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Brazil: Embracing Globalization?

For more than a century, Brazil was referred to as the country of the future. Analysts had always predicted that this sleeping giant, blessed with natural resources and a large internal market, would become a world power. But the prediction never materialized. The road to development for Brazil had not been easy. The Great Depression of the 1930s was disastrous for an economy that was extremely dependent on coffee exports. Later, for almost 40 years, Brazil followed an import substitution strategy characterized by massive government investment, targeting of key industries, and protection against competition with high tariff walls. For decades, the strategy appeared to be successful: Brazil grew by 7% per year between 1950 and 1980 and created a large and diversified industrial sector. But during the "lost decade" of the 1980s disaster struck again. Inflation soared, investment collapsed, foreign investors ran for cover, and growth stagnated as the country was haunted by the largest external debt in the developing world (see Exhibits 2-7).

In 1994, President Fernando Henrique Cardoso took office with a new development strategy: to privatize state-owned firms, deregulate the economy, lower trade barriers, and become competitive in the world economy—in short, to embrace globalization. In many ways, his strategy was a success. The economy grew and inflation rates hit record lows. Doubts re-emerged, however, in 1998 when Brazil was threatened by the Asian financial crisis. The economy slowed and investors attacked the real by selling their Brazilian currency. In 1999, after Brazil devalued its currency, the economy was stagnant. But by the year 2000, the economy seemed to have recovered from the currency crisis, and the country was expected to grow once again.

Despite optimistic forecasts, the external sector remained a concern, as it had been since the Great Depression. Trade and current account deficits persisted. Exchange-rate stability, as well as the external perception of the country depended on the current account. Accordingly, one of the government's major priorities was to increase exports. To do so, however, the government had to overcome two sets of problems. The first set included internal factors—high tax burden and inadequate infrastructure—that together were known as the "Brazilian cost." The second set was external—a wide variety of barriers that kept Brazilian products out of world markets.

One option for Brazil was to put its faith in the World Trade Organization's (WTO) quest to reduce trade barriers around the world and to use that forum to fight against practices that damaged Brazilian interests. Unfortunately, hopes that the WTO could fulfill this promise were dimmed by the failure of the WTO's 1999 Seattle Conference to set an agenda for the next round of trade negotiations.

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An alternative was to strengthen the Mercosur union.¹ During the 1990s, Mercosur, the regional integration area that included Brazil, Argentina, Paraguay and Uruguay, had become the fastest growing market for Brazilian goods. In addition, many observers argued that Mercosur had become a strong force in negotiations with other trading blocs and countries. However, Brazil's 1999 devaluation had strained its relations with the Mercosur countries, particularly Argentina, which was having its own economic difficulties. After the devaluation, trade disputes increased. Brazilian economist Jose Roberto Mendonça de Barros pronounced Mercosur "dead." "The differences between the exchange rate regimes mean that Argentina and Brazil cannot live together," he said.²

Indeed, in line with this view, many critics thought Brazil had already gained all it could from Mercosur and instead should concentrate its efforts on gaining market access in the United States and Europe by pursuing bilateral trade agreements with its major trade partners.

Now the question became: What trade strategy—global, regional, or bilateral—was best for the future? Could Brazil pursue all these strategies at once? Or did Brazil have to choose?

Brazil: The Country

With an area of 3.27 million square miles covering 47% of South America, Brazil is the fifth-largest country in the world—it is 18,500 square miles larger than continental United States—sharing its borders with 10 of the 12 other South American countries (see Exhibit 1). In addition, with more than 166 million people, Brazil is the world's fifth most populated country. As the world's ninth-largest national economy in terms of purchasing power, Brazil dominates the Latin American region, producing over a third of its output.³

Amazonia, which makes up one-third of the Earth's tropical forest, has the highest level of biodiversity in the world, with nearly two million animal and plant species. Brazilian environmental problems, with widespread pollution and deforestation of the Amazon region, have attracted international attention.

Economic structure Because of its tropical and subtropical climate, vast arable land, and ample natural resources, Brazil is a natural exporter of many products. It is the world's largest tobacco and sugar exporter, the producer of 85% of the world's orange juice concentrate, and it has been the world's largest coffee producer for over a century. In addition, the country is the second-largest exporter of soy and the third-largest exporter of beef and chicken. With one-third of the world's total iron reserves, Brazil rivals Australia as the world's major iron exporter, with 30% of world exports. It is also the world's second-largest producer of tin, the sixth-largest producer of aluminum, and the tenth-largest producer of gold.⁴ Remarkably, although Brazil is the fifth-largest agricultural producer in the world, only about one-third of the country's export earnings derive from primary products (see Exhibit 7b). Brazil's main exports include transportation equipment (planes and autos), metallurgical and chemical products.

Political institutions In 1985, after 21 years of military rule, Brazil returned to democracy as a federal republic with a presidential system. The president was elected for a maximum of two terms of four years each. Congress was bicameral, comprising a 513-member Chamber of Deputies and an 81-member Senate. Regional representation in Congress favored the less developed states of the north, northeast, and center-west. Brazil's highly fragmented political system included 18 political parties represented in Congress.

The Brazilians Until the latter part of the nineteenth century, the population was made up mainly of descendants of Portuguese, Africans, and indigenous peoples. At the end of the nineteenth

century and in the first decade of the twentieth century, Brazil attracted a large wave of immigrants from Italy, Germany, Poland, the Middle East, and Japan. "There is a strong and deep feeling among Brazilians of all racial backgrounds and national origins that they form a 'people' and a nation."⁵ A national poll found that Brazilians were optimistic about the future, and most of them thought Brazil would become a superpower some day.⁶

In 1999, 35% of Brazilians were under the poverty line.⁷ Poverty was most severe in northeast Brazil, where income per capita in many states was half that of the national average. In 1999, the richest 10% of Brazilians earned 47.9% of income and the lowest 20% only 5.7%. With a Gini coefficient of 0.6, Brazilians had one of the most unequal distributions of income in the world (see Exhibits 10a-b). Behind Brazil's vast inequality lay a neglected system of mass education, but stagnation, unemployment and chronic inflation further aggravated the inequality⁸. According to a study by the Ministry of Justice, homicides in Brazil increased by 6.81% a year (annualized rate) from 1979 to 1998; whereas, population growth during the same period was only 1.67%. The report attributed the increase in homicides to a lack of police enforcement and social inequalities. Other reports claimed that one of the reasons Brazil did not develop a tourist industry, despite the country's great natural appeal, was the increase in violent crime.

Social mobility was constrained by disparities in education, income, and power. Education was unevenly distributed in terms of quality both across rural and urban areas as well as across regions (north-south). Illiteracy rates among seven-year-olds and above, estimated at 11.5% in urban areas, reached 33.3% in rural areas. In 1996, less than one-third of the population had 7 years or more of school. Ironically, at 18.0 % of GDP (1996 data), Brazil had one of the highest social spending levels in Latin America. However, 41% of social spending went to pensions, whereas education and culture received only 22%. In addition, a disproportionate share of public spending was directed to universities, which, despite being free, were attended primarily by middle- or upper-class students. Diane Jean Schemo wrote in the *New York Times*, "In terms of globalization and competitiveness, education and job training are absolutely critical and Brazil falls way behind. It's the lack of investment in basic education that is holding and will hold Brazil back."⁹

Historical Background: Reshaping the Economic Structure

Discovered by the Portuguese in 1500, Brazil derived its name from the first product exploited by the Portuguese colonizers, *pau brasil* (Brazil-wood).¹⁰ From the colonial era through the twentieth century, Brazil's economic growth was driven by the economic cycles of its products: sugar, gold, and, perhaps most importantly, coffee.¹¹

Coffee, introduced into Brazil in the early part of the eighteenth century, became a major growth industry during the nineteenth century and the first decades of the twentieth century. By the 1920s, coffee represented more than 70% of total exports, and accounted for approximately 10% of Brazil's GDP.¹² When the Great Depression hit, however, plunging coffee prices took a tremendous toll. Exports fell from \$445.9 million in 1929 to \$180.6 million in 1932, forcing the government to devalue the currency, impose exchange controls, and offer credit and tax exemptions to domestic manufacturers.¹³ These policies, together with the lack of competition from imports, favored the expansion of the industrial sector. By 1931 industrial output had fully recovered to 1928 levels. In the following years, it more than doubled, becoming for the first time the economy's leading sector.

By the 1950s, industrialization and import substitution no longer represented a defensive reaction to external events. Rather, they had become "the principal method for the government to modernize and raise the rate of growth of the economy."¹⁴ Along with many Latin American counterparts,

trade investigations. Most recently, the Brazilian government had been accused by Canada of subsidizing Empresa Brasileira de Aeronáutica SA, Embraer, a producer of small jets.

