperation among Israel, Jordan, Egypt, and the Palestinian Authority.<sup>1</sup> In November 1997, Israel and Jordan agreed on the establishment of a QIZ in Irbid, Jordan for the purpose of jointly producing goods for export to the United States free of duty. In March 1998, the United States Trade Representative designated the Irbid industrial park as the first QIZ, stating that "the road to a secure and lasting peace in the Middle East will require greater economic cooperation."<sup>2</sup> Among the items likely to be exported from the Irbid QIZ to the United States are textiles and apparel, which already are a major source of economic activity in the Irbid QIZ. This article examines the QIZ program, U.S. textile and apparel trade with Israel and Jordan, and the potential for changes in patterns of such trade in the region as a result of the QIZ.*

The United States entered into its only free-trade arrangement outside of North America in 1985, with the signing of the United States-Israel Free-Trade Area Agreement. Under this free-trade agreement (FTA), the United States and Israel phased out all tariffs on bilateral trade in industrial goods by 1995. The United States also accorded the FTA tariff preferences to the West Bank and Gaza Strip, which came under Israeli control following the June 1967 conflict. Goods made in the West Bank and Gaza Strip and entered into the United States had to be marked as products of Israel.

The United States recently changed its country-of-origin marking rules for goods from the West Bank and Gaza Strip, chiefly in view of such developments as the adoption by Israel and the Palestinian Liberation Organization of the 1993 Declaration of Principles on Interim Self-

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<sup>1</sup> Statement by the White House Press Secretary, "Free Trade Area Extended to West Bank and Gaza Strip," Oct. 3, 1996, found at Internet address <http://www.library.whitehouse.gov/cgi-bin/web>, retrieved Jan. 13, 1998.

<sup>2</sup> Office of the United States Trade Representative, "U.S. Trade Representative Charlene Barshefsky Designates Duty-Free Zone in Jordan and Israel," press release 98-22, Mar. 6, 1998.

Government Arrangements, under which Israel transferred certain powers and responsibilities to the Palestinian Authority. On the basis of advice from the U.S. Department of State regarding the administration of country-of-origin marking rules, the U.S. Customs Service announced in November 1994 that imports of goods made in the West Bank and Gaza Strip may be marked as products of such an origin, or be marked as products of Israel. Subsequently, as of April 1995, the U.S. Customs Service determined that such goods were to be marked as products of the West Bank and Gaza Strip, and not as products of Israel.<sup>3</sup> The U.S. Customs arrangements, and the separation of the West Bank and Gaza Strip from Israel meant that U.S. imports of goods made in the West Bank and Gaza Strip no longer qualified for FTA tariff preferences as products of Israel and were subject to normal "most-favored-nation" tariff rates.<sup>4</sup>

At the Blair House meetings in February 1995, involving the United States, Egypt, Israel, Jordan, and the Palestinian Authority, President Clinton announced that duty-free treatment for goods of the West Bank and Gaza Strip was a major part of administration efforts to spur the Palestinian economy and an essential element of U.S. support for the Middle East peace process.<sup>5</sup> In the meantime, the Clinton administration worked with Congress to pass legislation enacting the proposed trade benefits. In April 1995 the United States granted duty-free treatment under the Generalized System of Preferences to a limited range of articles from the West Bank and Gaza Strip. At the Blair House meetings, the President also supported the concept of duty-free treatment for goods made in special manufacturing zones along the borders of Israel and Egypt or Israel and Jordan. Egypt and Jordan were among the few Arab countries to abandon the Arab League boycott of Israel, which had been in effect since 1951. In 1979, Egypt abandoned the boycott when it signed the Camp David Accords. And in 1994, Israel and Jordan signed a declaration of ending the state of war between the two countries and promising to negotiate an end to all economic boycotts.

In October 1996, U.S. legislation to implement the U.S.-Israel FTA (1985 FTA Act<sup>6</sup>) was amended to give the President authority to proclaim duty-free treatment for imported goods made in the West Bank and Gaza Strip, and in QIZs along the border of Israel with Egypt and Jordan.<sup>7</sup> The President subsequently issued Proclamation No. 6955 to provide for such duty-free treatment and to delegate to the United States Trade Representative (USTR) the authority to designate an area as a QIZ.<sup>8</sup> On November 21, 1996, products from the West Bank and

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<sup>3</sup> U.S. Department of the Treasury, Customs Service, "Country of Origin Marking of Products from the West Bank and Gaza," *Federal Register*, Apr. 6, 1995, p. 17607 (60 F.R. 17607) and Mar. 14, 1997, p. 12269 (62 F.R. 12269).

<sup>4</sup> U.S. Senate, Committee on Finance, "Extension of Free Trade Benefits to the West Bank and Gaza Strip; OECD Shipbuilding Agreement Act; and Reauthorization of the Generalized System of Preferences Program," S. Rept. 104-270, LEGI-SLATE report for the 104th Cong., Dec. 18, 1997.

<sup>5</sup> U.S. Department of State telegram No. 247206, "West Bank/Gaza Duty-Free Status: Background Information and Q's and A's," Washington, DC, Dec. 3, 1996.

<sup>6</sup> The United States-Israel Free Trade Area Implementation Act, Public Law 99-47, approved June 11, 1985, 19 U.S.C. 2112.

<sup>7</sup> Public Law 104-234, approved October 2, 1996.

<sup>8</sup> President, Proclamation 6955 of November 13, 1996, "To Provide Duty-Free Treatment to Products of the West Bank and the Gaza Strip and Qualifying Industrial Zones," published in the *Federal Register* of November 18, 1996 (61 F.R. 58759).

Gaza Strip became eligible for duty-free entry. In addition, the United States received assurances from the Palestinian Authority of reciprocal duty-free treatment of U.S. goods entering the West Bank and Gaza Strip.<sup>9</sup>

The USTR, Ambassador Charlene Barshefsky, received a joint letter dated June 29, 1997, from the Israeli Minister of Industry and Trade, Natan Sharansky, and the Jordanian Minister of Industry and Trade, Hani Mulki, requesting that an industrial park in Irbid, Jordan, be designated a QIZ. In separate letters to the Israeli and Jordanian officials, USTR described the type of documentation and additional information needed for QIZ designation.<sup>10</sup> On November 16, 1997, during the Middle East and North Africa Economic Conference held in Doha, Qatar, both Israel and Jordan signed an agreement creating the Irbid QIZ. Following implementation of the agreement by the governments of both countries pursuant to their domestic legal procedures, the USTR designated the industrial park in Irbid as a QIZ from which goods can now enter the United States free of duty, effective March 13, 1998.<sup>11</sup>

## **QIZ Program<sup>12</sup>**

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The new section 9 of the 1985 FTA Act defines a QIZ as an area that (1) encompasses portions of the territory of Israel and Jordan or Israel and Egypt, (2) has been designated by local authorities as an enclave where merchandise may enter without payment of duty or excise taxes, and (3) has been specified by the President as a QIZ.<sup>13</sup> Although a QIZ must encompass territory in both participating countries, the zones do not need to be contiguous. The size of the zone in each country is not determinative but there must be some economic activity present in both zones. Each participating country must formally designate its respective zone as an "enclave where merchandise may enter without payment of duty or excise taxes," whereby duty-free status must be given not only to articles of the other country but to articles of all countries.

Under criteria developed by USTR for use in determining whether to designate an area as a QIZ, the participating governments must submit a written request, either jointly or separately, to USTR specifying the identified zones as a QIZ. The request must set out the--

1. Geographic boundaries of the zones;
2. General description of economic activity within the zone, including requirements for Jordanian and Israeli investment and content to qualify for duty-free treatment into the United States;

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<sup>9</sup> Office of the United States Trade Representative, *1998 Trade Policy Agenda and 1997 Annual Report* (Washington, DC: U.S. Government Printing Office, 1998), p. 211.

<sup>10</sup> U.S. Department of State telegram No. 141773, "Letters to Jordan and Israel on Qualifying Industrial Zones," Washington, DC, July 30, 1997.

<sup>11</sup> Office of the United States Trade Representative, "United States-Israel Free Trade Area Implementation Act Designation of Qualifying Industrial Zone," *Federal Register*, Mar. 13, 1998, p. 12572 (63 F.R. 12572).

<sup>12</sup> Information in this section is from U.S. Department of State telegram No. 141773, "Letters to Jordan and Israel on Qualifying Industrial Zones," Washington, DC, July 30, 1997.

<sup>13</sup> To date, Israel and Egypt have not proposed any special manufacturing zones as QIZs.

3. Identification of the zones as duty-free zones for articles of the other country;
4. Agreement that articles processed in the zones are subject to the rules of origin for textiles and apparel set out in section 334 of the Uruguay Round Agreements Act (19 U.S.C. 3592); and
5. Assurance of customs cooperation.

Once an area is designated by USTR as a QIZ, U.S. imports of articles made in the QIZ enjoy duty-free treatment if they meet the rules of origin set out in the 1985 FTA Act (see text box). In general, the goods must be produced in and imported directly from the QIZ, and the value added in the QIZ must be no less than 35 percent of the total value of the article.

**Rules of origin for U.S. imports of products from QIZs**

1. The article must be wholly the growth, product, or manufacture of a QIZ or, if it contains foreign materials, must be substantially transformed into a new or different article of commerce in a QIZ;
2. The article must be imported directly from a QIZ; and
3. At least 35 percent of the total value of the article must consist of the cost or value of the materials produced in the QIZ plus the direct costs of processing operations performed in the QIZ (up to 15 percent of the total value of the article from U.S.-made materials may count toward the 35-percent requirement).

Source: Section 9 of the United States-Israel Free-Trade Area Implementation Act (19 U.S.C. 2112).

For textiles and apparel made in the QIZ, origin will be determined solely on the basis of the rules of origin established for such goods in section 334 of the Uruguay Round Agreements Act. The section 334 rules went into effect in July 1996, and apply to textiles and apparel from all countries except Israel, which is still subject to the pre-July 1996 rules in effect at the time of the FTA inception in 1985. The new rules affect goods subject to manufacturing and processing operations in, or containing components from, more than one country. For apparel assembled in one country from parts cut to shape in another, the rules generally confer origin on the country where the assembly occurs, rather than the country where the cutting took place, as is the case under the FTA rules of origin for Israel. Hence, for apparel assembled in the Irbid QIZ from parts made in Israel, the section 334 rules would generally confer origin on Jordan.

## **Irbid QIZ**

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As required by U.S. law, the Irbid QIZ has two territorial components. In Israel, an Israeli Customs Station at the Sheikh Hussein Bridge between Israel and Jordan will be part of the zone and will monitor the flow of inputs from Israel to the industrial park in Irbid. In Jordan, the zone is centered in the Prince Hassan Industrial Estate in Irbid. In addition, the QIZ agreement signed by Israel and Jordan in November 1997, calls for the creation of a joint committee to identify businesses in the Irbid zone that involve substantial economic cooperation between Israel and Jordan. Textiles and apparel processed in the zone by such joint ventures will be eligible for duty-free entry into the United States if they meet the section 334 rules of origin.

The Irbid zone consists of modern factories owned by the Century Investment Group (CIG), a Jordan-based firm founded in 1995. The eight joint ventures between CIG and Israeli investors in the zone employ more than 600 workers in the production of such goods as apparel and gold jewelry for export. As a result of the QIZ designation, six new joint ventures are expected to begin operations soon, reportedly producing apparel, aluminum cans, alkaline batteries, printed circuit boards, software, and kitchen products for export. One investment contingent upon the QIZ designation is a joint venture between CIG and a leading Israeli apparel firm to produce men's tailored clothing for export to the United States; the Israeli firm plans to employ as many as 800 workers in the Irbid zone assembling tailored clothing from Israeli fabrics and accessories.<sup>14</sup> In response to rising demand for space in the Irbid QIZ, which has already reached its capacity, the Jordanian Industrial Estates Corporation in January 1998 floated a tender to expand the estate by 50 percent.<sup>15</sup>

CIG expects that the QIZ designation will attract new Israeli investment in the zone; current investment reportedly totals about \$20 million and is expected to reach about \$100 million in the near future. New investment will likely be in labor-intensive industries, especially the textile and apparel sector, which is a major source of economic activity for Israel and Jordan. The latest available data show that the textile and apparel sector accounted for about 9 percent of Israel's industrial output and 16 percent of its industrial work force in 1996 and for 20 percent of Jordan's industrial work force and about 10 percent of its nontraditional exports in the early 1990s.<sup>16</sup>

Since the normalization of relations between Israel and Jordan, a number of Israeli textile and apparel firms, faced with rising foreign competition, have moved sewing operations there in an effort to reduce production costs. Reportedly the capital city of Amman alone has more than 10 textile and apparel joint ventures between Israeli and Jordanian firms.<sup>17</sup> Wage rates in Israel average more than \$8 an hour compared with less than \$1 an hour in Jordan. As a result, the cost of sewing garments in Jordan reportedly is about 30 to 40 percent less than that in Israel, reducing the total cost of garment production for Israeli firms by about 15 percent.<sup>18</sup>

Officials of several factories in Jordan assembling garments for Israeli firms have expressed interest in acquiring QIZ status.<sup>19</sup> Although these plants are not as sophisticated as the modern, CIG-owned factories in the Irbid QIZ, managers report that the expertise of their

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<sup>14</sup> U.S. Department of State telegram No. 004872, "Polgat Seeks 'Qualified Industrial Estate' Status for Industrial Park in Irbid, Jordan," prepared by U.S. Embassy, Tel Aviv, Mar. 25, 1997.

<sup>15</sup> U.S. Department of State telegram No. 001859, "Jordanian Firms Seek QIZ Status," prepared by U.S. Embassy, Amman, Mar. 3, 1998.

<sup>16</sup> Data for Israel are from L'Observatoire Europeen du Textile et de L'Habillement (OETH), *Quarterly Bulletin: Textiles and Clothing* (Brussels: OETH, Dec. 1996), vol. V, No. 4/1996, p. 70, and data for Jordan are from U.S. Department of State telegram No. 002313, "International Market Insight - An Overview of Jordan's Clothing, Textile, Leather, and Footwear Sector," prepared by U.S. Embassy, Amman, Feb. 27, 1994.

<sup>17</sup> "Jordanians, Israelis Increase Joint Ventures to Promote Peace," NewsEDGE, Sept. 9, 1996.

<sup>18</sup> L'Observatoire Europeen Du Textile Et De L'Habillement (OETH), *Quarterly Bulletin: Textiles and Clothing* (Brussels: OETH, Dec. 1996); vol. V, No.4/1996, p. 70.

