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Market Developments in Mercosur Countries Affecting Leading U.S. Exporters

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Staff Issue Paper:* Market Developments in Mercosur Countries Affecting Leading U.S. Exporters

ABSTRACT

This paper examines trade and investment trends in the Mercosur countries in the context of both the Mercosur agreement and unilateral policy changes implemented by member nations to spur economic growth. Profiles of the four charter members provide a synopsis of their macroeconomic performance and of the government policies, reforms, and remaining barriers affecting trade and foreign investment. To illustrate these trends and the outlook for U.S. firms in these markets, the report also profiles five leading U.S. export industries that account for about 25 percent of U.S. exports to Mercosur countries. These leading U.S. export industries include power generation equipment, motor vehicles and parts, medical devices and equipment, computer equipment and parts, and telecommunications equipment. For each industry, the paper provides a summary of a key bloc member's industry structure and recent market developments, an assessment of intra-Mercosur trade, a discussion of factors affecting market access for U.S. goods, and information on industry-specific tariff and nontariff barriers.

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* **Note to readers:** The views and conclusions expressed in this staff issue paper do not necessarily reflect the views of the U.S. International Trade Commission or of an individual Commissioner. Market developments in the Mercosur region are dynamic and more up-to-date information may be available. For additional information on industry sectors, please contact William Greene (greene@usitc.gov or 202-205-3405). For additional information on Mercosur countries and developments in the region, please contact James Stamps (stamps@usitc.gov or 202-205-3227).

INTRODUCTION

Mercosur* is a customs union whose founding members are Argentina, Brazil, Paraguay, and Uruguay. Chile and Bolivia are associate members. When Mercosur was originally formed in 1991 as a free trade zone, the two largest members, Argentina and Brazil, were trying to solidify democratic institutions after extended periods of military rule and to wean their economies away from policies of import substitution and government ownership, or support, of key industries. Most governments in the region had been facing stagnant productivity, shortages of investment capital, high inflation, and weak domestic consumption. In response to these challenges, the charter members of Mercosur took steps of varying degrees to emulate the Chilean growth model, which was based on unilateral tariff reductions, privatization of publicly owned industries and services, and openness to foreign investment. Mercosur's implementation of a regional customs union on January 1, 1995, provided a large market for its members, thereby providing an incentive for regional development and allowing each member to realize economies of scale. In the past several years, the charter members have experienced significant growth in GDP and international trade, both with fellow members and with nonmembers.

It is not yet possible to draw conclusions about the economic effects of Mercosur's implementation of a customs union, given the ongoing phase-in of common tariff rules, the short period of time the union has been in existence, and many other factors at work in the region. At the conclusion of the April 1998 Summit of the Americas in Santiago, Chile, leaders of 34 countries in the Western Hemisphere agreed to launch formal negotiations in September for a Free Trade Area of the Americas (FTAA). Recent developments in hemispheric trade and investment that involve Mercosur members may serve to provide insights on how market reforms could affect other hemispheric partners. Unilateral policy changes implemented by member nations in the early 1990s seem to have created an investment climate conducive to economic growth. It is anticipated that the Mercosur agreement will also influence the growth of these member economies by promoting trade and investment within the customs union.

This paper examines trends during 1990-97 in the political and economic climate of Mercosur countries, intra-Mercosur trade and bloc member trade with the United States and the rest of the world, and U.S. exports to and investment in member countries. Executive summary highlights (in italics) are provided for: (1) the overview of market developments in the Mercosur bloc; (2) the overview of industry analysis; and (3) each of the industry analyses which follow. Certain trade data on Mercosur imports and intra-regional Mercosur trade are provided throughout this paper for the latest year available (1996).

* Mercosur is shortened from the Spanish *Mercado Común del Sur* (Southern Common Market); in Portuguese (Brazil), the bloc is referred to as Mercosul.

OVERVIEW OF MARKET DEVELOPMENTS AND TRADE IN THE MERCOSUR BLOC

HIGHLIGHTS

- *Mercosur is the customs union formed by the Treaty of Asunción in 1991, which joined Argentina, Brazil, Paraguay, and Uruguay. In 1995, a set of common external tariffs (CET) on imports from nonmembers was added to the intra-regional free trade policies adopted earlier.*

- *By 1990, each founding member had begun to shift away from protectionism and had launched measures to implement market-oriented economic reforms on a unilateral basis. The Mercosur agreement has established a formal timetable for the harmonized liberalization of their trading regimes.*

- *Latin America has become one of the fastest growing markets for U.S. products during the 1990s. U.S. exports to the Mercosur bloc, the second largest Latin American market for U.S. products after Mexico, more than tripled during 1990-97, rising to $21.9 billion. Meanwhile, the U.S. merchandise trade balance with Mercosur countries shifted from a $3.1 billion deficit in 1990 to a trade surplus of $10.0 billion in 1997. The strong growth in U.S. exports to the Mercosur bloc reflects economic expansion in the region, lower rates of inflation, reduced trade barriers, liberalized foreign investment rules, and privatization of government-owned industries.*

- *Under Mercosur, U.S. exports now entering member countries generally face a lower average tariff than was the case before the CET was implemented. However, member countries have raised tariffs on selected goods, either as part of the agreement or in response to rising trade deficits and fiscal shortfalls which have occurred since its implementation.*

- *During the 1990-96 period, imports by Mercosur countries from other bloc members increased 314 percent, to $17.1 billion, as imports from non-Mercosur countries increased 185 percent, to $66.2 billion. At the same time, the Mercosur bloc exports to the rest of the world increased 37 percent, to $57.9 billion.*

MERCOSUR IN PERSPECTIVE [1]

With a population of over 200 million and a growing middle class, the Mercosur region has significant market potential for U.S. exports of merchandise and services. The charter members of Mercosur (Argentina, Brazil, Paraguay, and Uruguay) account for roughly two-thirds of U.S. trade with the region. The Mercosur agreement represents one of a series of bilateral and multilateral trade agreements among Latin American nations.* Following the ratification of the Treaty of Asunción in 1991, a transition period commenced during which most tariffs on intra-regional trade were phased out and trade regimes were harmonized under the auspices of a free-trade area (FTA). Mercosur's second phase was implemented on January 1, 1995, with the introduction of a system of common external tariffs (CET). The FTA serves to liberalize trade among the Mercosur partners by reducing and ultimately eliminating tariffs and some nontariff barriers on most goods within the region. Under the CET, most imports from outside

* See Appendix A for a separate discussion of the mechanics of the Mercosur agreement.

the Mercosur region are subject to a common tariff regime. Bolivia and Chile joined the FTA as Mercosur "associate members" in 1997.*

The advent of Mercosur coincided with a general expansion of trade and investment opportunities. Generally improved macroeconomic performance throughout the region gave momentum to Mercosur's goals of economic integration and trade liberalization. Furthermore, the Mercosur agreement was negotiated and implemented during a period of declining global trade barriers; the multilateral Uruguay Round Agreements (URA) also entered into force on January 1, 1995. Mercosur members already had adopted unilateral reforms that were more far-reaching than those agreed to in the URA, a fact that is in part reflected in the CET. (See the section of this paper entitled "Mercosur Charter Member Profiles" for a discussion of the recent economic performance and trade policies of these Mercosur members.)

Mercosur is not a union of equals. Although Argentina has a higher per capita GDP (table 1), Brazil dominates the Mercosur region in terms of economic activity (measured by GDP), land area, population, and trade volume. Consequently, Brazilian economic policies influence the pace of Mercosur's overall trade liberalization program. Brazil's shift away from protectionist trade policies and the implementation of market-oriented economic reforms have been influenced by similar steps taken by Chile and Argentina. Lower barriers to trade and investment and the privatization of state enterprises have also opened new areas of economic activity to foreign participation.

Table 1
Economic indicators for Mercosur members, 1997

Country	Total GDP	Land area	Population	GDP per capita	Exports	Imports
	Billion 1990 dollars	*Million sq km*	*Millions*	*1990 dollars*	*— Billion 1997 dollars[1] —*	
Argentina	231.0	2.8	35.7	6,476	19.0	20.6
Brazil	504.9	8.5	163.0	3,090	53.0	61.4
Paraguay	7.6	0.4	5.0	1,502	2.6	4.0
Uruguay	11.1	0.2	3.2	3,448	2.7	3.5

[1] Balance of payments basis.

Source: Inter-American Development Bank, *Basic Socio-Economic Data*, Mar. 16, 1998.

MERCOSUR'S ROLE IN HEMISPHERIC TRADE

The formation of Mercosur coincided with increased U.S. attention to and participation in efforts to create a hemisphere-wide free trade zone. The U.S.-Canada free trade agreement became operative in 1989 and the North American Free Trade Agreement (NAFTA) in 1994. The Clinton administration has indicated a desire to move toward a Free Trade Area of the Americas (FTAA) by expanding the NAFTA to other countries in the hemisphere. However, the United States Trade Representative (USTR) believes that agreements to expand NAFTA are unlikely without fast-track negotiating authority, which expired in 1994.[2] With NAFTA expansion delayed, Mercosur has taken on increasing importance in promoting hemispheric economic integration and as a vehicle for coordinating member country relations with the United States. Mercosur has already become a regional hub for trade agreements among South American

* This paper discusses trends related to the four charter member countries of Mercosur. Associate members enjoy the benefits of the Mercosur FTA without having to adopt the CET.

countries. Ongoing talks between Mercosur and both Canada and Mexico, in addition to negotiations with members of the Andean Pact, could make Mercosur the first trade agreement to span the hemisphere.

Since the signing of the Treaty of Asunción in 1991, Mercosur members have made significant progress toward the liberalization of their trade regimes. As the four economies have opened their markets to greater competition and reduced inflation, they have stimulated higher production levels and greater demand for imports, especially capital goods.[3]

Mercosur Trade with the United States

During 1990 to 1997, U.S. exports to the Mercosur bloc nearly tripled, rising from $6.5 billion to $21.9 billion (table 2). U.S. exports to each country have increased almost every year since the early 1990s.* Although Mercosur's share of U.S. exports (in total value) remains a modest 3 percent, U.S. exports to the region grew significantly faster in 1990-97 than U.S. exports to other important markets. In 1997, U.S. exports to Mercosur were dominated by computers and related equipment; telecommunications equipment; equipment for use in construction and mining; and industrial machinery; as well as chemicals, plastics, and transportation equipment. A significant portion of U.S. exports to Argentina and Brazil are in the form of parts for final assembly by subsidiaries or joint ventures of U.S. producers. The finished goods are then distributed to markets through out the region.

Table 2
U.S.-Mercosur bilateral trade, 1990-1997

(Million dollars)

Trading partner	1990	1991	1992	1993	1994	1995	1996	1997
Argentina:								
U.S. imports from	1,474	1,252	1,225	1,889	1,653	1,761	2,227	2,195
U.S. exports to	1,223	1,897	2,984	3,507	4,206	3,980	4,317	5,553
Brazil:								
U.S. imports from	7,762	6,760	7,588	7,763	8,847	8,989	8,871	9,510
U.S. exports to	4,877	5,945	5,442	5,712	7,638	10,757	11,920	15,001
Paraguay:								
U.S. imports from	51	44	35	50	80	55	43	40
U.S. exports to	256	317	357	459	713	928	858	856
Uruguay:								
U.S. imports from	207	237	263	266	166	168	260	229
U.S. exports to	136	198	210	231	288	374	461	514
Mercosur								
U.S. imports from	9,494	8,293	9,111	9,267	10,746	10,972	11,400	11,974
U.S. exports to	6,493	8,357	8,993	9,909	12,845	16,038	17,556	21,923

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

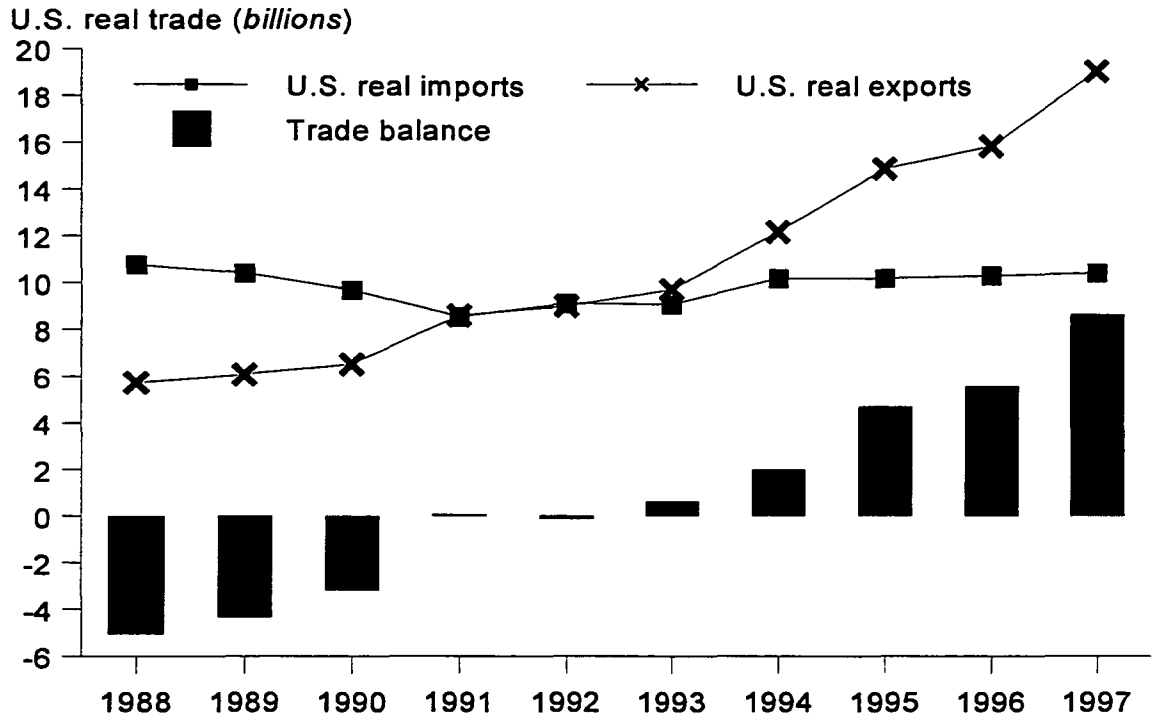
Source: Compiled from official statistics of the U.S. Department of Commerce.

The U.S. trade balance with Mercosur during 1990-1997 improved from a deficit of $3.1 billion to a surplus of $10.0 billion. After adjusting data for inflation, this trend becomes even more evident (figure 1). During the U.S. recession of 1990-91, U.S. imports from Mercosur dropped both in real and nominal terms, and are just now recovering to reach their 1989 levels.** In contrast, U.S. exports to the bloc countries consistently showed growth throughout the period and, after 1990, export rates generally

* The decrease in U.S. exports to Argentina in 1995 may be attributed to the crisis in Argentina's financial sector, which was triggered by the 1994-95 Mexican peso crisis. This is sometimes called the "tequila effect."

** Using constant 1992 dollars, U.S. imports from Mercosur members totaled $10.4 billion in 1989 and $10.39 billion in 1997. In nominal dollars, imports were $10.1 billion and $12.0 billion, respectively.

Figure 1
U.S. Trade with Mercosur (in 1992 dollars)



Source: Compiled by ITC staff using data from U.S. Department of Commerce.

exceeded the growth rate of the region's GDP.* The rapid increase in exports to the region can be attributed to the overall market expansion resulting from trade liberalization, GDP growth, privatization, and a positive investment climate in Mercosur countries.

Examination of trade flows on a sectoral basis between the United States and the Mercosur bloc, between 1993 and 1997, (table 3) shows growth in exports in all sectors with the exception of footwear. Similarly, most sectors show growth in imports with the exception of textiles, apparel, and footwear. Major export sectors tend to be value-added products (chemicals, machinery, transportation equipment, and electronic products). Major import sectors include natural resource-based commodities (agriculture products, minerals and metals), transportation equipment, and footwear.

Intra-Regional Mercosur Trade

Trade among the Mercosur signatories expanded more than threefold during 1990-96, from $4.1 billion to just over $17 billion (table 4). This period of expansion was dominated by bilateral trade between Argentina and Brazil; Brazil's imports from Argentina increased by 384 percent and Argentina's imports from Brazil increased 640 percent. This increase in bilateral trade raised the two countries' share of total intra-Mercosur imports from 76 percent in 1990 to 89 percent in 1996.

* Source: U.S. Department of Commerce.

Table 3
U.S.-Mercosur trade by sector, 1993-1997

(Million dollars)

Sector	1993	1994	1995	1996	1997
U.S. exports:					
Agriculture products	390	846	910	862	992
Forest products	224	280	483	536	614
Chemicals and related products	1,969	2,485	3,169	3,596	4,152
Energy-related products	527	547	612	732	691
Textiles and apparel	188	215	323	312	365
Footwear	12	14	16	16	10
Minerals and metals	334	453	677	598	887
Machinery	1,053	1,363	1,839	2,026	2,581
Transportation equipment	1,983	1,995	2,537	2,442	3,550
Electronic products	2,728	4,023	4,691	5,616	7,134
Miscellaneous manufactures	207	281	387	372	426
Special tariff provisions	294	344	395	448	521
Total	9,909	12,845	16,038	17,556	21,923
U.S. imports:					
Agriculture products	2,180	2,084	2,080	2,474	2,709
Forest products	497	651	951	712	778
Chemicals and related products	619	666	741	765	818
Energy-related products	541	608	491	966	710
Textiles and apparel	440	464	366	285	275
Footwear	1,459	1,308	1,155	1,220	1,167
Minerals and metals	1,353	1,994	2,235	2,194	2,388
Machinery	523	676	816	753	687
Transportation equipment	933	997	1,060	1,093	1,419
Electronic products	344	373	499	484	514
Miscellaneous manufactures	254	555	344	244	258
Special tariff provisions	124	367	234	211	253
Total	9,267	10,746	10,972	11,400	11,974

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

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

Table 4
Intra-Mercosur trade, 1990-1996

(Million dollars)

Country	1990	1991	1992	1993	1994	1995	1996
Exports:							
Argentina	1,832	1,977	2,290	3,674	4,804	6,760	7,922
Brazil	1,321	2,309	4,128	5,394	5,921	6,153	7,305
Paraguay	379	259	242	287	340	465	660
Uruguay	591	558	559	675	891	995	1,151
Total	4,123	5,102	7,220	10,031	11,955	14,375	17,038
Imports:							
Argentina	878	1,804	3,755	4,202	4,784	4,745	5,800
Brazil	2,318	2,268	2,208	3,572	4,826	6,821	8,257
Paraguay	367	397	475	571	891	1,170	1,548
Uruguay	559	655	831	1,046	1,322	1,320	1,461
Total	4,122	5,124	7,269	9,391	11,822	14,056	17,067

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

Source: Inter-American Development Bank, *DataIntal.*

Extra-Mercosur Trade

While trade between Mercosur and non-Mercosur trading partners grew at slower rates than trade within the group during 1990-96, the increase in the volume of trade was much greater, especially for imports (table 5). Mercosur imports from the rest of the world (ROW) increased 185 percent ($42.9 billion) to $66.2 billion. Mercosur member exports to the ROW increased 37 percent ($15.6 billion) to $57.9 billion.

Table 5
Mercosur bloc trade with the rest of the world (ROW), 1990-96

(Million dollars)

Country	1990	1991	1992	1993	1994	1995	1996
Exports:							
Argentina	10,518	9,999	9,738	9,418	11,035	14,202	15,889
Brazil	30,093	29,315	32,076	33,304	37,634	40,350	40,440
Paraguay	579	478	404	438	476	354	383
Uruguay	1,113	1,017	1,122	972	1,011	1,121	1,148
Total	42,302	40,808	43,341	44,132	50,157	56,027	57,860
Imports:							
Argentina	3,201	6,470	11,114	12,512	16,804	15,323	17,960
Brazil	18,322	18,773	18,305	23,728	30,714	42,761	45,027
Paraguay	826	878	762	906	1,247	1,026	1,302
Uruguay	853	894	1,084	1,286	1,264	1,545	1,861
Total	23,202	27,016	31,266	38,432	50,029	61,255	66,150
Trade balance with the ROW	19,100	13,792	12,075	5,700	128	-5,228	-5,228

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

Source: *Statistics Canada*, 1997 and Inter-American Development Bank, *DataIntal.*

Argentina

A far-reaching macroeconomic stabilization program launched in 1989, together with additional efforts contained in the 1991 Convertibility Plan, has revitalized Argentina's economy after years of stagnation. Argentina is Mercosur's second largest member in terms of geographic size, national income, and population, but its per capita income is Mercosur's highest. It has abundant natural resources, including copper, iron ore, lead, manganese, petroleum, tin, uranium, natural gas, and fertile plains for agricultural production. Argentina's leading manufactures are food processing, machinery and equipment for oil refining, textiles, chemicals, and petrochemicals. Its leading agricultural crops are corn, wheat, sorghum, oilseeds, livestock, and industrial crops (raw cotton, sugar cane, tobacco, and tea).

Economic Reforms and Performance

The Menem Administration's economic reform program has made significant progress in transforming Argentina from a closed, highly regulated economy to one based on market forces and exposed to international competition. Although economic liberalization started as early as 1989 with the privatization of government-owned enterprises, the key to restoring investor confidence in the Argentine economy was the 1991 Convertibility Plan. The Plan made the Argentine currency, the peso, freely convertible and established a one-to-one relationship between its value and that of the U.S. dollar. These actions brought about currency stability and monetary discipline that had long eluded Argentina, and indeed are attributed with helping to reign in Argentina's fiscal deficits, drive down inflation, and spur economic growth. Argentina averaged 8.9 percent real economic growth during the 1991-94.

The Argentine economy suffered a sharp recession during 1995 due to spillover effects from Mexico's 1994-95 peso crisis. Mirroring the sudden loss of investor confidence that plunged Mexico into a recession, many investors also rushed to pull out of Argentina. This trend was based on the view that Argentina's economic reform program was modeled on that of Mexico and that the Argentine peso like the Mexican peso was overvalued—effectively linking the two distant economies. A financial support plan undertaken by the International Monetary Fund (IMF) helped shore up Argentina's economy and rebuild investor confidence, but involved difficult austerity measures. Argentina also experienced some financial turbulence in 1997 that was triggered by the East Asian financial crisis. A new Extended Fund facility arrangement with the IMF was concluded at the end of 1997.

Argentina's economy grew by 4.4 percent in 1996 and 8.0 percent in 1997—a strong recovery from the 4.6 percent decline in output recorded in 1995. Inflation continued to decline and, through stepped-up efforts to improve tax collection, progress was made in reducing the fiscal deficit. Unemployment, which exceeded 17 percent in 1996 (and which had doubled between 1991 and 1994), edged down to 14.9 percent in 1997, according to Inter-American Development Bank (IADB) statistics. However, public opposition to austerity measures has increased.

Trade and Investment

Argentina's exports and imports have grown considerably since 1990, increasing the significance of trade for the country's GDP. The composition of Argentina's trade also changed, with industrial-based manufactures and fuels becoming more important export products and capital goods increasing their share of imports.[4] Argentina's merchandise trade balance moved from a peak surplus of $8.6 billion in 1990 to a series of deficits during the period 1992-94 that prompted the government to enact ad hoc protectionist measures. Argentina's trade balance returned to surplus in 1995, and reached $1.7 billion in 1996. In

1997, however, a trade deficit of $1.6 billion was recorded, largely due to sharply higher imports of capital goods and lower exports of certain primary products.

Reflecting a steady increase in the importance of regional partners during the past 5 years, developing countries in Latin America were the primary destination of Argentine exports during 1997, accounting for 47 percent of the country's total (of which Brazil alone accounted for 30 percent). Other leading destinations for Argentine exports were the EU (16 percent) and the United States (9 percent). Argentina's principal suppliers of imports were the EU (29 percent), Mercosur partners (26 percent, primarily Brazil), and the United States (21 percent).[5]

The United States registered a merchandise trade surplus with Argentina of $2.2 billion in 1995, $2.2 billion in 1996, and $3.4 billion in 1997. U.S. shipments of $5.6 billion in 1997 made Argentina the twenty-fourth largest export market for the United States. The stock of U.S. direct investment in Argentina, $8.1 billion in 1996 (historical cost basis), is concentrated in chemicals and allied products; finance, insurance, air travel services, and real estate; and food and kindred products.[6]

Trade Policy

As table 6 outlines, since 1989 (before Mercosur's implementation), Argentina has made significant progress in unilaterally reducing tariff and certain nontariff barriers. Licensing and quota restrictions were removed, while tariffs were lowered and made more uniform. In addition, the large-scale privatization and deregulation process that Argentina undertook opened significant new foreign opportunities. The result has been a dramatic expansion of Argentina's trade and increased openness to global market forces.[7] Relations with key trading partners, including the United States, were improved with the signing of agreements such as the Uruguay round of the G.A.T.T. and the U.S.-Argentina Bilateral Investment Treaty. Today, the list of bilateral issues is fairly small, with the lack of intellectual property rights protection and recent ad hoc protectionist measures being the top U.S. complaints. The United States has taken some action on these issues; for example, in May 1997, the administration suspended 50 percent of Argentina's GSP benefits due to a lack of patent protection for pharmaceuticals.