Although the country had few high-tech industries, Embraer had become Brazil's "Hot Commodity" as the headline of a *New York Times* article read, and "...was on the verge of displacing Canada's Bombardier as the world's third largest manufacturer of commercial aircraft."³⁹ Embraer's foreign sales, supported by subsidized interest rates through the Export-Financing Program (Proex), allowed the company to borrow cheaply. Proex was an important source for Brazilian companies seeking to equalize local and international interest rates for exporters.⁴⁰ Canadian officials claimed that the subsidies unfairly allowed Embraer to gain market share. Brazilian officials responded that Canadian firms received similar support. In July 2000, the WTO gave Canada permission to impose as much as \$226 million per year in trade sanctions against Brazilian goods. Referring to this incident, Brazilian Foreign Minister Luiz Felipe Lampreia said the WTO regulations, "...were made to benefit developed countries and do not offer emerging economies the chance to reduce the gap between the two blocs."⁴¹

In February 2001, in a move that Canadian officials said was not related to the Embraer-WTO ruling, Canada temporarily banned Brazilian beef imports. Canadian officials argued that Brazil had failed to provide required information to determine whether the country was free of mad-cow disease. The Brazilian government claimed to have provided such information.⁴² Although Canada lifted the ban one-month later, Brazilian officials were frustrated by Canada's arbitrary action and by the lack of clear WTO rules in relation to sanitary restrictions.⁴³

For the Brazilian Government, reduced trade barriers and increased exports were top priorities. One way to achieve these goals was to try to push its views through the WTO. In addition, the country could try to negotiate bilaterally with the United States and Europe or, it could concentrate its effort in consolidating Mercosur. After all, Brazilian external trade during the 1990s had benefited from the Mercosur regional integration initiative.

Mercosur, the Common Market of South America⁴⁴ In 1986, Brazil and Argentina began to negotiate the Mercosur project, in spite of the failure of previous trade integration attempts. This was an effort to increase growth and competitiveness after a period of sharp trade contraction between the two countries. Moreover, the political leadership in both countries saw regional integration as a way to diminish traditional geopolitical rivalries, to weaken respective military establishments, and to consolidate the emerging democracies.⁴⁵ Argentina and Brazil had long been divided by ambitions to become regional powers - a goal which dated back to the early days of their independence. During the 1970s, both countries had military governments that engaged in arms races of their own, which encompassed the production of weaponry as well as the development of nuclear power capability. Argentina's defeat in its war with Britain over the Malvinas/Falkland Islands (1982) and the subsequent withdrawal of the armed forces from power in both Argentina and Brazil made security concerns based on military considerations a very low priority. For the civilian administrations that ensued, security took a new meaning: the preservation of regional peace and democracy.⁴⁶

However, the negotiations stalled, primarily due to continued economic instability in both countries. But the project was revived in 1989 when the end of the Cold War brought the threat that Eastern Europe would draw investments away from Latin America. Furthermore, the region faced what seemed to be a world of strengthening trading blocs and bilateral agreements. Close to home, for example, the United States, Canada, and Mexico negotiated a free trade area (NAFTA). Changing international conditions coincided with political changes in Brazil and Argentina as Fernando Collor de Mello and Carlos Menem, both elected in 1989, pushed their countries towards liberalization and free markets.⁴⁷ In August of that year, Uruguay and Paraguay were invited to become members of Mercosur.

The Mercosur integration process became official in March 1991 with the signing of the Asuncion Treaty. The treaty envisioned the creation of a common market between Brazil, Argentina, Uruguay, and Paraguay by December 31, 1994, and the gradual coordination of macroeconomic policies.

After January 1, 1995, 90% of intra-regional trade circulated free of tariffs and quotas. Each country agreed to a "transition list" of products considered to be "sensitive" to foreign competition as to need protection until 2006.

In addition, member countries adopted a common external tariff (CET) and quotas with non-member countries. The CET was set between 0% and 23% of an import's value for some 90% of the products, with the remaining 10% included on a list of exceptions. The objective of this list was to allow the countries to adapt to the new competitive conditions of the international market. Tariffs were high on imports considered to be a threat to domestic production and low on goods used in the production of export products or not produced in the domestic market. Uruguay's list contained 212 products, such as milk products, chemicals, textiles, and steel products; Paraguay's 210 products list included chemicals, agriculture, and textiles; and Argentina's 232 products included chemicals, paper, and footwear. Brazil's 175-product list ranged from machines for industry (subject to a 20% tariff in 1998) to consumer goods such as cassette players (32%), hairdryers (29%), and cardiac pacemakers (10%). Capital goods confronted different rates among countries. In Brazil, the rate was 20%, in Argentina 10%, and in Paraguay and Uruguay 0%.

"Rules of origin" were created to avoid a "triangular circulation" of goods from countries outside the bloc: i.e., importing a good through a lower-tariff country within Mercosur and selling it later in a higher-tariff country. Goods sold within the four countries were exempt from tariffs only if at least 60% of their raw materials were produced in the region. However, a number of exceptions were permitted, in accordance with the specific situation of each country. For example, Paraguay was allowed a national content level of 50% for certain products.

The automobile sector was excluded from the regional agreement, and the tariff was set at 35% and the local-content requirement at 30%.

In a common market, not only goods, services, and capital circulate without restrictions between member states, but labor is also supposed to move freely. Within Mercosur, however, immigration procedures remained complex. There was a lack of coordination of legislation on pensions and business practices.

In 1996, Chile became an associate member of the union.⁴⁸ This led to a nearly one-third reduction in the average tariff rate on Mercosur/Chilean trade. Chile's associate status allowed it to maintain a flat external tariff of about 11% on imports from non-Mercosur countries. In 1997, after negotiating a similar agreement, Bolivia also became an associate member.

After the creation of Mercosur, trade among the member countries increased rapidly, making Mercosur the fastest growing trade region in the world. From 1991 to 1997, exports within the region rose from \$5.1 billion to \$20 billion. Bilateral trade between Brazil and Argentina represented approximately 75% of total trade flows within the region.⁴⁹ Argentina became Brazil's second trading partner after the United States, although the European Union was still the main destination of Brazilian goods (see Exhibit 7e).

Gains from Mercosur?⁵⁰ Many observers criticized Mercosur on grounds that the member countries were simply too dissimilar and unstable. There were huge differences in population and territory (see Exhibit 9 and 11). More importantly, the Mercosur economies had different productive structures. To cope with differences in the degree of openness and protection desired by each

The integration of this union appeared to be in Brazil's interests, in light of the barriers the United States imposed against Brazilian goods. However, this view was not widely shared. Brazilian economists estimated that the FTAA would mean an increase in Brazilian imports from the United States of around 25%; whereas Brazil's exports to the United States would rise by only 8%.⁶¹ In addition, Brazil's interests diverged as much from those of the United States as they did from the smaller countries within the region. Small countries heavily geared to exports could benefit from a free trade area that included the United States, provided that their exports would not face significant competition within the United States. But countries with more complex economies, such as Brazil, could face greater difficulties. Many Brazilian products would suffer fierce competition from more efficient U.S. rivals. However, the question of whether Brazilian firms would modernize without the "threat" of competition remained.

The United States As Brazil's single largest trading partner, the United States received about 23% of Brazilian exports. The trade balance with the United States had traditionally been unfavorable to Brazil. Before the 1999 devaluation, trade imbalances between the United States and Brazil had been attributed by the U.S. government to the so-called "Brazil cost" and to the overvaluation of the real relative to the U.S. dollar. According to Rubens A. Barbosa, Brazilian Ambassador to the United States, after the devaluation, "...the persistent asymmetry in our bilateral trade, however, points [to the fact] that the U.S. trade barriers—and not merely the intrinsic circumstances of our export performance—are still among the major factors responsible for the asymmetries in the commercial transactions with the United States."⁶²

Brazil had probably suffered the most antidumping and countervailing-duty investigations by the United States. Between 1980 and 1999, the United States conducted 42 antidumping investigations and 31 investigations against Brazilian exports that had been "unfairly" subsidized by the Brazilian government.⁶³ The list of products included, among others, orange juice, iron, rubber, cotton, and steel. According to Brazilian officials, U.S. antidumping rules and countervailing procedures were arbitrary and simply a disguised form of protectionism.⁶⁴ Barbosa noted the example of Brazilian steel, which had been subject to antidumping investigations, countervailing duties, and safeguard measures.