<sup>19</sup> Information in paragraph is from U.S. Department of State telegram No. 001859, "Jordanian Firms Seek QIZ Status," prepared by U.S. Embassy, Amman, Mar. 3, 1998

foreign partners will help them overcome technical QIZ-related challenges such as adhering to complex rules of origin, and ensuring that duty-free inputs do not enter the local market. These plants are examples of Israeli-Jordanian cooperation and produce export-quality goods. Acquiring QIZ status would likely allow them to expand production, create jobs, attract investment, and increase Jordan's exports to Israel as well as the United States.

## U.S. Imports of Textiles and Apparel from Israel and Jordan

The FTA has helped Israel to expand its textile and apparel exports to the United States by eliminating tariffs and quotas on its shipments. U.S. imports of such goods from Israel have increased by slightly more than sixfold since the FTA's inception in 1985 to \$408 million in 1997, although they accounted for less than 1 percent of total U.S. textile and apparel imports of \$54 billion. In more recent years, however, the Israeli shipments have slowed considerably, both absolutely and as a percentage of total U.S. imports from Israel, partly reflecting the ongoing global shift in U.S. textile and apparel trade to countries in the Western Hemisphere benefiting from preferential access to the U.S. market, namely Mexico, the Caribbean Basin countries, and Canada. From 1993 to 1997, Israeli shipments to the United States were up by 34 percent (table 1), compared with a gain of 50 percent in overall U.S. textile and apparel imports. The relative importance of textiles and apparel in Israel's overall exports to the United States declined from a recent high of 7.3 percent in 1995 to 5.6 percent in 1997. Apparel accounted for 70 percent of U.S. textile and apparel imports from Israel in 1997.

**Table 1**  
U.S. general imports of textiles and apparel from Israel and Jordan,  
1993-97

<i>(Million dollars)</i>					
Country	1993	1994	1995	1996	1997
Israel .....	303.9	368.9	417.7	402.1	408.2
Apparel .....	210.9	268.7	305.6	297.6	286.2
Textiles .....	93.0	100.2	112.1	104.5	122.0
Jordan .....	13.7	20.2	16.4	12.1	3.7
Apparel .....	12.1	18.6	15.0	10.3	2.9
Textiles .....	1.6	1.6	1.4	1.8	.8

Source: Compiled from official statistics of the U.S. Department of Commerce, Office of Textiles and Apparel, *Major Shippers Report* (CD-ROM).

Jordan is a very small supplier of textiles and apparel to the United States, although these products had accounted for the vast majority of overall Jordanian exports to the U.S. market during the early 1990s. U.S. textile and apparel imports from Jordan peaked at \$20.2 million in 1994 before falling to \$3.7 million in 1997. Textiles and apparel had accounted for as much as 73 percent of Jordan's merchandise exports to the United States as recently as 1993, but their share fell to just 15 percent in 1996 and 25 percent in 1997. U.S. textile and apparel imports from Jordan, like Israel, enter free of quota; however, imports from Jordan (absent a QIZ) are still subject to duty, which averaged 16 percent for its apparel shipments in 1997.

A small but probably growing part of U.S. textile and apparel imports from Israel consist of garments assembled in Jordan from parts cut to shape in Israel. As noted earlier, U.S. imports of apparel from Israel need only be cut into garment parts in Israel for the article to be a product of Israel under the 1985 FTA. The factories in Jordan, in cooperation with Israeli firms, assemble garments from Israeli fabric and then truck the finished goods back to Israel via the Sheikh Hussein Bridge for sale in Israel, Europe, or for export to the United States under a "Made in Israel" label.<sup>20</sup>

## Outlook

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The QIZ designation for the Irbid industrial park will likely help both participating countries improve their ability to compete in the global textile and apparel market. Israel will gain access to competitively priced labor in Jordan while Jordan likely will gain greater access to Israeli capital, technical and marketing know-how, and unfettered access to the U.S. market. The QIZ designation is expected to generate as many as 1,500 new jobs in the area during the next few years.<sup>21</sup> In addition, investors in the United States, India, Morocco, Malaysia, and Germany have expressed interest in QIZs in Jordan.

Although the competitive advantage of Israel and Jordan will diminish somewhat after the WTO Agreement on Textiles and Clothing phases out the Multifiber Arrangement system of quotas by January 1, 2005, Israel and Jordan will still retain a significant duty advantage. Although U.S. textile and apparel imports under the FTA and the QIZ program will enter free of duty, U.S. rates of duty for apparel from countries without preferential access to the U.S. market average about 18 percent ad valorem. Moreover, the expected increase in U.S. textile and apparel imports from the Irbid QIZ will likely replace those from Israel. Given that Israel and Jordan together account for less than 1 percent of total U.S. textile and apparel imports, the impact on the U.S. textile and apparel sector is likely to be small.

The Irbid QIZ is expected to compete directly with the fledgling industry in the West Bank and Gaza Strip producing textiles and apparel for export. U.S. textile and apparel imports from the territorial areas are negligible, totaling less than \$2,000 during 1995-97. The industry is a major source of manufacturing activity for the Palestinians, accounting for 30 percent of the industrial work force in the West Bank. In the Gaza Strip, the industry, consisting mostly of piecework destined for Israeli firms, accounted for 38 percent of the total value of its exports.<sup>22</sup> The Palestinians have expressed concern that their textile and apparel industry will lose business and Israeli investment to the Irbid QIZ, because Palestinian wages, which are lower than standard Israeli wages, averaging \$7.74 an hour in the industrial sector in 1996, are nevertheless still much higher than average hourly wage rates of less than \$1 in Jordan.

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<sup>20</sup> U.S. Department of State telegram No. 001859,, "Jordanian Firms Seek QIZ Status," prepared by U.S. Embassy, Amman, Mar. 3, 1998.

<sup>21</sup> U.S. Department of State telegram No. 003880, "MEPP: Doha Economic Conference--Overview of the Secretary's Participation," Washington, DC, Jan. 9, 1998

<sup>22</sup> U.S. Department of State telegram No. 018128, "Good News in Gaza: Industrial Sector, While Still Tiny, Shows Healthy Growth," prepared by U.S. Embassy, Tel Aviv, Nov. 21, 1995.

The Irbid QIZ will likely serve as a model for the development of other free-trade zones along Israel's borders with Jordan and also Egypt. Some trade analysts believe that CIG's performance in the Irbid QIZ will determine prospects for future joint ventures between Israel and Jordan and will help ascertain whether a QIZ offers sufficient economic incentive for Israeli investors to expand investments in Jordan. Although trade flows between the two countries under the QIZ will likely be limited at first, trade analysts believe that success on a small scale will create incentives for success and cooperation on a larger scale. The QIZ may, therefore, be considered a significant stepping stone towards free trade between Israel and Jordan. If successful, this initiative should enable further economic integration and growth that will tend to strengthen political and economic relations among countries in the region. ■

# The Assembly Industry in Hungary: Favorable Business Climate Creates New Opportunities for U.S. Industries<sup>1</sup>

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*Foreign assembly has become a global phenomenon during the past decade, particularly in Latin America and the Caribbean, Southeast Asia, and Central and Eastern Europe. Assembly in countries with low labor costs enables U.S. industries to better compete in foreign markets as well as in domestic markets. Business leaders and economists now predict that Hungary may become a hotbed for new investment in Central Europe (CE) by the turn of the century. Hungary has quickly emerged as a leading location for new investment by U.S.- and EU-based companies since the CE transition to market-based economies. This article examines how various factors promote or impede EU and U.S. production sharing operations in CE; highlights the role of Hungary in EU trade; profiles the assembly industry in Hungary; and provides specific examples of U.S. and EU companies that have become active participants in the assembly industry in Hungary.*

U.S. and European Union (EU)-based companies forge economic ties and business relationships in Central Europe (CE)<sup>2</sup> for reasons that include the search for new markets, the attempt to secure competitive production and assembly through lower labor costs, and the need to enhance price competitiveness in the global marketplace. Production-sharing trade between the EU and the three leading CE trading partners (the Czech Republic, Hungary, and Poland) has been structured in ways that are similar to U.S. assembly in Mexico.

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<sup>1</sup> This article is based on fieldwork conducted by USITC staff in Hungary during July-Aug. 1997, including interviews with Hungarian officials and representatives of private firms engaged in assembly operations.

<sup>2</sup> For purposes of this discussion, Central Europe is defined as the original founding members of the Visegrad countries (Czech Republic, Hungary, Poland, and Slovakia), as well as Croatia and Slovenia. Although Romania and Bulgaria have expressed an interest to be included in this geographical conglomerate, they are frequently regarded as part of Eastern Europe, a region that also includes the ex-Soviet republics flanking the east-Carpathian mountains.

EU customs law has an "outward processing trade" (OPT) tariff provision,<sup>3</sup> which is comparable to production-sharing provisions (PSP) of *HTS* Chapter 98. The value of the EU-origin content in imported articles is exempt from duty, provided that record-keeping requirements are complied with and all necessary permits are obtained prior to exporting the EU-origin materials to be processed. The EU, however, has many preferential tariff arrangements that minimize the incentive to import under OPT.<sup>4</sup> As a result, apparel and other textile products account for the bulk of EU imports under OPT from CE; most production sharing between the EU and CE in the motor vehicles and parts, electronic products, and machinery sectors is free of duty and is not reported under OPT.<sup>5</sup> Moreover, the ratio of EU OPT imports to total EU imports was approximately 2 percent in 1996, whereas U.S. imports under the PSP of *HTS* Chapter 98 accounted for roughly 10 percent of total U.S. imports.

Hungary quickly emerged as a leading location for U.S.- and EU-based companies for new investment during the CE transition to market-based economies beginning in 1989. During 1989-96, Western companies invested \$16.5 billion in Hungary, making it by far the leading recipient of foreign direct investment in the ex-Warsaw Pact region, attracting over one-third of total foreign direct investment in Central and Eastern Europe (including the former Soviet Union) since 1989 (figure 1). U.S. companies accounted for \$4.5 billion (27 percent) of the investment in Hungary.<sup>6</sup> EU and U.S. firms have chosen Hungary as a manufacturing and distribution center because of Hungary's central location to supply all of Europe, low labor costs, skilled labor, good educational and training facilities, evolving transportation and financial infrastructures, and the clustering of high-technology companies to service the region.

Good highway and rail connections to Germany through Austria have been particularly important in boosting the flow of investment into Western Hungary, making the Vienna-Budapest highway an assembly corridor. Industrial parks operating as free-trade zones has been established along the route, attracting maquiladora-type assembly operations. These transportation networks and proximity make it feasible to import materials and components

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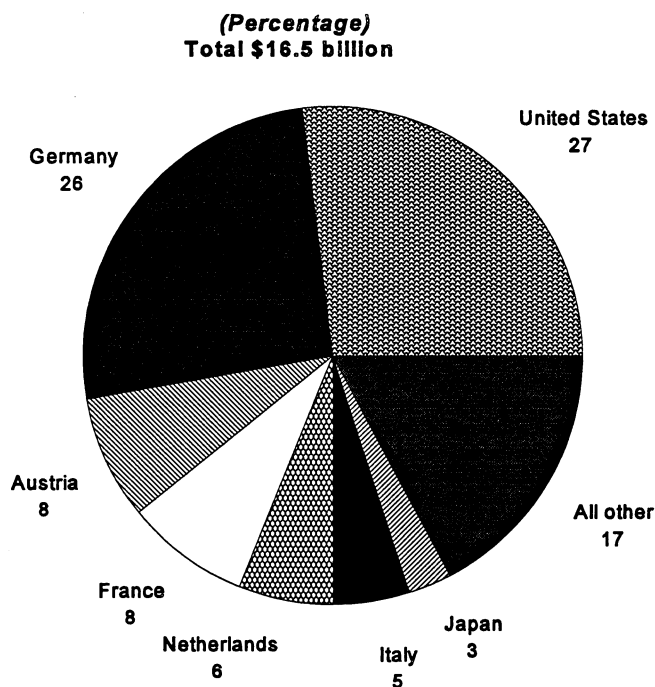
<sup>3</sup> "Outward processing relief arrangements" allow EU goods to be temporarily exported from the customs territory of the EU for the purpose of processing operations. Products resulting from such production-sharing activities may be granted partial relief from duties upon importation into the EU. The types of operations that may benefit from EU production-sharing provisions include the working (including fitting or assembly or adaptation to other uses), processing, and repair of goods. By contrast, U.S. production-sharing provisions are applicable only to goods that have been assembled or metal that has been processed.

<sup>4</sup> Shortly after pro-Soviet communist leadership was removed from power in Central and Eastern Europe, the EU signed trade agreements with most of these nations permitting duty-free access to the EU market for a wide range of articles. Most agricultural, steel, and textile products were exempted from this preferential tariff arrangement.

<sup>5</sup> Hungary has been an associate member of the EU since 1994. The Association Agreement, which came into effect in February 1994, provided for an asymmetrical liberalization of trade over the next 5 years. At the Copenhagen summit conference in 1994, further EU concessions were announced which exempted over 90 industrial products from customs duties and quotas beginning Jan. 1, 1995 (2 years before it would have been officially required by the Association Agreement).

<sup>6</sup> USITC staff interview with officials of the U.S. Commercial Service, Budapest, Hungary, July 8, 1997.

Figure 1  
Accumulated investment in Hungary 1989-96, by source country



Source: Estimated by USITC staff from data obtained from the International Trade Development Agency, Budapest, Hungary and the Embassy of the Republic of Hungary, Washington, DC.

from Western Europe and to re-export finished goods to leading customers in Austria and Germany.

Products manufactured at least in part by foreign-owned companies are estimated to have accounted for nearly 70 percent of Hungary's total exports in 1996.<sup>7</sup> Although trade preference programs with the EU and liberalized EU customs laws continue to reduce the incentive to use these provisions, the OPT, or "contract work,"<sup>8</sup> sector in Hungary is an important and growing source of export earnings and employment for the country, accounting for roughly 27 percent of Hungary's total exports in 1996.<sup>9</sup>

During 1993-96, Hungary accounted for an average of 10 percent of total EU OPT imports and it contributed about 20 percent of EU OPT imports from the region defined as Central Europe. Poland was the largest source of EU OPT imports, contributing 40 percent of all

<sup>7</sup> U.S. Department of State, U.S. Embassy, Budapest, *1998 Country Commercial Guide: Hungary*, prepared by U.S. Embassy, Budapest, p. 4.

<sup>8</sup> Assembly in Hungary is called "bermunka," or in literal translation "contract work." Hungarian literature typically describes assembly and/or production-sharing type activities as contract work.

<sup>9</sup> KOPINT-DATORG, *Guide to Hungarian Exporters and Subcontractors*, 1997, p. 8.

such imports from CE countries. The Czech Republic accounted for an average of 19 percent of total EU OPT imports from Central Europe during the period.<sup>10</sup> KOPINT-DATORG, a leading Hungarian source for international trade statistics, estimated that the export value of contract or assembly activities from Hungary amounted to \$3.5 billion in 1996. Only about one-third (\$1.3 billion) of those activities was reported under the EU OPT program in 1995.