The Mercosur agreement has not significantly altered Argentina's already liberal foreign trade and investment regime, but it did formalize previous changes and provide an overall framework for continued reform. Argentina's pre-Mercosur *ad valorem* tariff average was close to that established by the CET; however,* 90 percent of Argentina's negotiated exceptions to the CET are currently subject to higher rates. Mercosur commits Argentina to progressively lower such tariffs to the CET rate.[8] In the case of capital goods, computers, and telecommunications equipment, Argentina's tariffs had generally been lower than the negotiated CET rates, which are slated to be fully implemented in 2001 (capital goods) and 2006 (computers and telecommunications equipment). In August 1996, Argentina raised its tariffs on these goods to the Mercosur level.[9] Argentina implemented a 3 percent increase in external tariffs in January 1998, allowing exceptions for certain capital goods, informatics, telecommunications, and items carrying a zero tariff.[10] It is estimated that excepted goods account for over 40 percent of U.S. exports to the country.

Under Mercosur, Argentina is permitted to retain a 3 percent "statistical tax" on imports, charged in addition to any applicable duty, but the application of this tax is often inconsistent.[11] In September 1995, in order to help raise revenue during the fallout from the Mexican peso crisis, Argentina also raised substantially "specific" duties on apparel and athletic footwear and expanded the application of the

* See appendix A, "The Mercosur Agreement," for a more detailed discussion of the CET and exceptions to the CET granted for Argentina.

Table 6
Argentina: Trade and investment liberalization and remaining barriers

Area of barrier	Liberalization measures	Remaining barriers
Tariff and nontariff barriers (NTBs)	Starting in 1991, tariffs were made more uniform and reduced from an average rate of 29 percent *ad valorem* (1990) to 12 percent before Mercosur CET was implemented; comprehensively bound at 35 percent in Uruguay Round. Import licensing requirements and most quantitative restrictions removed (1989).	Continued application of 0.5 percent "statistical fee" to certain goods; minimum specific duties imposed on footwear and textile and apparel products; and a temporary 3 percentage point increase in the CET (with certain exceptions).
Motor vehicles sector	None identified.	Import licensing regime for automobiles; quotas, high tariffs, and other restrictions. Bilateral auto trade regime with Brazil.
Services	Commitments under the General Agreement on Trade and Services (GATS) are the most complete of the nine South American countries examined in a 1996 USITC study and include most basic telecommunications services. Privatization of pension funds and workers compensation offers opportunities to U.S. firms.	Broadcast rules effectively bar use of foreign-based advertisements. Cable regulations require local generation of majority of cable channels. Foreign access to satellite services market is precluded.
Investment	One of the most open foreign investment regimes in Latin America. Reforms began in 1989 with removal of government approval requirement. Foreign direct and portfolio investment is virtually unrestricted and foreign investors are accorded nondiscriminatory treatment. Privatization program actively seeks foreign investors. Enterprises in mining, oil, steel, petrochemicals, airlines, railroads, ports, telecommunications, toll roads, water, sanitation, electricity, natural gas, financial services, and television have all been sold, often with participation by foreign investors. Current privatization plans include the country's largest commercial banks. A 1994 bilateral investment treaty with the United States provides nondiscriminatory treatment to U.S. investors in most sectors (excluding shipbuilding, fishing, insurance, and nuclear power generation); removes performance requirements; and provides for international arbitration of investor-state disputes.	Sector-based restrictions on foreign investment incorporated into Mercosur agreement. Local content and trade balancing requirements in the automotive industry notified by the WTO, permitting Argentina to retain such measures until year-end 1999.
Intellectual property	A 1994 decree explicitly extended copyright protection to software and provided for criminal sanctions for infringement; court subsequently ruled that criminal sanctions are not authorized.	Inadequate patent protection for pharmaceutical products led U.S. to suspend 50 percent of Argentina's GSP benefits as of May 1997. Inadequate enforcement of trademarks and video piracy are problems.
Subsidies	A 1989 law suspended subsidies and tax exemptions to Argentine industries and repealed regulations that prohibited state enterprises from purchasing goods/materials from foreign suppliers.	Government retains minimal supports such as reimbursement of indirect tax payments to exporters and an industrial specialization program.
Phytosanitary	None identified.	Certain U.S. fruits, such as Florida citrus, denied entry; others face uncertain and non-transparent entry requirements.
Customs procedures	Automated system installed in 1994. Customs and tax authorities merged in 1997.	Certificates of origin and reference prices more frequently employed; preshipment inspection instituted for certain goods in November 1997.

Source: Complied by USITC staff from IMF, World Economic Outlook, Oct. 1997; USTR, "Argentina," 1998. *Report on National Trade Estimates on Foreign Trade Barriers*; and U.S. Department of State, *Country Reports on Economic Policy and Trade Practices*, 1998.

statistical tax to include capital goods and computer and telecommunications equipment. These actions resulted in a U.S. complaint to the World Trade Organization (WTO) and, in October 1996, initiation of a U.S. Section 301 investigation. In February 1997, Argentina repealed the existing "specific" duties on footwear, but immediately reinstated them under a safeguard investigation. In November 1997, a WTO dispute settlement panel ruled in favor of the U.S. challenge to the duties and taxes assessed by Argentina, though it did not rule on footwear. Also in November 1997, Argentina instituted pre-shipment inspection for imports of most consumer goods and vehicle products. In January 1998, Argentina reduced the statistical tax to 0.5 percent. Sectoral restrictions on foreign investment in Argentina were incorporated into the Mercosur agreement.

Brazil

Brazil's economic performance continues to benefit from the macroeconomic stabilization process introduced by the 1994 Real Plan. By virtue of its sheer size, the country dominates the Mercosur region in terms of economic activity, land area, population, and trade volume. Brazil has abundant natural resources, including bauxite, iron ore, manganese, nickel, uranium, gemstones, oil, and timber. Coffee, soybeans, sugar cane, cocoa, rice, beef, corn, oranges, cotton, and wheat are other leading primary exports; major manufactures include petrochemicals, steel, chemicals, motor vehicles, aircraft, cement, lumber, electrical and electronic appliances, textiles and apparel, and footwear.[12]

Economic Reforms and Performance

Although the process of economic liberalization in Brazil dates back to 1990, the Real Plan remains the key element driving the country's ongoing success in stabilizing its economy. The Real Plan was introduced after nearly a decade of economic stagnation and periods of hyperinflation. Based on deep spending cuts, de-indexation of most prices to remove automatic adjustments for inflation, and the adoption of a fixed exchange rate for the real (initially with a value equal to one U.S. dollar), the Real Plan facilitated a sharp deceleration of sustained inflation. Consequently, inflation, which reached 2,668.6 percent in 1994, has fallen dramatically, averaging 7.5 percent in 1997, the lowest rate in over 4 years.[13]

Brazilian policy makers have used a strongly valued currency (relative to the U.S. dollar) and high real interest rates to attract foreign capital. Foreign direct investment (FDI) rose from less than $1 billion in 1993 to an estimated $17 billion in 1997.[14] The Brazilian government has also launched efforts to privatize government-owned enterprises and reduce federal and state spending.[15] By 1997, government enterprises in such sectors as steel, petrochemicals, and electric power had been sold.

Macroeconomic stabilization, reduced inflation, lower trade barriers, and a strongly valued currency have increased buying power for Brazilians, spurred consumption, and triggered an increase in imports—adding to the merchandise trade deficit and prompting the government to take various measures to dampen demand. In 1997, for example, Brazil imposed restrictions on import finance and consumer credit. High real interest rates discourage business investment and, notwithstanding the privatization program, the government still dominates certain sectors of the economy such as telecommunications. Progress in reducing fiscal deficits has lagged—moving from nearly balanced accounts during 1990-94 to an expanding operating deficit in 1995 and slightly lower deficits in 1996 and 1997. In 1997, part of a package aimed at fiscal reforms at the federal, state, and municipal levels of government was approved.

Brazil's currency has come under pressure since October 1997 as a result of the East Asian financial crisis, prompting Brazilian monetary authorities to nearly double interest rates in late October and adopt a budget austerity package aimed at saving $18 billion in 1998 (2.5 percent of GDP). Financial markets have responded favorably to the package and reserves have returned to pre-crisis levels.[16]

Trade and Investment

Brazil's $8.4 billion merchandise trade deficit in 1997 exacerbated a $33.5 billion current account deficit—the highest since the early 1980s. The United States registered a $5.5 billion trade surplus with Brazil in 1997, when exports of $15.0 billion made Brazil the United States' eleventh largest export market. The stock of U.S. FDI in Brazil, $26.2 billion in 1996, is concentrated largely in the manufacturing, financial, and banking sectors.

Trade Policy

Brazil undertook a series of unilateral trade liberalization measures beginning in 1990 (before Mercosur's implementation). Import prohibitions were lifted, duties reduced, and quantitative restrictions eased or eliminated. Indeed, the United States Trade Representative's (USTR) latest report on foreign trade barriers indicates that despite some restrictive measures, "access to Brazilian markets in a significant number of sectors is generally good, and most markets are characterized by competition and participation by foreign firms through imports, local production, and joint ventures."[17] Table 7 summarizes Brazil's recent trade and investment liberalization efforts and identifies its most important remaining barriers: high tariffs in selected sectors, restrictions on foreign investment, and discriminatory government procurement.

A prosperous economy and increasing consumer demand has led to a surge in imports and large monthly trade deficits. Concerned that the economy could not remain stable under such conditions and rising imports, the Brazilian government imposed new credit restrictions and sharply increased tariffs in 1995. Initially, a range of consumer durable goods, including shoes and automobiles, was affected. However, the exemption for most capital goods, which constitute a significant portion of U.S. exports to Brazil, was phased out in September 1997, although an exemption for capital goods not available domestically was re-instituted as of January 1, 1998. The higher tariff was to be temporary and remain in place only until 2000. In March 1997, Brazil imposed new import financing rules that effectively increased the cost of many imports by eliminating or reducing supplier credits of less than 1 year. In November, Brazil instituted a 3 percentage point increase for most tariff rates, although limited exceptions to the increase were made for certain machinery, agriculture products, and petroleum products.[18] In December 1997, Brazil removed 300 items from the list of products for which import licensing is automatic and took steps to counter under-invoicing.

In December 1995, Brazil issued regulations establishing investment incentives for domestic automobile production. In August 1996, a decree was issued that provided tariff-rate quotas to Japanese, Korean, and European auto manufacturers; in-quota rates equaled the rates being offered to U.S. firms that had already invested in Brazil, but the United States was not included in the tariff-rate quota. In October 1996, the United States initiated a Section 301 investigation into Brazil's practices[19] and in March 1997, the United States and Brazil signed an agreement settling the dispute. Among other things, Brazil committed to end the tariff rate regime by December 31, 1999, and to not extend the trade-related investment measures to Mercosur partners.

Paraguay

Paraguay is a small, primarily agrarian, landlocked economy and is South America's poorest country after Bolivia. It is sparsely populated and has a political and economic history that has been heavily influenced by its Mercosur neighbors. The country's leading exports include cotton, soybeans, cattle, and timber. The government is Paraguay's largest employer, with a budget that accounts for one-third of the country's GDP. Export taxes and tariffs on imports have represented a significant source of central government revenues. In addition, the smuggling of consumer goods and other products to

Table 7
Brazil: Trade and investment liberalization and remaining barriers

Area	Liberalization measures	Remaining barriers
Tariff and nontariff barriers	Tariffs reduced to an average of 14 percent *ad valorem* by 1993. Import prohibitions on 1,300 products and most quantitative restrictions were eliminated (1991). Computerized import licensing system introduced in Jan. 1997.	Post-Mercosur (March 1995) tariff increases apply to a wide range of consumer durable goods, including automobiles. These temporary increases are currently slated to expire in 2000. In November 1997, Brazil implemented a 3 percentage point hike in its external tariffs on most items. Exemptions were made for certain machinery, agricultural products and petroleum products. Industry reports tariffs remain high on certain food and chemical products. In December 1997, Brazil removed 300 items from the list of products for which licensing is automatic and took other steps to counter under-invoicing. Numerous tariff exceptions to CET.
Export subsidies	None identified.	Tax and tariff incentives used to encourage production for export and use of Brazilian inputs.
Motor vehicles sector	None identified.	Local content and incentive-based export performance requirements introduced in 1995. Tariff-rate quota provided to Japanese, Korean, and European auto manufacturers; United States not included.
Services	In WTO negotiations, Brazil made commitments on most basic telecommunications services and will remove foreign investment restrictions on cellular and satellite services on July 20, 1999.	Restrictive investment laws; lack of transparency in administrative procedures; legal and administrative restrictions on remittances; arbitrary application of regulations.
Investment	Prior approval abolished (1990). Foreign exchange controls were lifted and the practice of foreign exchange allocation to priority sectors abandoned. Privatization program launched (1991) and later expanded (1995), opening many once government-dominated sectors (e.g. steel, electric power) to foreign investment. Cellular phone service is in the process of being opened to private investors and foreign firms; a bill to regulate privatization of remaining phone services is before Congress. Five electric companies were sold in 1997. Legislation and regulations to implement constitutional amendments eliminating the government monopoly in the petroleum and telecommunications sectors has been introduced.	1988 Constitution restricts foreign investment in petroleum and natural gas, mining, nuclear power, fishing, health care, financial institutions, insurance, print and electronic media, construction, and professional services. Sector-based restrictions on foreign investment, e.g. computers and motor vehicles, incorporated into Mercosur agreement. Limitations on foreign equity, local content requirements, and export performance incentives.

Table 7—*Continued*
Brazil: Trade and investment liberalization and remaining barriers

Intellectual property	New industrial property law entered into force in May 1997. Patents now available for pharmaceutical products and processes, chemical products, and other inventions. A law on the protection of plant varieties was passed in 1997. A bill to improve protection for computer software was signed by President Cardoso in February 1998.	Compulsory licensing is common. Long list of categories of marks not eligible for registration. No law enacted to protect integrated circuit designs. Piracy of computer software, motion pictures, sound recordings, and musical compositions is a problem, but enforcement has improved.
Government procurement	1993 law generally provides nondiscriminatory treatment, except for computer technology and telecommunications products. Privatization of state monopolies has opened opportunities in some sectors.	Discriminatory practices govern the telecommunications, computer, and computer software sectors. Non-price factors allowed to be taken into consideration in other bids.
Sanitary and phytosanitary measures	Bilateral agreement reached in July 1996 enables most U.S. fruit, grain, and seed exports to meet new phytosanitary requirements.	U.S. poultry and horticultural products still face barriers.

Sources: U.S. Department of Commerce, "Brazil: Market Access and Competition," found at Internet address http://www.stat-usa.gov/bems/bemsbraz/brzmac.html; Office of the U.S. Trade Representative, "Brazil," *1998 Report on National Trade Estimate on Foreign Trade Barriers*; U.S. Department of State, *Country Reports on Economic Policy and Trade Practices 1998*; Brazil, and U.S. Department of State, "Background Notes: Brazil," Mar. 1998.

neighboring Argentina and Brazil has historically been a significant economic activity in Paraguay's "informal" economy; such illegal activities were profitable because of the relatively closed Argentine and Brazilian markets. The opening of regional markets due to Mercosur and increased border enforcement by Brazil have significantly reduced demand for Paraguay's role as a trade intermediary.[20]

Economic reforms in Paraguay began in 1989. A free-floating exchange rate system was adopted, interest rates freed from government control, selective credit controls removed, and reserve requirements reduced. Expansion of the tax base and adoption of a value-added tax improved the state of public finances. In 1992, a new tariff code was passed which simplified and lowered rates. A new law permits the privatization of government-owned entities; however, only two out of six planned privatizations have occurred. Plans to relaunch the foundering privatization program were initiated by the President in 1996[21] and a law opening up the telecommunications sector has since been passed, but further action is effectively on hold until after the mid-1998 elections.[22]

Important barriers remain, particularly with respect to intellectual property rights. U.S. intellectual property rights concerns include Paraguay's out-dated patent law, infringement of well-known trademarks, copyright piracy, and lack of protection for industrial designs and trade secrets.[23] On January 16, 1998, the USTR identified Paraguay as a Priority Foreign Country under the Special 301 provisions of U.S. trade law. Paraguay is a regional distribution and assembly center for counterfeit merchandise in part due to its large re-export trade to Brazil, which caters to consumer demand for electronics, audio tapes, compact discs, and designer clothing and footwear, among other items.

Paraguay's economic and political system remains fragile, a fact that has tempered progress in economic reform despite the long-term improvement in economic fundamentals. New mechanisms for banking supervision have been established since a financial crisis emerged in 1995. A military coup was

attempted, but failed, in 1996. A slow down in growth since 1996 has made the reform process more difficult. Growth in 1997 was double the rate of the previous year (2.6 versus 1.3 percent), but currency reserves fell, exports and private investment were below expectations, the public deficit expanded, and the guarani fell against the U.S. dollar.[24] Uncertainty surrounding the May 1998 elections further dampened prospects for growth.

To encourage foreign investment and provide employment opportunities for semi-skilled workers, the Government of Paraguay implemented a maquila law in July 1997.[25] Modeled after Mexico's Maquiladora Program, the Paraguayan maquila law permits duty-free imports of machinery, components, and raw materials for use in the production/assembly of goods for export. The Government of Paraguay touts apparel, furniture, food processing, and energy-intensive industries as the sectors with the greatest potential for investment in export-oriented assembly or processing plants.*

U.S. companies can take advantage of Paraguay's maquila law to supply Mercosur markets at reduced rates of duty. For example, Mercosur customers of U.S. apparel or appliance manufacturers with assembly operations in Paraguay would pay the 23 percent common external tariff only on the value of the U.S. and other non-Mercosur origin components used to make the articles; no duty would be applied to the value added in Paraguay. If U.S.-based companies make use of Mercosur-origin materials in their maquila plants (such as lumber in the production of wood furniture), their customers would be responsible for just a 1 percent customs processing fee.[26]

To date, no U.S. companies have established assembly plants in Paraguay. Investors from Brazil and Argentina, however, have established industrial parks in Paraguay's duty-free zones[27] for companies from those two countries to take advantage of lower labor costs in Paraguay. Critics of the maquila law in other Mercosur countries have claimed that the law undermines the standards set forth in the Treaty of Asunción, complicating rules of origin determinations when crossing borders in the customs union. These critics complain that the maquila law has made it easier for companies from China and Taiwan to assemble and/or re-label counterfeit goods in Paraguay's duty-free zones and avoid detection when entering the Mercosur market. Chief examples of these illegal operations are the assembly of music tapes and compact discs and the re-labeling of apparel.[28]

Uruguay

Uruguay is a small country in terms of area and population, but its per capita income is high by Latin American standards. Uruguay's economy remains closely linked to the economies of neighboring Argentina and Brazil and has traditionally been heavily dependent on the production of a few agricultural commodities (wool and rice) and agriculture-based manufactures (textiles, leather, and meat). Efforts to diversify domestic production and exports during the 1970s and 1980s were moderately successful in establishing Uruguayan producers of chemicals and consumer goods, but these industries have declined in the face of rising global competition. Agriculture still accounts for more than half of Uruguay's exports.

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* Proparaguay, *Paraguay: Centro de Produccion y de Servicios*, undated. According to Dr. Emilio Baez Maldonado in an interview with Commission staff in Washington, D.C. on Apr. 24, 1998, Paraguay offers foreign investors low-cost labor for the sewing of apparel; nearby forests as a source of lumber for use in furniture production; and low-cost energy from the hydroelectric complex at Iguazu. Because of lower labor costs in Paraguay, Brazilian suppliers of poultry and other agricultural products have establish processing plants in Paraguay. The maquila law allows Brazilian agricultural products to enter Paraguay free of duty for the purpose of export processing, even though Paraguay has "excepted" many agricultural products from duty-free treatment under the Mercosur agreement.

The country also serves as a regional financial center; services, particularly tourism and finance, now account for approximately 50 percent of GDP.[29]

Uruguay's economic reforms date back to 1973-85, when tariffs were reduced and price controls eliminated. Since 1990, successive Uruguayan administrations have carried out additional reforms, including lowering tariffs, reducing government spending, and controlling inflation, in addition to agreeing to liberalize trade with its Mercosur partners. In January 1993, Uruguay's top Most Favored Nation (MFN) applied tariff rate was lowered from 24 to 20 percent, a level equal to the top tariff rate in Mercosur's CET. A limited degree of privatization has been attempted, with success achieved in port services, natural gas distribution,[30] air service, water supply, airport and toll road construction, passenger rail service, cellular telephone service, banking, and insurance.[31] The social security system has been partially privatized. Setbacks include failed efforts to privatize the state telephone company. Since 1995, Uruguay's economic reforms have been further consolidated, increasing growth and reducing inflation.

Uruguay's reform efforts have paid off. After holding average annual increases of just 1.2 percent for the 35 years ending in 1990, Uruguay's GDP rose at an average annual rate of 3.5 percent during 1991-95. Real GDP rose by 4.9 percent in 1996 and 6.0 percent in 1997, according to IADB figures. Financial performance of public enterprises has improved, government spending has fallen, and the public sector deficit as a proportion of GDP has declined. Some progress has been made in curbing inflation, which fell from 129 percent in 1990 to an estimated 15 percent in 1997. Capital inflows have been strong[32] and investment rates have also risen, fueling imports of capital goods.[33]

Remaining barriers include high tariffs on certain products, notably footwear, textiles, processed foods, and miscellaneous manufactured articles. Uruguay implemented the increase in Mercosur's CET in January 1998, with exceptions for capital goods, telecommunications, and information technology.[34] Certain imports require special licenses or customs documents, including pharmaceuticals, medical equipment, chemicals, fertilizers, and vehicles. Gaps in Uruguay's intellectual property regime exist; pharmaceuticals and chemicals are not patentable and piracy of software, videotapes, and music is common.[35] Significant limitations on foreign investment in strategic sectors remain.