Under WTO regulations, antidumping duties can be imposed against a country if a company exports a product at a price lower than the price it normally charges on its own home market; if producers are selling below the cost of production or if their selling price in the importing country's market is below that in other destinations. Countries are allowed to charge an extra duty—known as a countervailing duty—on subsidized imports found to be hurting domestic producers. Finally, a WTO member can temporarily restrict imports of a product (take "safeguard" actions) if its domestic industry is injured or threatened by a surge in imports.⁶⁵ However, the WTO allows governments to act only where there is a genuine ("material") injury to the domestic industry. Governments have to demonstrate that the violation takes place, the extent of the violation, and show that it is causing injury.⁶⁶

In 1998 the United States began a new set of investigations against Brazilian hot-rolled steel and carbon steel plates. The U.S. steel industry saw its position severely challenged as the demand for steel plummeted after reductions in investment and consumption in East Asia and as cheaper steel flooded the U.S. market after Russia and Brazil devalued their currencies. Prices reached all time lows. The *U.S. Steel Report* argued that non-competitive market structures in these countries and other structural problems that had led to unfair trade over the years also contributed to the problem.⁶⁷ Brazil objected to the assumption held in Washington that past subsidies paid to state-owned firms provided a continuing unfair benefit to their now privatized firms.⁶⁸ The U.S. Steel Manufacturing

Association contended that the protection was necessary: "The United States needs a strong steel industry. That is inarguable...."⁶⁹

Barbosa commented, "...trade restrictions and countervailing duties continued to be collected [by the U.S.] on imports of Brazilian hot-rolled steel and carbon steel plates, although WTO had condemned the U.S. practices on which those duties were based."⁷⁰

Another trade conflict that caused great concern to Brazilian officials was the United States' request to the WTO, in January 2001, to form a dispute panel against the 1997 Brazilian patent law. The United States claimed the law violated WTO rules because it forced companies to produce in Brazil after a certain period of time.⁷¹ "This is really about a specific portion of law, and the question is: Who owns the patent?" a U.S. Embassy official in Brazil said.⁷²

However, Brazilian officials feared it might affect Brazilian production of anti-AIDS drugs.⁷³ Brazil had earned international praise for its anti-AIDS campaign.⁷⁴ Since 1997 virtually every AIDS patient in Brazil received - for free - a triple cocktail that not only helped stabilize the epidemic but cut the death rate by 50%. Brazilian companies produced seven of the 12 anti-AIDS drugs administered in the free drug program. This cut the cost of the triple therapy to around \$3,000 from around \$10,000.⁷⁵

Brazil's 1997 patent law, passed to comply with the WTO (every country joining WTO must pass laws with respect to patents), ended the non-patentability of food, chemical, pharmaceutical, and biotechnology products. However, Brazil's law entitled the government, when it deemed necessary, to issue a license to a local firm and the legislation prohibited retroactive imposition of royalties on products already produced or sold in Brazil.

Thus, under the new law, anything commercialized anywhere in the world by May 15, 1997 remained forever un-patented in Brazil. This aspect of the law covered most first generation anti-AIDS drugs.⁷⁶ Among those not copied, Merck's and Roche's drugs, patented after 1997, represented around 36% of Brazil's \$310 million expenditures on AIDS medication in the year 2000. Brazilian officials were concerned about the increasing costs of the AIDS drug program. One solution was for these companies to sell the drugs at a lower price.⁷⁷ Another option was to produce the drugs locally. Brazilian officials argued that this move would be consistent with WTO regulations because members were allowed to make copies of patented items under certain situations, including national emergencies - the Brazilian government had already declared the AIDS crisis a national emergency.⁷⁸ Pharmaceutical companies challenged this approach.⁷⁹

Other U.S. industries and sectors insisted on protection as well. Several important Brazilian exports were penalized with high tariffs or quotas. Sugar faced a 236% equivalent tariff, tobacco a 350% equivalent tariff, and frozen orange juice concentrate, a 44.7% tariff. Although a greater number of U.S. products were subject to significant tariffs (i.e., above 10%), Brazilian import tariffs were generally less onerous, ranging from 3% on certain computer chips and aircraft parts to 35% on vehicles (see Exhibit 8).

A Brazilian Embassy study indicated that the removal of U.S. barriers affecting orange juice, steel products, sugar, footwear, tobacco, gasoline, shrimp, ethyl alcohol, and crude soy bean oil would correspond to an annual gain in GDP for Brazil of about \$831 million. According to Ambassador Ruben Barbosa, "...whether in negotiations regarding dumping and subsidies or in seeking to liberalize market access, the course of action pursued by Brazil up to this point, in all economic sectors, has produced either no results whatsoever or minimal results."⁸⁰

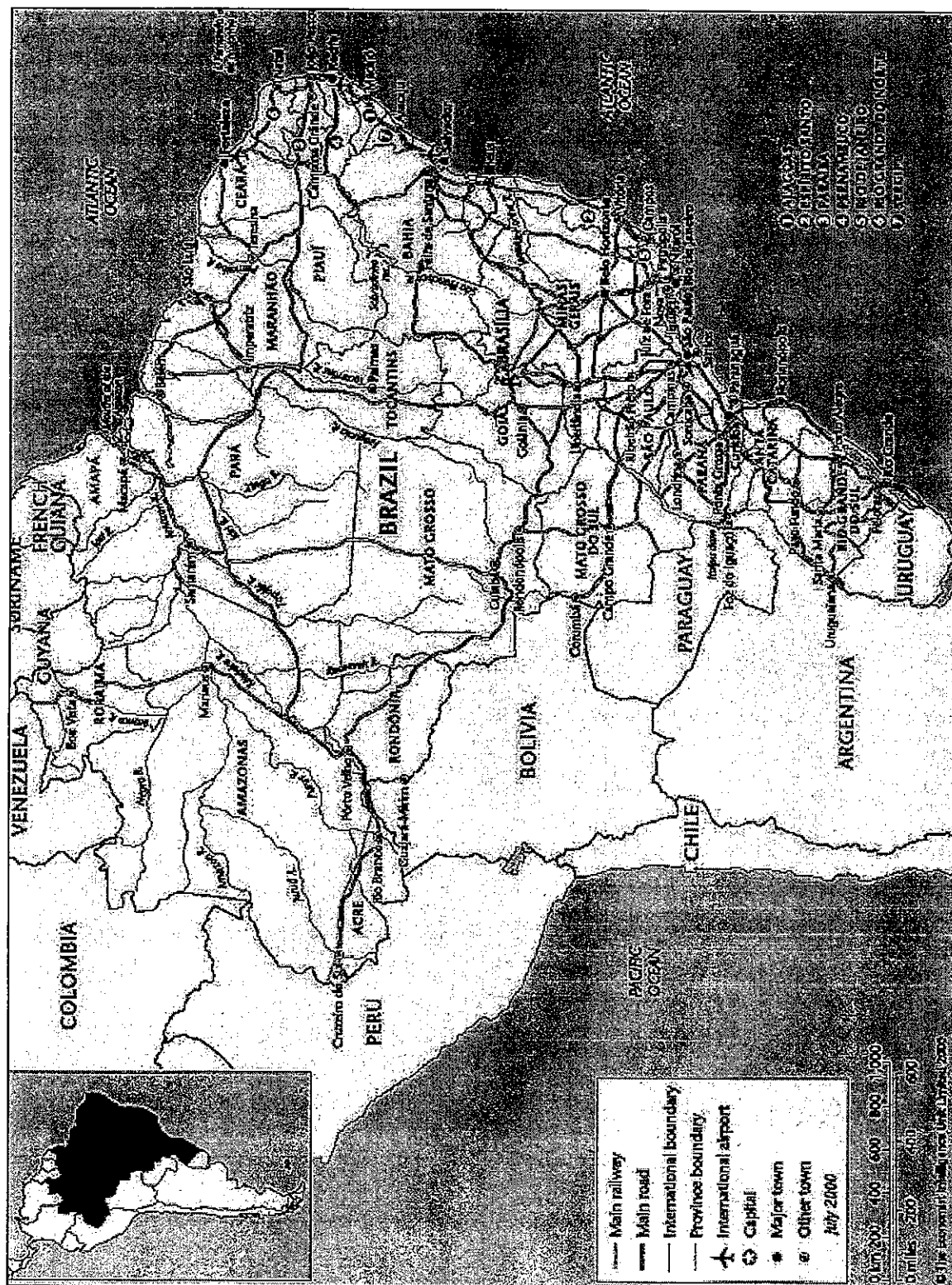
Brazil's Frustration

Although the WTO was created to lower trade barriers throughout the world, developing countries have regarded it with some suspicion. Most developing countries have come to believe that this multinational forum simply reflected U.S. and European interests. Indeed, at the WTO conference in Seattle, Brazil, backed by several developing countries, fought to restrain the efforts by various industrialized countries to impose stricter labor standards on poorer countries.⁸¹ In addition, several countries questioned the effectiveness of WTO enforcement mechanisms against the "big countries." Nevertheless, a major concern was the view that multilateral trade progress was paralyzed after the failure of the 1999 WTO trade conference to get a new round of negotiations off the ground.