## **The Role of Hungary in EU Trade**

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The importance of Hungary for EU and U.S. companies lies in the country's geographic location at the crossroads of Central and Eastern Europe, its flexible and longstanding adherence to western economic standards,<sup>11</sup> its historic role as a banking and financial center in Central Europe (particularly Budapest), a relatively skilled and well educated work force, and its commitment to privatization, modernization, and investment. Hungary also has a good reputation for strict adherence to debt repayment schedules.<sup>12</sup>

Many U.S. and EU firms forged business relationships in Hungary after the transition to a market economy began in 1989, establishing either a manufacturing or distribution presence in Hungary to serve surrounding markets in the region. The new wave of investors included firms such as Audi, Ford, General Electric, General Motors (Opel), Levi Strauss, Merck Sharp & Dohme, Microsoft, Nabisco, Oracle, Packard Bell, Pepsi Cola International, Philips, Siemens, Unilever, and United Technologies.<sup>13</sup>

Since 1989, the Government of Hungary has made significant strides to ease the regulatory burden, to reduce trade barriers, and to curb duty rates. At a WTO meeting in Singapore in December 1996, the Hungarian minister of trade reiterated Hungary's intention to decrease average import duty rates from 13 percent to 8 percent. However, Hungarian officials confirmed that they have no intention to take part in an accelerated phasing out of duties and added that, at this time, Hungary was not interested in joining the group that aims to phase out duties on information technology and telecommunication products.<sup>14</sup>

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<sup>10</sup> Compiled by USITC staff from Eurostat trade statistics.

<sup>11</sup> The Hungarian Government broke ranks with Soviet-style economic management principles as early as 1968, when the country embarked on a major reform, called the "New Economic Mechanism." The essence of the reform was to incorporate market principles and introduce production incentives in the management of state-owned enterprises and to allow private ownership for small- to-medium-sized businesses.

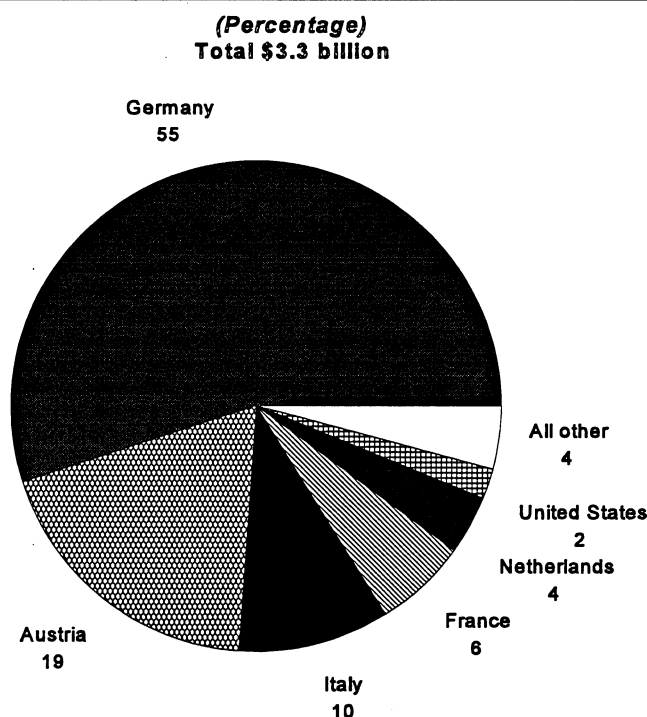
<sup>12</sup> U.S. Department of State, *1998 Country Commercial Guide: Hungary*, p. 6.

<sup>13</sup> General Motors and Ford Motor Co. expanded their manufacturing operations in Europe during the past decade. GM assembles cars in Germany, Spain, the Czech Republic, and Hungary, while Ford has manufacturing locations in the United Kingdom, Belgium, Germany, and Spain. GM and Ford have benefitted from the Association Agreement between Hungary and the EU, which provides for the staged elimination of Hungary's 43 percent rate of duty on vehicles imported from the EU. By contrast, Chrysler does not have an auto assembly plant in the EU and its vehicles are subject to the full 43 percent Hungarian duty.

<sup>14</sup> *The Hungarian Economy, A Quarterly Economic and Business Review*, vol. 24, No. 4, 1996, p. 19.

Trade between the EU and Hungary is defined primarily by traditional alliances and geographical proximity. Therefore, the three most important trading partners for Hungary continue to be Austria, Germany, and Italy. The three countries together consumed 48 percent of Hungary's total exports and more than three-quarters (84 percent) of its exports resulting from contract work (assembly) in 1996 (figure 2). Roughly one-half of all of Hungary's production from contract work is sold to Germany.

**Figure 2**  
**Hungary's exports from production-sharing operations (contract work) by leading markets, 1996**



Source: Compiled by the U.S. International Trade Commission from official statistics of KOPINT-DATORG Co. Ltd. Budapest, Hungary, 1997

Hungary's industrial duty-free zones (DFZs) experienced a sharp increase in foreign trade in 1996, increasing their role in Hungary's overall economy. Hungarian exports originating from DFZs amounted to \$2.8 billion in 1996, an increase of 73 percent compared with the previous year, while imports into DFZs totaled \$2.4 billion, an increase of 83 percent.<sup>15</sup> However, the most important recent development influencing trade between the EU and Hungary has been the so-called Pan-European Cumulation System (PECS), comprising a set of EU bilateral agreements, which aims to harmonize standards and rules-of-origin laws between the EU, EFTA, CEFTA, and other countries (a total of 28 countries) that includes

<sup>15</sup> Compiled by USITC staff from KOPINT-DATORG statistics.

the EU-15 plus Bulgaria, the Czech Republic, Estonia, Hungary, Iceland, Latvia, Lithuania, Norway, Poland, Romania, the Slovak Republic, Slovenia, and Switzerland.

The Government of Hungary signed an agreement conforming to the PECS with the EU on December 28, 1996; it became effective on July 1, 1997. Under the PECS, companies that import inputs from outside the cumulation region must pay duty in order to take advantage of free-trade preferences when exporting their finished goods to PECS countries. If, on the other hand, the importer opts to receive a so-called duty drawback (credit for duty paid when the input is imported), eligibility for preferences is lost and the finished product is exported on a most-favored-nation basis. Maximum duty rates and exemptions have been allowed during a so-called transition period to mitigate any negative effects of the new regime.

Hungary's trade agreements with the EU, EFTA, and CEFTA member states traditionally set the rate of local content requirement at 50 percent for industrial products to qualify for preferential treatment. However, under the new regulations on certificates of origin (the so-called "diagonal rule-of-origin cumulation"), if raw materials and/or components originating in any of these countries are processed in Hungary and then re-exported to EU territory, the value of raw materials and components will be considered local content.<sup>16</sup> Separate agreements were also signed between the EU and these partner countries to validate the PECS and implement the bilateral rules-of-origin cumulation. The agreement allows Hungary to treat materials and components originating in the EU as articles of Hungarian origin, provided that those materials and components comprise a finished product manufactured in Hungary.<sup>17</sup>

Although Hungarian exports accounted for only about 2 percent of total EU imports in 1995, Hungary is important to EU companies as a partner for low-cost assembly. Despite the EU's dominance in Hungarian trade, the United States and several other countries have also developed key roles in the assembly industry in Hungary.

## **The Assembly Industry in Hungary**

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Assembly or contract work has existed between Hungary and its neighbors since the 1970s. Operations were typically located by Western firms in the more developed areas, such as the West-Transdanubian counties bordering Austria (e.g., Győr-Ménfőcsanak, Vas, and Zala counties), where infrastructure and a more developed labor force attracted investment.

One community that has attracted a significant amount of foreign investment is Szekesfehervar. The free-trade zone there is home to subsidiaries of Ford Motor Co., Philips Electronics, IBM, and Alcoa. According to Robert Pel, Managing Director of the Philips' plant, despite the relatively high taxes paid by foreign assembly plants to the local government, Szekesfehervar is a good place to establish an assembly plant because of its

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<sup>16</sup> *The Hungarian Economy*, p. 13.

<sup>17</sup> The reverse also applies; i.e., materials and components originating in Hungary will be treated as EU articles provided that they are incorporated into a finished product manufactured in the EU.

“technically skilled workforce, a location close to European borders and a good infrastructure.”<sup>18</sup>

Critics in Hungary contend that unlike foreign investments in Poland and the Czech Republic, where foreign investors have purchased state-owned companies and tried to upgrade them into profitable concerns, multinationals investing in Hungary have largely set up assembly operations that do not rely heavily on local inputs. One official expressed concern that there is a “dual structure” in the economy, noting that multinationals do not pull domestic suppliers along with them, but rather tend to import, assemble, and export with hardly a link to the local economy.<sup>19</sup> Others hold that assembly is advantageous for Hungary because foreign investment in modern assembly operations has enabled Hungarian companies to acquire technological know-how and special machinery that would have otherwise taken years to develop.<sup>20</sup>

According to the U.S. Embassy in Budapest, the largest foreign investments in Hungary since 1989 include the following:

Investor	Country	Amount (Millions of U.S. dollars)	Industry	Company name
Ameritech/Deutsche Telecom	United States and Germany	2,700	Telecommunications	MATAV
General Electric	United States	690	Light bulbs	Tungsram
General Motors	United States	650	Finished autos, auto parts	Opel Hungary
Volkswagen/Audi	Germany	550	Finished autos, auto parts	Audi Hungary
Eridania	France	540	Sugar	Eridania Beghin-Say
RWE Energie-EVS	Germany	350	Electricity	Elmu Supply Co.
Scandinavian PTTS	Finland, Sweden, Denmark, the Netherlands	340	Telecommunications	Pannon GSM
U.S. West International	United States	330	Telecommunications	Westel
Suzuki	Japan	300	Finished autos	Magyar Suzuki
CGE Telecom	France	300	Telecommunications	Deltav Rt. CG, Tel. Div.
UTS	The Netherlands	300	Telecommunications	UTS

<sup>18</sup> Donal Power, “Szekesfehervar Imposes Tax Hikes,” in *Business Hungary*, American Chamber of Commerce in Hungary, April 1997.

<sup>19</sup> USITC staff interview with an official of the Ministry of Industry and Trade, Budapest, Hungary, July 30, 1997.

<sup>20</sup> KOPINT-DATORG Co. Ltd., *Guide to Hungarian Exporters and Subcontractors*, 1997, p. 8.

Although apparel dominates production-sharing trade reported under OPT (about one-half of all garments sewn in Hungary are exported to Germany), Hungarian statistics verify that exports resulting from contract work are much more diverse. Hungarian exports from production-sharing operations include articles such as ignition wiring sets (Loranger, Ford, UT Automotive); record and cassette players (Videoton); footwear; television and radio equipment (Philips); brassieres (Styl Clothing Factory); seats for motor vehicles; and printed circuit boards and disc drives (IBM).

EU companies often express concern that the social cost<sup>21</sup> of production in Hungary and other countries in CE is relatively high, and therefore prefer to set up structures that enable them to avoid these costs. For example, Italian firms have typically established joint ventures with Hungarian partners in which they retain majority ownership, then use contract work within this arrangement to avoid Hungarian health care, pension, and other related costs.<sup>22</sup>

## Company Profiles

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To provide insight into the operating strategies of companies that have established production-sharing subsidiaries in Hungary, six facilities are profiled below.

### *Ford Motor Company's Alba Plant*<sup>23</sup>

Ford has invested \$146 million in its wholly owned subsidiary in Szekesfehervar, Hungary. Construction began in 1990 and the Alba plant opened its first shift in 1992. Employment at the plant is currently 1,340. The plant maintains a 1 to 2 percent employee turnover rate compared with an industry average of 6 to 8 percent. Ford received a 5-year tax holiday for the plant. Production line wages are about \$2 to \$3 per hour.

Principal products assembled at the plant include fuel pumps, ignition coils, and starter motors for motor vehicles. Car models using these products include Fiesta, Escort, Mondeo, Scorpio, Ka, Transit, and Galaxy. The location of vehicle assembly plants using these auto parts is shown below.

Country	Plant location
Germany	Cologne, Merkenaich, Karmann, and Saarlouis
Belgium	Genk
Spain	Valencia
United Kingdom	Bridgend, Enfield, Dagenham, Daventry, Southampton, and Halewood
United States	Rawsonville, Ypsilanti, and Bedford

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<sup>21</sup> "Social costs" include contributions to programs such as health care, social security, and employee housing.

<sup>22</sup> USITC staff interview with an official of KOPINT-DATORG Co. Ltd., Budapest, Hungary, August 1997.

<sup>23</sup> Based on USITC staff interviews with the following Ford representatives in Szekesfehervar, Hungary, in July 1997: Dan Linder, Production Manager; Edit Gyulai, Treasurer; and Izolda Mayer, Customs Specialist.

Motor vehicle parts from the Alba plant are also exported to Ford operations in Argentina, Brazil, India, Malaysia, Poland, South Africa, Taiwan, and Thailand. The only Alba customer outside Ford Motor Company is Mazda in Japan.

There are 73 suppliers to the Alba Plant, of which most ship components and materials from EU and U.S. locations by sea containers and truck. Ford reports there are 5 sea containers and 30 truck shipments weekly. Hungarian suppliers include Loranger (see discussion below), Le Carbone, Berva, and Bakony Muvek. Together, these Hungarian suppliers represent 20 percent of Alba's purchases of components and materials.

### *Loranger Ipari Kft.<sup>24</sup>*

Ford Motor Co. prefers that its suppliers have production or assembly facilities located close to its vehicle assembly plants in order to provide JIT delivery, participate in coordinated design and production planning, and reduce transportation costs. At the urging and assistance of Ford, Loranger established a plant to manufacture precision-molded engineered plastic components for Ford's Alba plant. Both facilities are located in Szekesfehervar, with the Loranger plant, which has a workforce of about 200 employees, located on space previously occupied by a Soviet military base. Loranger's investment there totaled about \$30 million. Loranger representatives claimed that Szekesfehervar is one of the most cost-effective locations in Europe for assembly and manufacturing.

Loranger is a family-owned company based in Warren, Pennsylvania that specializes in the thermoplastic molding technology, an area in which the Loranger plant in Hungary also focuses. Although the company currently serves as an exclusive supplier to Ford, Loranger officials stated that the company is considering the expansion of its customer base in Hungary and elsewhere in Europe, targeting Opel and Audi for supplier contracts.