Endnotes

1. Information in this section is from the following sources: Office of the United States Trade Representative, *1997 National Trade Estimate Report on Foreign Trade Barriers,* Washington, DC, 1997; Trade Unit, Organization of American States (OAS), *Trade and Integration Arrangements in the Americas: An Analytical Compendium,*(Washington, DC, 1997; and the World Trade Organization (WTO), Trade Policy Review Division, *Mercosur: Objectives and Achievements*, Staff Working Paper TPRD-97-002, Washington, DC, June 3, 1997.
2. USTR, "Renewal of Fast Track Negotiating Authority," Testimony of Ambassador Charlene Barshefsky, before the Senate Finance Committee, Sept. 17, 1997, p. 5.
3. Guy de Jonquieres, "Mercosur trade group under fire," *Financial Times*, Oct. 24, 1996, p. 5 and Greg Mastel, "Regional trade under fire," *The Journal of Commerce*, Dec. 6, 1996, p. 9A.
4. Guillermo Mondino and Alejandro Reca, "Toward a Hemispheric Free Trade Area: The Case of Argentina," in Ana Julia Jata and Sidney Weintraub (eds.), *Integrating the Hemisphere*, Washington, DC: Inter-American Dialogue, Mar. 1997, p. 179.
5. U.S. Department of Commerce, *Country Fact Sheet: Argentina*, OLAC Facts Doc. 1001, July 1996; Economist Intelligence Unit, *Country Profile: Argentina, 1994-95;* Inter-American Development Bank (IADB), "Argentina," found at Internet address http://www.iadb.org/sep/AR-IPES.htm; U.S. Department of State telegram, "1997 Trade Act Report: Argentina," prepared by U.S. Embassy, Buenos Aires, message reference No. 06915, Nov. 19, 1996.
6. U.S. Department of State, *Country Reports on Economic and Trade Policies; Argentina*, 1998 and U.S. Department of State, *Background Notes;* Argentina, Mar. 1998.
7. The Inter-American Development Bank has developed a series of structural policy indicators of openness and exchange rate flexibility. According to this index, the IADB's latest annual report indicates that Argentina is now relatively open to international trade; its average tariffs, nontariff barriers to imports, and market and official

exchange rate differentials were each deemed low. IADB, *Economic and Social Progress in Latin America: 1996 Report*, Washington, DC: Johns Hopkins University Press, Nov. 1996, p. 72.
8. Guillermo Mondino and Alejandro Reca, "Toward a Hemispheric Free Trade Area: The Case of Argentina," op. cit., p. 183.
9. Ibid., p. 184.
10. U.S. and Foreign Commercial Service and U.S. Department of State, "Argentina - Tariff Increase," Market Research Report 3182, Jan. 9, 1998.
11. OAS, *Trade and Integration Arrangements in the Americas*, pp. 42 and 65. This rate is bound in Argentina's WTO schedule.
12. U.S. Department of State, *Background Notes: Brazil*, Mar. 1998.
13. IMF, *World Economic Outlook*, May 1997, p. 30.
14. U.S. Department of State, *Background Notes: Brazil*, Mar. 1998.
15. U.S. Department of State telegram, "Brazil: 1997 Trade Act Report," message reference No. 05322, prepared by U.S. Embassy, Brasilia, Nov. 20, 1996.
16. U.S. Department of State, *Background Notes: Brazil*, Mar. 1998.
17. USTR, *1997 National Trade Estimate Report on Foreign Trade Barriers*, p. 21.
18. U.S. Department of State telegram, "Further Study of Brazilian Tariff Increases; List," message reference No. 005149, prepared by U.S. Embassy, Brasilia, Nov. 21, 1997.
19. USTR, *1997 National Trade Estimate Report on Foreign Trade Barriers*, p. 22.
20. U.S. Department of Commerce, "Economic Overview: Paraguay," OLAC Facts, Doc. 1305, July 1996; U.S. Department of State telegram, "1997 Trade Act Report for Paraguay," message reference No. 02817, prepared by U.S. Embassy, Asunción, Nov. 13, 1996; World Bank, "Paraguay," *Trends in Developing Economies*, p. 414; U.S. Department of State, *Background Notes: Paraguay*, Mar. 1998; and U.S. Department of Commerce, *Country Commercial Guide: Paraguay*, 1998.
21. Ibid.
22. U.S. Department of Commerce, "Economic Overview: Paraguay," OLAC Facts, Doc. 1305, July 1996.
23. USTR, "Paraguay," *1997 National Trade Estimate Report on Foreign Trade Barriers*.
24. U.S. Department of State, "Paraguay Macroeconomic issues," message reference No. 332, prepared by U.S. Embassy, Asunción, Feb. 12, 1998.
25. The Paraguayan Senate passed the "Maquila Law" on December 20, 1996. PROPARAGUAY, Investor Assistance Department, *Law No. 1.064 Maquila*, Mar. 1997. The law was "promulgated" on July 3, 1997. "Existiria Desacuerdo Para Integrar Consejo de Maquila," *Noticias* (Asuncion, Paraguay), Oct. 25, 1997.
26. Information for this paragraph was provided by Dr. Emilio Baez Maldonado, a principal author of Paraguay's maquila law, in an interview with Commission staff in Washington, D.C. on Apr. 24, 1998.
27. For a description of the laws governing duty-free zones in Paraguay, see PROPARAGUAY, Investor Assistance Department, *Legal Regimen of Duty Free Zones*, Apr. 1997.
28. Mauro Laviola, "Quien le Teme a la Ley de Maquila?" *Gazeta Mercantil Latinoamericana*, Jan. 1998 (precise date not available). Mr. Laviola is a member of the Consejo Tecnico de la Asociacion Exportatdores Brasilenos (Technical Committee of the Brazilian Exporters Association).
29. U.S. Department of State, "Uruguay," *Country Reports on Economic Policy and Trade Practices*, Mar. 1997, p. 304, and World Bank, "Uruguay," *Trends in Developing Economies*, p. 531.
30. U.S. Department of State, "Uruguay," *Country Reports on Economic Policy and Trade Practices*, Mar. 1997, p. 304.
31. U.S. Department of State, "Uruguay," *Country Reports on Economic Policy and Trade Practices*, 1998.
32. World Bank, "Uruguay," *Trends in Developing Economies*, pp. 531-2.
33. U.S. Department of State, "The Economy in 1996: Growth, Inflation Stronger than Expected," message reference No. 107, prepared by U.S. Embassy, Montevideo, Jan. 14, 1997.
34. U.S. Department of State telegram, "Uruguay Implements the Increased Mercosur Common External Tariff," message reference No. 000022, prepared by U.S. Embassy, Montevideo, Jan. 8, 1998.
35. U.S. Department of Commerce, "Economic Trends and Outlook: Uruguay," OLAC Facts, Doc. 1405, Aug. 1996.

OVERVIEW OF INDUSTRY ANALYSIS

The industry analysis that follows focuses on U.S. exports and foreign investment for five important manufacturing groups that together accounted for about 25 percent of total U.S. exports to Mercosur members in 1997. These industries--power generation equipment, motor vehicles and parts, medical devices and equipment, computer equipment and parts, and telecommunications equipment--represent a cross-section of U.S. manufacturing industries whose performances in foreign markets are influenced by several factors. In addition, motor-vehicle parts and telecommunications equipment are important targets for foreign direct investment in the region.

Examination of these industries illuminates an interesting point about the application of common external tariffs (CET). Although the Mercosur customs union generally results in CETs lower than the average applied tariffs that prevailed prior to Mercosur, the implementation schedule is not uniform across manufacturing groups. For example, exceptions (items subject to a longer phase-in to the CET) taken by certain Mercosur members have allowed tariffs on some products to remain lower or higher until CET convergence occurs by 2006. Other bloc members have agreed to increase tariffs from prevailing national rates up to or exceeding the CET with convergence to CET by 2006, while the motor vehicle sector is exempt from Mercosur and the CET until January 1, 2000.

In many cases, unilateral actions by member countries that are unrelated to the Mercosur agreement may have an equal or larger effect on the export and investment performance of U.S. industries. Important unilateral actions include reduction of country-specific tariff and nontariff barriers, privatization, fiscal and monetary measures to control inflation and/or encourage growth, infrastructure development, and incentives to manufacture within the region.

HIGHLIGHTS

- *U.S. exports to Mercosur countries during 1993-97 have increased for each of the five major manufacturing product groups examined; U.S. export growth has ranged from 14 percent for power generation equipment to 347 percent for telecommunications equipment.*

- *The CET generally established tariffs on par with or lower than average applied tariffs that existed prior to Mercosur for the products of nonmembers entering the region. However, computer equipment/parts and telecommunications equipment are two categories for which the Mercosur agreement has resulted in higher applied tariffs. Argentina, Paraguay, and Uruguay increased prevailing national rates on computer products to the CET of 16 percent, whereas Brazil retains tariffs of up to 32 percent on these products under an exemption from the CET until 2006. Similarly, bloc members acceded to Brazil by raising tariffs for most telecommunications equipment to 20 percent, a rate which will fall to the CET level of 16 percent by 2006.*

- *Despite increased tariffs on certain products, total imports by Mercosur nations from non-member countries in the five manufacturing groups increased between 1993 and 1996 by a range of 58 to 138 percent. The change in intra-Mercosur imports during this period was substantially less than the increased trade with the Mercosur bloc experienced by non-member countries.*

- *In the long term, U.S. trade with Mercosur members is likely to be mixed. Among the five manufacturing groups, U.S. exports of certain power generation equipment are expected to expand; technology transfer and import substitution are likely to limit U.S. exports of motor*

vehicles; U.S. medical equipment exports will likely continue to dominate the Mercosur market; U.S. exports of computer equipment and parts will face increasing competition from Mercosur producers; and investment in U.S. subsidiaries located in Mercosur countries is likely to increase local production capabilities for telecommunications equipment and may diminish demand for U.S. exports. Reasons for these likely trends are noted in the highlights and discussion sections of each industry analysis.

POWER GENERATION EQUIPMENT*

HIGHLIGHTS

- *Privatization of electrical utilities expands opportunities for equipment sales by the United States and other suppliers.*
- *U.S. exports of power generation equipment to Mercosur rose by 38 percent during 1993-97 to $84 million, peaking at $94 million in 1995.*
- *U.S. and German suppliers accounted for nearly three-quarters of total Argentine and Brazilian imports during 1993-96.*
- *Intra-Mercosur imports increased by fourteenfold from $2 million to $28 million, whereas imports from non-member countries increased by 61 percent from $185 million to $295 million during 1993-96.*
- *In the long term, demand for U.S. exports of fossil fuel-fired power generation equipment is expected to expand as Mercosur partners diversify and privatize their electrical generating assets.*

INDUSTRY STRUCTURE AND RECENT MARKET DEVELOPMENTS

With the exception of Argentina, which has substantial deposits of natural gas, most of the countries in the Mercosur region have insignificant reserves of high-grade fossil fuel with which to generate electrical energy. For this reason, the individual Mercosur nations (particularly Brazil) have taken advantage of extensive water resources to establish hydroelectric facilities and thereby reduce their dependence on imported fossil fuels. For example, huge hydroelectric projects on the Parana and other rivers in Brazil currently supply an estimated 95 percent of the country's annual power consumption.

The power-generation equipment (hydraulic turbines, power generators, power transformers, and electrical switchgear) for many of these projects was supplied by European manufacturers during the 1970s and 1980s. Since major U.S. suppliers of generation equipment at the time were heavily committed to fossil fuel-burning equipment (particularly gas turbines), the Mercosur region did not afford these companies significant market potential. As a result, European producers have established themselves as the preeminent suppliers of hydro-related equipment to the Brazilian and Argentine markets.

The relatively small populations, industrial activity, and economic growth of Paraguay and Uruguay limit the potential for investments in power generation assets. In addition, Paraguay enjoys access to extensive power reserves as a result of its participation with Brazil in the world's largest hydroelectric facility, Itaipu. A similar joint project with Argentina is also planned.

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* Data for this industry sector are compiled from the U.S. Department of Commerce, the U.S. State Department, and the Inter-American Development Bank (IADB), *DataIntal*. The discrepancies between IADB and U.S. government data are attributed to differences in collection methodology, item classification, and reporting origin and destination of the merchandise (c.i.f. vs. f.o.b.). Furthermore, there are no trade reconciling agreements between the United States and the Mercosur countries.

Brazil's significant production capacity for hydroelectric generating equipment was established by European suppliers partly in response to high tariffs on equipment (in the range of 30 to 40 percent during the 1980s and early 1990s) and to assorted nontariff measures, particularly domestic content requirements. In addition, various tax incentives were offered to foreign suppliers to persuade them to set up production operations in Brazil. These policies were predicated to a large extent on a lack of foreign exchange with which to purchase imported equipment, as well as on a desire to stimulate local economies. Accordingly, major European suppliers of power generation equipment won most of the early contracts for power-generating installations and equipment, and subsequently established a significant base of indigenous operations to serve South American markets. As a result, the Brazilian market is currently dominated by subsidiaries of multinationals such as Asea Brown Boveri (Sweden/Switzerland), Siemens (Germany), Merlin Gerin (Italy), Gec-Ashton (France), and Voit (Germany).

The Brazilian market for electric power systems (including power generation equipment) grew by 11 percent between 1995-97 (table 8). The market for these products is expected to grow over the medium term as more state-run utilities are privatized and as a number of unfinished hydro plants are completed. Current estimates are that Brazilian consumption of electricity will increase by 4 to 5 percent annually (versus 1 to 2 percent in the United States).[1] Although demand for electric power systems in Brazil has previously been satisfied primarily by local production, imports are expected to account for an increasing share of annual equipment purchases in the future. As Brazil attempts to diversify its energy sources in order to get away from a heavy reliance on hydroelectric power, opportunities for U.S. companies should be enhanced if, as expected, the market moves towards fossil fuel-fired technologies.* A major effort was begun in early 1996 by the U.S. Energy Association and the U.S. Department of Energy's Office of Coal and Power Import and Export to support the expanded use of low-grade coal and coal technology by Brazil in the generation of electric power. This effort led to the development of the first Brazilian Coal Policy, which, if adopted, could bolster the efforts of leading U.S. coal-fired generating equipment suppliers to supply this equipment to the region.[2]

Table 8
Brazil: Electric power systems[1]

Item	1995	1996	1997
Total market size (*million dollars*)	1,970	1,980	2,178
Local production (*million dollars*)	1,860	1,870	2,057
Import market share (*percent*)	18	18	18
U.S. import market share (*percent*)	4	4	4

[1] These figures represent estimates for electric power generation, transmission, and distribution equipment.

Source: U.S. Department of State.

By the late 1980s, Argentina was experiencing significant power outages and brownouts primarily because of aging facilities and inadequate generating capacity. In early 1992, the Argentine Government began to privatize its electric utility industry in an effort to respond to sustained problems. The government sale of $1.5 billion in power generation, transmission, and distribution assets over a 2 year period not only significantly improved operational and management efficiencies and curtailed power failures, but also reportedly cut the wholesale cost of power in half.[3] Argentina chose to follow the example set by Chile (the "Chilean Model"), which successfully divested most of its publicly held electric utility industry beginning in 1985.

* The overwhelming dependence of Brazil on hydroelectric resources (95 to 97 percent) for power generation is virtually unprecedented globally. The potential for severe economic disruption associated with both natural disasters (drought, earthquake, etc.) or human events (terrorism, equipment failure, etc.) has prompted Brazilian officials to reassess the country's near total dependence on a single power generation resource.

The Argentine power generation and transmission equipment market grew by 26 percent during 1995-97 (table 9). Unlike Brazil, imports play an important role in Argentina's market. Privatization of electric utilities and a 7 percent increase in consumption of electricity in 1996 further accelerated the need to modernize the country's distribution system.[4] In 1997, imports accounted for 65 percent of total equipment purchases, with U.S. producers accounting for 23 percent of total consumption. Domestic production is generated by five large and ten medium-sized companies, which until recently have been major players in the Argentine market. Electric power generation and transmission equipment from the United States has traditionally dominated the market for foreign equipment, accounting for 52 percent of total imports.[5] Other leading sources include Germany (27 percent), Italy (6.5 percent), and Spain (4 percent).

Table 9
Argentina: Power generation and transmission equipment[1]

Item	1995	1996	1997
Total market size (*million dollars*)	570	625	720
Local production (*million dollars*)	221	230	270
Import market share (*percent*)	64	66	6
U.S. import market share (*percent*) ..	22	24	23

[1] These figures represent estimates for electric power generation and transmission equipment.

Source: U.S. Department of State.

MERCOSUR TRADE

Despite the significant growth in intra-Mercosur trade for power generation equipment during 1993-96, this source was greatly outpaced by imports from non-member countries. Intra-Mercosur imports increased dramatically from $2 million in 1993 to $28 million in 1996, but the value of U.S. exports to Brazil and Argentina in 1996 alone exceeded intra-Mercosur trade by nearly $60 million. Imports from non-member countries rose by nearly 60 percent from $185 million in 1993 to $295 million in 1996, despite a 50-percent decline from the 1994 import total of $594 million (table 10). Imports from the United States and Germany were particularly notable during 1993-96; Germany accounted for 46 percent ($618 million) of period imports (largely steam turbine equipment to Brazil) and the United States for 24 percent ($327 million) of the period total (principally gas turbines and gas turbine generator sets to Argentina). Imports of power generation equipment by Paraguay and Uruguay were negligible (less than $43 million) during the period.

As noted in table 10, the available statistical data showing imports of power generation equipment into Mercosur members were compiled at a higher level of statistical aggregation (broader product scope) than official U.S. export statistics. Consequently, equipment other than that used specifically for power generation was captured in the country totals, elevating the reported overall imports by approximately 30 to 40 percent. The vast majority of German shipments ($450 million, or 33 percent of the period total) arrived in 1994.

Table 10
Power generation equipment: Mercosur imports for consumption, by country or country grouping, for Argentina, Brazil, total, cumulative total, and supplier country share

Country	Mercosur partners	United States	Europe			Japan	Other countries	Total
			Germany	Other Europe[1]	Total			
	Value (*million dollars*)							
Argentina:								
1993	1.3	65.6	5.8	29.0	34.8	([2])	2.2	103.3
1994	2.8	30.1	10.7	67.2	77.9	0.1	9.9	117.3
1995	4.2	87.6	31.2	19.5	50.7	16.3	15.0	168.4
1996	13.3	43.9	12.0	18.9	30.9	0.0	22.5	106.0
Brazil:								
1993	0.0	11.7	4.8	51.4	56.2	5.7	4.9	78.5
1994	0.0	7.3	439.4	17.5	456.9	1.6	1.8	467.1
1995	5.6	17.3	26.6	3.1	29.7	0.1	7.8	60.5
1996	11.0	62.4	87.2	15.4	102.6	3.5	25.0	204.5
Mercosur total:								
1993	1.9	79.5	11.8	80.7	92.5	5.7	7.7	187.3
1994	4.3	36.5	450.0	86.0	536.0	1.8	20.1	598.7
1995	12.5	104.9	57.4	23.4	80.8	16.4	25.5	240.1
1996	27.9	106.5	99.2	34.8	134.0	3.5	51.1	323.0
Cumulative 1993-96	46.6	327.4	618.4	224.9	843.3	27.4	104.4	1,349.1
Supplier share of cumulative total (*percent*)	3.5	24.3	45.8	16.7	62.5	2.0	7.7	100.0

[1] The principal contributors of these imports were France, Italy, the United Kingdom, Spain, the Netherlands, Sweden, Denmark, and Belgium/Luxembourg.
[2] Less than $50,000.

Note.—The data in this table had to be compiled at a higher level of statistical aggregation (a broader product range) than official U.S. export data shown later in this sector write-up. Consequently, these totals include some equipment that would normally be excluded from the scope of power generation equipment.

Source: Inter-American Development Bank, *DataIntal.*

FACTORS AFFECTING U.S. MARKET ACCESS

Although barriers remain, structural changes in Mercosur national markets have done much to improve U.S. market access (table 11). Tariffs and government procurement practices continue to be the chief instruments for limiting imports. In addition, U.S. equipment exports must be adapted to Mercosur markets because of the bloc's usage of low-voltage distribution networks designed to follow Instituto Argentino de Racionalizacion de Materales (IRAM) and German DIN standards (380/220 volts, 50 cycle) rather than the U.S. standard (220/110, 60 cycle).

Table 11
Specific import and investment policies for power generation equipment, 1997

Argentina
- Tariff:[1] 0 to 22 percent.
- Statistical fee:[2] 3 percent.

Brazil
- Tariff:[3] 0 to 18 percent.
- State and federal government "Buy Brazilian" policies have traditionally encouraged foreign hydroelectric equipment manufacturers to produce locally instead of importing.
- Domestic equipment bidders that meet preferential "Buy Brazilian" criteria enjoy 12-percent price differential.

Paraguay
- Tariff:[1] 0 to 16 percent.
- Government procurement policies has hindered sales of U.S. equipment to public utilities.
- Limited import financing and high domestic interest rates represent a significant impediment to imports.

Uruguay
- Tariff:[1] 0 to 16 percent.
- Significant limitations on equity participation in the electricity sector of the domestic economy.
- Locally produced products enjoy a 10-percent price differential over comparable foreign equipment.

[1] Argentina, Paraguay, and Uruguay implemented a 3 percentage point increase in most CETs in early 1998.
[2] In January 1998, Argentina reduced the statistical fee to 0.5 percent.
[3] Refers to tariffs applied throughout most of 1997. In November, Brazil increased CETs by 3 percentage points.

Sources: U.S. Department of State, U.S. Department of Commerce, and Embassies of Argentina and Brazil.

Until recently, markets for power generation equipment in the Mercosur countries were heavily influenced by purchasing decisions made by the principal suppliers of electric power--federal- and state-owned electrical utilities. Electricity production in Brazil is dominated by national utility giant Electrobras and by smaller state-run suppliers. In Argentina, most of the major generating facilities are operated by the federal government. For domestic political reasons, these government-owned utilities have tended to buy domestic products even if better and less expensive equipment is available from foreign suppliers. As a result, concerns such as trade balances, full employment, and protection of indigenous suppliers have taken precedence over providing the lowest cost and most stable supply of electricity to domestic consumers.

Recent developments in the region, most of which are unrelated to the establishment of Mercosur, have changed the traditional way in which power generation equipment is procured. Whereas the state-owned electrical utilities historically controlled equipment purchases, they did not foster the most efficient and least expensive generation of electrical energy. In addition, Brazil had become almost totally dependent on its hydroelectric capabilities, which in turn had become susceptible to recurring droughts. At the same time, significant technological developments in the combustion of low-grade fossil fuels had caused Brazil to seriously consider developing its sizeable deposits of low-grade coal. Consequently, influenced by the success of Chile's privatization efforts, the markets for power generation equipment, particularly in Argentina and Brazil, have been opened to competition from the private sector. For example, in early 1995, the Brazilian Congress initiated a variety of new constitutional amendments aimed at introducing private competition into state-run companies (including Electrobras). The amendments were designed to permit private companies to own controlling interests in hydroelectric and other electric projects.

U.S. EXPORTS AND INVESTMENT FLOWS TO MERCOSUR

U.S. exports of power generation equipment (principally to Argentina and Brazil) rose irregularly from $61 million in 1993 to $84 million in 1997 after peaking at $94 million in 1995 (table 12). Argentina accounted for the vast majority of U.S. exports until 1996, when a sudden rise in Brazilian demand for steam boiler parts and miscellaneous electric generating sets pushed that country's share to nearly $38 million, or 48 percent of total U.S. exports to the region. This trend continued in 1997, when U.S. exports to Brazil rose to $56 million, or 67 percent of the annual total. This surge is reportedly associated with the construction of six coal-fired power plants in the Brazilian state of Santa Catarina announced by General Electric do Brasil (GE do Brasil) in February 1995.[6]

Table 12
U.S. exports of power generation equipment to Mercosur members and the world, 1993-97

(Million dollars)

Country[1]	1993	1994	1995	1996	1997
Brazil	3.4	0.7	4.5	37.9	56.4
Uruguay	2.4	(2)	(2)	0.2	.1
Argentina	55.2	31.4	89.1	41.0	27.7
Total Mercosur	61.0	32.1	93.6	79.1	84.2
World	1,592.0	1,334.6	1,864.6	1,498.8	1,811.7

[1] U.S. exports to Paraguay were negligible during this period.
[2] Less than $50,000.

Source: Official statistics of the U.S. Department of Commerce.

GE do Brasil, an affiliate of U.S.-based General Electric Company (GE), plans to build the plants (valued collectively at $2 billion) over the next 7 years in order to provide 1,590 mega (million) watts of electrical energy to the region. GE do Brasil is also planning to invest from $2.1 billion to $3.5 billion to construct six to ten similar plants in the state of Rio Grande do Sul. Each of these plants would generate a peak capacity of 265 megawatts and consume 800,000 tons of local coal per year. The Czech company, Skoda Export, and Brazilian regional power companies Celesc, Eletrosul, and CESP have also expressed an interest in investing in this venture, which will rely on GE's patented integrated gasification combined cycle (IGCC) technology to process the coal and manage the production of electricity.[7] GE is acknowledged as the worldwide leader in IGCC installations, which permit a power station to generate electricity from either coal or natural gas.

U.S. equipment exports to Argentina during 1993-97 were predominately gas turbines and large alternating current (AC) generators (shipped separately), with a temporary surge in miscellaneous generating sets (primarily gas turbine generating sets) contributing to a significant rise in U.S. sales during 1995. These shipments reflect the ongoing Argentine privatization of the electric utility sector. Gas turbine generator units (gas turbine and matching alternating current generator) provide the most rapid means of supplying electrical energy to an existing power grid. When they are used in conjunction with a separate steam turbine or boiler unit to capture and recycle the spent exhaust from the gas turbine (cogeneration), they are also nearly as efficient as fossil fuel-fired steam turbine generators. Argentina's ample reserves of natural gas make this equipment a logical answer to the short term power disruptions that the nation has experienced.

To date, investment by U.S. producers of power generation equipment in Mercosur countries has been minimal. Current operations are supported primarily through a network of regional sales representatives and agents. The only notable facilities that are owned by U.S. companies in the region are for maintenance and repair operations.[8] In addition, since almost all of the fossil fuel-fired equipment currently being sold in the region is imported and markets are relatively open, U.S. companies are not likely to make significant investments in regional facilities in the near future. Given the fact that markets are extensively supplied by imported equipment, U.S. companies are competing with other importers who are subject to the same duties and fees. Furthermore, because the production operations associated with

this equipment are highly capital and technology intensive, U.S. producers do not view potential savings in transportation, labor, and inventory costs as being sufficient to offset the cost of relocating these operations.