In a speech delivered to the Mercosur region in Buenos Aires, Argentina, in November 1999, the director-general of the WTO, Mike Moore, commented: "Globalization is the word on everyone's lips, yet regional agreements have never been so popular. A single regional market can help the poorer countries build on their competitive advantages, and increase their political commitment to an open economy. But regional accords can widen the trade divide between the industrialized and the developing countries." Furthermore, Moore warned that, "...regionalism alone leads not towards an open world economy, but an unbalanced system of hub and spokes, with rich countries at the center, holding all the cards, and developing countries on the periphery."⁸² In 2000, there were 200 regional trade groupings, compared with 50 in 1990.⁸³

On September 12, 2000, in a speech delivered at the 55th Session of the General Assembly of the United Nations, Brazil's Foreign Minister, Luiz Felipe Lampreia, said,

As I stated at the World Trade Organization conference in Seattle, the name of this game is discrimination. We must reverse these grave distortions in international trade, especially as concerns agricultural products. It is inadmissible that the most prosperous nations, whose economies are strongly based in the manufacturing and service industries, should be legally entitled to restrict access to their markets for agricultural goods. While, at the same time, they call for the free flow of those goods in which they benefit from an enormous competitive advantage.... Mr. President, Nations must come increasingly to comprehend and respect differing realities, outlooks, and objectives among themselves. At the same time, they must recognize their commonalties and affinities; explore and enlarge areas of convergence and opportunities for cooperation; overcome suspicions, rivalries, and disputes. Nowadays it is above all through regional integration that this learning process takes place.⁸⁴



Source: *The Economist*.

Exhibit 2 National Income Accounts (1981-1999)

	1981	1983	1985	1987	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
GDP (1998 R\$ billion)	595.3	582.7	662.4	737.2	760.0	728.3	735.8	731.8	767.8	812.8	847.1	869.6	898.3	900.1	907.3
Real GDP growth	-4.3	-1.1	6.6	5.5	1.5	-4.2	1.0	-0.5	4.9	5.9	4.2	2.7	3.3	0.2	0.8
GDP (current US\$ billion)	258.6	189.5	211.1	282.4	415.9	469.3	405.7	387.3	429.7	543.1	705.4	775.5	807.8	787.5	529.4
Population (MM inhabitants)	121.2	126.6	132.0	137.3	142.3	144.1	146.4	148.9	150.9	153.1	155.3	157.5	159.6	161.8	163.9
Investment (% GDP)	23.1	18.6	16.9	22.2	24.8	20.7	18.1	18.4	19.3	20.8	20.5	19.1	19.9	19.9	19.1
Invest. Federal SOEs (% GDP)	5.2	4.1	3.3	3.7	3.0	1.9	2.3	2.4	2.0	1.6	1.4	1.6	1.7	1.3	1.5
Domestic savings (% GDP)	18.6	15.2	16.8	21.7	25.0	19.6	16.9	19.3	18.5	19.9	17.7	15.7	15.2	14.6	N/A
Public	-0.7	0.7	0.3	-1.5	-1.3	5.7	3.5	1.7	2.4	4.3	-1.6	-1.1	-1.9	N/A	N/A
Private	19.3	14.5	16.5	23.2	26.3	13.9	13.4	17.6	16.1	15.6	19.3	16.8	17.1	N/A	N/A

Sources: IPEA (Institute of Research and Applied Economics) —www.ipeadata.gov.br; IBGE (Brazilian Institute of Geography and Statistics); Central Bank of Brazil.

Exhibit 3 Prices, Monetary and Financial Sector Variables (1981-1999)

	1981	1983	1985	1987	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
GDP deflator (%)	101.0	131.0	249.0	206.0	1,304.0	2,596.0	416.7	969.0	1,996.2	2,240.2	77.6	17.4	8.3	4.7	4.3
Annual interest rates (selic), (%)	89.3	193.2	225.9	353.0	2,407.3	1,153.2	536.8	1,549.4	3,060.0	1,153.6	53.0	23.9	42.0	31.2	18.9
M1/GDP (%)	7.7	5.1	3.5	4.2	2.0	3.3	2.8	1.8	1.3	4.3	4.1	3.7	5.3	5.6	6.8
M4/GDP (%)	25.4	24.7	27.9	27.0	24.8	15.6	15.5	25.6	27.5	32.6	36.0	39.8	44.1	50.0	59.9

Sources: IPEA (Institute of Research and Applied Economics) —www.ipeadata.gov.br; IBGE (Brazilian Institute of Geography and Statistics); Central Bank of Brazil.

Exhibit 4 Unemployment and Labor Productivity Indicators (1981-1999)

	1981	1983	1985	1987	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Rate of unemployment (%)	7.9	6.7	5.2	3.7	3.3	4.3	4.8	5.8	5.3	5.1	4.6	5.4	5.7	7.6	7.6
Labor productivity (1976 = 100)	122.5	125.2	147.9	147.5	149.1	144.7	156.6	166.2	182.6	200.9	208.9	239.3	266.5	288.4	N/A
Real wages index (1988 = 100)	90.3	90.0	95.6	97.7	96.9	83.9	77.6	88.5	97.4	107.7	118.9	126.4	134.0	136.9	N/A

Sources: IPEA (Institute of Research and Applied Economics)—www.ipeadata.gov.br; Central Bank of Brazil.

Exhibit 5 Sector of Economic Activity as a % of GDP (1960-1997)

	1960	1970	1980	1990	1995	1999
Agriculture, value added	20.68	12.34	11.01	8.10	9.01	8.09
Industry, value added	37.07	38.22	43.73	38.69	36.67	35.23
Manufacturing	29.69	29.29	33.42	N/A	23.58	22.84
Services, etc., value added	42.26	49.44	45.26	53.21	54.32	56.68
Real GDP growth rates ^a	7.40	6.20	8.70	1.60	3.00	1.80

Sources: IPEA (Institute of Research and Applied Economics)—www.ipeadata.gov.br; IBGE (Brazilian Institute of Geography and Statistics).

^aNumbers show the average growth per year of the previous decade. 1995 and 1999 columns show the average growth per year of the previous five- and four-year periods, respectively.

Exhibit 6 Public Sector Indicators as a % of GDP (1981-1999)

	1981	1983	1985	1987	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Gross tax collections	25.2	26.9	23.8	24.3	23.7	29.6	24.4	25.0	25.3	27.9	28.0	28.2	28.2	29.0	N/A
Operational deficit	6.5	3.1	4.4	5.7	6.9	-1.3	0.1	1.8	0.7	-1.1	5.0	3.8	4.3	7.5	3.5
Primary deficit ^a	N/A	N/A	-2.6	1.0	1.0	-4.6	-2.8	-1.6	-2.3	-5.1	-0.3	0.1	1.0	0.0	-3.1
Net public sector debt	23.7	49.5	50.1	47.3	38.9	38.5	35.3	35.7	32.2	26.0	27.3	30.9	30.9	42.4	46.9
Internal	8.8	16.6	19.5	17.3	20.3	15.5	12.0	17.0	17.8	17.6	21.8	27.0	26.6	36.1	37.0
External ^b	14.9	32.9	30.6	30.0	18.6	23.0	23.3	18.7	14.4	8.4	5.5	3.9	4.3	6.3	9.9

Sources: IPEA (Institute of Research and Applied Economics)—www.ipeadata.gov.br; Central Bank of Brazil.

^aThe primary deficit does not include interest payments. Deficit (+), Surplus (-). ^bData includes debt defaults and renegotiation in 1989 and 1993-94.