### *GM-Opel/General Motors Hungary<sup>25</sup>*

The General Motors-Opel plant in Szentgotthard represents the third-largest foreign investment in Hungary, valued at \$650 million. The plant assembles approximately 12,000 Opel Astra automobiles annually from imported components. Although most of the Astras are sold in the Hungarian market, vehicles are also exported to Italy, Greece, and China. The bulk of the plant's 1,245 workers, however, are involved in the production of cylinder heads, drive axles, and engines, principally for export to the EU and other foreign markets (including Mexico).

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<sup>24</sup> Based on USITC staff interviews with the following Loranger representatives in Szekesfehervar, Hungary, in July 1997: Sandy Roth, general manager, and Nandor Szvetko, production manager.

<sup>25</sup> Based on USITC staff interviews with the following General Motors representatives in Szentgotthard, Hungary, in July 1997: Edit Legradi, public relations manager; Gyula Herkli, Customs Coordinator; and Tamas Vass, supervisor of purchasing.

Opel is the market leader in Hungary with a 21-percent share of the market in 1996. Suzuki was second with a 19-percent market share, followed by Daewoo, Volkswagen, and Ford. Opel Hungary has approximately 250 suppliers; 25 of these use JIT delivery requiring no inventories. Hungarian sources supplied 8 percent of the components and materials used in the auto assembly plant in 1996 and 4 percent of those used in the engine plant. Examples of parts supplied by Hungarian producers include wiring harnesses, batteries, windshield wipers, tires, and inside sun shades.

### *Audi Hungaria Motor Kft./Volkswagen-Audi<sup>26</sup>*

The Audi plant in Gyor has facilities for both the manufacture of engines and the assembly of engines from imported parts. Cylinder heads and engines are assembled inside railway cars that are equipped with assembly kits. Most of the components in the kits are made in Germany. Workers do not unload the components or kits, but are positioned in and around the railway cars to perform the necessary assembly work. Once the work is completed, the train returns to Germany. The total elapsed time from departure from the plant in Germany, to assembly in Hungary, to return to the plant in Germany is usually 24 hours or less. The engine blocks are all imported into Hungary directly from the Volkswagen foundry in Germany; parts made in Hungary account for 6 to 8 percent of the value of all parts used to make the complete engine. Finished engines are sent to Audi's main vehicle assembly plant in Ingolstadt, Germany.

The Volkswagen Group established Audi Hungaria Motor Kft. (AMH) in 1993 with an equity of about \$1.5 million. Audi has invested about \$550 million in the Gyor facility thus far, but is on schedule to invest an additional \$200 million to bring the plant up to full capacity producing 4-, 6- and 8-cylinder engines and the TT coupe Roadster in Gyor by 1998. Audi picked Gyor out of 180 competing sites. Key elements in making their decision were the existence of an operational assembly facility (previously owned by the Raba railway company), an excellent railway connection, and the flexibility displayed by Hungarian authorities to accommodate Audi's needs.<sup>27</sup> The Government of Hungary has made the AMH facility a free trade zone, expediting the movement of goods in and out of the plant.

### *IBM Storage Products Kft.<sup>28</sup>*

IBM Storage Products Kft. is a wholly owned subsidiary of IBM producing hard disk drives for desktop computers. Total production exceeded 1 million drives in 1996 and IBM expects to triple its output in 1997. IBM is Hungary's largest exporter, with foreign sales valued at more than \$1 billion in 1996. The plant, which employs nearly 3,000 people, is in Szekesfehervar and operates in a free-trade zone.

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<sup>26</sup> Based on interviews with trade officials in Budapest, Hungary, July 1997.

<sup>27</sup> For example, Hungarian authorities agreed that Audi could schedule production around the clock every day of the week. By contrast, German labor laws prescribe a 5-day work week and the consent of both the trade union and the factory council is needed for any weekend hours or overtime work, which hampered flexible response in German production facilities.

<sup>28</sup> Based on USITC staff interview with Norbert Wolpert, Finance Manager, IBM Storage Products, Szekesfehervar, Hungary, July 1997.

The manufacturing process for hard disc drives is labor-intensive. It takes about 15 hours to assemble a single hard drive. Components are source from Italy, Malaysia, Thailand, and Germany. Two-thirds of the plant's production is sold to original equipment manufacturers in Europe, such as Apple, Gateway 2000, and Compaq. The principal competition for IBM Hungary are manufacturers in Southeast Asia, where wages are often lower than in Hungary.

IBM Hungary currently produces 2.1-, 2.6-, and 3.2- gigabyte hard disk assemblies. The Szekesfehervar hard disk drive units make use of magneto-resistive (MR) heads and No-ID sector formatting technology, which were both developed by IBM. The company's magnet disk storage unit production is centered in San Jose, California. However, plants in China, Germany (Mainz), Hungary (Szekesfehervar), Japan (Fujisawa), Mexico (Guadalajara), Singapore, and Thailand also assemble storage technology products for IBM, with most using some parts made in San Jose.

### *IR3 Video International Kft.*<sup>29</sup>

Philips and Grundig established IR3<sup>30</sup> Video in Szekesfehervar for the assembly of VCRs and VCR-television combos. The plant assembles 450 different models of VCRs and VCR-television combos, with annual production estimated at 5 million units. The facility employed 1,200 people in 1997. About 70 percent of the value of all of the components used in the assembly process are of EU origin; most of the EU components are produced in Austria and the United Kingdom. Components made in Hungary account for a small share of the products value. All of the assembled products are exported, with most going to the EU or South America. Prior the shifting assembly to Hungary, Philips used Portugal as its main European location for assembly. However, wages in Portugal doubled relative to wages in the Netherlands, rising from about 20 percent as high as Dutch wages in the late 1980s to approximately 40 percent as high in 1997. By contrast, Hungarian wages in 1997 were approximately 20 percent as high as wages in the Netherlands or Germany.<sup>31</sup>

## Outlook

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Companies continue to establish assembly plants in Hungary to take advantage of the combination of low labor costs, skilled workforce, economic and political stability, and proximity to markets throughout Europe.<sup>32</sup> U.S. companies seeking a low-cost manufacturing base in Europe have been able to use well-developed transportation links to distribute finished goods to Western European markets. Investment in assembly operations in Hungary has also positioned U.S. companies to take advantage of anticipated growth in markets in Central and Eastern Europe.

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<sup>29</sup> Based on USITC staff interview with Robert Pel, General Manager, IR3 Video International Kft., in Szekesfehervar, Hungary, July 1997.

<sup>30</sup> The company's name IR3 is an acronym for image, reception, recording, and replay.

<sup>31</sup> Hungarian wages went down by about 7 percent in 1996 because of the appreciation of the U.S. currency.

<sup>32</sup> U.S. Department of State, *1998 Country and Commercial Guide: Hungary*, p. 3.

U.S. companies that have met local content or transformation requirements have been eligible for preferential tariff treatment in the EU market from their Hungarian assembly plants. Hungary's recent Association Agreement with the EU will assure many U.S. companies with continued and expanded preferential access to the EU market from their Hungarian manufacturing bases. Some U.S. companies, however, will be placed at a competitive disadvantage because membership in the EU<sup>33</sup> will require Hungary to adopt the EU common external tariff (CET), which are sometimes higher than the Hungarian rates of duty. U.S.-made components that are currently imported free of duty into Hungary's free trade zones for processing and re-export to the EU will be subject to duty when the EU CET becomes applicable. Furthermore, in response to pressure from the EU, Hungary recently has established new regulations that make it much more difficult to establish a free trade zone.<sup>34</sup>

All U.S. companies with manufacturing operations in countries in Central and Eastern Europe that have negotiated association agreements with the EU will have duty-free access to the EU from their qualifying assembly operations in the region, but will ultimately be subject to the EU CET on imports of components and materials from the United States or other countries that are not parties to the association agreements. Some firms, however, will benefit when Hungary joins the EU. The duty rate on Chrysler vehicles, for example, will be reduced from the current Hungarian rate of 43 percent to the EU CET rate of 10 percent. ■

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<sup>33</sup> According to Hungarian Government officials, Hungary is expected to become a full member of the EU by 2002.

<sup>34</sup> *Ibid.*, p. 23.

# Indian Market Reforms Attract U.S. Investment and Trade in Capital Goods and Equipment<sup>1</sup>

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*In the late 1980s, recurring fiscal deficits and negative balances of payments encouraged the Indian Government to initiate an economic reform package to move the country from central planning to a market economy. The package of reforms instituted in 1991 included privatization of some public enterprises, convertibility of currency, liberal rules for foreign investment, lower tariff rates, and reduced import barriers.<sup>2</sup> The liberalization of government controls has been viewed as emulating the liberalized "power house" economies of the Asian Tigers.<sup>3,4</sup> Liberalization had other effects as well, such as contributing to a doubling of the dollar value of U.S. exports to India in the years 1990 to 1997. This article reviews the growth of Indian demands for U.S. exports of capital goods and equipment and the growth of U.S. investment in India during those years. It also considers what historical forces encouraged these economic changes.*

India is the world's second-most populous country and the fourth-largest economy, in terms of purchasing power (table 1). An Indian population of 970 million and an estimated middle class ranging between 160 to 250 million--nearly the size of the United States-- make India one of the world's largest potential markets for major international producers. India was the last of the countries identified by the U.S. Department of Commerce as a "big emerging market" to open its economy to international commerce. Although India's per capita annual income is comparatively low, between 100 and 300 million Indians possess sufficient disposable income to join a growing consumer class.

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<sup>1</sup> Includes capital goods and equipment covered under *HTS* chapters 84-90, including civil aircraft, medical and scientific equipment, computers, mining and construction machinery and equipment, agricultural equipment, televisions, telecommunications equipment, and motor vehicles. Collectively these products represented nearly 34 percent of total U.S. exports to India in 1997.

<sup>2</sup> For added information see USITC, "Textiles and Apparel: India's Integration into the World Economy and Opportunities for U.S. Firms," *ITTR*, July 1997. USITC, "India and Pakistan Resist Commitments to Greater Market Access in the Textiles and Apparel Sector," *ITTR*, Aug. 1994.

<sup>3</sup> "World Bank: The Indian Economy is Stronger and More Competitive," Embassy of India, Washington DC, 1997, found at Internet address <http://www.indiaserver.com>, retrieved Sept. 3, 1997.

<sup>4</sup> Recently, however, the Asian financial crisis has led to substantial capital outflows from the "Tigers," depreciating the currencies of these countries.

**Table 1**  
**India at a glance**

Population (1997) .....	970 million
GDP (1997) .....	\$342 billion
GDP per capita (1997) .....	\$368
Real GDP growth rate:	
FY 1994-95 .....	7.2 percent
FY 1995-96 .....	7.1 percent
FY 1996-97 .....	6.8 percent
Foreign debt (1997) .....	\$92 billion
Debt service ratio (1997) .....	25.1 percent
Inflation rate:	
FY 1994-95 .....	10.2 percent
FY 1995-96 .....	10.3 percent
FY 1996-97 .....	8.9 percent
Investment:	
Direct foreign investment (1997) ....	\$8.1 billion
U.S. investment in India (1997) ....	\$1.2 billion

Source: Embassy of India-Washington DC, Government of India, Ministry of Finance, U.S. Department of State.

The size and purchasing power of India's middle class, which have important implications for both U.S. exports and the performance of U.S. owned joint-ventures and subsidiaries, continues to be debated. The World Bank estimated that India's average household income is equivalent to \$6,452 and its middle class possesses only one-tenth the purchasing power of the American middle class.<sup>5</sup> Despite its significant reforms, India reportedly has fallen behind Indonesia, Malaysia, and South Korea that have realized per capita incomes 10 to 20 times India's.<sup>6</sup> A survey conducted by the National Council of Applied Economic Research indicates that more than one-half of India's population still lives in poverty and that while the market for mass consumption items is 76 million people, the market for higher priced, consumer products such as refrigerators, microwave ovens, and dishwashers is only 3.4 million people.<sup>7</sup>

## **Emergence of Market Policy Reforms**

In 1947, a new independent India embraced the Soviet economic model of a dominant public sector, and created a highly centralized economic system dominated by government-owned

<sup>5</sup> World Bank, *India*, The World Bank Group, found at Internet address <http://gopher.worldbank.org>, retrieved Oct. 14, 1997.

<sup>6</sup> John F. Burns, "India's 50 Years of Progress and Pain," *The New York Times*, Aug. 14, 1997, found at Internet address <http://www.nytimes.com>.

<sup>7</sup> The Economist, "India's Middle Class: Shattering the Myth," *Business South Asia*, EIU, June 1, 1996.

monopolies and stressing self-reliant industrialization based on import substitution.<sup>8</sup> This system promoted industrial development by using a complex import-licensing scheme, high tariffs, and government regulations to isolate and protect Indian industry from outside competition.<sup>9</sup>

As time passed, however, India found itself facing severe financial problems, high inflation, and plunging foreign reserves. By the late 1980s, India's foreign reserves had slipped by almost \$1 billion, and by 1991 its share of world trade had dropped to 0.53 percent from 1.8 percent in the 1950s.<sup>10</sup> India's policies, according to the World Bank, had successfully "throttled the private sector, discouraged production for exports, created recurrent shortages of foreign exchange, and made the balance of payments vulnerable to sudden changes in international markets."<sup>11</sup> Also, the dissolution of long-time economic ally the Soviet Union and China's successful implementation of limited free-market reforms forced India's leaders to consider whether a command-type economy was practical in the late 20th century.<sup>12</sup>

To prevent bankruptcy, India accepted loan assistance from the International Monetary Fund (IMF) and the World Bank in June of 1991.<sup>13</sup> The IMF and the World Bank agreed to provide India with assistance only if it opened its economy to the world. Out of necessity, India departed from self-sufficiency and four decades of central planning by initiating a series of reforms that covered five important areas: investment policy, the trade regime, the financial sector, taxation, and the gradual dismantling of state control over the economy. India reportedly reduced its nontariff barriers, selectively trimmed its quantitative restrictions (negative-import restricted list), delicensed most of its industries, invited some direct foreign investment, and liberalized its capital markets (see table 2 for added details).<sup>14</sup> India also opened portions of its economy to the private sector previously reserved for the public sector, such as banking, civil aviation, telecommunications, power generation and distribution, ports, and roads.<sup>15</sup>

Although the Indian Government continues to oppose the unrestricted flow of imports, it has reduced its applied tariffs from 350 percent on some goods in 1990 to a ceiling tariff of 40 percent in FY 1997-98.<sup>16</sup> India also lowered its global trade-weighted average tariff from

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<sup>8</sup> The Economist, fact sheet, Country Forecasts: India, The Economist Intelligence Unit (EIU), July 18, 1997.