OUTLOOK

With the exception of certain hydroelectric equipment, most of the power generation equipment that is consumed in the region is imported (predominately from the United States, Europe, or Japan), with all suppliers subject to the same tariff and nontariff regime. Because there is minimal intra-regional trade in this equipment, the preferential treatment of such shipments does not determine the conditions of competition between major foreign suppliers. However, what has already begun to develop, and is likely to increase rapidly, is a series of cooperative energy ventures between Mercosur members and adjoining non-member countries that may favorably affect future U.S. exports. Brazil, for example, which has few natural gas resources of its own, has entered into agreements with Argentina and Bolivia to provide gas via pipeline.[9] This fuel is to be used principally in conjunction with gas-fired cogeneration power plants.[10] The market for U.S.-made power generation equipment in the region is likely to be enhanced as a result of such ventures.

Endnotes

1. Claire Poole, "The Age of Enlightenment: The Brazilian Promise," *Latin Trade*, Dec. 1996, p. 54.
2. U.S. Energy Association, "Proposals for a Policy of a Coal Based Thermoelectric Generation of Energy," 1620 Eye St., NW, Washington DC, July 15, 1997.
3. Poole, "Age of Enlightenment ...," p. 50.
4. U.S. Department of Commerce, *Argentina: Leasing Sectors for U.S. Exports & Investment*, National Trade Data Bank, Country Commercial Guides, 1996, found at Internet address http://www.stat-usa.gov, retrieved July 24, 1997.
5. U.S. Department of Commerce, *Argentina-Low Tension Electric Energy Distribution Equipment/Supplies*, National Trade Data Bank, Market Research Reports, FY 1997, found at Internet address http://www.stat-usa.gov, retrieved July 24, 1997.
6. *Business Latin America*, Feb. 27, 1995.
7. *Business Latin America,* Mar. 6, 1995.
8. Conversation with official of the General Electric Co., Washington, DC, July 24, 1997.
9. U.S. Department of Energy, "Brazil," found at Internet address http://www.eia.doe.gov, retrieved Feb. 18, 1997.
10. Jose Emilio Nunes Pinto and Charles E. Schwenck, "Natural Gas Power Projects in Brazil," staff memorandum for Morrison & Foerster LLP, Irvine, CA, June 10, 1997, p. 3.

MOTOR VEHICLES AND PARTS*

HIGHLIGHTS:

- *U.S. exports to Brazil and Argentina more than doubled in quantity during 1993-97.*
- *Intra-Mercosur trade increased by 71 percent to $1.6 billion during 1993-96, whereas imports from non-member countries increased by 73 percent to $2.3 billion.*
- *Motor vehicles are exempt from the Mercosur agreement and CET until January 1, 2000. Based on a national policy grandfathered under Mercosur until 2000 and bilateral trade accords, Brazil uses high tariffs and local-content requirements to limit and regulate imports from both nonmember and member countries.*
- *Under a special transition agreement that applies solely to the motor vehicle sector, preferential tariff treatment is granted to U.S. and other foreign vehicle companies with domestic assembly operations in Brazil and Argentina.*
- *U.S. motor vehicle companies are expected to invest between $5 and $6 billion in the Mercosur region before the end of the decade.*
- *Over the long term, emphasis on technology transfer through local manufacturers and import substitution are likely to limit the growth of U.S. vehicle exports.*

INDUSTRY STRUCTURE AND RECENT MARKET DEVELOPMENTS

Under the Mercosur agreement, motor vehicles and parts are exempt from the FTA and the CET until January 1, 2000. Intra-Mercosur motor vehicle trade is governed by a series of bilateral accords signed by the four charter member nations during the 1980s. In January 1996, Brazil and Argentina signed a transitional agreement (covering the period of 1996-2000) that allows new vehicles and parts to qualify for duty-free treatment if they conform to local-content and trade-balancing requirements; however, each country's intra-Mercosur imports must be compensated for by exports within Mercosur or to other markets.[1] Qualifying producers are eligible for a 90-percent reduction of tariffs on imported new production machinery, test equipment, tools and dies, and quality-control instruments, and for a 55 percent reduction of tariffs on motor vehicle parts.

The Mercosur region is one of the world's fastest growing motor vehicle markets, with annual sales of more than two million vehicles. International motor vehicle producers believe the creation of a market that is twice the size of Canada's has tremendous potential for sales, especially in Brazil, where less than 25 percent of the population owns an automobile. Annual Mercosur auto production is expected to reach five million units by 2005, with Brazil alone accounting for more than three million units.[2]

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* Includes automobiles, light trucks, and parts thereof. Data for this industry sector have been compiled from official U.S. sources and the Inter-American Development Bank, *DataIntal*. The discrepancies between these two data sources are attributed to differences in collection methodology, item classification, and reporting origin and destination of the merchandise (c.i.f. vs. f.o.b.). Furthermore, there are no trade reconciling agreements between the United States and the Mercosur countries.

Motor vehicle production in both South America and the Mercosur customs union is dominated by Brazil, which was the world's eighth-largest motor vehicle producer in 1996. Brazilian motor vehicle production increased by 33 percent during 1993-96 (the fastest rate among Mercosur partners) to almost 1.5 million units in 1996, representing more than 80 percent of all motor vehicles produced by member countries (table 13).[3]

Table 13
Mercosur motor vehicle production

(Units)

Country	1993	1994	1995	1996
Brazil	1,099,459	1,249,265	1,297,500	1,468,100
Argentina	286,964	338,494	226,700	269,200
Paraguay	(1)	(1)	(1)	(1)
Uruguay	12,000	16,000	1,900	2,100
Total	1,398,523	1,603,759	1,526,100	1,739,400

[1] No production facilities exist.

Source: *Automotive News*, 1995 & 1997 Market Data Books.

Paraguay has no established motor vehicle industry. Sevel Uruguay and Nordex assemble motor vehicles in Uruguay under license for several European manufacturers. A Nordex-Sevel venture assembles Fiats in Montevideo principally for export to the Argentine market and Nordex assembles Peugeots, Citroëns, and Renaults in its other plants. The motor industry in Uruguay is exploring niche markets, especially short-series exclusive models that cannot be assembled economically in either Brazil or Argentina.[4]

The importance of the motor vehicle industry has grown in both Brazil and Argentina, representing nearly 10 percent of each nation's GDP in 1995.[5] Motor vehicle production within Mercosur is dominated either by local companies that assemble under licensing arrangements or by subsidiaries of large multinational corporations. Sales, production, and exports have grown significantly. Small cars lead the way, especially in Brazil where models such as the family-oriented "popular car" with an engine displacement of 1.0 liters or less, dominate sales. The Brazilian market share of these cars grew from 12 percent in 1993 to more than 60 percent in 1995.[6] As a result of their larger and faster growing markets, Brazilian and Argentine producers have recently restructured to take advantage of specialization in the production of a smaller number of models. Such specialization has reportedly boosted intra-Mercosur trade.[7]

Brazil is the only member of Mercosur with both the production capacity to satisfy its own internal market and the ability to compete in foreign markets outside of Mercosur. The Argentine motor vehicle industry, on the other hand, is regarded as too small to profit from economies of scale; consequently, unit costs tend to be significantly higher than in other major producing countries. Argentine facilities tend to be relatively small, with the average factory assembling only 15,000 vehicles of one model annually, compared with nearly 130,000 vehicles in the United States.[8] Quality remains low for both Argentine- and Brazilian-produced vehicles, while prices for both imports and domestically assembled vehicles remain high. Stringent local-content requirements also tend to prevent the production of vehicles that are technologically competitive both internationally and within Mercosur. For example, because of local content requirements Chrysler will be prevented from installing features that are standard on U.S.-made Jeep Grand Cherokees (such as its various computer systems) in its new Argentine models.[9]

Throughout 1997, Brazil's $18-billion motor vehicle market was dominated by General Motors (U.S.), Fiat (Italy), Ford (U.S.), and Volkswagen (Germany).[10] In September 1994, Brazil had lowered its tariffs on imported motor vehicles from 35 to 20 percent in order to cut costs, increase supply, and force local assemblers to lower prices.[11] The tariff cuts attracted large numbers of imported vehicles and turned Brazil's trade balance from a surplus into a deficit.[12] The Brazilian Government responded by raising the import tariff on motor vehicles to 32 percent and increasing the Industrial Products sales tax (IPI) on

popular cars from 0.1 to 8 percent.[13] The tariff increase was intended to slow the pace of imports by as much as 50 percent during the latter half of 1995.

The motor vehicle market in Brazil slumped as the economy fell into a recession during the first quarter of 1995. In order to stem its increasing monthly trade deficit and reinforce domestic price and production controls, Brazil temporarily raised tariffs on a wide range of consumer durables, including motor vehicles.[14] In March 1995, Brazil raised its tariff rate on motor vehicles from non-Mercosur nations to 70 percent.*

In addition, the Brazilian Government unilaterally instituted a series of initiatives, including quotas and import and investment incentives, that were designed to protect domestic producers and improve the country's trade balance.[15] In 1995, Brazil offered incentives and quotas for motor vehicles and parts manufactured by Japanese, Korean, and Western European producers who agreed to meet its export and production goals.[16] In December 1995, the quota regime was found to be inconsistent with World Trade Organization (WTO) obligations and was eliminated after the WTO's Balance of Payments committee rejected Brazil's justification for its quotas on the grounds of balance of payments.[17] Brazil also lowered to 35 percent its tariff rates on motor vehicles imported by domestic producers and subsidiaries of foreign producers with manufacturing facilities in Brazil, as long as they adhere to the country's trade-balancing scheme. The tariff reduction provides local producers with a competitive edge over importers that have no domestic production capabilities.[18] A Presidential decree issued in January 1996 established additional tax breaks and other incentives for motor vehicle assemblers willing to locate facilities in any of 19 states, especially in the underdeveloped northeast region.[19]

Motor vehicle assembly operations in Argentina are dominated by Ford, General Motors, Volkswagen, Fiat, Sevel (Peugeot and Citroën, a licensee assembler for GM), and CIADEA (a Renault licensee). These firms accounted for approximately 95 percent of Argentina's production of motor vehicles during 1994 and 1995.[20] The production of vehicles began to decline in Argentina during the first quarter of 1995 as the country slid into a recession brought on by capital flight that followed the 1994 Mexican peso crash.[21] Argentine vehicle production had grown from 90,000 units in 1990 to 338,494 units in 1994 before falling to 269,199 units in 1996. To cope with declining demand, Argentine manufacturers were forced to layoff workers, temporarily close plants, and cut prices (up to 40 percent off list price) to reduce inventories.[22] To counter a growing trade deficit in motor vehicles, Argentina established quotas on imports from its Mercosur partners as well as from other countries.[23] The Argentine market recovered strongly in 1997, but the East Asian-inspired recession in Brazil forced Ford and Fiat to scale back production at their Argentine assembly plants in December 1997 and January 1998. A significant share of the Escorts assembled by Ford in Argentina are exported to Brazil.[24]

Under the recently signed transitional agreement between Brazil and Argentina, the latter will be permitted to export 26,400 motor vehicles duty-free to the former during 1997, while Brazil will be allowed to export one unit for every two it receives from Argentina. Argentine production will come from local producers such as Renault (13,000 units), Peugeot (8,400 units), Toyota (4,500 units), and Chrysler (500 units).

Argentina has established a system of differing quotas and tariff rates for local assemblers, official distributors and motor vehicle dealers, as well as other firms and individuals.[25] Brazilian exports have been eligible to enter Argentina duty-free as of January 1, 1995, within the rules of a production-swapping agreement.[26] In that same month, Argentina increased its annual quota on imported autos from Uruguay

* Argentina held that these actions violated the Protocol of Ouro Preto (see appendix A). Brazil subsequently exempted Mercosur members as long as they complied with Brazil's compensation scheme.

from 17,000 to 20,000 and eliminated customs restrictions and export-compensation requirements. In turn, Uruguay agreed to increase its quota on duty-free Argentine imports to 4,000 vehicles.[27]

The Brazilian and Argentine motor vehicle parts, accessories, and service equipment market was estimated at $19.4 billion in 1997.[28] The Mercosur market for motor-vehicle parts and components is supplied principally by local producers, who accounted for approximately 94 percent of parts sales in Argentina and Brazil during 1995.[29] As with motor vehicles, Brazil dominates the Mercosur parts market, accounting for 93 percent of the total. The sales of parts boomed in both Brazilian and Argentine markets with the expansion in demand for new car sales,[30] with growth so brisk that Argentine parts producers ignored repeated violations of the country's 60 percent local-content requirement for locally assembled autos.[31] These violations have led in recent years to the elimination or reduction of Argentina's tariff and nontariff barriers on imports of parts and accessories. In December 1995, the Brazilian Government also instituted performance incentives for the parts industry similar to those applied to finished vehicles.[32]

MERCOSUR TRADE

In 1996, traditional trading patterns were upset, as intra-mercosur imports grew almost 70 percent and imports from non-Mercosur sources reversed their previous growth path. Intra-Mercosur imports had risen by less than 1 percent between 1993 and 1995 (table 14), while trade with non-Mercosur countries had tripled during that period (table 15).

Table 14
Intra-Mercosur motor vehicles imports, 1993-96

(Million dollars)

Country	1993	1994	1995	1996
Argentina	491.4	437.6	256.9	430.4
Brazil	226.6	291.1	534.8	1,023.0
Uruguay	77.7	27.0	32.7	30.4
Paraguay	121.7	170.6	100.8	84.3
Total	917.4	926.3	925.2	1,568.1

Source: Inter-American Development Bank, *DataIntal.*

Table 15
Mercosur motor vehicles imports from non-Mercosur partners, 1993-96

(Million dollars)

Source	1993	1994	1995	1996
United States	164.3	297.3	433.6	211.7
EU	383.1	1,735.5	2,614.4	1,269.4
Japan	543.4	541.6	487.7	300.9
All other	268.2	343.4	536.6	562.1
Total	1,359.0	2,917.8	4,072.3	2,344.1

Source: Inter-American Development Bank, *DataIntal.*

During 1996, Brazil accounted for approximately 65 percent of total intra-Mercosur motor vehicle imports, Argentina for 27 percent, Paraguay for 5 percent, and Uruguay for 2 percent (table 14). Since 1993, intra-Mercosur trade has become more important to Argentina as its motor vehicle exports to Brazil increased by 45 percent in 1996 (103,000 units) as major motor vehicle producers such as VW, Ford, and GM shifted production of some models from Brazilian to Argentine plants in order to gain economies of scale and other efficiencies.[33] The percentage share of Brazil's imports accounted for by intra-Mercosur trade increased from 8 percent in 1993 to 53 percent in 1996. Imports of motor vehicles from non-member nations declined by 42 percent in 1996 compared to 1995 principally in response to the effects of the Peso crisis on Argentina's economy. Intra-Mercosur trade in parts and accessories also grew substantially, from $50 million in 1990 to more than $550 million in 1996. As with vehicles, Brazil dominates parts and accessories imports within the bloc, accounting for 51 percent of the total in 1996 and the imposition of import financing rules by Brazil that effectively increased the cost of most imports.[34]

Despite the actions cited earlier to counter deficits, government policies aimed at attracting substantial direct foreign investment in the Brazilian and Argentine motor vehicle industries have been extremely successful. Lured by the enormous potential of Brazil's market, protective trade regimes, rising incomes, and the low cost of establishing assembly facilities in Argentina, foreign-based vehicle producers

have announced plans to invest between $12 and $14 billion in both countries by the end of the decade. At the end of 1995, the Brazilian Trade Ministry estimated that companies already operating in Brazil would spend $10.6 billion during 1996-99.[35] Although 75 percent of the money pledged is destined for Brazil, GM, Fiat, and Chrysler plan to construct plants in Argentina for the first time since the early 1980s.[36] While GM plans to export nearly 80 percent of its new Argentine production to Brazil, other manufacturers within the bloc have announced that, as the domestic markets become saturated, they will export to the rest of Latin America, the United States, and Western Europe.[37]

FACTORS AFFECTING U.S. MARKET ACCESS

Although vehicle markets in Argentina, Brazil, Paraguay, and Uruguay have been liberalized, they remain relatively protected from foreign competition by quotas, high import tariffs and other tax levies, a cumbersome bidding process for private importers, and performance requirements under local-content rules (table 16).

Table 16
Specific import and investment policies for motor vehicle and parts, 1997

Argentina
• Tariff:[1] 25 percent for private individuals, 10 percent for official distributors, 8 percent for dealers, and 2 percent for Argentine manufacturers.
• Tariff:[1] 18 percent on parts.
• 3 percent statistical fee levied on imports.[2]
• Sixty percent local content requirement for locally produced vehicles.
• Import quotas raised from 10 to 13 percent of domestic output.
• Companies located in Argentina are required to offset imports with exports.
Brazil
• Tariff:[3] 70 percent for private importers and 35 percent on motor vehicles imported by Brazilian producers.
• Tariff:[3] 7.2 percent for motor vehicle parts (IPI: 4 to 16 percent).
• Import compensation scheme for motor vehicles.
• Sixty percent local content requirement for locally produced vehicles.
• Industrial products tax ranging from 31 to 55 percent on imports with engine displacement exceeding 1.0 liters.
• Tariff reduction offered on imported capital equipment used to manufacture motor vehicles.
Paraguay
• Tariff:[1] 0 to 10 percent for motor vehicles and parts.
Uruguay
• Tariff:[1] 7 to 20 percent for motor vehicles, lesser rates for domestic producers.
• Tariff:[1] 18 percent on parts.
• Quotas on imports.
Mercosur-wide policies
• Motor vehicles are exempted from the CET and FTA until Jan. 1, 2000.

[1] Argentina, Paraguay, and Uruguay implemented a 3 percentage point increase in most CETs in early 1998.
[2] In January 1998, Argentina reduced the statistical fee to 0.5 percent.
[3] Refers to tariffs applied throughout most of 1997. In November, Brazil increased CETs by 3 percentage points.

Sources: U.S. Department of State, U.S. Department of Commerce, and Embassies of Brazil, Argentina, Paraguay, and Uruguay.

Despite the growing importance of imports, the Brazilian Government continues to impose tariffs, taxes, and fees on imported motor vehicles, consequently, increasing vehicle prices substantially and discouraging vehicle sales. These levies reportedly elevate the price of an imported motor vehicle by more than 250 percent and tend to discriminate against most U.S. export models, since they are based on vehicle weight, engine type, and engine displacement.[38] For example, a four-door Chrysler Neon retails for $26,000 to $28,000 in Brazil, compared with $12,000 to $15,000 in the United States.[39] An average annual income of only $4,000 in Brazil therefore effectively places most imported new motor vehicle models beyond the reach of much of the population.[40] In addition, since U.S. manufacturers export few, if

any, motor vehicle with engines of 1.0 liter engines or less to Mercosur countries, they are not eligible for Brazil's lowest Industrial Products sales (IPI) tax.*

However, tariffs reportedly continue to be Brazil's chief instrument for limiting motor vehicle imports from non-Mercosur sources and for sheltering non-competitive local producers.[41] Brazil raised tariffs on motor vehicles to 70 percent in 1995 and on imported motor-vehicle parts from 4.8 percent in 1996 to 7.2 percent in 1997. Additionally, the government announced its intention to raise motor-vehicle parts tariffs from 9.6 percent in 1998 to the CET level of 16 percent in 2000. Brazil also has initiated a series of measures to encourage foreign manufacturers to locate additional production capacity there.[42]

Special categories of quotas and tariff reductions on imported finished vehicles, parts, components, and other inputs for local producers were implemented to encourage additional investment and local production by foreign manufacturers.[43] In January 1997, the United States called for a series of consultations in the WTO to address the concerns of certain U.S. producers regarding preferential tariffs granted by Brazil to foreign-based assemblers that produce locally.[44]

U.S. EXPORTS AND INVESTMENT FLOWS TO MERCOSUR

Demand for imported vehicles intensified following the liberalization of the trade regimes and improvements in economic conditions in Brazilian and Argentine markets. The number of foreign-manufactured motor vehicles on the roads in the four Mercosur nations is increasing due to ongoing demand that outpaces local production. U.S. exports of motor vehicles to Argentina and Brazil, spurred by the rapid expansion of Brazil's vehicle market, more than doubled in units during 1993-97 (table 17). Approximately 43 percent of all motor vehicles sold in Argentina during 1995 were imported and nearly 30 percent of the country's motor vehicle fleet consists of either U.S.-made or U.S.-designed vehicles.[45] Exports (in units) from the United States to the region, however, accounted for less than 2 percent of total U.S. vehicle exports in 1997 and consisted principally of autos with four cylinder engines (between 1.5 liters and 3.0 liters in size) and an average unit value of $12,065 in Brazil and $12,554 in Argentina.[46]

Table 17
U.S. exports of passenger vehicles to Brazil and Argentina, 1993-97[1]

Country	1993	1994	1995	1996	1997
	Value (*million dollars*)				
Brazil	121.7	262.0	405.5	153.4	241.4
Argentina	88.6	113.8	78.8	93.2	112.2
Total	210.3	375.8	484.3	246.6	353.6
	Quantity (*units*)				
Brazil	6,916	18,168	28,618	14,465	20,008
Argentina	5,782	6,797	4,698	6,988	8,937
Total	12,698	24,965	33,316	21,453	28,942

[1] U.S. exports to Paraguay and Uruguay were negligible.

Source: Official statistics of the U.S. Department of Commerce.

Market expectations of leading international producers continue to be positive. In 1995, both Ford and GM announced that they would modernize their products and boost Mercosur-based capacity to counter investment proposals by rival multinational producers.[47] GM and Ford will also restructure their Brazilian and Argentine operations in order to adjust to long-term changes in the market, gain economies of scale, increase efficiency, and cut costs while maintaining access to an enlarged Mercosur market.[48]

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* Brazil's IPI is levied on most domestic and imported manufactured products and, in the case of motor vehicles, is based on weight, engine type, and engine displacement. Gasoline-powered motor vehicles with an engine displacement of 1.0 liter or less are subject to a tax of 12 percent, those between 1.0 to 1.5 liters are taxed at 31 percent, those between 1.5 to 3.0 liter at 31 to 36 percent, and those with engines greater than 3.0 liters are taxed at 30 percent. The IPI tax is assessed on the sum of the c.i.f. value plus the import duty.

GM, currently vying with Fiat for second place (in terms of sales) in Brazil's market, has added new products and more than doubled its capacity there since 1990. General Motors do Brasil, one of GM's top international performers, reported that sales have increased in each of the last 5 years.[49] GM plans to invest $3 billion in Mercosur by the end of the decade and expects to produce 400,000 vehicles annually in Brazil alone.[50] GM also returned to Argentina in May 1994 for the first time since closing its local plants in 1979 and plans to invest $100 million in Paraguay to assemble small- and medium-sized motor vehicles.[51]

Even after the dissolution of its failed Autolatina* production alliance with Volkswagen in 1995, Ford reported losses in Brazil of nearly $300 million in 1995 and $130 million during the first half of 1996. Once Brazil's second-leading producer, Ford has seen its market share slide from 20 to 12 percent when the collapse of Autolatina left the company without a competitive entry in Brazil's critical small-car market.** Ford reportedly planned to rely on imports of older model subcompacts from Europe until it could launch a new, modern Brazilian subcompact.[52] In March 1995, however, Brazil raised its IPI tax on cars with 1-liter engines or less and raised tariffs on imported motor vehicles to 70 percent.*** At that point, Ford officials considered that imports were no longer a profitable alternative and estimated that the company would record an additional $260 million of losses during the latter half of 1996.[53] However, Brazil subsequently lowered its motor vehicle tariffs for local producers to 35 percent, allowing Ford and GM's exports to the region to qualify for the preferential tariff rate granted to local producers.****

Chrysler, without production facilities in either Brazil or Argentina until April 1997, recently dedicated a $165 million assembly plant in the latter that will produce Jeep Grand Cherokee luxury sport utility vehicles for the Mercosur market. The company announced plans to produce 20,000 vehicles per year, 70 percent of which will be sold in the Brazilian market.[54] Chrysler has also entered into a joint venture with BMW to produce engines in Brazil and plans to erect a $315 million pickup truck assembly facility in Campo Largo, the state of Paranee, Brazil. Chrysler will qualify for lower tariff rates in mid-1998 when it begins to produce vehicles at these new plants.[55]

The Mercosur market for U.S. motor vehicles and parts production by U.S. firms in member countries have expanded simultaneously. Moreover, most of the world's leading parts producers have located production facilities in Brazil and are currently investing large sums of money to upgrade their operations. Global sourcing of parts is already changing the relationship between producers and parts suppliers in Brazil and Argentina;[56] the procurement of parts outside of Mercosur has forced local producers to become more efficient and more competitive. In 1995, U.S. exports accounted for approximately 15 percent of Argentina's and 2 percent of Brazil's vehicle parts and accessories market.[57] The preponderant share of U.S. products has been original equipment parts for locally assembled U.S.-designed vehicles, although U.S. producers also have supplied this market with aftermarket items such as spark plugs, roller bearings, and gaskets. To compete more effectively, U.S. parts producers are also acquiring local producers. For example, the Dana Corp. (U.S.) and Freios Varga (Brazil) formed a new company, Sistemas Modulares, to provide suspension systems for Brazilian-made Volkswagen Golf models.[58] In addition, Tenneco Automotive (U.S.) acquired Argentine exhaust system manufacturer Minuzzi, which produces systems locally for Volkswagen, Ford, and Daimler-Benz.[59]

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* Ford (U.S.) and Volkswagen (Germany) formed a joint venture known as Autolatina in 1987, which was once Latin America's largest car assembler.