Exhibit 7a Balance of Payments and Selected Data, US\$ Billions (1981-2000)

Balance of Payments	1981	1983	1985	1987	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 ^P
Exports	23.2	21.9	25.6	26.2	34.4	31.4	31.6	35.8	38.6	43.5	46.5	47.7	53.0	51.1	48.0	55.1
Manufacturing exports	12.0	11.5	14.2	14.9	18.9	17.4	17.3	21.4	23.5	24.9	25.6	26.4	29.2	29.3	30.3	NA
Imports	22.1	15.4	13.2	15.1	18.3	20.7	21.0	20.6	25.3	33.1	49.9	53.3	59.9	57.7	49.2	55.8
Trade balance	1.1	6.5	12.4	11.1	16.1	10.7	10.6	15.2	13.3	10.4	-3.4	-5.6	-6.9	-6.6	-1.2	-0.7
Service balance	-4.0	-3.9	-3.3	-3.9	-5.7	-5.6	-4.9	-4.1	-7.3	-8.4	-10.4	-11.3	-15.9	-16.9	-10.6	-10.6
Interest payments	-9.2	-9.5	-9.6	-8.8	-9.6	-9.7	-8.6	-7.3	-8.3	-6.3	-8.2	-9.2	-10.4	-11.9	-15.3	-15.1
Current account balance	-11.7	-6.8	-0.2	-1.4	1.0	-3.8	-1.4	5.9	-0.4	-1.3	-18.0	-23.1	-30.9	-33.6	-25.1	-24.6
Foreign direct investment	1.8	0.9	0.8	0.6	0.7	0.6	0.6	1.4	0.6	1.9	4.6	15.5	20.7	20.5	30.1	29.6
Short-term capital	1.2	1.1	-1.4	0.7	0.7	-1.3	-4.1	1.7	3.2	0.9	18.8	5.4	-19.0	-31.6	-8.5	-6.4
Capital account balance	12.8	2.1	-2.6	-8.0	-11.4	-3.9	-4.3	5.9	8.6	14.3	29.4	34.0	25.9	20.6	14.2	30.2
Current account balance (% GDP)	-4.5%	-3.6%	-0.1%	-0.5%	0.2%	-0.8%	-0.3%	1.5%	-0.1%	-0.2%	-2.5%	-3.0%	-3.8%	-4.3%	-4.7%	NA
Foreign reserves	7.5	4.6	9.2	6.8	8.7	9.1	8.8	23.2	31.7	38.5	51.5	60.1	51.7	44.0	35.7	43.8
Gross external debt	73.9	93.5	105.1	121.1	115.5	123.4	123.9	136.0	145.7	148.3	159.3	179.9	200.0	243.2	241.1	232.8 ^a
Gross external debt (% GDP)	28.6%	49.3%	49.8%	42.9%	27.8%	26.3%	30.5%	35.1%	33.9%	27.3%	22.6%	23.2%	24.8%	30.9%	45.5%	NA
Exchange rate (R\$/US\$) (end of year)	4.6E-11	3.6E-10	3.8E-09	2.6E-08	4.1E-06	1.0E-04	4.0E-04	4.5E-03	0.12	0.84	0.97	1.04	1.12	1.21	1.79	1.95
Devaluation rate (%)	76.7%	669.9%	986.4%	588.6%	15,620.8%	2,333.2%	300.0%	1,025.0%	2,535.6%	611.6%	15.2%	6.9%	7.4%	8.3%	48.0%	9.3%
Effective real exchange rate																
06/94 = 100 ^b	127.1	134.9	135.9	143.9	95.7	113.7	117.4	108.2	96.8	77.1	86.4	85.0	79.4	84.6	98.0	NA

Sources: IPEA (Institute of Research and Applied Economics)—www.ipeadata.gov.br; Central Bank of Brazil.

P = Preliminary data.

^aData for September 2000.^bAn increase in the index denotes real depreciation.

Exhibit 7b Exports and Imports by Product, % of Total (1999)

Imports (FOB)		Exports (FOB)	
Total (US\$ Millions)	49,219	Total (US\$ Million)	48,011
Total	100.0%	Total	100.0%
Consumer Goods	12.8	Primary Products	37.0
Foodstuffs	4.2	Coffee	5.1
Apparel	1.0	Soybeans	7.9
Others	7.5	Cocoa	0.2
Raw Materials	34.5%	Sugar	4.0
Grains	2.9	Orange juice	2.6
Peeled wheat beans	1.7	Meat	4.0
Fertilizers	1.8	Iron ore, manganese and other ores	6.1
Chemical products	18.3	Tobacco	1.9
Cast iron and steel	1.8	Others	5.3
Nonferrous metals	1.9	Industrialized Products	63.0%
Coal	1.2	Transport equipment and accessories	13.7
Others	6.7	Machines and mechanical instruments	6.1
Oil and Derivatives	9.8%	Electric and electronic equipment	3.8
Capital Goods	43.0%	Metallurgical products	10.5
		Chemical products	7.2
		Wood and manufactured wood	2.9
		Footwear and leather products	2.9
		Oil derivatives	2.5
		Paper and pulp	4.5
		Textile products	2.1
		Others	6.9%

Source: Central Bank of Brazil.

Exhibit 7c Breakdown of Brazilian Trade Flows (US\$ million)

Region	Sector	1996			1997			1998		
		Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance
Latin America and the Caribbean	Basic products	749	4,731	-3,982	799	4,656	-3,857	917	3,879	-2,962
	Semi-manufactured goods	492	622	-130	561	688	-117	585	677	-92
	Manufactured goods	10,430	6,350	4,080	13,327	8,164	5,163	12,785	7,902	4,883
	Other	19	20	-1	24	--	24	26	46	-20
	Total	11,690	11,723	-33	14,711	13,498	1,213	14,313	12,504	1,809
Asia^a	Basic products	3,025	1,757	1,268	3,568	1,322	2,246	3,072	892	2,180
	Semi-manufactured goods	2,937	54	2,883	2,904	69	2,835	2,202	63	2,139
	Manufactured goods	2,706	7,442	-4,736	2,284	9,191	-6,907	1,516	7,762	-6,246
	Other	11	10	1	9	1	8	5	7	-2
	Total	8,679	9,263	-584	8,765	10,583	-1,818	6,795	8,724	-1,929
European Union	Basic products	6,042	216	5,826	7,754	206	7,548	6,766	232	6,534
	Semi-manufactured goods	1,864	220	1,644	1,923	258	1,665	2,272	256	2,016
	Manufactured goods	4,892	13,460	-8,568	4,801	15,844	-11,043	5,672	16,271	-10,599
	Other	38	49	-11	35	8	27	34	60	-26
	Total	12,836	13,945	-1,109	14,513	16,316	-1,803	14,744	16,819	-2,075
NAFTA	Basic products	1,311	1,141	170	1,357	1,106	251	1,210	862	348
	Semi-manufactured goods	2,055	459	1,596	2,292	498	1,794	2,233	412	1,821
	Manufactured goods	7,076	12,271	-5,195	7,139	15,370	-8,231	7,942	14,533	-6,591
	Other	55	42	13	30	4	26	26	55	-29
	Total	10,497	13,913	-3,416	10,818	16,978	-6,160	11,411	15,862	-4,451
Other	Basic products	1,117	1,345	-228	1,076	1,741	-665	1,122	1,452	-330
	Semi-manufactured goods	1,133	267	866	886	312	574	933	292	641
	Manufactured goods	1,954	2,739	-785	2,334	3,086	-752	2,264	2,870	-606
	Other	518	26	492	713	--	713	540	1	539
	Total	4,722	4,377	345	5,009	5,139	-130	4,859	4,615	244

Source: United Nations Trade Statistics

^aIncludes Middle East.

Exhibit 7d Direction and Composition of Trade, 1998 (US\$ million)

	United States	Argentina	Germany	Total
EXPORTS FOB				
Meat	1.0	134.0	56.7	1,247.8
Fruit and vegetables and preparations	353.7	48.7	14.4	1,667.0
Sugar and preparations	130.4	18.0	0.7	2,027.1
Coffee	368.0	76.7	370.3	2,333.6
Animal feeding stuffs	0.3	5.4	129.7	1,799.3
Tobacco and manufactures	117.1	12.5	150.9	1,558.9
Oilseeds, nuts, and kernels	8.8	0.6	262.4	2,204.9
Wood and manufactures	385.4	54.9	61.1	1,126.9
Pulp	278.1	12.0	47.8	1,049.4
Ores, slag, and ash	224.1	159.4	572.2	3,465.8
Of which:				
Iron ore	167.6	155.2	569.8	3,251.1
Mineral fuels	197.0	9.4	3.6	353.2
Animal and vegetable oils and fats	34.4	9.3	9.3	982.9
Chemicals ^a	445.5	853.5	201.1	3,444.8
Paper, etc., and manufactures	88.1	278.2	13.2	929.9
Textiles fibers and manufactures ^b	134.6	292.9	39.9	935.2
Nonmetallic mineral manufactures ^b	506.6	97.8	66.8	1,233.7
Iron and steel and manufactures ^c	1,219.2	403.1	127.5	4,058.5
Aluminum and manufactures ^c	71.7	81.6	1.5	1,137.4
Tools, etc., and misc. metal manufactures	39.3	85.5	4.7	294.8
Machinery, excluding electrical	1,320.1	927.0	349.4	4,338.3
Electrical machinery	585.0	343.0	54.5	1,712.1
Road vehicles and tractors	424.2	2,036.8	181.3	4,975.2
Aircraft	947.0	2.5	1.0	1,317.6
Footwear	921.9	75.5	31.3	1,387.1
Scientific instruments, etc.	150.9	88.5	8.4	569.0
Total, including others				
	9,888.9	6,747.1	3,005.7	51,119.9
IMPORTS CIF				
Food	344.2	2,583.7	51.0	5,096.3
Of which:				
Cereals and preparations	150.4	1,454.0	22.5	2,261.3
Rubber and manufactures	229.2	80.0	63.1	959.9
Mineral fuels	520.2	760.6	16.2	5,615.9
Chemicals ^a	3,420.7	599.5	1,142.1	10,374.3
Paper, etc., and manufactures	334.2	56.7	73.7	982.8
Textile fibers and manufactures	244.0	341.4	25.3	1,691.7
Nonmetallic mineral manufactures ^b	110.3	26.6	66.3	615.5
Iron and steel and manufactures ^c	247.7	121.3	166.5	1,479.3
Nonferrous metals and manufactures ^c	329.7	31.7	134.5	1,134.8
Tools, etc., and misc. metal manufactures	123.0	15.7	101.8	488.5
Machinery, excluding electrical	3,542.2	398.7	1,789.7	11,014.5
Electrical machinery	2,425.0	148.9	740.1	8,192.9
Road vehicles and tractors	518.5	2,646.9	599.3	5,853.3
Aircraft	318.0	0.1	18.6	957.5
Scientific instruments, etc.	1,049.2	37.0	322.4	2,586.7
Total, including others				
	14,318.7	8,421.2	5,462.9	57,732.0