<sup>9</sup> Greg Jones, "Indian Economy Perks Up After Government Rolls Back Socialist Policies," *The Dallas Morning News*, Aug. 11, 1997, retrieved from NEWSEdge

<sup>10</sup> World Bank, *India*, Country Brief, South Asia Brief, The World Bank Group, found at Internet address <http://gopher.worldbank.org>, retrieved Nov. 5, 1997.

<sup>11</sup> Ibid.

<sup>12</sup> Zohar Abdoolcarim, "India's Power Unleashed," *Asian Business*, Feb. 1994, p. 18. Government of India, *Economic Survey 1993-94*, p. 1. Jones.

<sup>13</sup> U.S. Department of State telegram No. 000715, "Draft 1998 National Trade Estimate Report, for India," prepared by U.S. Embassy, New Delhi, Jan. 29, 1998.

<sup>14</sup> Martin Wolf, "India," *Financial Times*, Sept. 19, 1997, retrieved from NEWSEdge.

<sup>15</sup> Surendra Kaushik, "India's Democratic Economic Transformation," *Challenge*, Sept.-Oct. 1996, p. 54-61.

<sup>16</sup> U.S. Department of State telegram No. 001515, "Draft 1997 National Trade Estimates Report," prepared by U.S. Embassy, New Delhi, Feb. 11, 1997.

**Table 2**  
**Indian economic and investment reforms since 1991**

<b>Privatization</b>	<ul style="list-style-type: none"> <li>• More sectors opened to private investment, including power, steel, oil refining and exploration, air transport, telecommunications, ports, mining, and pharmaceuticals. The sectors now reserved exclusively for the public sector have been cut from 17 to 6, mainly defense-related.</li> </ul>
<b>Tariffs/import restrictions<sup>1</sup></b>	<ul style="list-style-type: none"> <li>• Some telecommunications projects are granted a special status allowing imports of infrastructure equipment at a 25-percent duty rate.</li> <li>• Established a program for concessional duties on capital goods for exporters willing to undertake a large export obligation.</li> <li>• India cut its top applied tariff rates from 350 to 40 percent, and the import-weighted tariff was lowered to 31 percent in 1996.</li> </ul>
<b>Currency convertibility</b>	<ul style="list-style-type: none"> <li>• In March 1993, India abolished its two-tiered exchange rate regime, moving to a single, market-determined exchange rate for trade transactions and inward remittances.</li> <li>• Devaluation of the rupee by 22 percent vis-a-vis the dollar.</li> <li>• Capital account transactions for foreign investors, both portfolio and direct, are fully convertible. However, Indian firms and individuals remain subject to capital account restrictions.</li> </ul>
<b>Investment policy</b>	<ul style="list-style-type: none"> <li>• Foreign investors may invest in all sectors of the India economy except defense, atomic energy, coal and lignite, mineral oils, and railway transport.</li> <li>• To speed capital inflow, automatic approval was granted for foreign equity participation up to 51 percent in 48 industries, up to 74 percent in 9 industries; and up to 100 percent in a few selected areas.</li> <li>• Foreign investors can now freely repatriate profits and capital investments for approved foreign investments.</li> <li>• Delicensing of most industries.</li> </ul>
<b>Other reforms</b>	<ul style="list-style-type: none"> <li>• Quantitative restriction on imports of capital equipment and intermediate goods removed.</li> <li>• The ban against using foreign brand names/trade marks has been lifted.</li> <li>• The corporate tax rate for foreign companies has been reduced from 65 percent to 55 percent.</li> <li>• Long-term capital gains rate for foreign companies was lowered to 20 percent.</li> <li>• The harmonized system of commodity classification developed by the Custom Cooperation Council was adopted by India in October 1995.</li> <li>• A number of items from the negative/restricted import list have been removed or shifted to the list of items that can be imported under the special import license scheme.</li> </ul>

<sup>1</sup> Refers to tariffs applied throughout 1997.

Sources: 1997 *National Trade Estimate Report on Foreign Trade Barriers*, United States Trade Representative; Embassy of India-Washington DC; Ministry of Finance-Government of India; U.S. Department of Commerce.

87 percent to 22.7 percent.<sup>17</sup> In 1997, the tariff on capital goods and semi-manufactured inputs was lowered even further to 20 percent in order to further support domestic manufacturers. Duty rates on capital goods imported under the India's Export Promotion Capital Goods program were also lowered from 15 percent to 10 percent.<sup>18</sup>

<sup>17</sup> U.S. Department of Commerce, *India: Trade Regulations & Standards*, National Trade Data Bank, Country Commercial Guides, Stat-USA Database, found at Internet address <http://www.stat-usa.gov>, retrieved Sept. 10, 1997.

<sup>18</sup> This program allows Indian companies manufacturing for export to import capital goods at a reduced duty as long as they comply with export performance requirements. The Foreign Investment Promotion Board (FIPB) was created to accelerate the pace of approvals. The Economist, "India's Foreign Trade: Angst," *Business South Asia*, EIU, Nov. 1, 1996.

By many accounts, India is making significant progress in its evolution from a centrally planned economy into one guided by free market mechanisms. Prior to 1991, India's GDP grew at an annual rate of 3.5 percent; after reforms its annual GDP growth rate rose to 7 percent per annum during FY 1994-95.<sup>19</sup> These growth rates reportedly rank India among the world's 10 best performing economies.<sup>20</sup> Although the original reform measures were very successful in liberalizing India's trade and investment regime, the pace of reform slowed somewhat during 1997 after the fall of the United Front government and the call for new parliamentary elections.<sup>21</sup> In FY 1996-97, the rate of GDP growth is expected to be 6.8 percent.

India's economic liberalization has also attracted large sums of foreign direct and foreign portfolio investment. Between 1991 and March 1997, foreign direct investment (FDI) was \$8.1 billion and government-approved FDI totaled \$34.9 billion.<sup>22</sup> Annual FDI grew to a record \$2.4 billion in 1996. Approved FDI reached \$10.3 billion in 1996 and \$5.8 billion during the first quarter of 1997; industry sources expect 1997 to be another record year.<sup>23</sup> Unlike the foreign investment flowing into China and East Asia, FDI projects approved by India tend to focus on production for the domestic market rather than for export.<sup>24</sup> Most of this FDI has been directed towards the production of consumer goods that are protected from import competition and other high-profit, low-risk products.

The United States has emerged as India's largest source of investment funds since 1991<sup>25</sup> and has become India's single largest source of approved FDI (28 percent) as well, followed by the United Kingdom, Japan, and Germany (table 3).<sup>26</sup> U.S. FDI has been concentrated principally in the areas of banking, manufacturing, infrastructure, and services. Estimates for U.S. FDI during 1997 have been placed between \$6 billion and \$7 billion.<sup>27</sup>

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<sup>19</sup> Surendra Kaushik, "India's Democratic Economic Transformation," *Challenge*, Sept.-Oct. 1996, p. 54-61.

<sup>20</sup> World Bank, *India*, Country Brief, The World Bank Group, found at Internet address <http://www.gopher.worldbank.org>, retrieved Sept. 19, 1997.

<sup>21</sup> U.S. Department of State telegram No. 000226, "Update on Economic Developments in India," prepared by U.S. Embassy, New Delhi, Jan. 9, 1998.

<sup>22</sup> *Foreign Investment in India*, Embassy of India, Washington DC, found at Internet site <http://www.indiaserver.com/embusa>, retrieved Nov. 19, 1997. The Indian Government requires prior government approval of all foreign direct investment and technology transfer projects. Approved FDI serves to foreshadow actual FDI flows in subsequent years.

<sup>23</sup> Ibid.

<sup>24</sup> Abdoolcarim, p. 18.

<sup>25</sup> "The India Conference," *India Economic News*, Embassy of India, Washington DC, Oct. 1997, found at Internet address <http://www.indiaserver.com/embusa>, retrieved Feb. 26, 1998.

<sup>26</sup> "Eye of The Tiger," Delco Electronics, found at Internet address <http://www.delco.com>, retrieved Sept. 3, 1997.

<sup>27</sup> U.S. Department of State telegram No. 000715, "Draft 1998 National Trade Estimate Report, for India," prepared by U.S. Embassy, New Delhi, Jan. 29, 1998.

**Table 3**  
**India: Foreign direct investment (1990-96)**

(Million dollars)						
FDI	1991	1992	1993	1994	1995	1996
<b>Inflows:</b>						
United States .....	13.3	44.4	152.1	107.0	198.0	( <sup>1</sup> )
United Kingdom .....	20.3	8.8	73.9	136.3	52.9	( <sup>1</sup> )
Japan .....	3.1	27.3	21.8	86.7	66.1	( <sup>1</sup> )
Germany .....	22.6	22.0	12.8	41.5	72.1	( <sup>1</sup> )
Total .....	143.2	255.7	567.5	947.3	1,930.1	( <sup>1</sup> )
<b>Approvals:</b>						
United States .....	75.8	466.3	100.1	1,111.9	2,137.7	2,873.1
United Kingdom .....	13.1	45.0	197.9	414.1	523.0	435.6
Japan .....	21.5	231.1	82.0	127.8	458.9	425.2
Germany .....	17.1	32.7	55.9	181.5	405.9	439.4
Total .....	217.0	1,470.0	2,815.3	4,520.5	9,719.2	10,327.7

<sup>1</sup> Not available.

Source: Embassy of India-Washington DC.

India's increasingly favorable investment regime and enormous reserves of human capital and natural resources encouraged a wide variety of prominent U.S.-based multinationals to invest either in wholly owned or in joint-venture manufacturing facilities (table 4). India's equity laws on foreign ownership limited many companies initially to being joint ventures, however, as equity limits have been abated, foreign companies have altered their investment strategies by moving away from joint to wholly owned ventures. The trend to majority ownership accelerated when permissible equity ownership was increased to 100 percent in areas such as automobile, electronics, and electrical equipment production. U.S. companies have also used technical collaborations as a principal vehicle for entering the Indian market. All these types of ventures are important to U.S. equipment and material suppliers because U.S. firms have tended to import U.S. capital goods, intermediate materials, and other inputs to build and sustain their Indian operations.

Some U.S. companies have made significant investments in India. For example, GM reportedly has invested more than \$300 million in a variety of ventures covering autos, auto parts, locomotives, satellites, and advanced military telecommunications hardware.<sup>28</sup> In 1996, GM holdings ranged from a \$30 million joint venture with Hindustan Motors, a \$42 million venture to produce diesel locomotives for India Railways, to a \$1 billion telecommunication venture (Hughes-Ispat).<sup>29</sup> Likewise, General Electric has established several Indian investments, including a \$19 million white goods joint venture with the Godrej Group. Ford Corp. has established a \$800 million joint venture with Mahindra & Mahindra.

<sup>28</sup> "General Motors Bullish on India," *India-Today's Business News*, Nov. 12, 1997.<sup>29</sup> Clarence Fernandez, "GM Sees Most Promise in India Telecom Stake," *Reuters*, Nov. 12, 1997.

**Table 4**  
**Selective list of U.S. ventures in India, 1990-97**

U.S. company	Indian partner (subsidiary)	Product
General Motors . . . .	Hindustan Motors . . . . .	Auto components
	Hughes-Ispat . . . . .	Telecommunications equipment
General Electric . . .	Godrej Group . . . . .	Appliances, X-ray machines
	GE-Elpro India . . . . .	Medical-imaging machines
	APAR . . . . .	Lighting systems
Ford . . . . .	Mahindra & Mahindra . . . .	Autos
Dura-Line . . . . .	Bharti Telecom . . . . .	Ducts for fibre optic cable
Picture Tel . . . . .	EnKay Telecom . . . . .	Video phones
Sumitomo* . . . . .	Sumitomo . . . . .	Gearless speed reducers
Lucent . . . . .	TATA . . . . .	Telecommunications equipment
Pantex . . . . .	Gebee Controls . . . . .	Hydraulic gear pumps, actuators, accumulators
Cardiac Contro . . . .	Shree Pacetronix . . . . .	Pacemakers
Worldcom . . . . .	Worldcom-India . . . . .	Switching gear
Motorola . . . . .	Motorola-India . . . . .	Computers, network servers
QUALCOM . . . . .	Indian Telephone . . . . .	Wireless local loop products
Case . . . . .	Mahindra & Mahindra . . . .	High horse power tractors
Crompton . . . . .	Crompton Greaves . . . . .	Metal transformers
Cummins Engine . .	Kirloskar Oil Engines . . . . .	Engines
Hewlett Packard . . .	HCL . . . . .	Computers
	H-P India . . . . .	Printers
Chrysler . . . . .	Mahindra & Mahindra . . . .	Autos
Maytag . . . . .	Maytag-India . . . . .	Appliances
Whirlpool . . . . .	Whirlpool-India . . . . .	Appliances
Johnson Control . . .	Telco (Tata) . . . . .	Auto seats
Dana Corp . . . . .	Spicer India . . . . .	Axles, drive shafts
TRW . . . . .	Rane Group . . . . .	Seat belts, air bags
IBM . . . . .	Tata Group . . . . .	Computers
Caterpillar . . . . .	CK Birla . . . . .	Earthmoving equipment
Texas Instruments .	TI-India . . . . .	Micro chips
Otis Elevator . . . . .	Otis-India . . . . .	Elevators
Compaq . . . . .	Compaq . . . . .	Computers

\*Sumitomo Machinery Corp. of America.

Source: Various sources including: U.S. Department of Commerce, U.S. Department of State, Embassy of India-Washington DC.

## Current Trade Barriers

Despite recent liberalizations in India's trade regime, it continues to maintain a wide variety of formal barriers to imports and foreign investment (see text box). According to the U.S. Department of State, "despite reforms, Indian tariffs are still among the highest in the world, especially for goods that can be produced domestically."<sup>30</sup> Imports continue to be delayed at the border because of cumbersome customs procedures, including extensive documentation requirements and subjective classification and validation interpretations by customs

<sup>30</sup> U.S. Department of State telegram No. 000715, "Draft 1998 National Trade Estimate Report, for India," prepared by U.S. Embassy, New Delhi, Jan. 29, 1998.

**Specific import and investment barriers, 1997**

- Foreign equity limitations in some sectors.
- Foreign investment prohibited in defense-related areas, atomic energy, certain metals and minerals, and rail transport.
- Quantitative restrictions for some imported products and a near total ban on imports of consumer goods.
- Marginal corporate income taxes are high by international standards. Although India recently lowered its tax rate for foreign companies to 48 from 55 percent, it also lowered the rate for domestic firms from 40 to 35 percent.
- Government procurement practices are not transparent and tend to discriminate against foreign suppliers.
- Lack of intellectual property protection.
- Import licensing scheme, especially for supercomputers and vehicle knock-down kits.
- Weak intellectual property protection.
- 2 percent special customs duty on all imports except those with a "zero" rate of duty or imported under various duty-free licenses. Additional charges on imports that may be border tax adjustments (so-called countervailing duties).
- Relatively high tariffs, especially on automobiles and luxury goods.
- Autos and consumer goods were exempted from India's Uruguay Round tariff bindings.