** The popular car market represents between 60 and 70 percent of Brazil's total motor vehicle market.

*** The 70 percent tariff forced Japanese manufacturers to cut exports by 95 percent during 1995.

**** Ford plans to invest approximately $2 billion in Brazil during 1997-2000.

OUTLOOK

Export opportunities exist for U.S. companies with production facilities in the Mercosur region, which as local producers, are exempt from import quotas, high tariffs, and other restrictive measures. Much of the direct investment made by foreign assemblers in Argentina and Brazil has been prompted by governmental policies that favor local manufacturers. More than a dozen U.S. and foreign motor vehicle producers and parts suppliers from the United States, Europe, and Asia have announced plans to invest more than $12 billion in new production facilities in Brazil and Argentina by the end of the decade.

In the short-term, U.S. exports are likely to increase because motor vehicle and parts are still in short supply. The number of imported motor vehicles on the roads within the Mercosur region is expected to expand as long as demand continues to outpace local production. Over the next 5 to 10 years, however, market saturation and the continued emphasis by Brazil and Argentina on technology transfer through local manufacturing and import substitution will likely limit future exports, although the existence of U.S.- affiliated assembly plants will likely ensure continued demand for U.S. exports of parts to the Mercosur bloc. The trend towards the globalization of production by Ford and GM, together with their historic preference for manufacturing locally may act to limit demand for U.S. exports. In addition, the industries in Brazil and Argentina are expected to rely increasingly on exports to other Latin American markets as the primary mechanism for expansion, as the surge in capacity outpaces growth in the Mercosur market.[60]

Endnotes

1. "Integration Agreements," *Investing, Licensing & Trading Conditions Abroad*, The Economist Intelligence Unit, Jan. 1, 1996.
2. U.S. Department of State telegram, "World's Auto Makers Beat a Path to Brazil's Door," message reference No. 12958, prepared by U.S. Embassy, São Paulo, Apr. 12, 1996.
3. *Wards Auto World*, 1996.
4. "Road warriors in Mercosur," *Business Latin America*, The Economist Intelligence Unit, Feb. 27, 1995.
5. U.S. Department of State telegram, "Argentine Auto Industry in the Spotlight," message reference No. 04112, prepared by U.S. Embassy, Buenos Aires, July 20, 1995.
6. Ian Katz, "High Gear," *U.S./Latin Trade*, July 1995, p. 36.
7. Standard and Poors DRI, from Brendan M. Case and Andrea Mandel-Campbell, "Auto Fever," *Latin Trade*, May 1998, p. 42.
8. U.S. Department of State telegram, "Argentine Auto Industry in the Spotlight," message reference No. 04112, prepared by U.S. Embassy, Buenos Aires, July 20, 1995.
9. Ibid.
10. Mercedes, BMW, Chrysler, Toyota, Honda, and Peugeot are also building new production facilities in Brazil.
11. Jonathan Wheatly, "Brasilia rocks the boat," *Financial Times,* Feb. 4, 1997.
12. "Manufacturing-Automobiles Forge Ahead," *Latin American Country Report*, The Economist Intelligence Unit, Mar. 3, 1995.
13. U.S. Department of State telegram, "Brazil sets out on the long road to Mercosul integration," message reference No. 000643, prepared by U.S. Embassy, Brasilia, Feb. 14, 1996.
14. Inter-American Dialogue, *Integrating the Hemisphere, Perspectives from Latin America and the Caribbean*, Mar. 1997, Washington, DC, p. 162.
15. Ibid.
16. Ibid.
17. "Brazil sets low auto tariffs, but critics are not appeased," *The Journal of Commerce*, Aug. 22, 1996.
18. U.S. Department of Commerce, *Brazil-Investment Climate*, 1996, National Trade Data Bank, Stat-USA database, found at Internet address http://www.stat-usa.gov, retrieved Apr. 15, 1997.
19. Stephen Fidler, "Mercosur," *Financial Times*, Feb. 4, 1997.
20. Ministry of Economy and Public Works and Services in Argentina, *Investment Opportunities in Argentina: Automobiles,* Oct. 31, 1996, p. 1, found at Internet address http://www.mecon.ar, retrieved Apr. 17, 1997.

21. U.S. Department of Commerce, *Argentina - New Automobiles*, National Trade Data Bank, Country Commercial Guides, 1995, Stat-USA database, found at Internet address http://www.stat-usa.gov, retrieved Apr. 16, 1997.
22. *Argentina*, Country Profile, The Economist Intelligence Unit, Nov. 1, 1995.
23. In July of 1995, Argentine President Menem signed Law No. 1024 (Media Provisioria) establishing auto import quotas for 1995 and 1996.
24. Brendon M. Case and Andrea Mandel-Campbell, "Auto Fever," *Latin Trade*, May 1998, p. 446.
25. U.S. Department of State telegram, "1997 Argentina--National Trade Estimates Report," message reference No. 000440, prepared by U.S. Embassy, Buenos Aires, Jan. 27, 1997.
26. "Brazil fixes car import quotas from Argentina," *O Estado de São Paulo*, p. B1, received by NEWSEDGE/LAN, Apr. 28, 1997.
27. "Road warriors in Mercosur," *Business Latin America*, The Economist Intelligence Unit, Feb. 27, 1995.
28. U.S. Department of Commerce, *Argentina: Leading Sectors for U.S. Exports & Investment*, 1997, National Trade Data Bank, Country Commercial Guides; and *Brazil: Leading Sectors for U.S. Exports & Investment*, Stat-USA Database, found at Internet address http://www.stat-usa.gov, retrieved July 24, 1997.
29. U.S. Department of Commerce, *Brazil: Leading Sectors for U.S. Exports & Investment*, National Trade Data Bank, Country Commercial Guides, 1996, Stat-USA database, found at Internet address http://www.stat-usa.gov, retrieved Apr. 17, 1997.
30. Ibid.
31. U.S. Department of Commerce, *Argentina: Leading Sectors for U.S. Exports & Investments*, National Trade Data Bank, Country Commercial Guides, 1995, Stat-USA database, found at Internet address http://www.stat-usa.gov, retrieved Apr. 17, 1997.
32. "The new automotive regime reduces tariffs," *Latin American Country Report*, The Economist Intelligence Unit, Feb. 26, 1996.
33. *Latin American Weekly Report*, Jan. 1, 1997, p. 36.
34. Inter-American Development Bank.
35. "Brazil: On a Crash Course?," *Business Latin America*, The Economist Intelligence Unit, Mar. 25, 1996.
36. Ibid.
37. Jonathan Wheatley, "Brasilia rocks the boat," *Financial Times*, Feb. 14, 1997.
38. Frances Williams, "Brazil urged to pursue liberal measures," *Financial Times*, Nov. 1, 1996, p. 5.
39. Jeb Blount, "Protectionism, Latin Style," *Latin Trade*, Mar. 1997, pp. 59-62.
40. Ibid.
41. Jeb Blount, "Protectionism, Latin Style," *Latin Trade*, Mar. 1997, p. 61.
42. U.S. Department of Commerce, *Brazil-Automobiles and Autoparts*, 1997, National Trade Data Bank, Market Research Reports, Stat-USA-database, found at Internet address http://www.stat-usa.gov, retrieved July 29, 1997.
43. The Market Access Data Base, *Market Access Sectoral Report-Brazil*, found at Internet address http://www.mkaccdb.eu, retrieved Apr. 16, 1997.
44. "Protests Over Car Incentives," *Latin American Regional Reports-Brazil*, Feb. 4, 1997, p. 3.
45. *Latin American Weekly Report*, Jan. 14, 1997, p. 29; and U.S. Department of Commerce, *Argentina--Automotive Parts*, 1997, National Trade Data Bank, Market Research Reports, Stat-USA database, found at Internet address http://www.stat-usa.gov, retrieved Apr. 15, 1997.
46. Compiled from official statistics of the U.S. Department of Commerce.
47. Caroline Wilson, "The Automotive Sector Poised for Major Investments," *Inside Brazil*, Edition No. 13, Apr. 5, 1996, found at Internet address http://www.amcham.com.br, retrieved Apr. 16, 1997.
48. U.S. Department of State telegram, "Brazil sets out on the long road to Mercosul integration," message reference No. 000643, prepared by U.S. Embassy, Brasilia, Feb. 14, 1996.
49. U.S. Department of Commerce, *Brazil-Auto Industry Trends*, 1996, National Trade Data Bank, Market Research Reports, Stat-USA database, found at http://www.stat-usa.gov, retrieved Apr. 16, 1997.
50. Caroline Wilson, "The Automotive Sector Poised for Major Investments," *Inside Brazil*, Edition No. 13, Apr. 5, 1996, found at Internet address http://www.amcham.com.br, retrieved Apr. 16, 1997.
51. "General Motors to set up plant in Paraguay," *Gazette Mercantile*, Apr. 22, 1997, p. 23, retrieved from NEW SEDGE/LAN, Apr. 24, 1997.
52. Katherine Yung, "Ford paying for a bad South American marriage," *The Detroit News*, Apr. 28, 1996, found at Internet address http://www.detnews.com, retrieved Apr. 16, 1997.
53. "Ford Warns of Brazil Losses, Sees UAW Pact," *Reuter*, Industry Net Report, found at Internet address http://www.industry.net, retrieved Apr. 14, 1997.

54. "Detroit fires up Argentine automotive industry," *WARD's Automotive International*, Dec. 1997, p.1.
55. "Chrysler Dedicated First Plant in Mercosur," Chrysler Corp., retrieved from NEW SEDGE/LAN, Apr. 25, 1997.
56. Caroline Wilson, "The Automotive Sector Poised for Major Investments," *Inside Brazil*, Edition No. 13, Apr. 5, 1996, found at Internet address http://www.amcham.com.br, retrieved Apr. 16, 1997.
57. U.S. Department of Commerce, *Brazil: Leading Sectors for U.S. Exports & Investment*, National Trade Data Bank, Country Commercial Guides, 1996, Stat-USA database, found at Internet address http://www.stat-usa.gov, retrieved Apr. 17, 1997.
58. *Latin Trade*, Nov. 1996, p. 19.
59. "Tenneco Buys Parts Maker," *Latin Trade*, Nov. 1996, p. 18.
60. Keith Bradsher, "In South America, Auto Makers See One Big Showroom," *The New York Times*, Apr. 25. 1997, p. 4.

MEDICAL DEVICES AND EQUIPMENT*

HIGHLIGHTS

- *Between 1993-97, U.S. exports to the Mercosur countries grew by 86 percent to $376 million.*
- *Medical devices and equipment are exempted from the CET by Brazil until 2001.*
- *U.S. exports of medical equipment will likely continue to dominate the Mercosur market in the future since local producers are unable to provide customers with sophisticated, high-technology equipment.*
- *Intra-Mercosur imports declined by 17 percent to $9.6 million during 1993-96, whereas imports from non-member countries have increased by 66 percent to $827 million.*

INDUSTRY STRUCTURE AND RECENT MARKET DEVELOPMENTS

The vast majority of Mercosur medical device and equipment manufacturers tend to be small-to medium-sized companies that produce almost exclusively for their own domestic markets.[1] Products manufactured within Mercosur, although durable, are considered to be low-tech in nature.[2] U.S. exports face limited competition from local producers, especially high technology equipment for large hospitals, private sector clinics, and major diagnostic centers. European and Japanese companies have proven to be the primary competition for U.S. exports in the Mercosur market.[3] Companies such as Siemens (Germany) and Philips (the Netherlands) have maintained assembly facilities in Brazil and Argentina since the 1960s; Seimens has had a particularly commanding presence in the Argentine market for more than 25 years.[4] In recent years, Japanese companies, especially Toshiba, have established a presence in the Mercosur market by supplying lower priced equipment and some medical devices that employ the latest in digital technology, such as computerized scanners and ultra-sound equipment.[5]

The demand for imported medical devices and equipment in Mercosur will continue to expand as Argentina and Brazil implement programs to modernize, reform, and overhaul their health care systems, which will ultimately result in the privatization of many government-owned hospitals.[6] Historically, Brazil's National Institute for Medical Assistance and Social Security (INAMB) was responsible for more than 70 percent of all medical equipment bought by the country's hospitals. By 1996, the market for medical devices and equipment reached more than $1.2 billion.[7] Locally produced Argentine and Brazilian medical devices and equipment, intended primarily for domestic consumption, increased by 25 percent during 1994-97.

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* Data for this industry sector have been compiled from official U.S. sources and the Inter-American Development Bank, *DataIntal*. The discrepancies between these two data sources are attributed to differences in collection methodology, item classification, and reporting origin and destination of the merchandise (c.i.f. vs. f.o.b.). Furthermore, there are no trade reconciling agreements between the United States and the Mercosur countries.

The Argentine market for medical devices and equipment grew by nearly 79 percent in 1993-97,[8] to $755 million, as estimated by the U.S. Department of State (table 18). Whereas local producers satisfy only a small percentage of Argentina's demand for sophisticated, high-tech equipment, foreign companies supply the bulk of these products through either imports or domestic assembly. In 1997, U.S. producers accounted for roughly 35 percent of Argentina's estimated market, 47 percent of the total import market, and 65 percent of imports from non-Mercosur countries.[9]

Table 18
Argentina: Medical devices and equipment market

(Million dollars)

Item	1993	1994	1995	1996[1]	1997[1]
Total market	422	551	602	699	755
Local production	204	216	231	242	260
Import market	262	388	429	511	560
Imports from U.S.	118	212	237	241	265
Exports	44	53	58	62	65

[1] Estimated.

Source: U.S. Department of State.

Opportunities for new investment and additional sales were created after the government partially deregulated Argentina's union-managed health care system, thereby allowing employees to select their own health care plans. The Argentine Government also signed a Memorandum of Understanding with the World Bank in April 1995 pledging to totally deregulate its health care sector within 2 years.[10] Privatization of government-owned hospitals and the aforementioned deregulation plan will encourage these facilities to invest large amounts of private sector capital in new machinery and equipment. In June 1994, after the Argentine Government lifted its ban on imports of some types of used and refurbished health care equipment, a thriving market for these items was created. Since that time, U.S. companies have captured over 70 percent of the used equipment market.[11]

Declining import duties, the elimination of other import restrictions, and the need to improve the quality and availability of medical services have created a growing market for medical equipment in Brazil. Between 1993 and 1997, the Brazilian market for medical devices and equipment grew by 34 percent to an estimated $1.3 billion (table 19).[12] As in Argentina, imports dominate the high-tech sectors in Brazil, accounting for 47 percent of the estimated value of the country's total market in 1997. Imports, particularly products made in the United States, enjoy a reputation for being of better quality and more technically sophisticated, user friendly, and dependable than those produced domestically. Brazilian production of low-tech devices was expected to grow by 12 percent annually during 1996 and 1997. Medical equipment manufactured by Brazilian producers is targeted almost exclusively for domestic consumption, with 75 percent of such production consumed in-country in 1997.[13]

Table 19
Brazil: Medical devices and equipment market

(Million dollars)

Item	1993	1994	1995	1996[1]	1997[1]
Total market	955	990	1,130	1,233	1,277
Local production	650	665	750	847	957
Import market	450	470	530	540	551
Imports from U.S.	180	190	225	267	315
Exports	145	145	150	154	231

[1] Estimated.

Source: U.S. Department of State.

International organizations such as the World Bank and the Inter-American Development Bank have recently initiated a series of projects designed to assist Brazil and Argentina in improving their public health care systems. In June 1996, the World Bank and the Inter-American Development Bank provided $750 million for Brazil to expand and improve its public health care facilities. The project sets up an investment fund that will support facility rehabilitation and equipment purchases and improve management systems for the state-owned Unified Health System (Sistema Unico de Saude) hospital and ambulatory network.[14]

These two international institutions have also provided Argentina with substantial financial support to restructure its health care facilities. The World Bank recently approved a $100 million loan to refurbish hospitals in the Buenos Aires area and is considering an additional $300 million loan to reform Argentina's health care and insurance system.[15] These programs will result in significant purchases of medical equipment, some of which is likely to be supplied by U.S. firms.

MERCOSUR TRADE

Whereas total intra-Mercosur imports of medical devices and equipment declined by 17 percent during 1993-96 (table 20), imports from non-member countries increased by 68 percent (table 21). The trend in intra-Mercosur imports of medical devices and equipment has been the inverse of that seen with non-member imports. Thus, whatever growth has occurred in intra-Mercosur trade has been outpaced by imports from non-member countries. In 1996, products from non-member nations accounted for 99 percent of Mercosur's total imports. The United States dominated non-member imports, accounting for more than 37 percent of the total during 1996.

Table 20
Intra-Mercosur medical devices and equipment imports, 1993-96

(Million dollars)

Country	1993	1994	1995	1996
Argentina	6.5	6.5	7.7	2.4
Brazil	1.8	1.5	2.9	3.0
Paraguay	1.2	2.7	1.9	2.5
Uruguay	2.0	2.3	2.0	1.7
Total	11.5	13.0	14.5	9.6

Source: Inter-American Development Bank, *DataIntal.*

Table 21
Mercosur medical devices and equipment imports from non-Mercosur partners, 1993-96

(Million dollars)

Country	1993	1994	1995	1996
U.S	179.3	207.7	260.6	308.0
EU	164.1	173.5	190.1	244.1
Japan	93.9	96.6	99.9	135.3
Others	49.5	73.8	80.2	129.5
Total	486.8	551.6	630.8	816.9

Source: Inter-American Development Bank, *DataIntal.*

FACTORS AFFECTING U.S. MARKET ACCESS

Recent market-oriented reforms by the Mercosur members--spurred by the need to improve the quality and availability of medical services--have transformed the market for medical devices and equipment into one of the region's most important sectors. However, imports from non-Mercosur member countries continue to face a variety of barriers, such as moderately high taxes and tariffs designed to protect sensitive sectors, discriminatory government procurement policies, local content requirements, and disparities between Mercosur and foreign regulations and standards for government safety and quality (table 22).

As recently as 1990, Brazil's medical device and equipment market was partially closed to imports in order to protect local producers from foreign competition until they could restructure and become internationally competitive.[16] Since Brazilian manufacturers were unsuccessful in their attempts to produce the sophisticated equipment required by hospitals, the market was opened and duty rates were lowered substantially for imports that do not compete with locally produced equipment.[17] Duty rates for medical devices and equipment exported to Brazil and Argentina from non-member nations range from zero to 22 percent, and are substantially higher than those of the United States, the EU, and Japan. However, Brazil has exempted medical equipment from the CET until 2001. The Mercosur FTA provides for duty-free trade in medical devices among members as long as more than 50 percent of a product's cost is produced locally in one of the four countries.[18]

Table 22
Specific import and investment policies for medical devices and equipment, 1997

Argentina
• Tariff:[1] 0 to 22 percent.
• Statistical fee:[2] 3 percent.
Brazil
• Tariff:[3] 0 to 18 percent.
• Lack of intellectual property rights.
• Import licenses required.
• Discriminatory government procurement practices.
Paraguay
• Tariff:[1] 16 percent.
Uruguay
• Tariff:[1] 16 percent.
Mercosur-wide policies
• Medical equipment is subject to a CET rate of 16 percent.
• Medical equipment is exempted by Brazil from the CET until Jan. 1, 2001.
• 50 percent local content requirement for duty-free trade within Mercosur.
• Disparities between Mercosur and foreign regulations and standards for government safety and quality.

[1] Argentina, Paraguay, and Uruguay implemented a 3 percentage point increase in most CETs in early 1998.
[2] In January 1998, Argentina reduced the statistical fee to 0.5 percent.
[3] Refers to tariffs applied throughout most of 1997. In November, Brazil increased CETs by 3 percentage points.

Sources: U.S. Department of Commerce, U.S. Department of State, and Embassies of Argentina, Brazil, Paraguay, and Uruguay.

Although notable progress has been made in the elimination of nontariff barriers, imports continue to face hurdles. For example, Resolution 225 mandates compulsory product registration and approval by the Ministries of Health, as well as the establishment of on-premises quality control laboratories for quality and performance testing on medical devices.[19] Some producers have alleged that this testing is duplicative and unnecessary. Another resolution (266) recently proposed in the Argentine Congress would exempt the United States and 18 other industrialized countries from such requirements, since they are deemed to have well-established manufacturing and product standards at home.

U.S. EXPORTS AND INVESTMENT FLOWS TO MERCOSUR

The Mercosur agreement has encouraged many U.S. medical device and equipment companies to change the way they do business in Latin America. Before its implementation, many U.S. companies focused primarily on Brazil and Argentina, while other Latin American markets were often considered solely as secondary markets.[20] With the elimination of tariffs and most nontariff barriers among member nations, many large U.S. companies have adopted a region-wide focus and are now in the process of establishing a local presence in the other Mercosur countries in order to more effectively serve the whole region.[21] Currently, however, exports to each country must satisfy the standards, testing, and conformity requirements of all four member nations. Although the harmonization of rules under the Mercosur agreement would decrease conformity assessment costs, reduce time needed to reach a market, and prevent delays in delivery within Mercosur, such an effort has not yet been undertaken.

U.S. and other foreign suppliers of medical devices and equipment to the Mercosur market expect to benefit from recent national programs designed to extend health care coverage to all citizens and to rejuvenate the public health-care sectors in Brazil and Argentina.[22] These and other measures have attracted significant foreign capital to the region for new machinery and equipment at the same time that former government-owned medical facilities have been forced to modernize.[23]

The consumption of U.S.-origin medical devices and equipment within the Mercosur region increased by 86 percent during 1993-97 (table 23). U.S. exports are expected to grow by 7 percent annually over the next 5 years as U.S. medical equipment producers shift more of their focus from traditional mature markets to the developing world.[24] The Mercosur market for medical devices and equipment, while still relatively small in dollar terms, is growing two to four times faster than markets in the United States, Western Europe, and other industrialized countries.[25] Even though Mercosur's demand for U.S.-made devices has increased significantly, in 1997, U.S. trade with the region accounted for only 3.3 percent of the value of all U.S. exports of medical devices and equipment.

Table 23
U.S. exports of medical devices and equipment to Mercosur members, 1993-97

(Million dollars)

Country	1993	1994	1995	1996	1997
Brazil	128.7	126.9	203.0	224.8	262.8
Argentina	60.8	88.9	64.7	67.3	89.2
Paraguay	2.2	2.9	6.0	5.0	5.2
Uruguay	10.9	13.1	17.1	13.7	18.9
Total Mercosur	202.6	231.8	290.8	310.8	376.1

Source: Official statistics of the U.S. Department of Commerce.