Sources: United Nations, Trade Statistics; EU Country Profile 2000

^aIncluding crude fertilizers and manufacture of plastics. ^bIncluding precious metals and jewelry. ^cIncluding scrap.

Exhibit 7e Trade Flows by Region (1995-1999)

	1995		1996		1997		1998		1999	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
Total (US\$ millions)	46,506	49,972	47,747	53,346	52,994	59,837	51,140	57,734	48,011	49,222
Total (%)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Mercosur	13.2%	13.7%	15.3%	15.6%	17.1%	15.9%	17.4%	16.3%	14.1%	13.7%
Argentina	8.7%	11.2%	10.8%	12.8%	12.8%	13.4%	13.2%	13.9%	11.2%	11.8%
Paraguay	2.8%	1.0%	2.8%	1.0%	2.7%	0.9%	2.4%	0.6%	1.6%	0.5%
Uruguay	1.7%	1.5%	1.7%	1.8%	1.6%	1.6%	1.7%	1.8%	1.4%	1.3%
Chile	2.6%	2.2%	2.2%	1.7%	2.3%	1.6%	2.0%	1.4%	1.9%	1.5%
Mexico	1.1%	1.6%	1.4%	1.8%	1.6%	2.0%	2.0%	1.7%	2.2%	1.3%
Asia	16.8%	16.1%	15.8%	13.9%	13.9%	14.7%	10.5%	13.3%	11.5%	12.8%
China	2.6%	2.1%	2.3%	2.1%	2.1%	1.9%	1.8%	1.8%	1.4%	1.8%
Korea	1.8%	2.7%	1.8%	2.2%	1.4%	2.3%	0.9%	1.7%	1.3%	2.1%
Japan	6.7%	6.6%	6.4%	5.2%	5.8%	5.9%	4.3%	5.7%	4.6%	5.2%
Canada	1.0%	2.3%	1.1%	2.4%	1.1%	2.4%	1.1%	2.3%	1.1%	2.0%
European Union	27.8%	27.7%	26.9%	26.7%	27.4%	26.5%	28.8%	29.2%	28.6%	30.4%
Germany	4.6%	9.6%	4.4%	9.1%	4.9%	8.3%	5.9%	9.1%	5.3%	9.6%
France	2.2%	2.8%	1.9%	2.5%	2.1%	2.7%	2.4%	3.4%	2.5%	4.0%
Italy	3.7%	5.7%	3.2%	5.5%	3.2%	5.7%	3.8%	5.6%	3.8%	5.3%
United States	18.9%	21.3%	19.5%	22.4%	17.8%	23.2%	19.3%	23.7%	22.6%	24.1%

Source: Central Bank of Brazil.

Exhibit 8 Tariff Comparison: Brazil and the United States (1999)

U.S. Tariffs for 15 Leading Brazil Global Exports	Ad Valorem Equivalent (%)
Coffee, not roasted, not decaffeinated	0.0
Iron ores and concentrates, not agglomerated	0.0
Soybeans, whether or not broken	0.0
Oilcake and other solid residues from the extraction of soybean	0.8
Turbojet airplanes, exceeding 7,000 kg but not 15,000 kg	0.0
Orange juice, frozen	44.7
Chemical woodpulp	0.0
Cane sugar, raw	236.0
Iron ores and concentrates	0.0
Women's leather footwear	10.0
Aluminum	2.6
Other semimanufactured articles of iron or steel	2.1
Other cane sugars in solid form	18.2
Unmanufactured tobacco, processed for use in cigarettes	350.0
Soybean oil, crude	19.7
Average tariff	45.6

Percent share of above items in total Brazil exports: 36.4

Source: Brazilian Embassy.

^a Average

Brazilian Tariffs for 15 Leading U.S. Global Exports	Ad Valorem Equivalent (%)
New passenger transports W gt>15,000Kg	3.0
Parts for automatic data processing machines	24.0
Chips, W frs digital monolithic integrated circuits	3.0
Parts and accessories for vehicles	21.0
Other parts of civil airplanes/helicopters	3.0
Other parts and accessories passenger vehicle	18.0
Parts of turbojet and turbopropeller A/C eng, civil	3.0
Control units of data processing machines	15.0 ^a
Passenger veh. new, > = 3000 cc, 6 cyl.	35.0
Engines F road truck, bus, auto, ov 2000 cc	21.0
Soybeans, whether or not broken	11.0
Monolithic integrated circuits digital	5.0
Vehicles, new, eng. exc. 1,500, exc 3,000 cc < = 4 cyl.	35.0
Gold bullion unwrought, nonmonetary	3.0
Digital processing units	30.0
Average tariff	14.3

Percent share of above items in total U.S. exports: 18.1

Exhibit 9 Socio-economic Development, Various Countries (1998)

	Brazil	Mexico	Argentina	Chile	India	United States	Japan	Germany	China	Korea
GDP per capita (PPP 1998)	6,625	7,704	12,013	8,787	2,077	29,605	23,257	25,512	3,105	13,478
Life expectancy at birth (years)	67.0	72.3	73.1	75.1	62.9	76.8	80.0	77.3	70.1	72.6
Adult literacy rate (age 15 above)	84.5	90.8	96.7	95.4	55.7	99.0	99.0	99.0	82.8	97.5
Population without access (%):										
to safe water	24.0	15.0	29.0	9.0	19.0	N/A	N/A	N/A	33.0	7.0
to health services	N/A	9.0	N/A	5.0	25.0	N/A	N/A	N/A	N/A	0.0
to sanitation	30.0	28.0	32.0	N/A	71.0	N/A	N/A	N/A	76.0	0.0
Doctors/100,000 people	134.0	85.0	268.0	108.0	48.0	245.0	177.0	319.0	115.0	127.0
TVs/1,000 people	316.0	261.0	289.0	232.0	69.0	847.0	707.0	580.0	272.0	346.0
PCs/1,000 people	30.0	47.0	39.0	48.0	3.0	459.0	237.0	305.0	9.0	157.0
Main phone lines/1,000 people	121.0	104.0	203.0	205.0	22.0	661.0	503.0	567.0	70.0	433.0
Internet hosts/1,000 people	1.3	1.2	1.8	2.0	0.0	112.8	13.3	17.7	0.0	4.0

102 Source: Human Development Report—United Nations Development Programme.

Exhibit 10a Income Distribution in Brazil (1960-1996)

Year	Income Distribution		Gini Coefficient
	Lower 40%	Top 10%	
1960	11.3	39.6	0.50
1970	10.0	46.5	0.57
1980	9.7	47.9	0.59
1990	7.2	48.7	0.63
1996	8.0	47.6	0.60

Source: World Bank, World Development Indicators, several years.

Exhibit 10b Income Distribution in Select Countries, 1999

% Income Controlled by:	Brazil	Chile	Mexico	United States
Lowest 20%	2.5	3.5	3.6	4.8
Second 20%	5.7	6.6	7.2	10.5
Third 20%	9.9	10.9	11.8	16.0
Fourth 20%	17.7	18.1	19.1	23.5
Highest 20%	64.2	61.0	58.2	45.2
Highest 10%	47.9	46.1	42.8	28.5

Source: World Bank, World Development Indicators, 1999.
Note: May not add up to 100% due to rounding.