Source: U.S. Department of Commerce, Embassy of India-Washington DC, United States Trade Representative, U.S. Department of State.

officials.<sup>31</sup> These barriers represent serious impediments to U.S. trade and remain a concern of the United States Trade Representative (USTR), which noted that India "has made important progress in the past 5-6 years in liberalizing its import regime. However, the job will be incomplete until the remaining import barriers covering over 2,700 import items, that are no longer WTO-justified, are eliminated."<sup>32</sup>

India's applied tariffs remain significantly higher than those of the United States (table 5), especially for motor vehicles and parts that are subject to customs duties and taxes that can elevate the price of an imported vehicle by more than 100 percent. These taxes and tariffs tend to discriminate against vehicles imported into India from the United States, Japan, and the European Union (EU). According to the IMF, India's tariffs are higher than tariffs of its neighbors in East Asia, where tariffs average 12 percent compared with 20 percent for India.<sup>33</sup>

The Indian Government's 1996-97 budget introduced a special 2-percent customs tax on all imports, except for goods imported duty free for purposes of export production, to help control India's fiscal deficit. In September 1997, India also imposed an across the board 3-percent increase in customs duties (except for oil) and a 10-percent additional duty on certain

<sup>31</sup> USTR, *National Trade Estimates 1997: India*, p. 160.

<sup>32</sup> Ibid. *U.S. Supports WTO Decision on Balance of Payments Provisions Regarding India*, USTR, press release No. 97-53, June 13, 1997.

<sup>33</sup>

"India's Macro Outlook Strong: IMF," *India Economic News*, Embassy of India, Washington DC, July 1997, found at Internet address <http://www.indiaserver.com>, retrieved Sept. 3, 1997.

capital goods, mainly machinery imported duty-free under the Government's Export Promotion Capital Goods Scheme.<sup>34</sup>

**Table 5**  
**A comparison of selected Indian and U.S. tariffs (FY 1996-97)**

(Percent)		
Product	Indian tariff	U.S. tariff
Air conditioners/refrig. equipment . . . . .	40	0.9 - 1.7
Appliances . . . . .	25 - 50	1.7 - 4.1
Autos (motor vehicles) . . . . .	40	2.5
Camera components . . . . .	50	5.8
Computers . . . . .	20	2.7 - 3.4
Computer parts . . . . .	10	Free - 1.5
Farm machinery . . . . .	20	Free - 3.1
Integrated circuits and micro assemblies . . . . .	10	Free
Locomotives . . . . .	25-40	1.6
Machine tools . . . . .	20	Free - 4.4
Medical equipment and parts . . . . .	10 - 30	0.8 - 3.6
Motorcycles . . . . .	40	1.5 - 2.9
Printing machinery . . . . .	20	1.3 - 3.6
Radios . . . . .	40	1.5 - 5.8
Telecom. equipment . . . . .	30	Free - 3.6
Color televisions . . . . .	40	2.6 - 4.2
Vacuum cleaners . . . . .	40	1.4

Source: U.S. Department of State, Customs Tariff of India, FY1997-98 Budget Edition, 20th Edition, CEN-CUS Publications.

India currently employs quantitative restrictions through a "negative list" to restrict the flow of unwanted imports. The list divides imports into three distinct groupings: (1) banned or prohibited items (tallow, fat & oils of animal origin); (2) restricted items, requiring a special import license; and (3) "canalized" items or goods that can be imported only by government trading monopolies.<sup>35</sup> India continues to use its negative list to effectively ban most consumer goods, especially those that compete with domestically produced goods.<sup>36</sup> However, in 1992 India freed virtually all imported capital goods and semi-manufactured inputs from import licensing.

<sup>34</sup> India created the Export Promotion Capital Goods Scheme to encourage exports with inducements such as a 10-percent customs duty on imported capital goods, contingent upon the importing company exporting four times the value of its imports within a period of 5 years. To stimulate large investments, companies are allowed to import capital goods duty free if the company exports six times the value of the imports within a 8-year period. U.S. Department of State telegram No. 009507, "Indian Government Announces Mid-Year Course Correction With New Fiscal Measures," prepared by U.S. Embassy, New Delhi, Sept. 17, 1997, retrieved from NEWSEdge.

<sup>35</sup> U.S. Department of State telegram No. 000715, "Draft 1998 National Trade Estimate Report for India," prepared by U.S. Embassy, New Delhi, Jan. 29, 1998.

<sup>36</sup> Included products such as instant print cameras, electronic items and components, and a wide range of other items.

The United States often has been critical of India's use of quantitative restrictions to limit imports for balance of payments purposes. In 1996-97, India's negative list continued to restrict entry of nearly one-third of India's tariff lines. Although the use of the "special import license" scheme (SIL) was designed to permit entry of a wider range of imports, it still limits market access for virtually all consumer goods, especially those that compete with Indian products. The SIL list has tended to grant access only to premium, high priced items with limited demand that can not be produced economically or in large quantities in India. In February 1997, India removed an additional 542 items from its restricted list, making them subject to SIL requirements and shifted 69 items from the SIL to the free list (no license required).<sup>37</sup> Items shifted to the SIL list include a variety of items such as air conditioners, commercial dish washers, sewing machines, and a wide range of office machines.<sup>38</sup> Goods moved to the free list included escalators, conveyors, instant print cameras, ATM machines, and air purifiers and cleaners.<sup>39</sup>

The SIL limits on the importation of smaller, lower priced items, reportedly restrict U.S. and other foreign exporters to high-end imports regardless of demand.<sup>40</sup> For example, of the nearly 2 million refrigerators sold in India during 1994-95 only 15 percent of those sold were eligible for importation under the SIL.<sup>41</sup> Similarly, color televisions entered under the SIL accounted for only 2 percent of the total color TV sales during that period. The SIL list has tended to restrict U.S. exports to capital goods and intermediate inputs.

In 1996, the WTO's Balance of Payments Committee asked India to come up with a plan for phasing out its quantitative restrictions on imports of more than 2,700 consumer and agricultural products. India initially proposed a gradual phaseout covering 6 years in which it would slowly convert quotas into tariffs. The WTO ruled that India could no longer use foreign exchange problems to justify quantitative restrictions because it possessed foreign reserves exceeding \$30 billion.<sup>42</sup> In July 1997, the United States, the European Union, Canada, Australia, New Zealand, and Switzerland requested that the Balance of Payments Committee institute dispute settlement procedures against India to deal with the phaseout of quantitative restrictions.<sup>43</sup> The United States rejected several of India's proposals, insisting

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<sup>37</sup> In 1990, nearly 90 percent of all imports of manufactured goods was subject to quantitative restrictions under India's licensing schemes. Today the list has been pared to fewer than 3,698 items, and of the 542 items moved to the free list nearly 70 percent is consumer goods. The Economist, "Foreign Trade & Payments: More Import Liberalization," Country Reports: India, EIU, Oct. 21, 1996.

<sup>38</sup> These items are subject to the current applicable tariff plus a countervailing duty of 30 percent and a customs surcharge of 2 percent. U.S. Department of Commerce, *India-Consumer Goods liberalization*, Asia Business Center, USA-Trade.

<sup>39</sup> U.S. Department of State telegram No. 001838, "Import Liberalization of Consumer Goods," prepared by U.S. Embassy, New Delhi, Feb. 20, 1997.

<sup>40</sup> The Economist, "India's foreign trade: Angst," *Business South Asia*, EIU, Nov. 1 1996.

<sup>41</sup> The Economist, "Consumer durables in India: Import tangles & knot tying," *Business Asia*, EIU, Oct. 7, 1996.

<sup>42</sup> USTR, "United States Requests WTO Dispute Settlement Consultations With India Regarding India's Balance of Payments Restrictions," press release 97-68, July 15, 1997.

<sup>43</sup> USTR, "Monitoring and Enforcing Trade Laws and Agreements," USTR fact sheet, Sept. 30, 1997, p. 8.

instead on an 18-month phaseout ending January 1, 2000.<sup>44</sup> In November 1997, the United States requested that the WTO Dispute Settlement Body form a panel to examine India's regime on quantitative restriction and import licensing for imports of agricultural, textile and industrial products.<sup>45</sup>

## U.S. Exports and Investment Flows

As the major market in South Asia, India represents a largely untapped market for U.S. exporters. Before undertaking its reforms, India's imports consisted principally of intermediate goods used in the production of domestic products. India's leading publicly owned companies also tended to favor capital goods and equipment offered through tied loans or bilateral aid programs from the United Kingdom, Germany, France, Japan, and the former Soviet Union.<sup>46</sup>

Fueled by a surge in industrial growth, Indian imports grew by 23 percent in 1994-95 and by 28 percent in 1995-96. Since 1991, the United States has emerged as India's leading trading partner accounting for 10 percent of its total imports. By the end of 1997, bilateral U.S.-India trade totaled more than \$10.8 billion, representing an increase of more than 70 percent since 1991 (table 6). Similarly, U.S. exports of capital goods and equipment more than doubled, to nearly \$2 billion in 1997. Since 1991, capital goods and equipment have dominated U.S. exports to India, rising from 36 percent in 1991 to a peak of 62 percent in 1996, before falling to 56 percent in 1997.

Table 6  
U.S.-India trade, 1990-97

(Million dollars)								
Trade	1990	1991	1992	1993	1994	1995	1996	1997
U.S. exports:								
Capital goods & equipment . .	953	700	737	1,663	1,215	1,596	1,998	1,939
Total U.S. exports . . . . .	2,411	1,949	1,846	2,702	2,212	3,149	3,205	3,474
Percent of total . . . . .	39.5	35.9	39.9	61.5	55.0	50.8	62.4	55.8
U.S. imports:								
Capital goods & equipment . .	87	96	127	178	240	339	397	600
Total U.S. imports . . . . .	3,198	3,200	3,753	4,536	5,286	5,702	6,145	7,289
Percent of total . . . . .	2.7	3.0	3.4	3.9	4.5	6.0	6.5	8.2
Trade balance:								
Capital goods & equipment . .	866	604	610	1,485	975	1,257	1,601	1,339
Total . . . . .	(787)	(1,251)	(1,907)	(1,834)	(3,074)	(2,553)	(2,940)	(3,815)

Source: U.S. International Trade Commission Trade Database.

<sup>44</sup> USTR, "United States Requests WTO Dispute Settlement Consultations With India Regarding India's Balance of Payments Restrictions," press release 97-68, July 15, 1997.

<sup>45</sup> U.S. Department of State telegram No. 216815, "WTO Dispute Settlement Body Meeting," prepared by U.S. Department of State, Washington DC, Nov. 18, 1997.

<sup>46</sup> During 1997, Japan guaranteed \$1.1 billion in official development assistance loans for 11 projects in India covering power generation, urban development, environmental, forest, and water resources. The Economist, "India," Country Watch List, *Business Asia*, EIU, Feb. 10, 1997.

After the initial effects of trade liberalization boosted U.S. exports during 1990-93, growth in demand for U.S. exports moderated somewhat and declined during the latter half of 1996 as business conditions tightened.<sup>47</sup> India's demand for U.S. exports reportedly was adversely affected by high real interest rates (ranging between 18 and 22 percent), limited availability of commercial credit, an underdeveloped infrastructure, and inconsistent government trade policies.<sup>48</sup>

Despite the extraordinary growth in India's demand for domestically manufactured consumer and industrial products, India remained a relatively small market for U.S. manufacturers, accounting for less than 1 percent of total U.S. global exports during 1997.<sup>49</sup> U.S. exports to India are heavily skewed towards capital goods and equipment (table 6). Such exports also are concentrated in 10 export categories (table 7), which in 1997 accounted for 34 percent of the value of total U.S. exports to India and 61 percent of the value of U.S. capital goods and equipment exports to India.

**Table 7**  
**Selected U.S. capital goods and equipment exports to India, by product, 1990-97**

Product	(Million dollars)							
	1990	1991	1992	1993	1994	1995	1996	1997
Aircraft, spacecraft, and parts . . . . .	117.6	91.3	111.8	700.8	323.0	161.7	490.6	271.3
Medical and scientific equipment . . . . .	166.6	121.1	117.9	127.4	138.3	182.9	209.0	227.2
Computers, office machinery, and parts . . .	68.5	65.3	55.2	54.9	90.9	138.9	173.7	179.9
Mining, construction, and agricultural machinery . . . . .	89.9	64.5	69.4	99.7	62.2	70.2	93.5	98.7
Turbojets, turboprops, other gas turbines . .	33.1	26.7	19.0	166.3	55.0	59.4	90.7	187.1
Televisions, radio transmission and reception apparatus . . . . .	15.8	15.6	24.8	26.7	29.7	33.8	54.6	41.6
Internal combustion engines and parts . . . .	17.6	10.6	10.9	13.4	16.3	31.2	46.7	40.6
Motor vehicles . . . . .	38.4	12.9	9.5	31.3	20.2	20.8	39.6	28.7
Telephone and telegraph apparatus . . . . .	4.6	4.1	9.1	9.0	15.3	44.2	44.0	28.0
Diodes, transistors, integrated circuits, and similar semi-conductions . . . . .	52.4	34.9	41.0	41.3	57.4	116.1	83.5	83.8
Top 10 total . . . . .	604.5	447.0	468.6	1,270.8	808.3	859.2	1,325.9	1,186.9

Source: U.S. International Trade Commission Trade Database.

<sup>47</sup> Economic Survey 1997, Ministry of Finance, Government of India, found at Internet address <http://www.nic.in/indiabudget>, retrieved Sept. 9, 1997.

<sup>48</sup> The Economist, "India: Outlook for 1997-98," Country Reports, EIU, Jan. 31, 1997. "Economy: But the panic revealed the real problems," Country Reports: India, The Economist Intelligence Unit, Jan. 31, 1997.

<sup>49</sup> "Indo-US Trade Relations," Embassy of India, Washington DC, found at Internet address <http://www.indiaserver.com>, retrieved Sept. 3, 1997.

## Outlook

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The demand for U.S. capital goods and investment should continue to grow as India modernizes its infrastructure and as U.S. companies gain greater access to India's formerly protected markets. However, the flow of U.S. exports will continue to be impeded by India's restrictions on the importation of consumer goods, quantitative restrictions under the negative list, and high tariffs. Some in the business community also have implied that the growth in U.S. exports and investment could be restrained by an overestimation of the size of India's middle class, continuing public opposition to the presence of foreign multinationals, and the uncertainty of India's political stability.