In recent years, major U.S. medical device producers have boosted their sales through exports and by expanding manufacturing operations overseas. Since 1992, exports have grown to account for almost 33 percent of U.S. industry sales growth.[26] Major U.S. equipment manufacturers have maintained assembly operations, subsidiaries, and distribution networks in Brazil and Argentina since the 1960s. Baxter International, for example, earns nearly 75 percent of its revenues outside the United States. Becton Dickinson and St. Jude Medical have been active in the Mercosur market for more than 40 years, supplying higher end products from the United States and locally produced lower end products.[27] Similarly, GE Medical Systems, a subsidiary of General Electric Co. (U.S.), announced in 1995 that it would increase its investment in Brazil by constructing an X-ray tube recharging plant in São Paulo.[28]

OUTLOOK

U.S. medical device and equipment manufacturers are cautiously optimistic about their future in the Mercosur region. Many believe that they are well situated to take advantage of the vast growth potential and dynamism of the market. The inability of domestic industries to provide customers with sophisticated high-technology equipment will likely continue to drive demand for products manufactured by long-established, local subsidiaries of U.S. companies and for imports from the United States, Europe, and Japan.[29] As a result, U.S. companies such as Becton Dickinson, Johnson & Johnson, Medtronic, and 3M have substantially increased their investments in Mercosur countries, with Brazil serving as the principal market area for near-term investments.[30]

Endnotes

1. U.S. Department of Commerce, *The Medical Equipment Sector in Brazil*, National Trade Data Bank, Market Research Reports, 1996, Stat-USA database, found at Internet address http://www.stat-usa.gov, retrieved Apr. 17, 1997.
2. Ibid.
3. Mark B. Rosenberg, "Benign Neglect," *Latin Trade*, Feb. 1997, p. 96.
4. U.S. Department of Commerce, *Medical Equipment and Services*, Aug. 26, 1996, National Trade Data Bank, Market Research Reports, Stat-USA database, found at Internet address http://www.stat-usa.gov, retrieved Apr. 14, 1997.
5. U.S. Department of Commerce, *Brazil Health Technology Sector,* found at Internet address http://www.ita.doc.gov, retrieved Apr. 11, 1997.
6. U.S. Department of Commerce, *The Medical Equipment Sector in Brazil*, National Trade Data Base, Market Research Reports, Aug. 26, 1996.

7. Health Industry Manufacturers Association, *The 1997 Global Medical Technology Update, The Challenges Facing U.S. Industry and Policy Markers*, Washington, DC, 1997, p. 6.
8. U.S. Department of Commerce, *Best Prospects for U.S. Exports to Argentina*, National Trade Data Base, Country Commercial Guides, Aug. 26, 1996, Stat-USA database, found at Internet address http://www.stat-usa.gov, retrieved Apr. 11, 1997.
9. Health Industry Manufacturers Association, *1996 HIMA Emerging Market Report*, Washington, DC, 1996, pp. 11-25.
10. U.S. Department of State telegram, "Argentina Economic Trends," message reference No. 01057, prepared by U.S. Embassy, Buenos Aires, Feb. 27, 1997.
11. Used and refurbished imports are required to meet the International Standards Organization (ISO) 9000 standards. U.S. Department of Commerce, *Argentina Health Technology Sector*, found at Internet address ftp://www.ita.doc.gov, retrieved Apr. 12, 1997.
12. U.S. Department of Commerce, *The Medical Equipment Sector in Brazil*, National Trade Data Base, Market Research Reports, 1996, Stat-USA database, found at Internet address http://www.stat-usa.gov, retrieved Apr. 11, 1997.
13. Ibid.
14. "$750 Million Project to Improve Health Care to the Poor in Brazil," The World Bank Group, Press Release No. 96/65LAC, June 21, 1996.
15. Health Industry Manufacturers Association, *1996, HIMA Emerging Market Report*, Washington, DC, 1996.
16. USITC staff conversations with officials of Becton Dickinson Industries, Cirugicas Ltda., São Paulo, Brazil, Mar. 11, 1997.
17. Health Industry Manufacturers Association, *1996, HIMA Emerging Market Report*, Washington, DC, 1996.
18. The Mercosur agreement is discussed in greater detail in appendix A.
19. USITC staff conversation with Mr. Ronaldo Pitta, Treasury Secretary, St. Jude Medical Brazil Ltda., São Paulo, Brazil, Apr. 2, 1997.
20. USITC staff conversations with officials of Becton Dickinson Industries, Cirugicas Ltd., São Paulo, Brazil, Mar. 11, 1997.
21. Ibid.
22. Health Industry Manufacturers Association, *1996, HIMA Emerging Market Report*, Washington, DC, 1996.
23. USITC staff conversations with officials of Becton Dickinson Industries, Cirugicas Ltd., São Paulo, Brazil, Mar. 11, 1997.
24. Ian Katz, "Brazil's Big Chance," *U.S./Latin Trade*, June 1995, p. 54 and U.S. Department of Commerce, *Expanding Opportunities for Industry*, National Trade Data Bank, Stat-USA database, found at Internet address http://www.stat-usa.gov, retrieved Apr. 13, 1997.
25. Richard Lawrence, "Good vital signs," *The Journal of Commerce*, Mar. 17, 1997, p. 1A.
26. Ibid.
27. USITC staff conversations with officials of Becton Dickinson Industries, Cirugicas Ltd., São Paulo, Brazil, Mar. 11, 1997.
28. GE also allocated $10 million for the construction of a special customs stock replacement warehouse. "Examples of recent foreign investment in Brazil," *Investing, Licensing & Trading Conditions Abroad*, The Economist Intelligence Unit, Jan. 1, 1995.
29. U.S. Department of Commerce, *Expanding Opportunities for Industry*, National Trade Data Bank, found at Internet address http://www.stat-usa.gov, retrieved Apr. 13, 1997.
30. Ibid.

COMPUTER EQUIPMENT AND PARTS*

HIGHLIGHTS

- *U.S. exports to Mercosur grew by more than 150 percent during 1993-97.*
- *The CET does not apply to computer equipment until 2006.*
- *Brazilian tariffs on computer equipment reach as high as 32 percent.*
- *Intra-Mercosur imports increased by 131 percent to $62 million during 1993-96, whereas imports from non-member countries increased by 58 percent to $2.2 billion.*
- *Imports from the United States are likely to face increasing competition from domestic production.*

INDUSTRY STRUCTURE AND RECENT MARKET DEVELOPMENTS

The Mercosur region provides a fast growing and dynamic market for computers, with Brazil its most promising and largest market.[1] Brazil ranked fourth in the world in 1996 with 2.7 percent share of the global market.[2] Computer equipment multinationals from around the world operate in Brazil, with far fewer in Argentina (table 24). The largest domestic firm is Brazil's Itautec-Philco, established in 1982. IBM, with 19 percent of the market, is the Brazilian sales leader, followed by Compaq (18 percent), Itautec-Philco (15 percent), and Microtec (6 percent).[3]

As expected, Brazil accounts for the vast majority of all computers sold within Mercosur. Sales there increased by 88 percent to $2.7 billion during 1992-96. Prospects for Brazil's computer market remain bright, with sales projected to reach $3.1 billion by the end of 1997. Overall, personal computers (PCs) account for the majority of sales within the region with $1.7 billion in Brazil and $574 million in Argentina in 1996. Since 1992,

Table 24
Computer companies operating in Mercosur

Company	Argentina	Brazil
Hewlett-Packard	X	X
Compaq	X	X
Acer		X
NEC		X
IBM	X	X
Apple	X	X
Edisa-HP		X
Sid Informatica		X
Procomp	X	X
ABC Bull		X
Digital Equipment		X
CPM		X
Dismac		X
Sisco		X
Itautec-Philco		X
UIS		X
Unisys		X
Fujitsu		X
Epson	X	
Packard Bell		X

Source: *Informática Exame*, July 1995.

* Includes Harmonized Tariff System (HTS) headings 8471 (automatic data processing machines and units thereof) and 8473 (parts and accessories suitable for use solely or principally with machines of headings 8469-8472). Data for this industry sector have been compiled from official U.S. sources and the Inter-American Development Bank, *DataIntal*. The discrepancies between these two data sources are attributed to differences in collection methodology, item classification, and reporting origin and destination of the merchandise (c.i.f. vs. f.o.b.). Furthermore, there are no trade reconciling agreements between the United States and the Mercosur countries.

Brazil's PC base grew by 207 percent to an estimated 3.8 million units in 1996, whereas Argentina's expanded 140 percent to an estimated 862,000 units.[4] By comparison, the European Union PC base, an important export market for U.S. manufacturers, grew by 40 percent to an estimated 52.4 million units during the same period. A relative steep decline in prices in the Brazilian market has made low-end PCs more accessible to the average buyer, as evidenced by the growth in the small office-home office (SOHO) market.[5] This segment of the market represented approximately 50 percent of Brazil's PC sales in 1995 and is expected to grow even further.[6]

Until 1992, Brazil operated under the "market reserve" system (see text box) whereby the imported and domestic products of multinational producers had only limited access to the Brazilian market while local producers enjoyed a virtual monopoly. This policy excluded foreign suppliers that did not have a domestic presence in the Brazilian PC industry. It also led to significant levels of smuggled goods (at times estimated to be 50 percent of the country's installed PC base), contributing to the abolition of the market reserve system in 1992.[7]

Brazil's "market reserve"

Until 1992, Brazil's hardware and software markets functioned under the "market reserve" system, which strongly limited access to imported products. The market reserve was justified by the military's regard for the computer sector as strategically critical and by their prevailing market ideology of import substitution, which included efforts to foster local infant industries. The market reserve for computers was administered in the 1970s by federal agencies known as CAPRE and SEI. CAPRE oversaw bidding by foreign minicomputer firms for limited entrance to the Brazilian market, judging foreign minicomputer vendors's bids primarily on the basis of the amount of technology and equity transferred to Brazil. Under SEI, and later Depin, the sale of PCs was limited to local manufacturers, except where it could be demonstrated, on a case-by-case basis, that no local technology was capable of meeting the end user's needs.

Source: U.S. Department of Commerce, International Trade Administration.

As a result of the market reserve, many of Brazil's computer manufacturers formed domestic joint ventures with foreign manufacturers in the early 1990's, especially with those who could offer them the latest in computer technology. NEC (Japan), for example, formed a joint venture assembly operation with Scopus Technologia to produce imported PCs and monitors in a semi-knocked-down state.[8] Also, UIS, Brazil's third-leading manufacturer, has signed technology exchange partnerships with Daewoo (Korea).[9]

In 1996, PCs dominated Brazil's computer hardware market, growing from 33 percent of total computer sales in 1992 to more than 62 percent in 1996 (table 25). In 1997, PC sales were expected to account for 69 percent of total hardware sales, with sales reaching $2.2 billion. Growth in this market has been driven by falling prices, greater product availability, increased use of the Internet, a rise in real income, and investments by corporations in customized networking technology (i.e. LAN and WAN).[10] PCs and workstations remain the fastest growing segment of the computer market whereas mainframes and other multi-use systems have been displaced in large part by PC-based client server networks.[11]

Table 25
Brazilian computer sales, 1992-96[1]

Item	1992	1993	1994	1995	1996[2]
Total sales (*million dollars*) . . .	1,440	1,677	1,893	2,278	2,707
PC sales (*million dollars*)	470	700	920	1,270	1,680
Installed base (*1,000 units*) . .	1,240	1,600	2,200	2,830	3,810

[1] Includes sales of PCs, workstations, servers, and mainframes.
[2] Estimates.

Source: FENASOFT, *Informática No Brasil: Fatos E Números*, 1996.

The Argentine computer market has been one of the world's fastest growing import markets.[12] Whereas overall imports from non-Mercosur member countries grew by 32 percent during 1993-96, imports from the United States grew by 42 percent.[13] A price war initiated by locally based subsidiaries of foreign multinationals has enabled the following brand name suppliers to recoup the market share previously lost to local clones: IBM, Hewlett-Packard, Compaq, Acer (Taiwan), and Epson (Japan). These companies accounted for 60 percent of Argentina's market for PCs in 1996.[14]

In Argentina, demand for mainframes and related peripherals is expected to remain strong as recently privatized firms continue to upgrade their obsolete equipment. PC sales tripled between 1992 and 1996, while the installed base (PCs in use) more than doubled (table 26). Sales of personal computers are expected to continue their strong growth as the use of client server networks expands.[15]

Table 26
Argentina: Personal computer sales and installation, 1992-96

Item	1992	1993	1994	1995	1996[1]
Sales (*million dollars*)	184	283	428	454	574
Unit price (*dollars*)	1,736	1,630	1,783	1,794	1,761
Installed base (*1,000 units*)	359	458	574	709	862

[1] Estimates.

Source: FENASOFT

U.S. exports also dominate the computer markets of both Paraguay and Uruguay.[16] The relatively small size of these markets, however, discourages direct investment by major multinational computer equipment firms.[17]

MERCOSUR TRADE

During 1993-96, intra-bloc imports of computer equipment increased by 131 percent to $62 million (table 27). In the same period, Mercosur imports from non-members increased by 58 percent to $2.2 billion (table 28) and exports of U.S. computer equipment and parts to Mercosur countries rose by 30 percent to $1.3 billion.

Table 27
Intra-Mercosur imports of computers and parts, 1993-96

(*Million dollars*)

Country	1993	1994	1995	1996
Argentina	10.7	11.2	20.8	50.3
Brazil	8.2	5.3	10.3	1.5
Paraguay	2.5	3.0	3.4	4.0
Uruguay	5.4	3.2	4.6	6.1
Total	26.8	22.7	39.1	61.9

Source: Inter-American Development Bank, *DataIntal.*

Table 28
Mercosur imports of computers and parts from non-Mercosur partners, 1993-96

(*Million dollars*)

Source	1993	1994	1995	1996
United States	999.0	1,062.4	1,387.0	1,295.9
EU	155.1	160.9	164.4	213.8
Japan	101.0	193.2	99.1	169.6
Others	164.3	461.7	365.2	562.4
Total	1,419.4	1,878.2	2,015.7	2,241.7

Source: Inter-American Development Bank, *DataIntal.*

In 1996, Argentina accounted for 81 percent of total intra-Mercosur imports, most of which came from Brazil, followed by Uruguay (10 percent), Paraguay (7 percent), and Brazil (2 percent). The Brazilian industry's dominant market position in the bloc is due in part to that country's market size and associated economies of scale in production. The use of high tariffs and other nontariff measures by the Brazilian government has successfully induced foreign multinationals to establish local production facilities rather than relying exclusively on imports to serve these markets.[18]

As with other products, the Brazilian computer market has become very important to Argentina's equipment and parts manufacturers. Though its exports have increased, Argentina still lags significantly behind the United States, the EU, and Japan as a supplier to the Brazilian market.[19] The share of Argentine exports is the result of investment by Brazilian-based manufacturers, who have recently begun to establish production facilities in Argentina. For example, Procomp of Brazil opened its first Argentine manufacturing subsidiary in 1996.[20]

FACTORS AFFECTING U.S. MARKET ACCESS

Although many of the trade barriers placed on imports by the Mercosur countries have been terminated or eased, Brazilian producers of computer equipment continue to receive protection from foreign competition (table 29). Restrictions remain despite the phase-out of the "market reserve" system in 1992, which lifted a longstanding ban on the importation and independent manufacture of foreign-made computers and peripheral equipment. Computers are one example of how the Mercosur agreement will result in higher external tariffs for some members; Argentina, Paraguay, and Uruguay have already increased some tariffs from the level of prevailing national rates to that of Mercosur's 16 percent CET. All countries will meet the CET by 2006.

Table 29
Specific import and investment policies for computer equipment and parts, 1997

Argentina
• Tariff:[1] 0 to 22 percent.
• Statistical fee:[2] 3 percent.
Brazil
• Tariff:[3] 0 to 32 percent.
• Equity partnership limitations.
• Incentive-based performance requirements.
• Government procurement preferences.
• Computers are exempted from the CET by Brazil until 2006.
Paraguay
• Tariff:[1] 0 to 16 percent.
Uruguay
• Tariff:[1] 0 to 16 percent.
Mercosur-wide policies
• CET rate: 16 percent.

[1] Most computer parts and equipment were exempted from the 3 percent CET increase in early 1998.
[2] In January 1998, the statistical fee was reduced to 0.5 percent.
[3] Refers to tariffs applied throughout most of 1997. In November, Brazil increased CETs by 3 percentage points.

Sources: U.S. Department of Commerce and Embassies of Argentina, Brazil, and Uruguay.

Brazil has developed the most significant computer industry within Mercosur, particularly PCs, behind high protective tariffs. Since 1990, Brazil has unilaterally lowered its duties on PCs from 105 percent to 32 percent. In negotiations regarding the CET, Brazil insisted that its nascent industry continue to be protected from import competition until it becomes competitive on an international level.[21] However, the Brazilian Ministry of Science and Technology announced in February 1997 that Brazil would lower its duties to the CET rate more quickly than initially expected.[22] Brazil's high tariffs and other charges have driven the cost of imported computers up to more than 180 percent of their home market price.[23]

In addition, Brazilian firms are eligible for preferential treatment in government procurement and have access to fiscal benefits and tax reductions that discriminate against U.S. exporters without a local presence.[24] Bidders that meet one or more of the preferential treatment criteria are allowed up to a 12-percent price differential compared with other bidders.* Local manufacturers that meet Brazil's strict Basic Production Process guidelines are also eligible for significant tax relief. Accordingly, the majority of computers sold in Brazil, particularly PCs, are manufactured locally (except for high-end PCs and laptops that have yet to be produced in Brazil). Local producers also benefit from government incentive programs

* Decree No. 1070 (1994) regulates government procurement of informatics and telecommunications goods and services. The decree requires federal and state entities to give preference to domestically produced computer goods based on a complex price/technology matrix.

such as a reduction in the IPI tax* on computers manufactured in Brazil and generous exemptions and discounts from local and state taxes.[25]

U.S. EXPORTS AND INVESTMENT FLOWS TO MERCOSUR

Prior to the termination of the informatics "market reserve" system in the early 1990s, many foreign-based multinational computer manufacturers entered into joint ventures, distribution agreements, and assembly operations with Brazilian firms in order to produce locally and avoid import restrictions that were imposed on foreign producers.[26] Nevertheless, since 1993, imports have captured an increasing share of the Brazilian market, currently accounting for more than 50 percent. Subsequently, both imports and domestic competition from foreign-based computer manufacturers have forced Brazilian "home-grown" PC producers to improve the quality of their equipment and lower their prices by 25 to 32 percent.[27]

U.S. exports of computer equipment and parts to the Mercosur region more than doubled during 1993-97 and are expected to continue their vigorous growth over the next 5 years (table 30). Although this amount accounted for less than 5 percent of the value of U.S. exports of such products during 1996, the United States was the dominant supplier of computer equipment and parts to the region, with the latter making up about 55 percent of the total. Mercosur import data indicates that the United States accounted for 58 percent of the bloc's total non-member imports during 1996.

Table 30
U.S. exports of computer equipment and parts to Mercosur members, 1993-97

(Million dollars)

Country	1993	1994	1995	1996	1997
Argentina	382	510	398	476	575
Brazil	558	779	1,053	1,395	1,765
Paraguay	134	247	306	372	348
Uruguay	25	26	41	53	82
Total Mercosur	1,099	1,562	1,798	2,296	2,770

Source: Official statistics of the U.S. Department of Commerce

U.S. producers also compete in the Mercosur market through local assembly operations, joint ventures, and distribution agreements. Firms such as Hewlett-Packard (HP), Packard Bell, and Compaq qualify as local producers since they now have production facilities in member countries. For example, throughout the 1990's, HP has invested in a São Paulo-based joint venture, Edisa Informatica. In 1993, the company paid $59 million to pay down Edisa's debt,[28] and in late 1995 spent $10 million on a new production line for its HP9000 minicomputers.[29] In January 1996, HP announced that it had bought out its joint venture partner, Iochpe-Maxion, and that the facility would operate as a subsidiary, Edisa Hewlett-Packard S.A.[30]

Compaq, the world's largest maker of PCs, opened a $430 million facility in early 1995 that is capable of producing 400,000 PCs annually.[31] It also announced plans to invest an additional $40 million in its Brazilian operations during 1997. Other U.S. companies such as IBM, Apple, NCR, and Digital Equipment have entered into joint production ventures with Brazilian businesses in order to qualify as domestic producers.[32]

As these companies add more production within the bloc, many of their subsidiaries will eventually compete with U.S. exports and displace them in the long term.[33] For example, IBM Argentina has announced that it may procure some of its equipment from Brazil rather than importing it from the United States.[34] The region's high tariffs and other restrictions will continue to place U.S. exports at a distinct price disadvantage while favoring Brazilian-based producers. Consequently, U.S. exports may

* Brazil's Industrial Products sales tax (IPI) is levied on most domestic and imported manufactured products. The IPI tax is assessed on the sum of the c.i.f. value plus the import duty.

decline as Brazilian producers expand their presence within Mercosur to take advantage of a tariff-based price differential.[35]

OUTLOOK

As computer equipment markets reach maturity in developed nations, the importance of U.S.-based manufacturers penetrating new markets, such as Mercosur, will increase. Latin America as a whole contains one of the world's fastest growing regional computer markets (albeit from a small base) and much of the continent's growth potential comes from Mercosur economies, especially Brazil.[36] Printer manufacturer Xerox views Brazil as an "immense untapped market."[37] Apple, though a relatively small player, expects Brazil's PC market to grow by 20 percent annually through 2000, and the rest of Latin America by 25 percent.[38]

Joint venture and local assembly arrangements involving U.S. and other foreign computer manufacturers have successfully narrowed the price gap between local clones and international brands such as Apple, Acer, Compaq, Hewlett-Packard, and IBM, which have relied heavily on name recognition, quality, and support service to justify the higher prices of their products.[39] In the near future, market growth will continue to be driven by lower prices, the development of Mercosur's computer culture, the increasing use of the Internet, and the proliferation of new product technologies.[40]

Imports of computer equipment and parts/subassemblies not manufactured in the bloc are expected to expand further. Imports of lower end products (PCs, printers, modems, etc.) are expected to decline as manufacturing capacity within the bloc increases and as international producers use their Mercosur production facilities as export platforms to the rest of the region.[41]

Endnotes

1. Mabel Corrales, "The HP Way," *U.S./Latin Trade*, Oct. 1995, p. 27, and Fenasoft, Feiras Comerciais LTDA, *Informatica no Brasil: Fatos e Numeros*, Edição No. 1, 1996.
2. Elsevier, *Yearbook of World Electronics Data*, 1996.
3. Fenasoft, Feiras Comerciais LTDA, *Informática no Brasil: Fatos e Numeros*, Edição No. 1, 1996. Digital Equipment Corporation (U.S.) holds a 45-percent stake in Microtec.
4. Fenasoft, *Informática no Brasil: ....*
5. Ibid.
6. "O avanco dos megabytes," *Mercosul, Revista de Negocios*, No. 49, July 1996, pp. 4-8.
7. U.S. Department of Commerce, *Brazil - Brazil Lowers Import Duties*, National Trade Data Bank, Country Commercial Guides, Aug. 1996, Stat-USA Database, found at Internet address http://www.stat-usa.gov, retrieved Dec. 12, 1996 and "O avanco dos megabytes," *Mercosul, Revista de Negocios*, No. 49, July 1996, pp. 6-8.
8. "Examples of Foreign Investment," *Investing & Trading Conditions Abroad*, Jan. 1, 1993, The Economist Intelligence Unit.
9. "Brazil: UIS to set up $25 million plant in Manaus," *Gazeta Mercantil*, Apr. 18, 1997, p. C-2, reported by NEWSEDGE, Apr. 23, 1997.
10. U.S. Department of Commerce, *Brazil - Software Development Tools*, National Trade Data Bank, Market Research Reports, Aug. 1996, Stat-USA database, found at Internet address http://www.stat-usa.gov, retrieved Feb. 19, 1997.
11. Scott Norvell and Ian Katz, "Infotech Revolution," *U.S./Latin Trade*, May 1995, p. 73.
12. U.S. Department of Commerce, *Argentina: Economic Trends and Outlook*, National Trade Data Bank, Country Commercial Guides, 1995, Stat-USA Database, found at Internet address http://www.stat-usa.gov, retrieved Jan. 13, 1997.
13. Inter-American Development Bank, *DataIntal.*
14. "Computers," *Business Latin America*, Mar. 24, 1997, p. 7.
15. U.S. Department of Commerce, *Argentina - Networking Software*, National Trade Data Bank, Market Research Reports, Aug. 1996, Stat-USA Database, found at Internet address http://www.stat-usa.gov, retrieved Dec. 20, 1996.