Exhibit 11 Indicators of Economic Development—1998

Country	Population (millions)	Surface Area ('000 sq. miles)	GNP (\$ billions)	GNP per Capita (\$)	PPP GNP per Capita (\$)	Mean Tariff (%)	Trade in Goods (% of PPP GDP)	Agriculture	Industry	Manufacturing	Service	Total External Debt
Mercosur												
Argentina	36	2,780	290.3	8,030	11,728	13.5	12.9	7	37	25	56	144,050
Brazil	166	8,457	767.6	4,630	6,460	14.6	9.9	8	36	23	56	243,202
Paraguay	5	407	9.2	1,760	4,312 ^b	9.5	34.7	25	22	15	53	2,304
Uruguay	3	177	20.0	6,070	8,451	12.2	22.7	8	27	18	64	7,600
Other Developing												
Chile	15	757	73.9	4,990	8,507	11.0	24.7	8	35	17	57	36,302
Mexico	96	1,958	368.1	3,840	7,450	13.3	32.9	5	27	20	66	159,959
China	1,239	9,597 ^c	923.6	750	3,051	17.5	8.3	18	49	37	33	154,599
Developed												
Canada	30	9,971	580.9	19,170	22,814	7.5	59.0	--	--	--	--	--
France	59	552	1,465.4 ^d	24,210 ^d	21,214	--	46.3	2	26	19	72	--
Japan	126	367	4,089.1	32,350	23,592	5.7	21.3	--	--	--	--	--
United Kingdom	59	245	1,264.3	21,410	20,640	--	48.1	2	31	21	67	--
United States	270	9,364	7,903.0	29,240	29,240	5.2	19.9	2	27	18	71	--

Source: World Bank, World Development Indicators

^aPPP is purchasing power parity.^bThe estimate is based on regression; others are extrapolated from the latest International Comparison Program benchmark estimates.^cIncludes Taiwan, China.^dGNP and GNP per capita estimates include the French overseas departments of French Guiana, Guadeloupe, Martinique, and Reunion.

Endnotes

- ¹ For an overview of the academic literature, see Jagdish Bhagwati, "Regionalism and Multilateralism: An Overview" in *Trading Blocs: Alternative Approaches to Analyzing Preferential Trade Agreements*, ed. Jagdish Bhagwati, Pravin Krishna and Arvind Panagariya (Cambridge, MA: MIT Press, 1999) pp. 3-31; Paul Krugman, "Is Bilateralism Bad?" in *International Trade and Trade Policy*, ed. Elhanan Helpman and Assaf Razin (Cambridge: MIT Press, 1991) pp. 9-23; Jeffrey Frankel, *Regional Trading Blocs* (Washington, D.C.: Institute for International Economics, 1997); Anne Krueger, "Introduction" in *The WTO as an International Organization*, ed. Anne Krueger (Chicago: The University of Chicago Press, 1998) pp. 1-30; T.N. Srinivasan, "Regionalism and the WTO: Is Nondiscrimination Passe?" in *The WTO as an International Organization*, ed. Anne Krueger (Chicago: The University of Chicago Press, 1998) pp. 329-352; Michael Finger and Alan Winters, "What can the WTO do for the Developing Countries?" in *The WTO as an International Organization*, ed. Anne Krueger (Chicago: The University of Chicago Press, 1998) pp. 365-400; On Mercosur, see Luigi Manzetti, "The Political Economy of Mercosur" in *Modern Political Economy and Latin America. Theory and Policy*, ed. Jeffrey Frieden, Manuel Pastor Jr. and Michael Tomz (Boulder, CO: Westview Press, 2000); Barry Eichengreen "Does Mercosur Need a Single Currency?" Working Paper, University of California, Berkeley (1998); Alfonso Bevilacqua, Marcelo Catena and Ernesto Talvi "Integration, Interdependence and Regional Goods: An Application to Mercosur," *Journal Economics*, vol. 2, no. 1 (Washington, D.C.: Brookings Institute Press, 2001) pp. 153-200.

- ² Taken from Jose Roberto Mendonca de Barros, "A década do Brasil," *Examen*, 2000.
- ³ *Country Report: Brazil 2000*. Economist Intelligence Unit (EIU) (www.eiu.com, 2000).
- ⁴ *Country Report: Brazil 2000*. Economist Intelligence Unit (EIU) (www.eiu.com, 2000).
- ⁵ T. Lynn Smith, "The People of Brazil and Their Characteristics" in *Modern Brazil: New Patterns and Development*, ed. John Saunders (Gainesville, FL: University of Florida, 1971).
- ⁶ Folha de São Paulo - 23 de abril de 2000. Poll by Data Folha.
- ⁷ See www.ipeadata.gov.br - Social Indicators.
- ⁸ Barros and Urani (1992) show that if wage differentials by education level are eliminated, labor income inequalities in Brazil would be reduced by almost 50%. See Eliana Cardoso, Ricardo Paes de Barros, and Andre Urani, "Inflation and Unemployment as Determinants of Inequality in Brazil: The 1980s," in *Reform, Recovery and Growth: Latin America and the Middle East*, ed. Rudiger Dornbusch and Sebastian Edwards (Chicago, IL: University of Chicago Press, 1995).
- ⁹ Diane Jean Schemo, "Companies pitch in where public education leaves off," *New York Times*, July 16, 1998.
- ¹⁰ The bark of the tree "pau brasil" or Brazil-wood was used as dyestuff in Europe.
- ¹¹ There were smaller cycles of cotton, cacao, and rubber.
- ¹² Werner Baer, *The Brazilian Economy: Growth and Development* (Westport, CT: Praeger, 1995) p. 18.
- ¹³ In August 1931, the government suspended foreign debt payments and began to negotiate a debt consolidation agreement.
- ¹⁴ Baer, op. cit., p. 41.
- ¹⁵ See Paul R. Krugman and Maurice Obstfeld, *International Economics: Theory and Policy*, 5th ed. (New York, NY: Addison-Wesley, 2000) pp. 713-714.
- ¹⁶ Given the absence of adequate capital markets, the BNDE (currently the BNDES, the National Bank of Economic and Social Development), Brazil's development bank, was created in 1952 to help plan and finance infrastructure and industrial projects often at subsidized interest rates.

- ¹⁷ Peter Evans, *Embedded Autonomy: States and Industrial Transformation* (Princeton, NJ: Princeton University Press, 1995) p. 153.
- ¹⁸ According to the economist Albert O. Hirschman, one industry may facilitate the development of another by easing conditions of production in the other, and by setting the pace for further rapid industrialization. A "forward linkage" industry is one that lowers the cost of production for another activity. A "backward linkage" raises the demand for another activity. Additionally, the protection of industries may encourage the learning and assimilation of new techniques of production (learning by doing). See Albert O. Hirschman, *The Strategy of Economic Development* (New Haven, CT: Yale University Press, 1958).
- ¹⁹ Baer, op. cit., p. 18.
- ²⁰ An indexation or monetary correction on financial instruments was instituted. The principal and interest were readjusted in accordance with the rate of inflation. Later, a monetary correction was applied to taxes and wages.
- ²¹ Baer, op. cit., p. 80.
- ²² Helen Shapiro, *Brazil - Managing Structural Change in the 90's*, Harvard Business School Case 391-206 (1993).
- ²³ Jorge Domínguez, "Order and Progress in Brazil" in *Ideology and National Competitiveness: An Analysis of Nine Countries*, ed. George C. Lodge and Ezra F. Vogel (Boston, MA: Harvard Business School Press, 1987) p. 241.
- ²⁴ Authors' interview with Antônio Delfim Neto, Finance Minister of Brazil (1968 to 1973), São Paulo, August 2000.
- ²⁵ "Survey on Brazil," *The Economist*, March 25, 1999.
- ²⁶ Gustavo H.B. Franco, "O Desafio Brasileiro: Ensaios sobre Desenvolvimento, Globalização e Moeda," Editora 34, 1999, p. 68.
- ²⁷ *Ibid.*, p. 73.
- ²⁸ In 1998, the telecommunications company Telebras was sold for \$19 billion.
- ²⁹ The primary balance does not include interest payments.
- ³⁰ *Country Report: Brazil 2000*. Economist Intelligence Unit (EIU) (www.eiu.com, 2000).
- ³¹ "Survey on Brazil," *The Economist*, March 25, 1999.
- ³² "A década do Brasil," *Examen*, 2000.
- ³³ World Bank Development Indicators (All figures are for 1998). OECD Revenue Statistics, 2001.
- ³⁴ *Country Report: Brazil 2001*. Economist Intelligence Unit (EIU) (www.eiu.com, 2001).
- ³⁵ Set at R\$180 in December 2000.
- ³⁶ J.S. Arbache, "Do unions always decrease wage dispersion? The case of Brazilian manufacturing," *Journal of Labor Research. Working Paper*, University of São Paulo (2000).
- ³⁷ Data from Mercado do Trabalho. Conjuntura e Análise no. 12, February 2000. National household surveys collected by Brazilian National Statistical Institute. Average data from 1992 to 1997.
- ³⁸ "Embarço à carne brasileira já foi superado, afirma Prainá," *Estado do São Paulo*, March 13, 2001.
- ³⁹ Larry Kohler, "Brazil's hot commodity? Not coffee, not soccer," *New York Times*, December 31, 2000.
- ⁴⁰ *Commerce Profile: Brazil 2001*. Economist Intelligence Unit (EIU) (www.eiu.com, 2001).
- ⁴¹ "Canada gets WTO approval for sanctions against Brazil," *The Wall Street Journal*, December 13, 2000, p. A21.
- ⁴² "US Joins Canada's Ban of Brazil Beef," *The Wall Street Journal*, February 5, 2001.
- ⁴³ "Brasil denuncia Canada em reunião da OMC," *O Estado do São Paulo*, March 15, 2001.