India's development also has been constrained by its limited infrastructure.<sup>50</sup> India possesses inadequate electrical power, water, and sewage treatment, as well as inferior roads, ports, and communications systems. In 1992, for example, India possessed only 5.5 million telephone lines for 970 million people. Hewlett-Packard, for instance, recently cited India's inadequate port facilities as one of the reasons for closing a factory dedicated to the production of components for ink jet printers.<sup>51</sup> The United Front government (UF) estimated that India will need \$200 billion over the next 5 years to address India infrastructure shortfalls.<sup>52</sup>

U.S. exports and investment in India could also be affected by India's uncertain political stability. India's fourth government in less than 2 years collapsed in November 1997. At the same time, the rupee reportedly had fallen to a historic low of 38 against the dollar, making imports from the United States more costly.<sup>53</sup> Anti-reform elements within and outside the former UF coalition continue to oppose the pace of liberalization.<sup>54</sup> Parties within the Indian Government opposed to the pace of liberalization have claimed that the changes have produced few jobs and that further liberalization could ultimately lead to a new era of cultural and economic colonialism. Organized labor, the Hindu nationalist Bharatiya Janata Party (BJP), antiwestern leftist parties, and other domestic lobbies have rallied their supporters to oppose the pace of reform.<sup>55</sup> These groups reportedly favor greater protection for domestic industries and have called on the government to curb alleged preferential treatment for foreign investors and to limit foreign investment in many industries. The BJP has adopted the popular phrase "microchips not potato chips" in its demand that the government approve only high-technology and infrastructure related foreign investment rather than allowing investment in

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<sup>50</sup> U.S. Department of State telegram No. 008078, "Update on India's Economic Performance," prepared by U.S. Embassy, New Delhi, Aug. 8, 1997.

<sup>51</sup> The Economist, "Information Technology in India," *India Business Intelligence*, EIU, Aug. 1, 1997.

<sup>52</sup> The Economist, fact sheet, Country Forecasts: India, EIU, , July 18, 1997.

<sup>53</sup> "Gujral's Coalition Government Collapses, *Los Angeles Times*, Nov 29, 1997, retrieved from NEWSEDGE.

<sup>54</sup> U.S. Department of State telegram No. 000226, "Update on Economic Developments in India," prepared by U.S. Embassy, New Delhi, Jan. 9, 1998.

<sup>55</sup> The Economist, "Political Scene: Liberalization programme is being undermined," Country Reports: India, EIU, Jan. 31, 1997.

lower priority sectors, such as consumer goods.<sup>56</sup> As of March 1998, a weakened new Hindu nationalist government presides in India which poses uncertainty regarding the sustained ability of initiated reforms, especially with respect to foreign investment liberalization. ■

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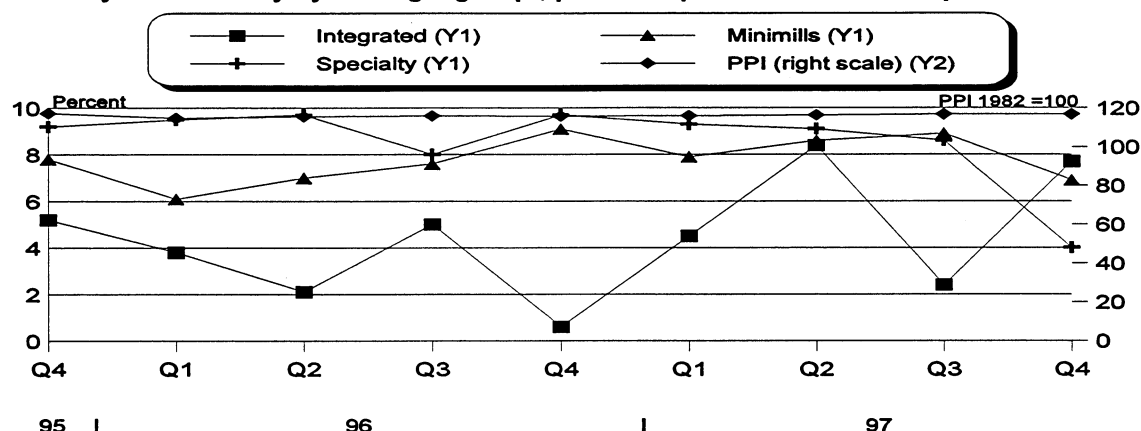
<sup>56</sup> Dexter Flikins, "Indian Economy's Reform Engine Stalls," *Los Angeles Times*, Dec. 30, 1997.

**APPENDIX A**  
**KEY PERFORMANCE INDICATORS OF SELECTED**  
**INDUSTRIES**

- ☐ **STEEL** (Tracy Quilter, 202-205-3437/tquilter@usitc.gov)
- ☐ **AUTOMOBILES** (Laura A. Polly, 202-205-3408/polly@usitc.gov)
- ☐ **ALUMINUM** (Karl S. Tsuji, 202-205-3434/tsuji@usitc.gov)
- ☐ **FLAT GLASS** (James Lukes, 202-205-3426/lukes@usitc.gov)
- ☐ **SERVICES** (Christopher Melly, 202-205-3461/melly@usitc.gov)

## STEEL

Figure A-1

Steel industry: Profitability by strategic group<sup>1</sup>, producer price index for steel products

PPI = Producer Price Index

<sup>1</sup> Operating profit as a percent of sales. Integrated group contains 9 firms. Minimill group contains 8 firms. Specialty group contains 5 firms.

Source: Individual company financial statements and U.S. Bureau of Labor Statistics.

- Prices of steel mill products decreased slightly in the fourth quarter of 1997 as West coast hot rolled and cold rolled sheet prices have been under pressure from Asian imports.<sup>1</sup> However, by early Feb. 1998, several U.S. steelmakers announced price increases for products ranging from coated sheet to plate and merchant bar.
- Continued strong domestic demand during the fourth quarter, resulting in the highest shipments levels in over 20 years,<sup>2</sup> increased integrated steelproducers' profitability. However, specialty steelproducers attribute the sector's decline during 1997 to a combination of soft prices and a 4 percent increase in imports from 1996.<sup>3</sup> J&L Specialty Steel and Lukens Stainless Group both recorded an operating loss for the fourth quarter.
- Bethlehem Steel will acquire Lukens Inc. for \$750 million and then sell Lukens' assets used in the manufacture of stainless products to Allegheny Teledyne (AT). The agreement also provides AT with up to 15 percent of the available time on Lukens' facilities for wide coil and plate production.<sup>4</sup>

<sup>1</sup> Frank Haflich, "Asia clouds US steel pricing: W. Coast tags erode," *American Metal Market*, Jan. 21, 1998, p. 1.

<sup>2</sup> American Iron and Steel Institute (AISI) News Release, "1997 U.S. Steel Shipments at Highest Level Since 1974," Feb. 24, 1998.

<sup>3</sup> John E. Sacco, "97 data hold specialty blues," *American Metal Market*, Feb. 9, 1998, p.1.

<sup>4</sup> World wide web, retrieved Jan. 29, 1998, Yahoo finance, <http://biz.yahoo.com/finance/bethlehem>, "Bethlehem selling Lukens assets to Allegheny," *Reuters Limited*, Jan. 28, 1998.

Table A-1

Steel mill products, all grade

Item	Q4 1997	Percentage change, Q4 1997 from		1997	Percentage change, 1997 from	
		Q3 1997	1997		1996 <sup>1</sup>	1996 <sup>1</sup>
Producers's shipments (1,000 short tons) . . . . .	26,538	0.0	104,958	4.8		
Imports (1,000 short tons) . . . . .	7,080	-9.9	31,157	6.8		
Exports (1,000 short tons) . . . . .	1,582	-1.2	6,036	20.0		
Apparent supply (1,000 short tons) . . . . .	32,037	-2.3	130,079	4.7		
Ratio of import to apparent supply (percent) . . . . .	22.1	<sup>2</sup> -1.9	24.0	<sup>2</sup> 5		

<sup>1</sup> Based on unrounded numbers.

<sup>2</sup> 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**

Item	Dec. 1997	Percentage change, Dec. 1997 from Sept. 1997 <sup>1</sup>	4th Quarter 1997	4th Quarter 1996
Shipments (1,000 net tons) .....	2,242	-9.1	7,104	6,578
Ending inventories (1,000 net tons) .....	7,271	1.0	7,271	6,962
Inventories on hand (months) .....	3.2	( <sup>2</sup> )	3.2	3.4

<sup>1</sup> Based on unrounded numbers

<sup>2</sup> Not applicable

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

Source: Steel Service Center Institute.

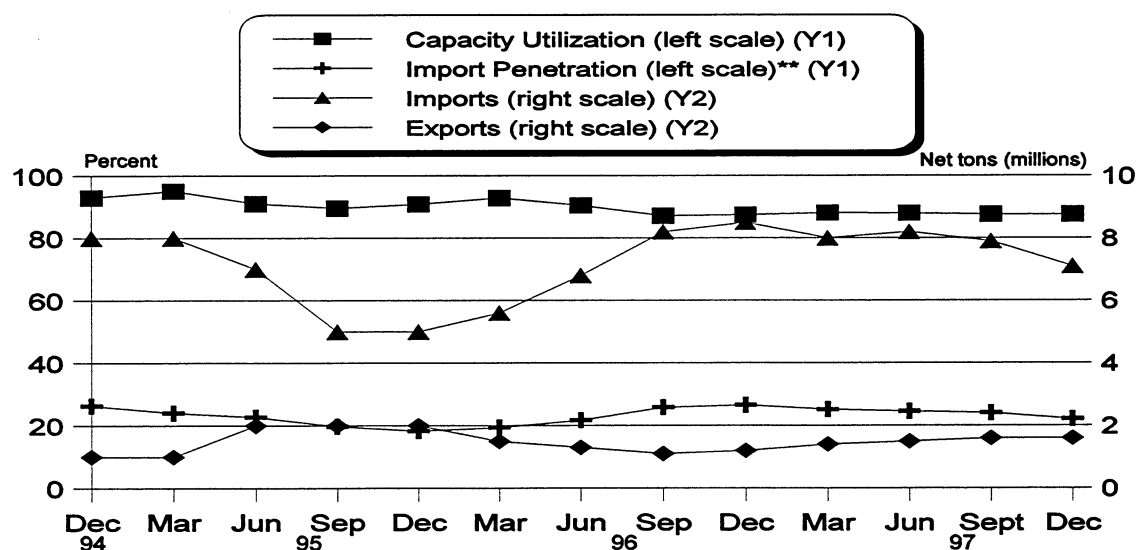
- The Steel Service Center Institute (SSCI) reported a strong start to 1998 with daily shipping rate gains in several product categories, led by carbon steel flat rolled products and bars.<sup>1</sup> Some SSCI members anticipate being faced with shortages of plate and structurals within the next 3 months.
- Imports for the quarter ending December 1997 decreased 10 percent from the previous quarter, but overall, imports in 1997 reached their highest levels ever and 7 percent higher than in 1996.<sup>2</sup> Import penetration for the year was 24 percent of the steel market. These figures reflect robust demand for steel and steel products and can be attributed in part to the strength of the U.S. economy in 1997. Exports weakened slightly during the fourth quarter, but were up 20 percent from the previous year.<sup>3</sup>
- Capacity utilization remained unchanged from the previous quarter at 88 percent.

<sup>1</sup> SSCI News Release, "No Slowing Down," Feb. 24, 1998.

<sup>2</sup> AISI News Release, "1997 Steel Import Tonnage Highest Ever," Feb. 19, 1998.

<sup>3</sup> Compiled from AISI monthly reports for Oct., Nov., and Dec. 1997.

**Figure A-2**  
**Steel mill products, all grades: Selected industry conditions**

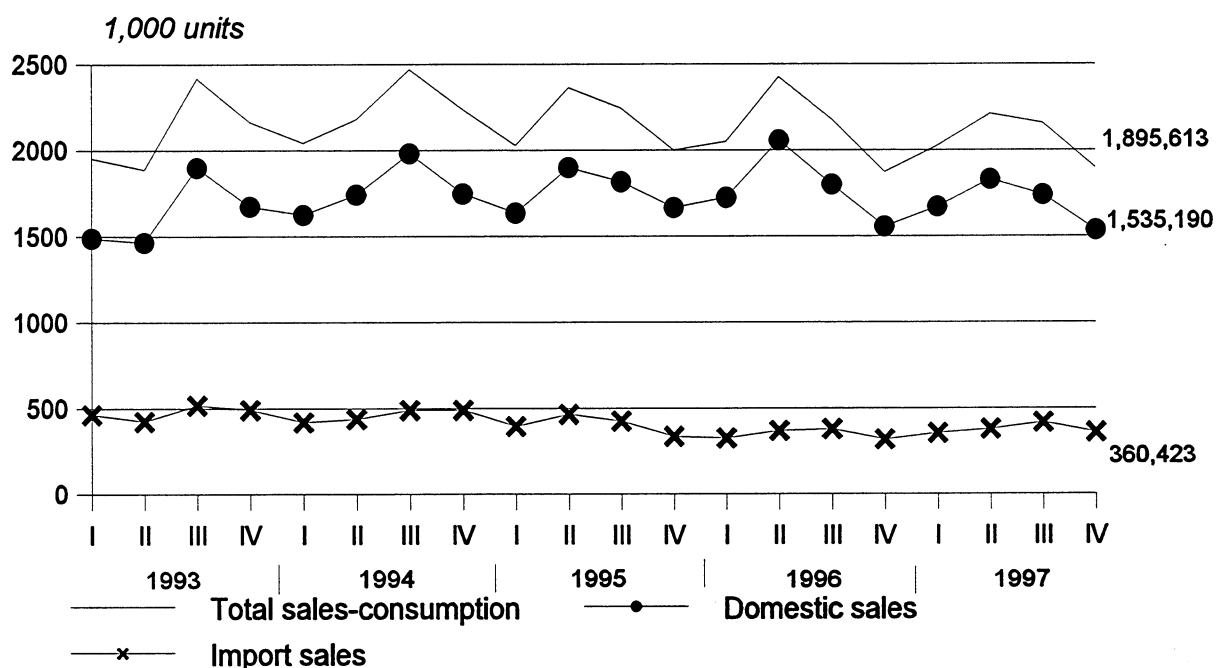


\*\*Import share of apparent open market supply.

Source: American Iron and Steel Institute.

## AUTOMOBILES

Figure A-3  
U.S. sales of new passenger automobiles, by quarter



Note.—Domestic sales include all automobiles assembled in Canada and imported into the United States under the United States-Canadian automobile agreement; these same units are not included in import sales.