16. Inter-American Development Bank, *DataIntal.*
17. U.S. Department of State telegram, "1997 Trade Act Report: Uruguay," message reference No. 002817, prepared by U.S. Embassy, Asunción, Nov. 1996.
18. Charles W. Thurston, "The Trade Boom," *Latin Trade*, Dec. 1996, p. 40.
19. Inter-American Development Bank, *DataIntal.*
20. "Banking on Computers," *Latin American Regional Reports - Brazil*, The Economist Intelligence Unit, Mar. 1997, p. 2.
21. "Mercosur: Give and Take," *Business Latin America*, The Economist Intelligence Unit, Sept. 19, 1994.
22. "Edginess in relations with U.S.," *Latin American Regional Reports-Brazil*, The Economist Intelligence Unit, Mar. 11, 1997, p. 3,
23. "Tariffs & Import Taxes," *Investing, Licensing & Trading Conditions Abroad*, Latin Business International, The Economist Intelligence Unit, Jan. 1, 1997.
24. U.S. Department of State telegram, "1997 Trade Act Report - Brazil," message reference No. 05322, prepared by U.S. Embassy, Brasilia, Nov. 1996.
25. "Brazil: High-Tech Bedfellows," *Business Latin America*, Apr. 25, 1994, The Economist Intelligence Unit.
26. Ibid.
27. U.S. Department of Commerce, "Software Distribution Channels," National Trade Data Bank, Market Research Reports, 1996, Stat-USA Database, found at Internet address http://www.stat-usa.gov, retrieved Nov. 13, 1996.
28. "United States Management Alerts," *Business Latin America*, The Economist Intelligence Unit, Dec. 6, 1993.
29. "Company Watch in Latin America," *Business Latin America*, The Economist Intelligence Unit, Nov. 6, 1995.
30. Hewlett-Packard, press release, "HP Acquires Majority Shares of Edisa Hewlett-Packard," Jan. 31, 1996.
31. Ian Katz, "Brazil's Big Chance," *U.S./Latin Trade*, June 1995, p. 53.
32. James Purdy Levaux, "Giving Direct PC Business A Brazilian Beat," *Investor's Business Daily*, Feb. 19, 1997.
33. "O avanco dos megabytes," *Mercosul, Revista de Negocios* , No. 49, July 1996, pp. 4-8.
34. U.S. Department of State telegram, "Making the Case for Fast Track--Argentina," message reference No. 001470, prepared by U.S. Embassy, Buenos Aires, Mar. 1997.
35. Ibid.
36. Scott Norvell and Ian Katz, "Infotech Revolution," *U.S./Latin Trade*, May 1995, p. 73.
37. Xerox do Brasil president Carlos Salles, as quoted in Katz, "Brazil's Big Chance," p. 53.
38. Stan Runyon, "Brazil: Sleeping giant set to surge," *Emerging Markets: Annual Report*, CMP Publications, Inc., Apr. 29, 1996, issue: 899.
39. *Latin America Computer Systems Market Review and Forecast 1992-1997*, International Data Corporation, Feb. 1994.
40. "O avanco dos megabytes," *Mercosul, Revista de Negocios,* No.49, July 1996, pp. 4-8.
41. Charles W. Thurston, "The Trade Boom," *Latin Trade*, Dec. 1996, p. 40, and David Pilling and Tim Coone, "The Computer Revolution," *Latin Trade*, Mar. 1996, p. 68.

TELECOMMUNICATIONS EQUIPMENT*

HIGHLIGHTS

- *Between 1993 and 1997 U.S. exports to Mercosur nations more than quadrupled to $894 million.*
- *Trends in trade between the United States and Mercosur countries have not changed significantly since commencement of the customs union in 1995.*
- *Temporary tariff standardization for some products at 20 percent, above the agreed CET of 16 percent, required significant increases in tariffs for Argentina, Paraguay, and Uruguay.*
- *Intra-Mercosur trade in telecommunications equipment grew 93 percent to $29 million during 1993-96, whereas imports from non-member countries increased by 138 percent to $1.8 billion.*
- *In the long term, demand for U.S. exports may decline as offshore investment in subsidiaries increases local production capabilities.*

INDUSTRY STRUCTURE AND RECENT MARKET DEVELOPMENTS

The Mercosur countries have an average annual growth in phone lines of more than 10 percent. However, outside the large urban areas basic phone service remains underdeveloped by industrialized country standards.[1] The potential consumer base of the Mercosur bloc is reflected in the contrast between the number of phone lines per 100 people ("teledensity") in the United States (62.8) and the average for Mercosur countries (11.6) (table 31).[2] Recognizing that the development of a modern telecommunications system is essential for active participation in the global economy, bloc members have initiated a series of privatization and deregulation programs aimed at attracting investments that would help modernize their telecommunications sector. Prior to the adoption of these programs, tariffs and nontariff barriers guaranteed local producers a virtual monopoly in Argentine and Brazilian markets. In response, the leading foreign-based multinationals established local production facilities and since the opening of markets, import competition has increased from the United States, Europe, and Japan.[3]

Table 31
NAFTA and Mercosur teledensity by country, 1995

Country	*Phone lines per 100 people*
Argentina	16.0
Brazil	7.5
Paraguay	3.4
Uruguay	20.0
Average for Mercosur	11.6
United States	62.8
Canada	59.0
Mexico	9.6

Source: International Telecommunication Union, 1997.

* This section primarily examines wired and wireless telecommunications equipment contained within Harmonized System classifications 8517 (wired equipment), 8520.20 (answering machines) and 8525.20 (wireless equipment). Subheading 8525.20 also includes some radio-wave transmitting/receiving equipment that is not typically considered telecommunications equipment. Data for this industry are compiled from the U.S. Dept. of Commerce and the Inter-American Development Bank, *DataIntal.* Discrepancies exist between these sources of data for imports from the United States and official U.S. export data.

The introduction of new technologies such as cellular phones, digital specialized mobile radio (SMR) networks, satellites, and cable service will enable bloc members to leap frog several generations of development and move directly to products that supplement or compete with existing, inferior systems. Brazil dominates the production of telecommunications equipment in Latin America and, historically, is the only country in the region capable of undertaking research and development activities. The pent-up demand for new, more efficient and cheaper equipment and services makes the Brazilian market the most attractive for investment and exports.

Paraguay and Uruguay do not manufacture telecommunications equipment. Historically, these two nations have relied exclusively on imports for their equipment needs.[4] Paraguay reportedly has the most antiquated telecommunications infrastructure within the Mercosur region, which, along with low teledensity, tends to discourage foreign investment. However, ANTELCO, Paraguay's state-owned monopoly service provider, signed a $106 million agreement with Siemens in 1995 to modernize its phone system.[5] The Paraguayan Government supports updating the country's telecommunications infrastructure and has since pledged $120 million to expand and modernize this sector.[6]

Uruguay boasts the highest telephone density in Latin America with approximately 20 phone lines per 100 inhabitants, and its telecommunications infrastructure is reasonably adequate to meet future demands.[7] Nonetheless, its monopoly service provider, ANTEL, has initiated a program to modernize services and plans to invest $150 million annually over the next 5 years to improve its cellular telephone and wireless local loop capabilities.[8] Siemens, Ericsson, NEC do Brasil, and Motorola have all won contracts to supply ANTEL with new telecommunications equipment for both wired and wireless systems.[9]

The production of telecommunications equipment in Brazil increased irregularly during 1993-96 to approximately $1.3 billion, or by 8 percent (table 32). Brazilian manufacturers are expected to strengthen their position in the region as the market expands in response to deregulation and privatization efforts within Mercosur, including the pending privatization of Brazil's state monopoly service providers, TELEBRÁS and EMBRATEL.[10]

Table 32
Brazilian production of telecommunications equipment

(Million dollars)

Year	1993	1994	1995	1996
Production	1,200	1,300	1,261	1,299

Source: *Yearbook of World Electronics Data 1994*, 1996.

Foreign companies with local production facilities play a very important role in Brazil (table 33). Ericsson (Sweden), for example, has been active in the Brazilian market since the 1920s and, with a 41-percent market share, dominates the country's market for wireline switching equipment.[11] Ericsson's cellular terminals and switching equipment production facility in Brazil is Latin America's largest. In 1996-97, the company began construction of a new $25 million cell phone facility[12] and invested $11 million to complete a facility to manufacture cellular base stations in early 1998.[13] Ericsson commands approximately 35 percent of Brazil's cellular telephone market, making it second only to NEC, which holds 43 percent. Ericsson also signed a series of contracts, valued at approximately $1.2 billion, with TELEBRÁS and three of its state-level subsidiaries, to purchase a range of

Table 33
Mercosur foreign telecommunication equipment suppliers

Company	Argentina	Brazil
Alcatel (France)	X	X
Lucent (U.S.)	X	X
Ericsson (Sweden)	X	X
Italtel (Italy)	X	
Moddata (U.S.)[1]	X	
Motorola (U.S.)	X	X
Movicom (U.S.)[1]	X	
N.Telecom (Canada)	X	
NEC (Japan)	X	X
Qualcomm (U.S.)	X	
Samsung(Korea)	X	
Siemens (Germany)	X	X
Telettra (Italy)	X	X

[1] U.S. joint venture.

Source: Compiled by USITC staff.

equipment including both analog and digital Advanced Mobile Phone Service wireless communications systems and phone switching equipment.[14] Other foreign companies recently investing in Brazil include Samsung, which spent $500 million to $1 billion on manufacturing facilities for cellular equipment; and NEC do Brasil, which operates a $15 million plant to produce a variety of cellular and paging products.[15]

In 1996, the Brazilian Government instituted a program--Programa de Recuperação e Ampliação do Sistema de Telecomunicações e do Sistema Postal (PASTE)--to promote competition and thereby expand service, modernize its network, and attract investment. Initially, PASTE focused on liberalizing cellular markets by auctioning B-band licenses and privatizing cellular operations of TELEBRÁS, which created demand for new equipment. Also enacted in 1996, the National Plan for Investments allocated $16 billion for telecommunications infrastructure projects during 1997-98.[16] The Government initially anticipated a mix of private and government investment of just over $75 billion to help increase the country's teledensity to 24 percent by 2003,[17] but has revised its estimate to more than $90 billion.[18]

In April 1997, the privatization of Brazil's telecommunications service sector began with government acceptance of bids on ten cellular phone concessions, which were awarded in September of that year. To stimulate domestic production of cellular equipment, Brazil temporarily suspended import duties on 100 components of cellular radio base stations and telephone switching equipment. The Government hoped that this measure would aide domestic producers while inducing foreign manufacturers to establish production facilities in Brazil.[19] The agreement is also moving to fully privatize TELEBRÁS, its 26 subsidiaries, and the long distance carrier EMBRATEL, which is likely to lead to additional investment in modern equipment.[20] The privatization process for TELEBRÁS began on October 23, 1997 and is scheduled to be completed in late June 1998.[21]

Seven firms, all subsidiaries of foreign-based multinationals, account for 85 percent of telecommunications equipment production in Argentina.* These firms are involved in the sales and production of cellular phone, switching and transmission equipment. Argentina is almost self-sufficient in the production of telephone sets and most switching equipment, such as branch exchanges, that are assembled locally using imported components. Foreign-based companies such as Siemens (Germany) dominate Argentina's equipment market through a combination of imports and local production.

The Argentine Government is trying to improve the nation's telecommunications network. During 1995-96, Argentina's phone monopolies Telecom Argentina STET and Telefonica de Argentina signed loan agreements with the Export-Import Bank of Japan for $50 million and $80 million, respectively, to modernize and expand the country's phone network.[22]

MERCOSUR MEMBER TRADE

During 1993-96, intra-Mercosur trade for telecommunications equipment remained low compared with imports from non-member countries. Whereas intra-Mercosur trade increased by 93 percent to $29 million (table 34), imports from non-members more than doubled to more than $1.8 billion (table 35).[23] As tariffs and trade barriers among member countries have fallen and their markets have grown, Brazilian manufacturers, including multinationals, have begun to exploit opportunities within Mercosur. Since Mercosur's inception, Brazil has been the bloc's top exporter, accounting for 79 percent of all intra-bloc exports in 1996, followed by Argentina (20 percent), and Uruguay (1 percent).

* The entire Argentine industry is comprised of about 40 companies.

Table 34
Intra-Mercosur telecommunications equipment imports, 1993-96

(1,000 dollars)

Country	1993	1994	1995	1996
Argentina	13,274	15,425	6,376	4,383
Brazil	485	592	1,921	1,808
Paraguay	744	433	556	8,505
Uruguay	808	16,363	4,148	14,779
Total	15,311	32,813	13,001	29,475

Source: Inter-American Development Bank, *DataIntal.*

Table 35
Mercosur telecommunication equipment imports from non-Mercosur partners

(1,000 dollars)

Country	1993	1994	1995	1996
United States.	250,396	449,122	500,944	687,312
EU	275,089	370,896	506,592	634,840
Japan	146,821	224,513	163,947	164,403
Others	91,529	162,178	192,120	331,558
Total	763,835	1,206,709	1,363,603	1,818,113

Source: Inter-American Development Bank, *DataIntal.*

FACTORS AFFECTING U.S. MARKET ACCESS

The demand for telecommunications equipment began to expand in the early 1990s as most Mercosur member countries opened their markets to import competition, embraced new technologies, and committed to either partial or total privatization of state-owned telecommunications service monopolies. Member governments and private investors are expected to commit billions of dollars to expand and modernize their telecommunications systems over the next 10 years.

Progress toward greater market access remains mixed despite recent and ongoing sector reform in Argentina and Brazil. Foreign suppliers attempting to participate in Mercosur's telecommunications equipment market still encounter barriers in the form of high tariffs, import restrictions, and government purchasing policies (table 36). Because telecommunications equipment was included on Brazil's national list of exceptions, the other bloc members acceded to the country's insistence that its tariffs for most telecommunications equipment be raised to 20 percent, which will fall to the common external tariff (CET) of 16 percent by 2006. Prior to 1991, however, other bloc members had lowered or eliminated their tariffs on these products.[24]

The Brazilian Government has traditionally sheltered its domestic industries with "buy Brazilian" policies and high tariffs. Official procurement practices require foreign companies to have a majority Brazilian partner in order to receive preferential treatment in bidding processes. For example, in 1993, the Government passed a decree mandating that state agencies and parastatals give priority to Brazilian-developed informatics and automation goods.[25] Telecommunications

Table 36
Specific import and investment policies, 1997

Argentina
- Tariff:[1] 0 to 28 percent.
- Fees: Three percent statistical fee for certain products.[2]
- Three percent anticipated profits tax on all imported consumer goods, except for goods directly imported by user.

Brazil
- Tariff:[3] 0 to 30 percent.
- Local content requirements.
- Limit on foreign equity participation.
- Government procurement practices are not transparent and tend to discriminate against foreign companies.

Paraguay
- Tariff:[1] 0 to 20 percent.
- Trademark infringement and counterfeiting.

Uruguay
- Tariff:[1] 0 to 20 percent.
- Limit on foreign equity participation.

Mercosur-wide policies
- CET rate of 16 percent by 2006.

[1] Most telecommunications equipment was exempted from the 3 percentage point CET increase implemented in early 1998.
[2] In January 1998, the statistical fee was reduced to 0.5 percent.
[3] Refers to tariffs applied throughout most of 1997. In November, Brazil increased CETs by 3 percentage points.

Source: U. S. Department of Commerce and Embassies of Argentina and Uruguay.

equipment covered by this decree includes public telephones, teleprinters, switching equipment for telephony and telegraphy, and radio transceivers. In addition, since 1994 several non-price factors, such as domestic content requirements, are considered in the bidding process. Bidders that meet the criteria for preferential treatment (Brazilian-owned company, Brazilian technology or products, and minimum local value-added content) are allowed up to a 12 percent price advantage over other bidders.[26] To avoid such barriers, leading U.S. and other international manufacturers of telecommunications equipment established local production facilities, formed joint ventures and consortiums, and entered into distribution agreements in order to qualify as local producers. "Loopholes" also exist that allow duty-free imports of network equipment for private use, which in turn permit businesses and residential groups to import and install a private network and terminal equipment that may be connected to the public telephone system. The Brazilan Government has also lowered or eliminated tariffs on imported telecommunications equipment that cannot be substituted with domestic products and has temporarily eliminated duties on components for cellular radio base stations and telephone switching equipment.

U.S. EXPORTS AND INVESTMENT FLOWS TO MERCOSUR

Imports have not been significant in the Argentine and Brazilian markets due to government restrictions and the pivotal role played by local subsidiaries of foreign producers.[27] Nonetheless, the United States has traditionally been one of Mercosur's leading suppliers; between 1993-97, the value of U.S. exports of telecommunication equipment increased by almost 350 percent to $894 million (table 37). U.S. producers have been able to take advantage of the process of deregulation and privatization in the Argentine and Brazilian telecommunications sectors, as well as the pent-up demand for modern, more efficient, and cheaper equipment.[28] However, the Mercosur market accounted for only 5 percent of the value of total U.S. exports of these products during 1997.

Table 37
U.S. exports of telecommunications equipment, 1993-97

(1,000 dollars)

Country	1993	1994	1995	1996	1997
Brazil	84,297	162,347	266,938	332,560	534,127
Argentina	92,710	252,493	121,259	121,299	302,261
Paraguay	20,400	28,463	42,015	44,347	41,256
Uruguay	2,409	7,065	6,907	21,588	16,047
Total	199,815	450,369	437,120	519,794	894,051

Source: Official statistics of the U.S. Department of Commerce.

The opening of Brazilian and Argentinian telecommunications markets to significant foreign participation has increased demand for associated equipment.[29] A number of U.S. producers have secured contracts with Mercosur's state-owned telecommunications monopolies. Lucent Technologies, for example, has won contracts with Brazil's state phone monopoly service provider, TELEBRÁS, to supply a variety of switching and radio equipment. As government control of the telecommunications markets has waned, U.S. and other foreign firms have made substantial direct investments in their manufacturing facilities in Argentina and Brazil since 1990. In October 1996, Motorola, one of the world's leading cellular telephone and pager manufacturers, invested $20 million to begin assembly of cellular phones in Brazil (from foreign parts) for both the domestic and Mercosur markets.[30] In November 1997, the company began production of cellular infrastructure equipment in Brazil in response to winning more than $300 million of business from Brazilian cellular system operators.[31] In the spring of 1997, Lucent revealed plans to construct a $40 million manufacturing facility in Brazil to supply digital and analog cellular equipment to markets in Brazil, Argentina, Uruguay, and Chile.[32] Qualcomm, a leading U.S. manufacturer of cellular phone infrastructure equipment, also announced plans to construct a $50 million factory for the production of code division multiple access equipment in Brazil to serve the Mercosur market.

OUTLOOK

Enhanced telecommunications services and an improved infrastructure will help the Mercosur economies to develop. However, infrastructure development will require large amounts of capital investment. While the prospects for growth in these countries' telecommunications markets are strong, the equipment market will not reach its greatest potential until state-owned monopolies are fully privatized. Mercosur's high external tariffs and other restrictions will continue to place imports, regardless of source, at a disadvantage in relation to locally produced equipment.[33] Still, the prospects for further growth in U.S. exports of telecommunications equipment and parts are good, since demand within the bloc for basic infrastructure should remain strong and barriers to imports will continue to be reduced. As privatization advances in Brazil, government purchasing polices and concessions that have placed imported equipment at a disadvantage will become less of a barrier. U.S. producers should benefit from being perceived as trend setters in telecommunications and for offering high quality and value.[34] However, demand for imported products may decline in the long term (10 to 15 years) as the market matures and Mercosur domestic production increases. Certain U.S. exports may face additional competition as subsidiaries of U.S. companies develop their local production facilities as export platforms for Mercosur countries and the rest of Latin America.

Endnotes

1. Paula Green, "Latin America Plans Massive Telecom Investment," *Journal of Commerce*, June 10, 1996.
2. Source: International Telecommunications Union.
3. U.S. Department of Commerce, National Trade Data Bank, *Argentina Telecom. Equip. and Services*, Market Research Reports, Aug. 1996, Stat-USA Database, found at Internet address http://www.stat-usa.gov, retrieved Sept. 8, 1997.
4. Telephone conversation with Paraguayan embassy official, June 27, 1997.
5. "Economic infrastructure: Transport & Communications-- Paraguay," *Country Profiles*, The Economist Intelligence Unit, Nov. 22, 1996.
6. U.S. Department of State telegram, "1997 Trade Act Report for Paraguay," message reference No. 002817, prepared by U.S. Embassy, Asunción, Nov. 1996.
7. Siemens, "Telecommunications in Latin America," *Telcom Report International* 19 (1996) No. 2, found at Internet address http://www.siemens.de/telecomreport/articles, retrieved Mar. 26, 1997.
8. U.S. Department of State telegram, "1997 Trade Act Report: Argentina," message reference No. 006915, prepared by U.S. Embassy, Buenos Aires, Nov. 1996.
9. "Ericsson Receives D-Amps Order to Expand Uruguay's Network," *Ericsson Press Release*, Sept. 3, 1996, found at Internet address http://www.ericsson.se, retrieved Oct. 8, 1997; Motorola, "Motorola continues to lead the industry in delivering cellular technology to Latin America," *Motorola Press Release*, June 10, 1996; Siemens, "Company tradition since 1957," *Telecom Report International* 19 (1996) No. 2 , found at Internet address http://www.siemens.de/telecomreport/articles, retrieved Mar. 26, 1997.
10. TELEBRÁS controls 27 regional subsidiaries and EMBRATEL, Brazil's long distance carrier.
11. "Ericsson Signs a Total of USD 150 Million Contracts," *Ericsson Press Release*, Apr. 2, 1997, found at Internet address http://www.ericsson, retrieved Apr. 28, 1997.
12. Jonathan Wheatly, "Shape up in Brazil," *1996 Ericsson Connection*, found at Internet address http://www.ericsson, retrieved Apr. 22, 1997.
13. "Ericsson to start D-Amps wireless base station production in Brazil," *Ericsson Press Release*, Oct. 20, 1997.
14. "Switching deal landed," *Latin Trade*, Mar. 1997, p. 21; "Ericsson Signs AMPS Expansion Contract in Brazil," *Ericsson Press Release*, June 27, 1997; "Ericsson Signs USD 150 Million Contracts in Brazil," *Ericsson Press Release*, Apr. 2, 1997; "Ericsson Signs Orders for USD 400 Million in Brazil," *Ericsson Press Release*, Mar. 18, 1996; Ericsson Signs USD 385 Million AXE Contracts in Brazil, *Ericsson Press Release*, Dec. 1996, found at Internet address http://ericsson.se, retrieved Oct. 8, 1997.
15. "Recent Foreign Investment in Brazil," *Licensing & Trading Conditions Abroad*, Jan. 1, 1997, The Economist Intelligence Unit; J.J. Gullish, "Brazil Ushers in Liberalization," *Focus Brazilian-Trade Magazine*, 1996; and *Motorola Press Releases*, Oct. 31, 1996 and Nov. 24 1997.