- ⁴⁴ On Mercosur, see Jeffrey Frankel, Ernesto Stein, Shang-jin Wei, "Trading Blocs and the Americas: The Natural, the Unnatural, and the Super-natural," *Journal of Development Economics*, vol. 47, no. 1 (1995) pp. 61-95; F. R. Almeida, "Brasil y el futuro del Mercosur: dilemas y opciones," *Integración y Comercio* (Washington, D.C.: Interamerican Development Bank, 1999); and A. Averbug, "Brazilian Trade Liberalization and Integration in the 1990s," Working Paper BDS, 1999; Alfonso Bevilacqua, Marcelo Catena and Ernesto Talvi "Integration, Interdependence and Regional Goods: An Application to Mercosur," *Journal Economía*, vol. 2, no. 1 (Washington, D.C.: Brookings Institute Press, 2001) pp. 153-200.
- ⁴⁵ Wilson Suzigan and Arnúbal V. Villela, *Industrial Policy in Brazil* (Campinas, Brazil: UNICAMP, 1997) p. 169; Jeffrey Carson, "Democracy Looks South: Mercosur and the Politics of Brazilian Trade Strategy," in *Democratic Brazil*, ed. Peter Kingstone and Timothy Power (Pittsburgh, PA: University of Pittsburgh Press, 2000) p. 205.
- ⁴⁶ Luigi Manzetti, "The Political Economy of Mercosur" in *Modern Political Economy and Latin America. Theory and Policy*, ed. Jeffrey Frieden, Manuel Pastor Jr. and Michael Tomz (Boulder, CO: Westview Press, 2000).
- ⁴⁷ J. Carson, op. cit., p. 208.
- ⁴⁸ For more details on Chile's trade strategy, see Robert Kennedy, *Chile: The Latin American Tiger* (Harvard Business School Case 798-092 (1999)).
- ⁴⁹ An additional bilateral accord allowed goods manufactured in Brazil's Manaus free-trade zone or Argentina's Tierra del Fuego to be traded with full tariff exemptions within Mercosur.
- ⁵⁰ Based on Almeida, op. cit.
- ⁵¹ On custom unions, see Jacob Viner, *The Customs Unions Issue* (New York, NY: Carnegie Endowment for International Peace, 1950); Richard Lipsey, "The Theory of Custom Unions: General Survey," *The Economic Journal*, vol. 70 (1960) pp. 496-513; Richard Baldwin and Anthony Venables, "Regional Economic Integration" in *Handbook of International Economics*, ed. Gene Grossman and Kenneth Rogoff (Amsterdam, Netherlands: Elsevier, 1995) pp. 1597-1640.
- ⁵² See Barry Eichengreen, "Does Mercosur need a single currency?" NBER Working Paper W6821, December 1998.
- ⁵³ *Mercosur Report*, 2000.
- ⁵⁴ *Mercosur Report*, 2000.
- ⁵⁵ A. Averbug, "Brazilian Trade Liberalization and Integration in the 1990s," Working Paper BDS, 1999.
- ⁵⁶ Ministério de Desenvolvimento, Indústria e Comércio Exterior, "Barreiras externas as exportações Brasileiras," (www.indic.gov.br, 1999).
- ⁵⁷ Ibid.
- ⁵⁸ The European Union agreed to begin negotiations on a free-trade area with Mercosur in July 2001, extending until 2005, the same period stipulated for the implementation of the Free-Trade Area of the Americas (FTAA). These deadlines nevertheless remain subject to change.
- ⁵⁹ Calculations by Luiz V. Pereira, taken from A. Averbug, "Brazilian Trade Liberalization and Integration in the 1990s," Working Paper BDS, 1999.
- ⁶⁰ Based on F. R. Almeida, "Brasil y el futuro del Mercosur: dilemas y opciones" in *Integración y Comercio* (Washington, D.C.: Interamerican Development Bank, 1999) and A. Averbug, "Brazilian Trade Liberalization and Integration in the 1990s," Working Paper BDS, 1999.
- ⁶¹ Calculations by Marcelo F. Abreu, taken from A. Averbug, "Brazilian Trade Liberalization and Integration in the 1990s," Working Paper BDS, 1999.
- ⁶² Brazilian Ambassador to the U.S. Rubens Barbosa, "Brazil-U.S. Trade: The Export Challenge," *Gazeta Mercantil*, March 9, 2000.

- ⁶³ Ministério do Desenvolvimento, Indústria e comércio exterior, "Barreiras Externas às exportações Brasileiras." (www.mdic.gov.br, 1999).
- ⁶⁴ "O porrete do antidumping," *O Estado de São Paulo*, March 12, 2001.
- ⁶⁵ Anne Krueger, "Introduction," in *The WTO as an International Organization*, ed. Anne Krueger (Chicago, IL: University of Chicago Press, 1998).
- ⁶⁶ Dumping refers to the practice of exporting a product at a price lower than that normally charged in the home market. Governments usually take action against dumping to protect local industries. Taken from www.wto.org.
- ⁶⁷ *Report to the President-Globel Steel Trade: Structural Problems and Future Solutions*, US Department of Commerce, International Trade Administration (www.ita.doc.gov, July 2000).
- ⁶⁸ Frances Williams, "Brazil in US steel move," *Financial Times*, January 1, 2001.
- ⁶⁹ Speech by the U.S. Steel Manufacturing Association, before Members of the Senate and Congressional Steel Caucuses, December 12, 2000.
- ⁷⁰ Brazilian Ambassador to the U.S. Rubens Barbosa, "Brazil-U.S. Trade: The Export Challenge," *Gazeta Mercantil*, March 9, 2000.
- ⁷¹ Unless the patent holder can prove that it is economically non-viable to manufacture the product domestically.
- ⁷² "U.S., Brazil Clash Over AIDS Drugs," *The Washington Post*, February 6, 2001.
- ⁷³ Tina Rosenberg, "Look at Brazil," *New York Times*, January 28, 2001.
- ⁷⁴ Stephen Buckley, "U.S., Brazil clash over AIDS drugs; 'model' treatment program, seen at risk in dispute on patents and pricing," *The Washington Post*, February 6, 2001; "Look at Brazil," *New York Times*, January 28, 2001.
- ⁷⁵ Tina Rosenberg, "Look at Brazil," *New York Times*, January 28, 2001.
- ⁷⁶ Stephen Buckley, "U.S., Brazil clash over AIDS drugs; 'model' treatment program, seen at risk in dispute on patents and pricing," *The Washington Post*, February 6, 2001; "Look at Brazil," *New York Times*, January 28, 2001.
- ⁷⁷ "Brazil's AIDS program faces a new threat," *Wall Street Journal Europe*, February 14, 2001.
- ⁷⁸ *Ibid.*
- ⁷⁹ "U.S., Brazil Clash Over AIDS Drugs," *The Washington Post*, February 6, 2001.
- ⁸⁰ Brazilian Ambassador to the U.S. Rubens Barbosa, "Brazil-U.S. Trade: The Export Challenge," *Gazeta Mercantil*, March 9, 2000.
- ⁸¹ Stephen Buckley, "Brazil moves from wings to center stage," *The Washington Post*, August 6, 2000.
- ⁸² "Regional trade pacts thrive as the big players fail to act," *The New York Times*, December 28, 2000, p. 1.
- ⁸³ *Ibid.*
- ⁸⁴ Speech delivered by Luiz Felipe Lampreia, Brazil's Foreign Minister at the 55th Session of the General Assembly of the United Nations (www.brasilemb.org (Brazil's Embassy in US), September 12, 2000).