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

Table A-3  
U.S. sales of new automobiles, domestic and imported, and share of U.S. market accounted for by sales of total imports and Japanese imports, by specified periods, January 1996-December 1997

Item	Percentage change-			
	Oct.-Dec. 1997	Jan.-Dec. 1997	Oct.-Dec. 1997 from July-Sept. 1997	Jan.-Dec. 1997 from Jan.-Dec. 1996
U.S. sales of domestic autos (1,000 units) <sup>1</sup> .....	1,535	6,795	-11.8	-4.8
U.S. sales of imported autos (1,000 units) <sup>2</sup> .....	360	1,495	-13.3	7.6
Total U.S. sales (1,000 units) <sup>1,2</sup> .....	1,896	8,289	-12.1	-2.8
Ratio of U.S. sales of imported autos to total U.S. sales (percent) <sup>1,2</sup> .....	19.0	18.0	-1.3	10.7
U.S. sales of Japanese imports as a share of the total U.S. market (percent) <sup>1,2</sup> .....	9.2	9.3	-9.4	8.1

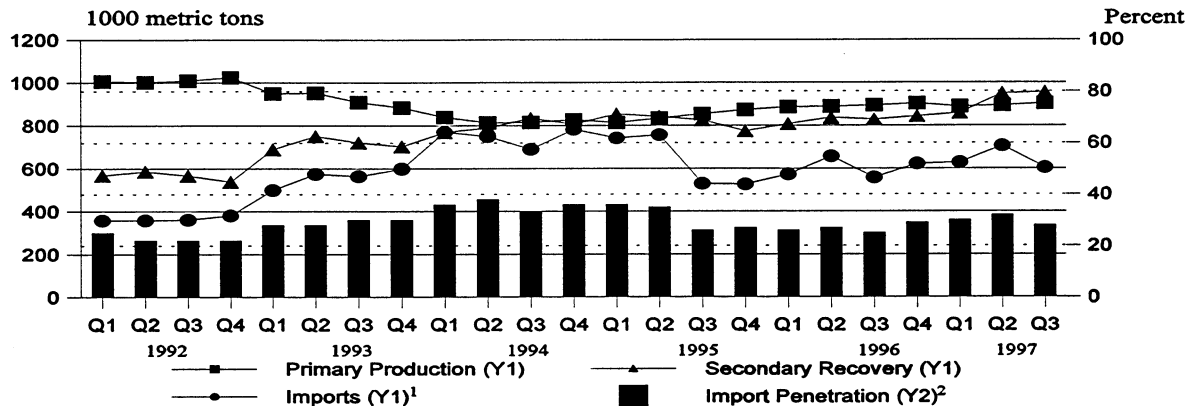
<sup>1</sup> Domestic automobile sales include U.S., Canadian-, and Mexican-built automobiles sold in the United States.

<sup>2</sup> Does not include automobiles imported from Canada and Mexico.

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

## ALUMINUM

**Figure A-4**  
**Aluminum: Selected U.S. industry conditions**



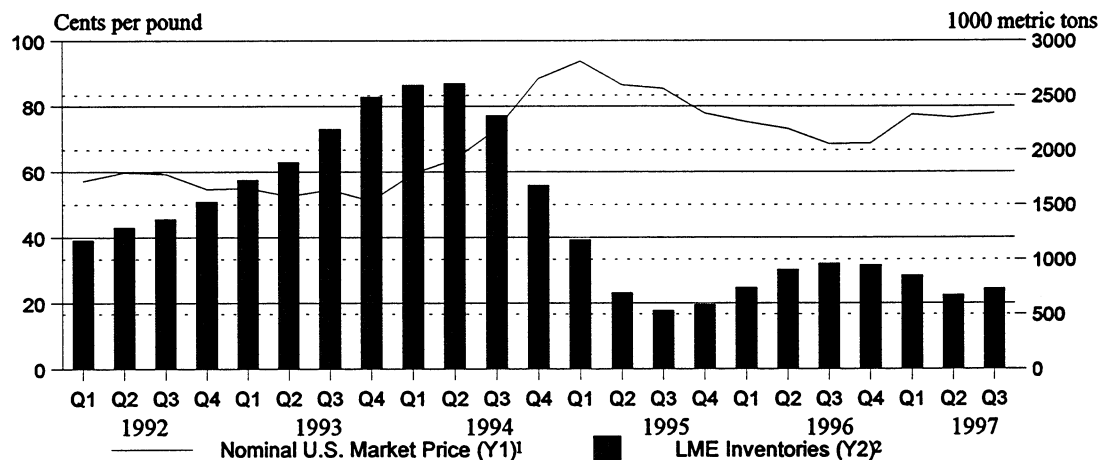
<sup>1</sup> Crude forms (metals and alloys) and mill products (e.g. plates, sheets, and bars) for consumption.

<sup>2</sup> Percent share of imports to apparent domestic supply.

Source: U.S. Geological Survey.

- The global aluminum market retreated in the third quarter 1997 from the robust price conditions and expanding production that had prevailed since fourth quarter 1996, as order rates softened with decreased seasonal demand. Declining LME inventories reached a low in early August 1997 before rebounding to 732,000 metric tons at the end of the third quarter (9 percent above the previous quarter's final level).
- Likewise, the U.S. market softened in third quarter 1997. On the supply side, primary production and secondary recovery of unwrought aluminum rose slightly (0.8 percent) to a combined output of nearly 1.9 metric tons. Identifiable inventories grew by 20,000 metric tons, despite sales of nearly 9,400 metric tons from the National Defense Stockpile in early August. On the demand side, total apparent consumption decreased 4 percent to 2.1 million metric tons, although demand from automakers and several other downstream sectors began to rebound after a summer slowdown.
- In response to these conditions, U.S. imports fell 101,000 metric tons (14 percent) to 604,000 metric tons, and import penetration decreased 4 percentage points to 28 percent. A price spike, reflecting perceived low global inventories, increased the average U.S. price for primary aluminum to 77.8 cents per pound, 1.2 cents above the previous quarter's level.

**Figure A-5**  
**Aluminum: Price and inventory levels**



<sup>1</sup> Quarterly average of the monthly U.S. market price of primary aluminum ingots.

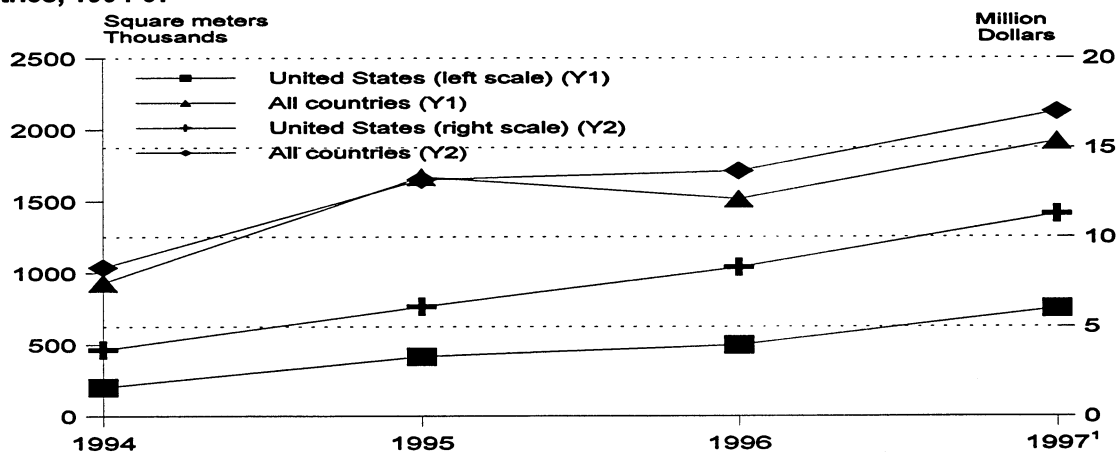
<sup>2</sup> End of quarter inventories.

Sources: U.S. Geological Survey, World Bureau of Metal Statistics, and Metals Week.

## FLAT GLASS

Figure A-6

Average monthly Japanese imports of flat glass, by quantity, from the United States and all countries, 1994-97



<sup>1</sup> January-November.

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

### Background

- The U.S.-Japanese agreement on market access in Japan for imports of flat glass<sup>1</sup> for the period 1995-99 seeks to increase access and sales of foreign flat glass through such means as increased adoption of nondiscriminatory standards and expanded promotion of safety and insulating glass.<sup>2</sup> Average monthly Japanese imports from all countries doubled under the agreement to 1.9 million square meters (\$17 million) in 1997, with imports from the United States more than tripling in volume to 800,000 square meters (\$11.3 million). However, the United States rated the results in opening the Japanese market over the past year as "poor" at the second annual review of the agreement in May 1997.<sup>3</sup> In July 1997, twenty-six members of the United States Senate and fifty-three members of the House of Representatives requested the President to urge Japan to significantly improve its performance during the remainder of the agreement. The U.S. Trade Representative cited the low volume of foreign glass in the Japanese distribution system in its 301 report in October 1997, and sought consultations with the Japanese on the matter in the same month. Discussions held in Tokyo in October 1997 failed to address U.S. concerns.<sup>4</sup> Further discussion of these issues was postponed until the next annual session in the spring.<sup>5</sup>

### Current

- Japanese demand for imported glass is weakening, with the Asian financial crisis a likely contributing factor. The average monthly quantity and value of Japanese imports from all countries increased by 25 and 24 percent for the first seven months of 1997, respectively, compared to the averages for 1996, but slowed to increases of only 1 and 0.2 percent during August through November. Japanese imports from the United States performed somewhat better than average, increasing by 38 and 31 percent during the first seven months of 1997, respectively, and 9 and 3 percent during the next four months.

<sup>1</sup> Flat glass is largely unworked; it may be surface ground or polished and have an absorbent, reflecting or non-reflecting coating, but it has not been tempered, laminated, bent, edge-worked, engraved, drilled, enameled, or otherwise worked. Safety glass (tempered or laminated) and insulating glass are also covered under the U.S.-Japanese agreement on flat glass.

<sup>2</sup> USITC, "Flat glass," *Industry, Trade, and Technology Review*, Oct. 1995, p. 42.

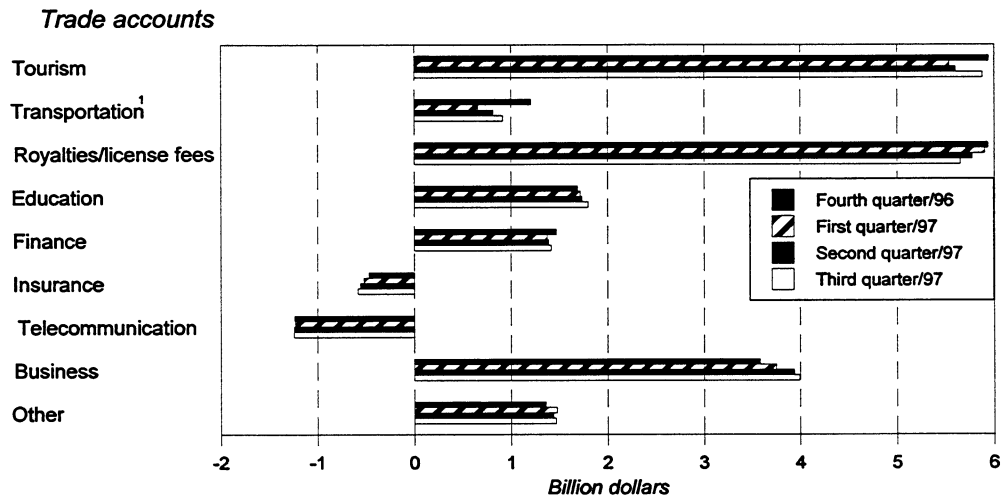
<sup>3</sup> U.S. Department of State (USDOS) telegram, "Glass: Second Annual Review of the Agreement," message reference no. 05113, prepared by U.S. embassy, Tokyo, June 12, 1997.

<sup>4</sup> The U.S. Government is concerned violations of Japanese antimonopoly regulations and the limited increase in imports from companies without capital affiliations with Japanese companies.

<sup>5</sup> USDOS telegram, "Glass: Press on Review Meeting," message reference no. 09261, prepared by U.S. embassy Tokyo, Oct. 23, 1997, retrieved from NewsEdge/Web Nov. 12, 1997.

## SERVICES

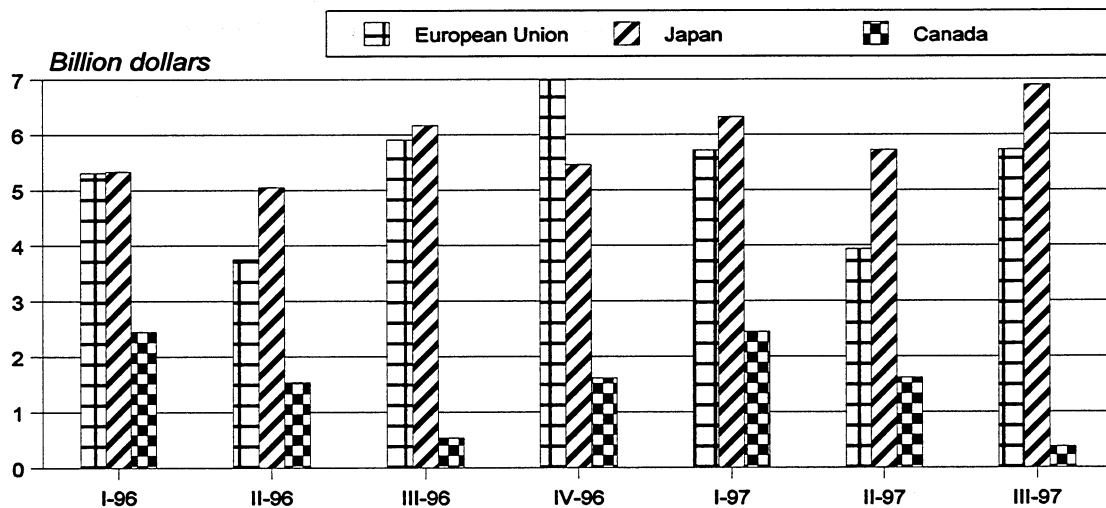
**Figure A-7**  
 Balance on U.S. service trade accounts, fourth quarter 1996 through third quarter 1997



<sup>1</sup> Includes port fees.

Source: Bureau of Economic Analysis, *Survey of Current Business*, Jan. 1998 table 3, p. 20.

**Figure A-8**  
 Surpluses on cross-border U.S. service transactions with selected trading partners, by quarter, 1996-97<sup>1</sup>



<sup>1</sup> Figures reflect private-sector transactions only; military shipments and other public-sector transactions have been excluded.

Source: Bureau of Economic Analysis, *Survey of Current Business*, table 10, Jan. 1998 pp. 28-33.