16. U.S. Department of State telegram, "Brazil: 1997 Country Report on Economic Policy and Trade Practices," message reference No. 0005322, prepared by U.S. Embassy, Brasilia, Nov. 1996.
17. J.J. Gullish, "Brazil Ushers in Liberalization," *Focus Brazilian-Trade Magazine*, 1996, found at Internet address http://www.focustrade.com, retrieved Jan. 8, 1997.
18. "Economic Infrastructure: Transport and Communications," *Business Latin America*, The Economist Intelligence Unit, Sept. 1, 1997.
19. J.J. Gullish, "B-Band: Let It Begin...," *The Brazilianist*, found at Internet address http://www.brazilianist.com, retrieved Oct. 7, 1997.
20. "Brazil to open bidding to private companies for cellular service," *The Boston Globe*, Apr. 6, 1997, found at Internet address http://www.1/096/Brazil, retrieved Apr. 28, 1997.
21. J.J. Gullish, "Telebras Privatization," *The Brazilianist*, Autum 1997, found at Internet address http://www.brazilianist.com/ Autum 97/, retrieved May 13, 1998.
22. "Loan Guarantee to Telecommunications Network Project in Argentina," *The Export-Import Bank of Japan*, Press Release NR96-36, Dec. 27, 1996, found at Internet address http://www.japanexim.go.jp, retrieved Apr. 28, 1997.
23. Because intra-Mercosur trade could only be generated at a 4 digit Harmonized Schedule heading level, intra-bloc export and non-member import trade represent a somewhat broader group of products than were examined for U.S. exports to bloc members.
24. U.S. Department of State telegram, "Tariffs Reduced to GATT Binding Levels," message reference No. 002669, prepared by U.S. Embassy, Buenos Aires, May 5, 1995.
25. U.S. Department of Commerce, National Trade Data Bank, *Brazil: Leading Sectors for U.S. Exports & Investment*, 1997, Country Commercial Guide, Stat-USA Database, found at Internet address http://www.stat-usa.gov, retrieved Oct. 7, 1997.
26. U.S. Department of State telegram, "Brazil: *1997 Country Report on Economic Policy and Trade Practices*," message reference No. 0005322, prepared by U.S. Embassy, Brasilia, Nov. 1996.
27. U.S. Department of Commerce, National Trade Data Bank, *Argentina-Telecom. Equipment and Services*, Market Research Reports, 1995, Stat-USA Database, found at Internet address http://www.stat-usa.gov, retrieved Jan. 21, 1997.
28. U.S. Department of Commerce, National Trade Data Bank, *Argentina Telecom, Equip. And Services*, Aug. 1996, Stat-USA Database, found at Internet address http://www.stat-usa.gov, retrieved Apr. 16, 1997.
29. James Hoo, "Telecommunications Business Opportunities in Brazil," *Telecommunications*, Aug.-1996, p. 57.
30. "Brazil Ushers ...," *Focus Brazilian-Trade Magazine*, 1996, and Motorola opens new cellular telephone plant in Brazil, *Motorola Press Release*, Oct. 31, 1996.
31. "Motorola CIG to open new manufacturing facility in Brazil," *Motorola Press Release*, Nov. 24, 1997.
32. "Lucent Completing Cellular Phone Factory," *El Diario*, Mar. 24, 1997, found at Internet address http://www.net.cl/atamericas, retrieved Apr. 28, 1997.
33. U.S. Department of State telegram, "Making the Case for Fast Track--Argentina," message reference No. 001470, prepared by U.S. Embassy, Buenos Aires, Mar. 1997.
34. USDOC, *Argentina-Telcom....*

APPENDIX A

THE MERCOSUR AGREEMENT

Mercosur's Origins

Mercosur was built upon a series of bilateral economic and trade agreements between Argentina and Brazil, South America's two largest economies. A 1986 agreement liberalized sectoral and bilateral trade in capital goods. The subsequent 1989 Treaty for Integration, Cooperation, and Development aimed to eliminate tariff and nontariff barriers to trade between the two countries by the year 2000. In July 1990, the Argentina-Brazil Integration and Economic Cooperation Program systematized and deepened existing commercial market-opening agreements; at the same time, the two countries advanced the liberalization timetable to 1995. Later in 1990, Paraguay and Uruguay expressed an interest in participating in this process.[1]

Mercosur was formally launched with the signing of the Treaty of Asunción by Argentina, Brazil, Paraguay, and Uruguay on March 26, 1991.[2] The treaty was subsequently ratified by all members and entered into force on November 29, 1991—initiating a transition period during which most tariffs on intra-regional trade were to be eliminated and trade policies harmonized in preparation for the implementation of a regional customs union in 1995. The Treaty of Asunción was formally amended by the Additional Protocol of the Treaty of Asunción, known as the Protocol of Ouro Preto, signed on December 17, 1994. Among other things, the Protocol of Ouro Preto confers on Mercosur its status as a distinct international legal entity.[3] Although they undertake a common trade policy vis-a-vis third countries and coordinate positions on economic and trade forums (such as negotiations towards a Free Trade Area of the Americas or FTAA), the Mercosur countries continue to be represented individually, rather than as a single entity, in the World Trade Organization (WTO).[4]

Mercosur and NAFTA Compared

Mercosur is the second-largest economic integration group in the Western Hemisphere after the North American Free Trade Agreement (NAFTA) (table A-1). As initially implemented, Mercosur is generally less comprehensive than NAFTA,[5] although its long-term objective —creation of a common market—ultimately could make it the more far-reaching agreement. A common market would include the free movement of goods, services, and factors of production, such as capital and labor, within the Mercosur region. However, the Mercosur partners could not reach agreement on implementation of these measures in time for inclusion in the Protocol of Ouro Preto, and some issues—in particular the free movement of labor and free trade in banking and financial services—proved difficult to negotiate.

Table A-1
Economic Indicators: Mercosur and NAFTA, 1996

Item	Mercosur	NAFTA
Population (*millions*)	207	388
GDP (*billion 1990 U.S. dollars*)	667	7,117
GDP per capita (*1990 U.S. dollars*)	3,225	18,352
Real GDP growth rate (*1991-96 average*)	3.4	2.1

Source: Inter-American Development Bank, *Principal Economic Indicators by Integration Group, 1991-96.*

Mercosur Within the ALADI Framework

Regional trade agreements in Latin America such as Mercosur are not new, dating back to the 1960 Latin American Free Trade Association, which in 1980 became the Latin American Integration

Association (LAIA, commonly referred to by the Spanish acronym ALADI). All Mercosur members are also members of ALADI,* which among other things, establishes a general preferential tariff scheme for trade among its members and common rules of origin. ALADI also provides the framework for numerous bilateral preferential trade arrangements among trading partners, with the goal of eventually achieving regional free trade.[6] Even before Mercosur was launched, bilateral trade among its members was conducted on a preferential basis under ALADI, with tariffs as much as 40 percent below the *ad valorem* tariff generally applied to non-ALADI countries.[7]

Mercosur was formally established as a sub-regional agreement within the ALADI legal framework and as such generally remains subject to the latter's broader trade rules.[8] Mercosur is only open to the accession of other ALADI members. In turn, only Latin American countries are eligible for ALADI membership. Bolivia and Chile joined Mercosur as associate members in 1997 and the union signed framework liberalization agreements with the Andean Community and Central American Common Market in April 1998. The Andean Agreement calls for negotiations of a free trade area between the two regional groups by the year 2000 with an initial phase of liberalization to be completed by October 1998. Although the Treaty of Asunciòn and the Protocol of Ouro Preto do not state that only democratic governments can be members of Mercosur, a political crisis in Paraguay forced approval of a resolution that established respect for democratic institutions as a sine-qua non condition for Mercosur countries.

Intra-Regional Trade: The Mercosur Free Trade Area

To create the Mercosur Free Trade Area (FTA), the Trade Liberalization Program set forth by the Treaty of Asunción implemented "gradual, linear, and automatic" tariff reductions on intra-regional trade. Mercosur partners reduced their tariffs on intra-regional trade by 47 percent in applied rates immediately following the ratification of the Treaty of Asunción in 1991. Afterwards, tariffs in each country were reduced by 7 percent once every 6 months during a transition period that began in July 1991 and ended on December 31, 1994. Remaining duties were eliminated at the end of the transition phase.

Each Mercosur country is permitted to maintain a list of import-sensitive products for which intra-regional tariffs temporarily remain in effect. These exceptions[9] allow countries to continue to protect industries that require additional time to modernize in order to compete with other Mercosur industries.[10] Argentina has 222 such sensitive items listed, including iron and steel products, textile, footwear, and paper products. Brazil has 29 items, primarily textile and rubber products. Paraguay has 436, and Uruguay 492; the lists of both countries include textile, food, and paper products. Tariffs on listed items may not be higher than the prevailing import duty, which is either the Common External Tariff (CET) or the corresponding tariff under the CET exception.[11]

Beginning January 1, 1995 (for Argentina and Brazil) and January 1, 1996 (for Paraguay and Uruguay), tariffs on import-sensitive items were scheduled to undergo automatic annual reductions, with the goal of tariff elimination by January 1, 1999 (for Argentina and Brazil) and January 1, 2000 (for Paraguay and Uruguay). However, with prior notice, any Mercosur country can restart the tariff reduction timetable at the original 1995 or 1996 tariff level. All remaining tariffs are scheduled to be phased out by January 1, 2006.

The automotive and sugar industries are the only economic sectors not formally included in the FTA. Trade in automobiles (discussed in more detail in the sectoral analysis) is governed by separate

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* ALADI members are Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, and Venezuela.

bilateral accords between Argentina and Brazil—the region's main producers—and both countries and Uruguay until January 1, 2000.[12] After that time, goods are to be traded freely, without tariffs, and subject to the CET. Intra-regional tariffs continue to be applied on sugar, although a commission has been established to develop a plan for free trade in the product by January 2001.[13]

External Trade: The Mercosur Common External Tariff

Unlike NAFTA, the four Mercosur partners apply a common tariff regime to products imported into the region from all non-member countries. As finalized by the Protocol of Ouro Preto, the CET consists entirely of *ad valorem* rates charged on the c.i.f. value of imports, ranging from 0 to 20 percent. The CET became operative on January 1, 1995 as part of the Mercosur customs union and immediately covered approximately 88 percent of the region's combined tariff schedule. The remaining 12 percent was made up of products that had a longer phase-in timetable or were subject to special tariff regimes.

The CET established an average *ad valorem* tariff of approximately 10-12 percent for products from nonmember countries entering the Mercosur region, which was on par with or lower than prevailing average applied tariffs before Mercosur was implemented.[14] Mercosur's CET is characterized by tariff escalation. Raw materials face the lowest tariffs, averaging 6.3 percent in 1995. Tariffs on semi-manufactures and goods used as inputs for other production average 9.1 percent, while those on processed articles average 12.5 percent. Members are permitted to retain certain customs surtaxes on imports from non-members.[15]

Each member maintains a list of items subject to a longer CET phase-in. These exceptions are intended to facilitate national structural adjustment and to provide a transition period, during which sectors can improve their competitiveness. Argentina, Brazil, and Uruguay were initially permitted to list 300 such items each; tariffs on these were to be phased out by the year 2000. Paraguay was permitted 399 items, subject to CET convergence by 2006. To achieve convergence, the Mercosur partners periodically adjust tariffs downward (for tariffs above the CET) and upward (for tariffs below the CET) on these exceptions. In 1995, Mercosur countries reported to the WTO that Argentina, Brazil, Paraguay, and Uruguay would increase CET rates on 84, 123, 214, and 212 of their items, respectively, and decrease rates on 147, 52, 0, and 6 of their items, respectively.[16]

Mercosur members temporarily raised CETs by 3 percentage points in late 1997 and early 1998. Brazil implemented the increases first in November 1997, Argentina and Uruguay implemented in January 1998, and Paraguay increased its CETs in March 1998. Each country excepted certain products from the increase, but these exceptions were not uniform across the member countries. The increases in these tariffs are scheduled to be in effect until December 31, 1999.

Initially, Mercosur members were permitted only to eliminate items from the CET exceptions lists, not to add new items.[17] However, beginning in 1995, members were permitted to exempt a limited number of additional items for domestic macroeconomic stabilization, price control, and domestic supply purposes. For example, Brazil could exempt an additional 150 items as part of its macroeconomic stabilization program; these products included foods such as meat, cheese, rice, and barley; steel products; and consumer durables. Brazil raised its auto tariffs to 70 percent *ad valorem*.[18] In March 1997, Brazil's Central Bank imposed limits on import financing, although Mercosur partners were exempted from these restrictions starting in mid-April.

Capital goods are subject to a special CET implementation timetable. Each country's tariffs are to converge to a common tariff of 14 percent *ad valorem* by 2001 (for Argentina and Brazil) or 2006 (for Paraguay and Uruguay). Tariffs on computer systems and telecommunications products are scheduled to

converge to a common rate of 16 percent *ad valorem* by 2006. Automobiles are excluded from the CET until 2000[19] and sugar until 2001.[20]

Mercosur members are also permitted to diverge from the CET in the case of certain special tariff rates. These include rates below scheduled rates on particular investment goods to assure basic supplies of primary products and inputs for industries, temporary admission of goods to be re-exported, and duty-free entry of goods from free-trade zones. Such exceptions are to be consolidated into a common Mercosur-wide regime, but a timetable has not been established.[21]

Rules of Origin

Mercosur's rules of origin are derived from (but are stricter than) those established under ALADI. Beginning January 1, 1995, products eligible for Mercosur treatment must be made entirely within the region or, if made of non-Mercosur components, generally must meet two requirements: (1) a change of tariff classification through processing or transformation within the region (certain products also must be made up of no more than 40 percent non-Mercosur components); and (2) if there is no substantial transformation (i.e. if the production process entails only assembly), foreign inputs can account for no more than 40 percent of the f.o.b. value of the good (versus 50 percent under ALADI). Products from Uruguay are permitted to contain up to 50 percent non-Mercosur components until 2001. Capital goods have stricter rules of origin; to qualify for Mercosur preferences, they must be made up of no more than 20 percent non-Mercosur components.[22]

Circulation of Goods within the Mercosur Zone

In theory, products from non-member countries that enter a Mercosur member can circulate freely among the four partners and importers should be able to take it across internal frontiers by showing that the appropriate CET duty has been paid. However, several reports have documented bottlenecks and administrative difficulties that continue to impede the free circulation of goods within the Mercosur zone. An estimated 60 percent of the goods traded within the region are transported by trucks linking São Paulo, Brazil, and Buenos Aires, Argentina; carriers on this route apparently face problems of poor roads, border and customs clearance delays, and high freight charges.[23] Moreover, goods from non-member countries that do not enter Mercosur under international transit arrangements (i.e. with a customs seal) and which pay the CET at the first port of entry could also be assessed duty at borders within the bloc.[24]

Many nontariff barriers to intra-regional trade were eliminated or harmonized as of July 1995. A technical committee was created to follow up on the lifting of remaining restrictions.[25] The harmonization of a number of technical standards under the Mercosur agreement has reportedly benefitted intra-regional trade and produced significant liberalization in the food, automotive, and telecommunications sectors.[26] However, Mercosur does not provide a regime for the reciprocal recognition of national technical standards.[27]

Institutional Structure

Mercosur is an international treaty subscribed to by member states. The bodies established under the treaty are inter-governmental rather than supra-national.[28] Mercosur's policy-making body is the Common Market Council, made up of the four countries' economic and finance ministers. Measures passed by the Council have no force on their own, but must be implemented through corresponding national legislation. Unlike in the case of the European Union (EU), Mercosur bodies do not have the

power to oblige member states to comply with common market rules.[29] However, member states have agreed to adopt measures that are necessary to assure (in their respective territories) compliance with decisions of the Common Market Council, the Common Market Group, and the Treaty Commission of Mercosur. Decisions are reached on the basis of consensus, with each country having one vote.

Provisions to settle disputes concerning intra-regional trade are set forth in the 1991 Protocol of Brasilia, as modified by the Protocol of Ouro Preto. Complaints are initially heard by the Mercosur Trade Commission consultator and they may subsequently be sent to the Common Market Council or to an Ad Hoc Arbitration Panel.[30]

The Treaty of Asunción commits the Mercosur partners to engage in the coordination of their macroeconomic policies. To this end, the economic authorities of the four countries have had frequent contact at various levels, although no specific agreements on macroeconomic coordination have been made.[31] Mercosur partners have also committed to maintaining a common commercial policy with non-members in matters such as the adopting of trade and investment agreements in the future.[32] Common rules on anti-dumping have reportedly been drafted and are being brought into alignment with WTO rules.[33]

Investment

The Mercosur countries have a separate reciprocal investment promotion and protection agreement, the January 1994 Colonia Protocol. It guarantees nondiscriminatory treatment, prohibits both expropriation and performance criteria such as minimum exports or local inputs, bans restrictions on capital repatriation and profit remittances, and establishes mechanisms for handling government-to-government and investor-government disputes. However, the Mercosur partners have invoked numerous sectoral exceptions to these regulations of unspecified duration, including two assessed in the industry profiles below (automobiles and power generation equipment).[34] For example:

- Argentina exempted border real estate, air transportation, shipbuilding, nuclear power generation, uranium mining, insurance, and fisheries;
- Brazil exempted mineral exploration and exploitation, hydroelectric power, health care, telecommunications, rural property, banking and insurance, construction, and shipping;
- Argentina and Brazil reserved the right to maintain performance requirements in the automobile sector;
- Paraguay exempted border real estate, radio and television broadcasting, transportation, electricity, exploitation of hydrocarbons and strategic minerals, the importing and refining of petroleum products, and the postal service; and
- Uruguay exempted electricity, hydrocarbons, petrochemical and plastics industries, nuclear energy, exploitation and extraction of strategic minerals, financial industries, rail transportation, telecommunications, radio and television, and journalism.

The Mercosur countries have also signed a Protocol for the Promotion and Protection of Investments from Non-Mercosur Countries, which defines minimal acceptable standards for the reduction of national incentives to attract foreign investment. In addition, to encourage trade and investment in the region, Mercosur signed a framework treaty with the United States in June 1991, which established a consultative council.[35]

Areas not Covered by Mercosur

The Treaty of Asunción mentions trade in services, but does not set a schedule for liberalization in this area. In December 1996, Mercosur countries signed a protocol establishing guidelines for a common competition policy in the region. At a December 1997 meeting, Mercosur foreign and economy ministers agreed to launch negotiations to attain free trade in services in the coming decade. In the same month, Mercosur presidents approved guidelines to restrict imports of dumped products from non-Mercosur countries and also instructed the Mercosur Trade Commission to develop and implement a common antidumping regulation.[36] An Ad Hoc Group on Services was scheduled to present a framework agreement on trade in services by late 1997.[37] At their December 15, 1997 summit, the Presidents of the Mercosur member countries endorsed the progressive and eventually total liberalization of services over a 10-year term. They also approved norms for common rules on antidumping measures and discussed full participation of Chile in the bloc's decisionmaking.[38] Mercosur does not address government procurement; however, a Technical Committee has been created to investigate similar public policies that distort competitiveness.[39] The Treaty of Asunción does not address intellectual property rights (IPR) but an August 1995 protocol provides limited common terms of reference on them.[40] Common Mercosur safeguard provisions are currently under discussion.

Mercosur and the WTO

Article XXIV of the 1994 General Agreement on Tariffs and Trade (GATT) permits the formation of preferential regional trade arrangements such as Mercosur, notwithstanding the most-favored-nation (MFN) principle. This principle requires that trade concessions made to one WTO member be made to all members. However, preferential trade arrangements are permitted under certain circumstances in the belief that closer integration of regional economies can, on balance, support the goals of liberalizing economic and trade policies. Article XXIV requires that such agreements not harm the trade interests of other WTO members and that they cover "substantially all trade." Under the 1979 Decision on Differential and More Favorable Treatment, Reciprocity, and Fuller Participation of Developing Countries (also known as the "Enabling Clause"), preferential trade agreements involving only developing countries such as Mercosur members are exempt from the article XXIV requirements so long as they facilitate trade, do not create "undue difficulties" for other countries, and do not impose new trade barriers.

A WTO working party has looked at Mercosur in light of the relevant provisions of article XXIV as well as the Enabling Clause, an examination that continues under the WTO Committee on Regional Trade Agreements.[41] During a 1996 trade policy review of Brazil, the WTO noted that the country's adoption of the CET had raised some tariffs and led to the violation of a number of WTO tariff bindings. Brazil responded that "the actual tariff rate under the Mercosur CET was lower than the pre-existing tariff averages," but that it "stood ready to engage in consultations with interested WTO members where WTO bindings had been exceeded and notified."[42]

Endnotes

1. Embassy of Uruguay, "Mercosur and Its Origins," Jan. 1, 1997, found at Internet address http://www.embassy.org/uruguay/econ/mercosur/mere-002.html.
2. The original Spanish and Portuguese text and English translations and summaries of the treaties, protocols, resolutions, and decisions related to Mercosur are available through numerous print and Internet sources. Further source citations to these documents are therefore not provided. For a print version, see GATT, "Southern Common Market (Mercosur) Agreement," L/7379/Add.1, Jan. 18, 1994. For an electronic version, see Organization of American States (OAS), found at Internet address http://www.demon.co.uk/Itamaraty/msul.html.
3. World Trade Organization (WTO), Trade Policy Review Division, *Mercosur: Objectives and Achievements*, Staff Working Paper TPRD-97-002, June 3, 1997, p. 4.

4. Ibid., p. 15.
5. In addition to eliminating tariffs on most goods, NAFTA covers trade in services, provides for the protection of investment and intellectual property, applies rules to government procurement, contains highly developed systems for dispute settlement, and facilitates the movement of business people and professionals. NAFTA also liberalizes market access conditions in transportation, telecommunications, and financial services, and is accompanied by additional agreements concerning labor and the environment. For further discussion comparing the agreements with Mercosur, see OAS, *Trade and Integration Arrangements in the Americas: An Analytical Compendium,* Washington, DC, 1997, p. 10.
6. Ibid, p. 12.
7. Under the ALADI preferential tariff regime, tariffs on trade among members are 8, 12, 20, 28, or 40 percent below applicable most-favored-nation rates, depending on the relative level of economic development of the trading partners. Inter-American Development Bank (IADB), *El proceso de integración en América Latina en 1990,* Buenos Aires, 1991, p. 35.
8. WTO, *Mercosur: Objectives and Achievements*, p. 4.
9. Safeguard actions (in the form of quotas) were permitted during the transition phase, at the end of which, products subject to safeguard actions could be placed on countries' exemptions lists. OAS, *Trade and Integration Arrangements in the Americas: An Analytical Compendium,* Washington, DC, 1997, pp. 43 and 66.
10. Martín Arocena, "Common Market of the Southern Cone (Mercosur)," in *Integrating the Hemisphere: Perspectives from Latin America and the Caribbean*, Ana Julia Jatar and Sidney Weintraub, eds.,Washington, DC, Inter-American Dialogue, 1997, p. 156.
11. Guillermo Mondino and Alejandro Reca, "Toward a Hemispheric Free Trade Area: The Case of Argentina," in Ibid., p. 184.
12. Bloc members have signed separate bilateral agreements covering their trade in autos until January 1, 2000.
13. Martín Arocena, "Common Market of the Southern Cone," in Ibid., p. 158.
14. That is, in the cases of Argentina (with an average tariff rate of 12.2 percent in 1991), Brazil (with an average tariff of 21.2 percent in early 1992), and Uruguay (with an average tariff of 21.5 percent in late 1991); only Paraguay had pre-Mercosur tariffs lower than the prevailing CET levels. WTO, *Mercosur: Objectives and Achievement*, p. 8. This source cautions that this is a simple average MFN rate that does not take into account concessional tariff rates which, if included, could lower the average tariff rate even more. Estimates vary, and an independent estimate was not calculated by USITC staff. Unofficial estimates are as low as 10 percent. One source provides an estimate of 12 percent; see Roberto Bouzas, "Mercosur's Economic Agenda," in *Integration and Trade*, p. 65. Another source calculates an arithmetic average CET tariff of 11.14 percent with a standard deviation of 6.22 percent; see Martín Arocena, "Common Market of the Southern Cone," in *Integration in the Hemisphere: Perspectives from Latin America and the Caribbean*, Ana Julia Jatar and Sidney Weintraub, eds., Washington, DC, Inter-American Dialogue, March 1997, p. 160. However, it is noted that the U.S. Embassy in Buenos Aires reports that Argentina's average tariff rate (no further clarification provided) before Mercosur was 10 percent, but rose to 12 percent as a result of compliance with the CET; U.S. Department of State telegram, "1997 Trade Act Report: Argentina," message reference No. 06915, prepared by U.S. Embassy, Buenos Aires, Nov. 19, 1996.
15. OAS, *Trade and Integration Arrangements in the Americas*, pp. 42 and 65.
16. WTO, *Mercosur: Objectives and Achievement*, p. 7.
17. Ibid.
18. Ibid., p. 9.
19. OAS, *Trade and Integration Arrangements in the Americas*, pp. 142 and 146.
20. Martín Arocena, "Common Market of the Southern Cone," in *Integrating the Hemisphere: Perspectives from Latin America and the Caribbean*, Ana Julia Jatar and Sidney Weintraub, eds.,Washington, DC, Inter-American Dialogue, 1997, p. 158.
21. WTO, *Mercosur: Objectives and Achievements*, p. 7.
22. Ibid.
23. Martín Arocena, "Common Market of the Southern Cone," p. 172.
24. WTO, *Mercosur: Objectives and Achievements*, p. 14.
25. OAS, *Trade and Integration and Arrangements in the Americas*, p. 54.
26. Arocena, "Common Market of the Southern Cone," p. 172.
27. OAS, *Trade and Integration and Arrangements in the Americas*, p. 54.
28. WTO, *Mercosur: Objectives and Achievements*, p. 5.
29. Ibid.
30. OAS, *Trade and Integration Arrangements in the Americas*, pp. 19 and 31.

31. Ibid., p. 17.
32. Ibid., p. 16.
33. WTO, *Mercosur: Objectives and Achievements*, p. 15.
34. OAS, *Trade and Integration Arrangements in the Americas*, p. 125.
35. WTO, *Mercosur: Objectives and Achievements*, p. 17.
36. U.S. Department of State, "Highlights of Mercosur Guidelines on Antidumping," message reference No. 372, prepared by U.S. Embassy, Montevideo, Feb. 21, 1998.
37. Ibid., p. 19.
38. *Washington Trade Daily*, Dec. 16, 1997.
39. Ibid., p. 22.
40. Ibid., p. 21.
41. The Committee on Regional Trade Agreements was created by the WTO in February 1996.
42. WTO, Trade Policy Review Body, "Review of Brazil's TPRB Evaluation," Press Release PRESS/TPRB/47, Nov. 1, 1996.